

# **Agenda**

## **Sacramento Suburban Water District Facilities and Operations Committee**

3701 Marconi Avenue, Suite 100  
Sacramento, CA 95821

Monday, March 30, 2015  
6:00 p.m.

Public documents relating to any open session item listed on this agenda that are distributed to the Committee members less than 72 hours before the meeting are available for public inspection in the customer service area of the District's Administrative Office at the address listed above.

The public may address the Committee concerning any item of interest. Persons who wish to comment on either agenda or non-agenda items should fill out a Comment Card and give it to the General Manager. The Committee Chair will call for comments at the appropriate time. Comments will be subject to reasonable time limits (3 minutes).

In compliance with the Americans with Disabilities Act, if you have a disability, and you need a disability-related modification or accommodation to participate in this meeting, then please contact Sacramento Suburban Water District Human Resources at (916)679-3972. Requests must be made as early as possible and at least one-full business day before the start of the meeting.

### **Call to Order**

### **Roll Call**

### **Public Comment**

This is an opportunity for the public to comment on non-agenda items within the subject matter jurisdiction of the Committee. Comments are limited to 3 minutes.

### **Consent Items**

The committee will be asked to approve all Consent Items at one time without discussion. Consent Items are expected to be routine and non-controversial. If any member of the Committee, staff or interested person requests that an item be removed from the Consent Items, it will be considered with the action items.

- 1. Minutes of the January 21, 2015 Facilities and Operations Committee Meeting**  
*Recommendation: Approve subject minutes.*

**Items for Discussion and Action**

- 2. Request for Variance at 2134 Butano Drive**  
Review variance request for the installation of water main and service lines to serve new 148 unit apartment complex.
- 3. Review of District Regulations Governing Water Service**  
Receive updated draft regulations and direct staff as appropriate.
- 4. 2015 Water Conservation Stage Declaration**  
Receive report and direct staff as appropriate.
- 5. Water Meter Asset Management Plan Update**  
Receive updated plan and direct staff as appropriate.
- 6. Sacramento Metropolitan Air Quality Management District – Notice of Violation**  
Receive report regarding the status of a Notice of Violation received from Sacramento Metropolitan Air Quality Management District.
- 7. San Juan Unified School District Landscape Irrigation Services Customer Partnership Proposal**  
Receive report and direct staff as appropriate.
- 8. Grant of Easement at 2163 Fulton Avenue**  
Receive report on acquisition of a water pipeline easement at 2163 Fulton Avenue.
- 9. Grant of Easement at 2600 Fulton Avenue**  
Receive report on acquisition of a water pipeline easement at 2600 Fulton Avenue.

**Adjournment**

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**Upcoming Meetings:**

Tuesday, March 31, 2015, at 5:00 p.m., Ad Hoc Water Rights Review Committee Meeting  
Monday, April 20, 2015, at 6:30 p.m., Regular Board Meeting

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I certify that the foregoing agenda for the March 30, 2015, meeting of the Sacramento Suburban Water District Facilities and Operations Committee was posted by March 27, 2015, in a publicly-accessible location at the Sacramento Suburban Water District office, 3701 Marconi Avenue, Suite 100, Sacramento, California, and was made available to the public during normal business hours.

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Robert S. Roscoe  
General Manager/Secretary  
Sacramento Suburban Water District

## AGENDA ITEM: 1

### Minutes

Sacramento Suburban Water District  
**Facilities and Operations Committee**  
Wednesday, January 21, 2015

#### Call to Order

Chair Bob Wichert called the meeting to order at 6:01 p.m.

#### Roll Call

Directors Present: Bob Wichert and Kevin Thomas.

Directors Absent: None.

Staff Present: General Manager Robert Roscoe, Assistant General Manager Dan York, Jim Arenz, David Espinoza, Heather Hernandez-Fort, Dave Jones, and John Valdes.

Public Present: William Eubanks.

#### Public Comment

None.

#### Items for Discussion and Action

##### 1. Water Meter Asset Management Plan Update

General Manager Robert Roscoe presented background information on the Water Meter Asset Management Plan as well as a description of the updated 2015 Water Meter Asset Management Plan. Staff informed the Committee of the potential budget implications and educated them on the financial differences between retrofitting meters in front yards versus backyards. Chair Wichert asked how often the District opens contractor bids for the Meter Retrofit Program. Staff informed the Committee that the District opens contractor bids once a year around December. Chair Wichert requested a graph representing the actual spending budget for meter retrofits in 2015.

Mr. William Eubanks commented on the durability of the District's meters. He also believes that half of the District's budget is spent on Capital Improvements. He is against accelerating the target to retrofit meters, regardless of inflation. He also commented on his belief that the rate structure will go to a third tier option once construction is complete.

Director Thomas asked if the District still uses Badger meters. Staff informed the Committee that the District currently has several different meters in the system and that all of the District's meters meet the American Water Works Association standards.

Director Thomas inquired which areas plan to be retrofitted next. Staff directed him to the item displaying the areas located on the map in the Plan. Chair Wichert requested that staff make the map a little more legible in the updated report to the full Board.

There was further discussion regarding the details on why the District is implementing backyard meters when eventually those mains will move to the front yards. General Manager Roscoe explained that from an asset management planning standpoint, it is more valuable long term for the District to utilize the full life expectancy of the current mains, before relocating them. Director Thomas asked if the District could expedite the Main Replacement Program in order to not install meters in the backyard. General Manager Roscoe reminded the Committee of the financial impact of relocating backyard mains stating that the District has approximately 271 miles of backyard mains to replace. Currently the District is replacing roughly 8 miles of main per year at roughly \$10-12 million dollars per year. He stated that the District would need to multiply that figure by roughly five times in order for the District to move backyard mains to the front yards to meet the state mandate deadline.

Director Thomas acknowledged the discrepancy between what the Districts projected cost, per the 2009 Water System Master Plan, for the Meter Retrofit Program. He stated that the District estimated approximately \$22 million dollars, however, staff believes the actual cost is closer to roughly \$18 million. Director Thomas recommended for staff to readjust the total project completion budget closer to \$20 million. Chair Wichert agreed and recommended that staff review the budget again at the end of 2015. Staff informed the Committee that the budget discrepancy was due to the projected increase in costs associated with purchasing materials (meters, meter setters, etc.), and that each year staff monitors and makes any necessary budget adjustments.

General Manager Roscoe requested to the Committee that the “Water Meter Retrofit Plan” change to the “Water Meter Asset Management Plan” by adding discussion on meter replacement. Chair Wichert agreed, stating he would like it presented at the next Facilities and Operations Committee and would then suggest staff bring it in front of the full Board for consideration and approval.

## **2. 2736 Auburn Boulevard – Appraisal of District Property**

General Manager Roscoe presented the proposal and requested to move forward with a formal property appraisal of the planned lot line readjustment. He stated the current leaseholder, Mr. Skip Maggiora, is interested in the purchase of the property. Director Thomas inquired about the lease agreement. Assistant General Manager York informed the Committee that Mr. Maggiora has a lease agreement for \$5500.00 dollars a month, and that rate increases every two years up to 2024. He also informed the Committee that Mr. Maggiora has a “first right of refusal” included in the lease agreement.

Director Thomas stated his concern was if the property was sold to Mr. Maggiora, then changed ownership, a prospective new owner may have concern over the District’s easement right. General Manager Roscoe reminded the Committee that this property is

zoned for commercial use, and any potential property owners would have that information regarding the easement restrictions prior to purchasing the property.

General Manager Roscoe recommended that the District obtain a formal appraisal of the District's property. He discourages advancing this process if the District doesn't have a potential buyer. He suggests that the District work with Mr. Maggiora for the benefit of both parties. Chair Wichert stated that he encourages the sale of any surplus property that the District owns, however he doesn't support an approach that is seeking a buyer before putting surplus property on the open market. Chair Wichert recommended that staff determine if it wants to surplus this property prior to bringing it before the full Board.

The Committee directed staff to determine if they want to recommend surplus of this property. If so, then proceed with the guidelines of the District's policy on disposal of surplus property.

### **3. Antelope Pump Back O&M Agreement Update**

General Manager Roscoe provided an update and summarized the history of the Antelope Pump Back Project. He informed the Committee that San Juan Water District's (SJWD) interim Finance Director is showing some concerns on spending money for an intangible asset. General Manager Roscoe was optimistic that staff can conclude negotiations with SJWD providing a mutually agreed upon O&M Agreement to present to both boards for approval.

General Manager Roscoe reminded the Committee that the District is not guaranteeing that it will supply water for SJWD through this agreement, and that SJWD is not buying capacity in our system. SJWD is using the grant money to generate an opportunity for SSWD to provide mutual aid to the SJWD when capacity is available. However, we are unable to provide any mutual aid to this neighboring district without these pumps.

Chair Wichert expressed concern that this may reopen the previous Memorandum of Understanding (MOU). Staff will review the previous MOU to make sure. Chair Wichert requested more information on this topic regarding how percentages were decided and how the District got to its current position on this project.

Director Wichert also suggested that the O&M Agreement is not discussing actual capital cost and General Manager Roscoe stated that the O&M Agreement is based on estimated costs. General Manager Roscoe continued with informing the Committee that the MOU was updated after the Board originally approved it and that the capital costs were through a different MOU. Director Wichert asked staff to provide him with a copy of the approved MOU's.

Director Thomas identified that the cost of standby power should be the responsibility of the SJWD. Further discussion concluded that there should be potential for a pro rata option.

Director Thomas also suggested an option for reimbursement of money versus water under Agenda Item 3, section 10. He recommended an option to request payment in lieu of water prior to the three year suggestion.

The Committee directed staff to continue finalizing the O&M Agreement with SJWD and bring it back to the F&O Committee prior to presenting it to the full Board for approval.

#### **4. District Property Report – Potential Surplus and Purchase**

General Manager Roscoe presented an update on the several District owned properties to surplus. He advised that these properties are of no real value to the District and have to be maintained on a monthly/quarterly basis. Staff is recommending the District present this surplus list to the Board which would alleviate the District from maintenance and liability.

Chair Wichert and Director Thomas appreciated the update and are in favor of selling surplus property on the open market. Chair Wichert directed staff to bring this to the full Board with a list of the properties for surplus.

#### **5. Facility Utilization – Suite 300**

General Manager Roscoe presented the staff report and recommendation on the efficient utilization of Suite 300 at the Marconi Administration building. He informed the Committee that staff will be utilizing the space without any structural changes, only new carpet, paint, minor electrical/communication wiring and adding partitions. General Manager Roscoe informed the Committee that the full Board approved \$180,000 in the CY2015 Budget for Suite 300 improvements. He stated the District may have to pull a building permit for the electrical wiring component of the project. General Manager Roscoe informed the Committee that if the cost exceeded a certain threshold amount, it may be necessary to renovate improvements for handicapped access from Marconi Avenue to the front office.

Chair Wichert suggested staff consider hiring a space planner to make best use of the space in Suite 300. He also suggested consideration of an architect to see if there is a better solution to the handicap access from Marconi Avenue, should construction of such be necessary.

Mr. William Eubanks expressed his support and further suggested staff considers relocating the existing computer server room.

The Committee approved moving ahead with staff recommendations without presenting to the full Board.

#### **Adjournment**

Chair Wichert adjourned the meeting at 7:50 p.m.



## Facilities and Operations Committee

### Agenda Item: 2

**Date:** March 25, 2015

**Subject:** Request for Variance at 2134 Butano Drive

**Staff Contact:** David Espinoza, Associate Engineer

#### **Recommended Committee Action:**

Staff recommends compliance with District regulations requiring an adequate sized water main be constructed along the frontage of the Anton Arcade Apartments project at 2134 Butano Drive.

#### **Discussion:**

Staff has received a written request, dated January 27, 2015, from Cunningham Engineering Corporation (CEC) on behalf of Anton Development Company (Anton) regarding a project at 2134 Butano Drive, attached as Exhibit 1. Anton is proposing to improve the property and is requesting a variance from the District Regulations No. 7 and No. 9, within Regulations Governing Water Service, to consider an alternative to the construction of a new 12 inch water main fronting the project site. Anton's request is supported through the following two points:

1. A Preliminary Water Model report prepared by CEC and last revised on January 28, 2015 (Exhibit 2). In this report, CEC claims the velocity of the water flowing through the existing pipes would remain below 5 feet per second (fps) after development of the Project.
2. A fire flow test performed on an existing fire hydrant on Butano Drive shows that the required fire flow of 1,500 gallons per minute (gpm) can be supplied by the present facilities.

#### **Existing Facilities:**

The Project is located in the District's South Service Area, north of Cottage Way and west of Watt Avenue (See Exhibit 3 – Location Map). The existing facilities include an 8 inch water main and appurtenances along the west side of Butano Drive (running north and south), adjacent to the Project site. North of the Project site lies a 10 inch water main along Butano Drive (running east and west). Along the eastern property line of the Project's parcel is an 8 inch water main (running north and south) (See Exhibit 4 – Existing Facilities). The 8 inch water main on the parcel would be considered a backyard main.



**Project:**

Anton's proposed project is to construct 148 attached multi-family residential units, three stories high, on a parcel with a Zoning Designation of RD-30. Anton's *initial plan submittal* proposed a 6 inch domestic metered service served from the existing 10 inch water main. Two 8 inch fire services are proposed to be served from the two 8 inch water mains (one service each from the western water main and one from the eastern water main) (See Exhibit 5 – Proposed Services). The parcel is currently a parking lot with landscaping. There is an existing irrigation service proposed to be reused on the Project.

Staff met with Anton and CEC to discuss the Project's options. It was agreed the Project would proceed along two paths:

1. The review of the initial plan submittal. With this path CEC would submit a variance request for the Facilities and Operations Committee to review. Anton's effort to keep the project on schedule prompted a second path.
2. CEC would submit a *revised plan* showing the installation of a 12 inch water main along Butano Drive (replacing the western 8 inch water main). This second path was proposed by Anton under the assumption that the F&O Committee would reject the variance request and require the 12 inch water main (See Exhibit 6 – Required Facilities).

**Variance Request:**

CEC's variance request letter identifies their appreciation for the District's Regulations. However, CEC suggests infill projects such as this one should be considered solely on flow requirements. CEC's Preliminary Water Model Report claims the velocities of the water in the District's current 10 inch main and two 8 inch mains would remain below 5 fps after construction of the project. CEC, in their calculations considered the Project's site domestic, irrigation and fire suppression demand. CEC attempts to lower the velocity of the water in the District's water mains by distributing the load to the three water mains surrounding the Project's parcel. One of the requested service connections is on a backyard main, which would be in violation of District Regulations.

CEC also made reference to a fire flow test performed for the Project on the existing water system showing the available fire flow in the area. The hydrant flow test was performed by staff using the existing fire hydrant on Butano Drive located on the west side of Butano Drive (See Exhibit 7, Flow Test Letter and Map). The hydrant is a steamer type connected to an existing 8 inch water line located behind the sidewalk on the west side of Butano Drive. During the test, the results showed at *present operating conditions* a flow of approximately 1,210 gpm from the steamer hydrant. At 20 pounds per square inch (psi) a *calculated flow* of 4,158 gpm could be potentially available. This theoretical calculated flow is extrapolated using the existing static pressure, the residual pressure during the test and the flow at current conditions. The calculated flow determines what may be available if the system pressures are drawn down to 20 psi by the connection of a suction pump and the water is drawn out of the fire hydrant. However, the existing steamer hydrant and 8 inch water main cannot provide this quantity of flow without

serious risk of failure to the existing distribution system such as collapsing a pipeline, blowing-out a fitting, or damaging a valve somewhere within the immediate system. This is technically the fire department's standard procedure for hooking up a pumper truck to a fire hydrant for boosting pressures and flows. In an effort to reduce such risk, and the possibility of water hammering, the District limits the velocity of the water to 5 fps. Per Exhibit 2, the required flow demand for this project is 2,955 gpm, which is a calculated velocity of approximately 19 feet per second (fps) if served by the single 8 inch water main on Butano Drive. The velocity of 19 fps is based on the demand of this project alone. Including the existing demand on the system, the velocity would be even greater. CEC distributes the project's demand load onto the three water mains surrounding the project parcel, and in doing so, claims to maintain the water velocities under 5 fps. Again, what the Water Model Report does not consider is the existing demand on the three water mains. An example of this is an existing 8 inch fire service on the 10 inch water main. The 8 inch service provides fire service to the Walmart Supercenter located at the southwest corner of El Camino Avenue and Watt Avenue. The cumulative water demand from existing services and the proposed services from this project will cause the velocities in the water mains to exceed 5 fps.

**Required Facilities:**

The District's Regulation No. 7 defines requirements for water service. For new development or improvements, an adequate size water main is required to front the parcel connected to the nearest adequate source of reserve capacity. Regulation No. 9 defines the size of water main based on the zoning and use required for each project/development/improvement. For this Project the required water main size is 12 inch. If the proper facilities do not exist, it is the developer/owners responsibility to upgrade the existing facilities per District regulations prior to granting water service to the project. The following are portions of the Regulations, which apply to this project:

- Regulation 7, Article A – Service Connection – No service connection shall be connected to the District water system unless there exist a District water main in a street or right-of-way fronting an Applicant's property accessible to the proposed location of the Applicant's service. The District main shall have Adequate and Reserve Capacity and pressure to provide safe and reliable water service for domestic and fire protection use as solely and conclusively determined by the District (See Exhibit 8 – Regulation 7, Article A).
- Regulation 7, Article B, Section 2.d. – No Adequate Main Abuts Applicant's Property – The Applicant will provide a main of Adequate and Reserve Capacity at his/her cost and expense, which main shall be constructed in a public right-of-way fronting the entire frontage of the Applicant's Parcel (See Exhibit 9 - Regulation 7, Section 2.d.). The adequate size water main for this type of use is 12 inch. Currently there is no adequate sized water main fronting the property on Butano Drive as required per District Regulations.
- Regulation 9, Article A, Section 1 - Extension Facilities – In those situations where the District does not maintain a main line capable of providing Adequate and Reserve Capacity supply of water in a street or public right-of-way completely fronting the Applicant's

Parcel(s), the Applicant shall install, at Applicant's sole cost, Extension Facilities of the size defined in Sections N and O fronting his, her or its Parcel(s) in the public right-of-way.

- Regulations 9, Article N, Minimum Water Main Size – The required water main size is based on the zoning of the parcel. The project's parcel is zoned High Density Residential (RD-30), which requires a water main size of 12 inch (See Exhibit 10 – Regulation 9, Article N). Currently a 12 inch water main fronting the parcel on Butano Drive does not exist.
- Regulation 9, Article O, Maximum Velocity – The maximum water velocity shall not exceed 5 fps under maximum day and fire demand conditions. At 2,955 gpm, the velocity in the 8 inch water main is approximately 19 fps, which exceeds the maximum velocity limits set forth in the District's Regulations. If services were provided from the existing 10 inch main, the velocity would be approximately 12 fps for the same flow of 2,955 gpm (See Exhibit 11 – Regulation 9, Article O).

**Summary:**

Based on the above findings the following apply:

- Anton is constructing 148 attached multi-family residential units, three stories high, on a parcel with a Zoning Designation of RD-30, requiring a new domestic water service and two new private fire sprinkler water services.
- The request for water service requires water system improvements per District Regulations No. 7 and No. 9.
- Per the existing system there is no adequately sized water main fronting the property as required per Regulation No. 7 and No. 9.
- The existing water system consists of an 8 inch water line on the west side of Butano Drive, a 10 inch water line on the north side of Butano Drive and a 8 inch water line on the east side of the project's parcel.
- A hydrant flow test was conducted from an existing fire hydrant located on the west side of Butano Drive, across the Project's parcel with the results showing that the required 1,500 gpm fire flow is available from the existing water system on Butano Drive.
- Per Regulation No 7, Article A, new services shall be connected to water mains of Adequate and Reserve Capacity fronting the Applicant's property, thus not allowing for a backyard connection.
- Per Regulation No 9, Article O, the velocities through the existing water line exceed the limits set forth in this regulation, which therefore requires a larger size water main.
- Per Regulation No 9, Article N, the minimum size water main for a parcel zoned High Density Residential (RD-30) shall be 12 inch in diameter.

It may be of interest to the committee that in the past there have been similar requests for variances made by other developers of a like nature. One of the most recent cases was the Presentation Church and School project at 3100 Norris Avenue, dated July 27, 2011. In the Norris Avenue project case the Board denied the variance request and required the developer to

comply with District regulations by installing a 12 inch water main for the project. In this case staff recommends similar action, by requiring that Anton comply with District regulations requiring an adequately sized water main be constructed along the frontage of the project on Butano Drive.

**Conclusion:**

Staff proposes for Anton to install a 12 inch water main along Butano Drive to serve the project's domestic, irrigation and fire services.

**Fiscal Impact:**

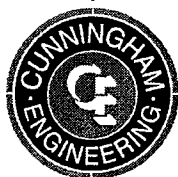
Currently there are no fiscal impacts.

**Strategic Plan Alignment:**

Water Supply 1.B. - Provide for the long-term future needs of the District through prudent planning that will ensure sufficient capacity to serve all customers.

Water Supply 1.E. - Ensure the safety and security of the water supply system

Installing the required 12 inch water main will assure that adequate and reserve capacity exists within the District's infrastructure and allow for the safe and reliable delivery of potential fire flow for the area.



27 January 2015

via email: [despinoza@sswd.org](mailto:despinoza@sswd.org)

David Espinoza  
Sacramento Suburban Water District  
3701 Marconi Ave., Suite 100  
Sacramento, CA 95821

Subject: Proposed Anton Arcade Apartments  
2134 Butano Drive, APN: 279-0110-061

Dear David:

The conditions of approval for this project state, in part, that the “owner/developer may be required to install a 12 inch water main...”. This letter serves as a request for SSWD to consider not requiring the installation of a new 12 inch water main within Butano Drive, adjacent to the project. It appears the following two SSWD regulations are at issue and pertinent to this request:

Issue 1: We understand that Regulation No. 9, Section N. states that a property zoned RD-30 shall have a 12 inch main supplying the property. We can appreciate such a standard being required for new greenfield development areas, where the details and specific flow requirements of individual RD-30 projects have not yet been formulated at the time of installation of major adjoining infrastructure. However, with infill development, we believe each project should be reviewed based on its’ specific flow requirements. This particular project site is unusual in that it is almost entirely surrounded by existing SSWA water mains (10” on north, and 8” on east and west). As demonstrated in the water model report for the project, dated December 19, 2014, the existing adjoining water infrastructure is capable of supplying the required water flows to meet the specific project demands.

Issue 2: We understand Regulation No. 9, Section O states that the maximum velocity of the water traveling through SSWD water main shall be 5 feet per second. Maximum required Fire Flow is typically the predominant contributor of flow demands for an apartment project and often requires dual (and looped) connections to the public system. Because of Regulation No 9, Section O, we have selected a design that connects to the SSWD system at two locations on opposite sides of the site (east and west). This solution allows for greater distribution of flows in the public system as needed to keep velocities within the existing mains below 5 feet per second, as indicated in the water model report.

Anton Butano  
27 January 2015  
Page 2

In summary, because the site specific design and resulting water model for this particular project indicates that adequate water flow is available to meet project demands while maintaining water main velocities at less than 5 feet per second, we request SSWD consider not requirement a 12 inch main be installed within Butano Drive. Thank you for your consideration of this matter. Please feel free to contact me if you have any questions or need any additional information.

Very truly yours,



Daniel A. Fenocchio, RCE 51484  
President

Enclosures – Water Model Report, December 19, 2014

Cc: Andy Davidson, Anton Development Co.

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PRELIMINARY WATER MODEL  
for  
ANTON ARCADE (2134 BUTANO DR.)

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Prepared By:

Cunningham Engineering Corp.  
2120 20<sup>th</sup> Street, Suite Three  
Sacramento, CA, 95818  
916.455.2026

For:

Anton Development Company  
1415 L Street, Suite 450  
Sacramento, CA, 95818  
916.444.9887

Last Revised:

January 28, 2015



## **Introduction**

This preliminary water model was prepared to analyze the ability of the existing public water system to provide the required flow, pressure and velocity to meet the water flow requirements for the proposed Anton Arcade Apartment project (formerly known as Butano Apartments) and District standards.

When analyzing the ability of a public water infrastructure system to serve a multi-family project such as the proposed Anton Arcade Apartment project, typically the governing on-site demands are site fire flow. In addition to applying the required fire flow (described below), this analysis also concurrently applies the estimated site domestic water demand of 800 gpm and the estimated site irrigation demand of 30 gpm. The proposed design for the project includes a looped private fire water main (serving hydrants and building sprinkler services) as well as a separate private domestic water system (serving each building) and separate irrigation system.

## **Hydraulic Modeling**

The site water system was modeled using Bentley WaterCAD V8i (Select Series 1) software. Results of the analysis are discussed below have been included as attachments to this report.

## **Boundary Conditions**

The boundary condition was modeled using the hydrant flow test data performed by the Sacramento Suburban Water District on November 10, 2014 (Attachment G – Fire Flow Test) representing the available pressures and flows of the existing public water system adjacent the site. To simulate the available boundary flow conditions, a “theoretical” boundary pipe network system (labelled as BNDRY on Attachment A) was incorporated to supply the available pressure and flows into the model at the four distribution nodes which are connected to the existing city public water mains. The purpose of this theoretical pipe network is to distribute the available flows presented by the fire flow test to the modeled public mains and on-site network. The existing public water main system adjacent the project site was incorporated into the water model so as to analyze pipe flows and velocities within the adjoining public water mains.

## **Proposed Design**

Due to an initial concern raised by Sacramento Suburban Water District regarding potential for relatively high velocity within the public water main, the proposed site water system design has been modified to indicate one new 8” fire water connection to the existing 8” public main on the east side of the site, and one new 8” fire water connection to the existing 8” public main on the west side of the site. Additionally, the domestic service is proposed to be served from the existing 10” public main at Butano Drive, north of the site with the irrigation service served from the existing service from the 8” main on the east. This design helps to spread and balance the distribution of flows to the site in separate existing mains and therefore retains the velocity in each existing public main below the 5 fps District standard under peak flow conditions.

## **Water System Analysis**

The proposed site fire water system was analyzed for flow, pressure and velocity conditions considering the required site fire flow and approximate domestic flows. The flow demands and system results are provided below:



### Site Fire Flow Demand

Based on Table B105.1 of the 2013 California Fire Code, the required unadjusted site fire flow requirements based on the site's most restrictive building square footage and construction type is 4,250 gpm (Building B at 57,158 SF and Type V-A). As allowed under Section B105.2 of the 2013 California Fire Code, a site fire flow reduction of 75% is allowed when the building is provided with an approved automatic fire sprinkler system. However, local fire agency, Sacramento Metro Fire District, allows a reduction of 50% (to 2,125 gpm) which was applied for this analysis. It is our understanding that local fire district standards allow for a maximum of 1,500 gpm to be pulled from a single fire hydrant.

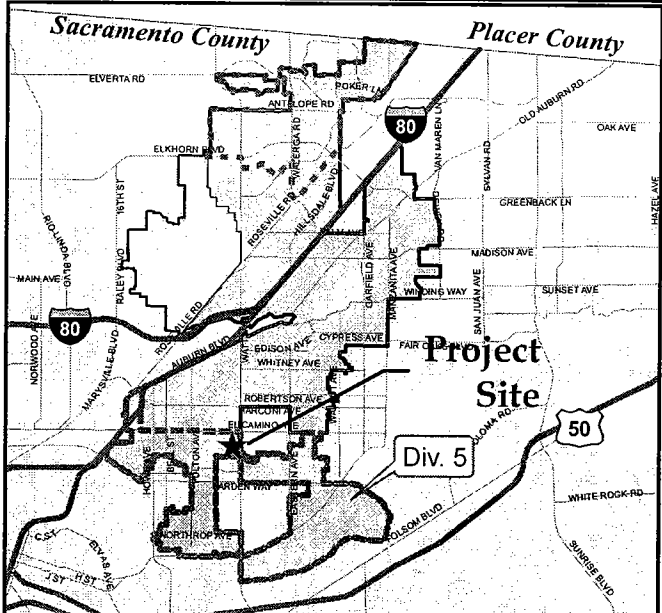
An analysis of the overall proposed fire water system network was performed by applying an arbitrary demand to each on-site fire hydrant in the system to determine the two most hydraulically isolated hydrants. Based on this overall system analysis, it was determined that fire hydrant number 4 was the most hydraulically isolated and fire hydrant number 2 was the second most isolated. Therefore, the 2,125 gpm fire flow demand was divided between the two hydrants applying 1,500 gpm to hydrant number 4 and 625 gpm to hydrant number 2. Refer to Exhibit A – Pipe Network for fire hydrant locations.

### **Summary**

Based on the demands and modelling explained above, the existing public system is capable of providing adequate water flow and pressure to the proposed fire water system, while also providing the estimated site domestic demand. The model indicates that the fire system is able to flow at the required flow rates while still providing a pressure of approximately 30 psi, which exceeds the minimum required of 20 psi. Additionally, the model results indicate that the existing public water mains adjacent to the site do not exceed a maximum velocity of 5 fps during concurrent site fire flow, domestic demand flow and irrigation flow.

### **Attachments**

- A – Pipe Network
- B – Pipe Table Report
- C – Junction Table Report
- D – Pump Definition Detailed Report
- E – Valve Headloss Curve Detailed Report
- F – California Fire Code Table B105.1
- G – Sacramento Suburban Water District Fire Hydrant Flow Test



NOT TO SCALE Portion of Sacramento Suburban Water District

**EXHIBIT 3**

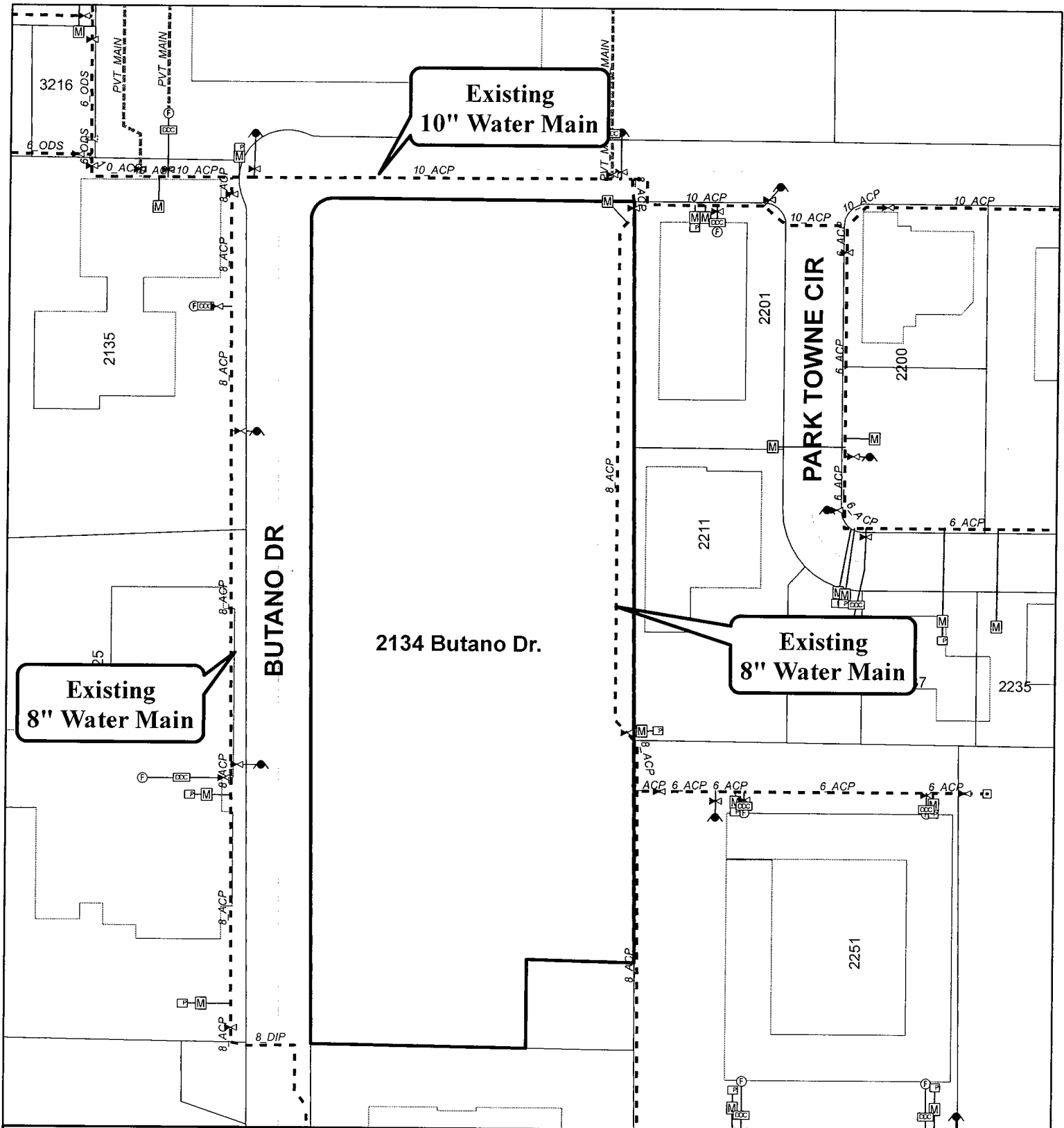
**Location Map**

**2134 Butano Drive**

(Voting Division 5)



Base Data: Sacramento County Gis Base Map  
 Projection: CA State Plane 2, NAD83  
 Scale: Relative  
 Prepared by: D.A.V., SSWD  
 Sacramento, CA March 2015  
 Butano\_2134\_Loc.Mxd



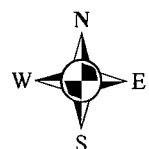
NOT TO SCALE

**EXHIBIT 4**

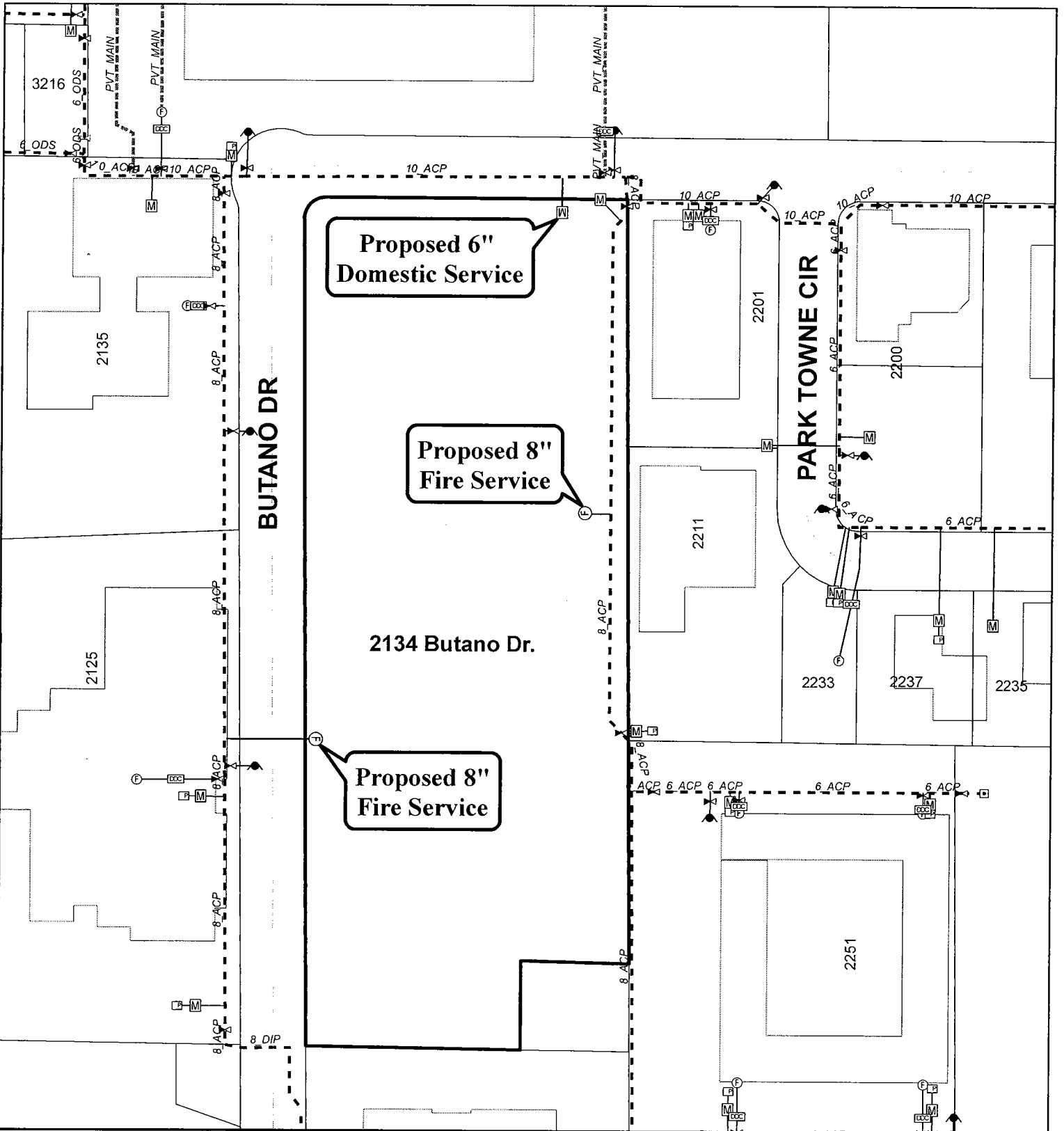
Portion of Sacramento Suburban Water District

**2134 Butano Drive  
Existing Water Mains**

(Voting Division 5)



Base Data: Sacramento County Gis Base Map  
 Projection: CA State Plane 2, NAD83  
 Scale: NTS  
 Prepared by: D.A.V., SSWD  
 Sacramento, CA March 2015  
 Butano\_2134\_Fac4.Mxd



NOT TO SCALE

**EXHIBIT 5**

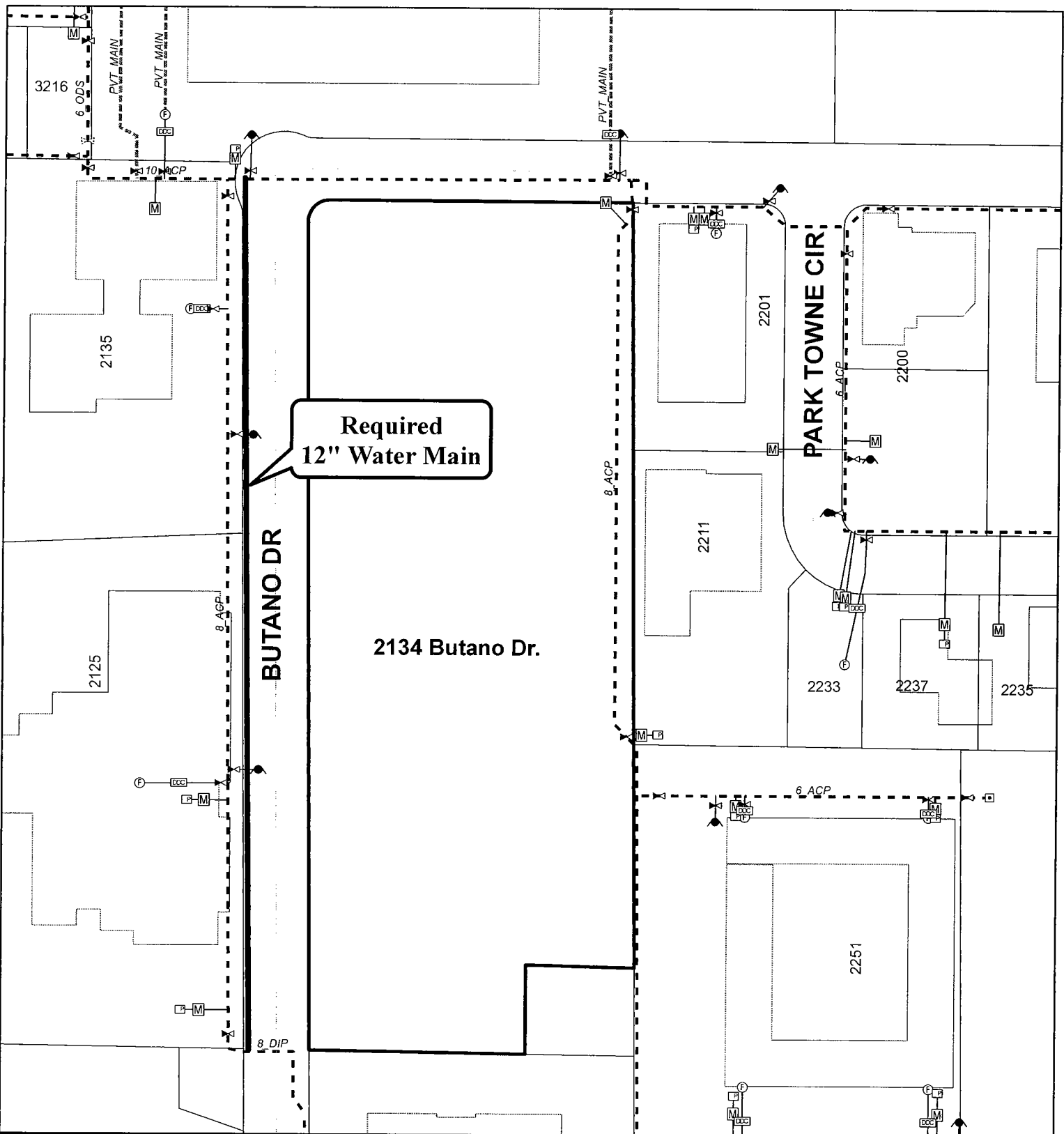
Portion of Sacramento Suburban Water District

**2134 Butano Drive  
Proposed Services**

(Voting Division 5)



Base Data: Sacramento County Gis Base Map  
 Projection: CA State Plane 2, NAD83  
 Scale: NTS  
 Prepared by: D.A.V., SSWD  
 Sacramento, CA March 2015  
 Butano\_2134\_Fac5.Mxd



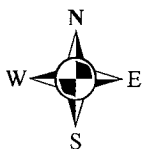
NOT TO SCALE

**EXHIBIT 6**

Portion of Sacramento Suburban Water District

**2134 Butano Drive  
Required 12" Water Main**

(Voting Division 5)



Base Data: Sacramento County Gis Base Map  
 Projection: CA State Plane 2, NAD83  
 Scale: NTS  
 Prepared by: D.A.V., SSWD  
 Sacramento, CA March 2015  
 Butano\_2134\_Fac\_Ex6.Mxd

General Manager

Robert S. Roscoe, P. E.



# Exhibit 7

Board of Directors

President - Kevin M. Thomas  
Vice President - Thomas C. Fellenz  
Frederick A. Gayle  
Todd L. Robison  
Neil W. Schild

November 10, 2014

Rachel Green  
Anton Development Company  
1415 L Street, Suite 450  
Sacramento, CA 95814

Via Email: [rgreen@anton.co](mailto:rgreen@anton.co)

Re: Fire Hydrant Flow Test for 2134 Butano Drive, Sacramento, CA

Dear Ms. Green:

The Sacramento Suburban Water District (District) on November 10, 2014 performed a fire hydrant flow test near the proposed requested location near the subject property. The test was performed on a steamer style type fire hydrant located on the west side of Butano Drive as shown on the attached map. The water main serving the fire hydrant is 8-inch in diameter. During the test the following results were received:

Date of Flow	November 10, 2014
Type of Flow Test	Individual
Location	West side of Butano Drive
Static Pressure	62 psi
Residual Pressure	59 psi
Pitot Pressure	52 psi
Hydrant Type	Steamer
Water Main Size	8 - inch
Nozzle Flow Size	2.5 inches
Flow at Conditions	1210 gpm
*Calculated Flow at 20 psi	4158 gpm

\*Calculated flow based on nozzle coefficient of 0.90 and flow at conditions rounded down to the nearest 250 gpm.

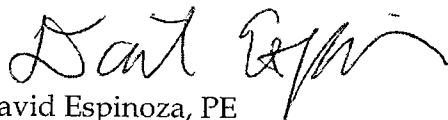
This flow should be continuous but not limited to the following conditions:

- Acts of terrorism and/or vandalism to District facilities causing lost of flow or pressures in the system.
- Failure of District facilities such as water mains breaks causing lost of volume and pressures.

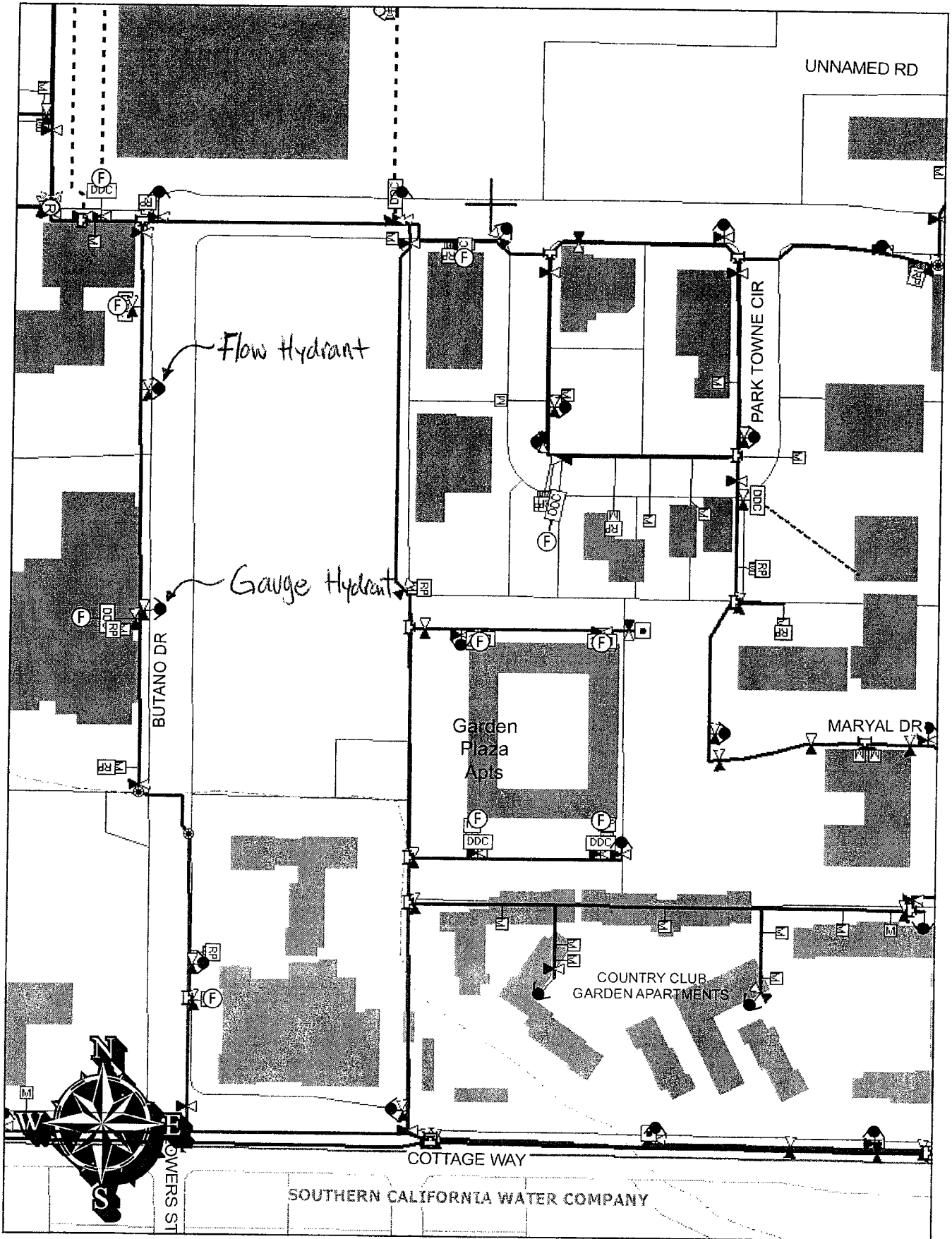
- Abnormal demands on the water system causing decrease in pressures and volumes.
- Malfunctions of existing water production wells and pump stations such as motor burn out, well collapse and power outages causing lost of water production and pressures.
- Simultaneous fires occurring within the District causing reduction in available water flows.

Should there be any questions, please call me at 916.679.2886. Thank you.

Very truly yours;  
Sacramento Suburban Water District

A handwritten signature in black ink, appearing to read "David Espinoza". The signature is fluid and cursive, with a long horizontal stroke at the end.

David Espinoza, PE  
Associate Engineer





## **Exhibit 8**

### **Regulation No. 7 Service Connections**

Adopted: July 19, 2004

Amended: December 19, 2011; March 19, 2012; January 28, 2013;  
March 18, 2013

#### Requirements for New or Additional Service Connection

Water Service from Sacramento Suburban Water District is not transferable or assignable and is subject to full compliance with the District's Regulations Governing Water Service, including the following terms and conditions:

##### A. Service Connections

No New Service shall be connected to the District Water System unless there exists a District water main in a street or right-of-way fronting an Applicant's property accessible to the proposed location of the Applicant's service. The District main shall have Adequate and Reserve Capacity and pressure to provide safe and reliable water service for domestic and fire protection use as solely and conclusively determined by the District. The District, in determining the adequacy of the existing facilities, will take into consideration all factors such as the water requirements of the project to be served by a new connection, the flows required for fire protection, and whether the use of the water will significantly impair service to existing Customers. If the District determines that the New Service will not be connected into the District Water System unless the Applicant provides such adequate extensions or additions as may be necessary in accordance with District regulations, Master Plan and technical specifications, then the District shall determine the location, capacity, and design of such extensions or additions and provide its determination to the Applicant. In making this determination, the District may consider all factors, including but not limited to, anticipated future land uses, water requirements, the desirability of looping water mains to increase reliability and adequacy of service, required flows needed for fire protection, and the long range plans for capital improvements of the District Water System. The District's determination will be conclusive on the Applicant.

## Exhibit 9

### Regulation No. 7 Service Connections

Adopted: July 19, 2004

Amended: December 19, 2011; March 19, 2012; January 28, 2013;  
March 18, 2013

#### Requirements for New or Additional Service Connection

Water Service from Sacramento Suburban Water District is not transferable or assignable and is subject to full compliance with the District's Regulations Governing Water Service, including the following terms and conditions:

2. No Adequate Main Abuts Applicant's Parcel

Service will be connected provided the following conditions are fulfilled:

- (a) The Parcel to be served is within the District's geographical boundaries or is annexed to the District in accordance with an order of LAFCo;
- (b) The Applicant's Parcel is or has been made subject to applicable bonded indebtedness of the District, if any;
- (c) The District possesses adequate water supply to serve the Applicant's requested needs;
- (d) The Applicant will provide a main of Adequate and Reserve Capacity at his/her own cost and expense, which main shall be constructed in a public right-of-way fronting the entire frontage of the Applicant's Parcel. Should the Applicant's Parcel front two or more rights-of-way, the Applicant shall be required to install the main along the Parcel's Principal Boundary as designated in the District's Master Plan as the right-of-way necessary to provide for future extension of the District's capabilities and facilities. Should the Applicant be required to service the Parcel from a right-of-way other than the principal right-of-way (service shall also mean fire service if required by the applicable fire agency), then the Applicant shall be required to install water mains of Adequate and Reserve Capacity along both the principal and the service frontage. All provisions for main extensions shall be in accordance with applicable District Regulations, Master Plans, Plans and Specifications.

## Exhibit 10

### Regulation No. 9 Extensions of and Additions to District Facilities

Adopted: July 19, 2004

Amended: December 21, 2009, December 20, 2010; January 28, 2013

#### N. Minimum Water Main Size

The minimum size for water distribution mains necessary to adequately deliver domestic water and public fire protection to all new developments and construction of whatever kind or size shall be determined with reference to real property-use zones established by the County of Sacramento, including any variance granted thereto, and specifically in compliance with the following provisions:

Sacramento County Zoning	Minimum Water Pipeline Size
Industrial (All Types)	16-Inch
Commercial (PB, SC, LG, GC, AC, TC)	12-Inch
Mobile Home Park (RM-1)	12-Inch
High Density Residential (RD-20, RD-30, RD-40)	12-Inch
Public (Schools, Parks, etc.)	12-Inch
Quasi-Public (Hospitals, Churches, etc.)	12-Inch
All Other Zoning*	8-Inch
*Exception: Cul-de-sacs, Single Family (No Fire Hydrant Requirement)	6-Inch

## **Exhibit 11**

### **Regulation No. 9 Extensions of and Additions to District Facilities**

Adopted: July 19, 2004

Amended: December 21, 2009, December 20, 2010; January 28, 2013

#### **O. Maximum Water Velocity**

All new Extension Facilities are required to be designed to provide for a maximum water velocity within those facilities of five (5) feet-per-second under maximum day and fire demand conditions, as fire demand is computed under the fire suppression rating schedule, published by the ISO (Editions 6-80, or latest edition). If a conflict between Sections N and O shall exist, the provisions of this Section O shall control.



## Facilities & Operations Committee

### Agenda Item: 3

**Date:** March 24, 2015

**Subject:** Review of District Regulations Governing Water Service

**Staff Contact:** John E. Valdes, Engineering Manager

**Recommended Committee Action:**

Receive report on recommended changes to the District’s Regulations Governing Water Service and provide input as appropriate. Direct staff to present the final draft to the full Board as an upcoming policy review at the regular April 20, 2015 Board meeting.

**Background:**

The District currently has Regulations Governing Water Service (“Regulations”) that include seventeen different regulations. These include Regulation No. 3, Water Service Charges and Rates, and Regulation No. 7, Service Connections, as examples.

The District is mostly “built out” but there are still areas where new subdivisions can and will be constructed. In addition, there is potential of re-development and/or in fill development. In any one year, the District receives numerous requests for new or modified water service to various types of development, both residential and commercial. The District’s current Regulations were originally written to primarily address new subdivisions and/or new construction. They are not very easy to use when evaluating infill development and/or new water services in areas where water mains and other facilities already exist. District staff has always tried to use a “common sense” approach when implementing the Regulations.

**Discussion:**

In November 2014, following a qualification based selection process, Coleman Engineering (“CE”) was hired to perform an independent review of the District’s Regulations. Note that CE was also asked to review the District’s Improvement Standards and Technical Specifications (“Standards”). Their review of the Standards is discussed in a separate staff report. This was the first major review of both of these documents since the former Arcade and Northridge Water Districts consolidated on February 1, 2002.

CE was tasked with an independent review of the Regulations to see if they were consistent with other similar sized water agencies in the area. In addition, CE was asked to also consider consistency with the “10 State Standards” and American Water Works Association (AWWA)

standards. The 10 State Standards were originally developed by the Great Lakes-Upper Mississippi River Board of State and Provincial Health and Environmental Managers to provide a set of standards for water treatment facilities. The "10" states directly involved are Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania and Wisconsin along with the province of Ontario. In addition to these states and provinces, many others have also used the 10 State Standards as a guideline for their own standards.

As part of their review process, District staff provided CE with examples of recent situations where there were challenges in trying to interpret the current Regulations and Standards while reviewing developer requests for water service as the result of re-development and infill development, as opposed to new development.

CE has now completed their review of the Regulations and provided the District with a summary listing of recommended changes and revisions. As part of their review process, CE also met with District staff to discuss potential changes recommended by staff. Changes are recommended to Regulations Nos. 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, and 15. Regulation No. 7, part H.5, Facilities Development Charge, was approved by the full Board at the March 16, 2015 Board Meeting. No changes are recommended to Regulations Nos. 4, 7 H.5, 10, 16, and 17. Attached is a summary of the proposed changes (Exhibit 1) and a redline/strikeout version of each regulation with the proposed changes (Exhibit 2). District legal counsel has also reviewed the proposed changes and revisions.

After review by the Facilities and Operations Committee, and after any Committee concerns are addressed, the revised Regulations will be presented to the full Board at the April 20<sup>th</sup> Board Meeting as an upcoming policy review item. The Board will then have a full month to review the proposed changes before being asked to adopt the revised Regulations at the regular May Board Meeting. The Board will be required to adopt a resolution to modify the Regulations. See the attached Exhibit 3 for a draft resolution to be presented to the Board for action.

**Fiscal Impact:**

The District's contract is in the amount of \$25,000. Also, minor increase in revenue related to the increase in fees where the District's cost of service has been reevaluated.

**Strategic Plan Alignment:**

Finance – 4.A. Monitor District operations to ensure cost effective and competitive performance.

Finance – 4.B. Provide rates and connection fees that are fair, simple to understand, logical and meet revenue requirements of the District.

Approval of the amendments to the Regulations Governing Water Service will improve staff's ability to operate efficiently and allow District customers to better understand the regulations upon which staff bases decisions while implementing Board policy.

# EXHIBIT 1

Sacramento Suburban Water District Regulations Review			
SSWD	Comments	Similar References	Pros/Cons
<p>Reg Interpretation Issues</p> <p>Consider requiring valves such that a max of 10 homes would be without service at any one time</p>	<p>Current Regs require valves such that no more than 20 homes at one time can be out of service. Current Standards require that the distribution system will be designed with a sufficient number of valves so located that no single shutdown will result in shutting down a transmission main or necessitate the shutdown of a distribution main for a distance of more than 500 feet. No more than 20 customers will be without service from any single shutdown. In no case will more than two fire hydrants be out of service from any single shutdown.</p>	<p>California Waterworks Standards, Chapter 16, Division 4, Title 22, CAC specifies valves to be provided on water mains to minimize inconvenience and sanitary hazards. In General, valves on water mains 12" and smaller should be located not more than 1,000 feet apart. The City of Roseville, 'Ten States Standards', and other Districts recommend valves at 500' intervals in commercial, school, industrial, and/or multi-family zones and at 800' intervals in residential and/or other districts (or shutting off 20 services, whichever occurs first). AWWA recommends valve spacing such that no more than 20 lots are out of service at one time.</p>	<p>Pros: limits the number of services to be without service at any one time. Cons: may not be able to justify cost of additional valves, particularly if fire suppression water is still available. A maximum of 20 services affected for any one event is typical. No District in our limited research had a lower maximum number than 20 for the services to be without service at any one time.</p>
<p>Recommendation</p> <p>Current Regs and Standards are typical. Recommend keeping no more than 20 customers (homes) at one time to be out of service. Consider reducing the number of customers to be out of services at one time for school, commercial, industrial, or multi-family zone new developments; for example: no single shutdown in school, commercial, industrial, or multi-family zones shall result in shutting off water to more than 10 customers.</p>	<p>Current Regs meet California Waterworks Standards for separation and AWWA recommendations for no more than 20 lots out of service at one time. Valves on all branches of crosses and tees is not required.</p>	<p>For pipelines 12" and smaller, to provide flexibility of operation, 4 valves at crosses and 3 valves at tees is common (10 States Standards, EID, Carmichael Water Dist).</p>	<p>It is recommended that all new tees and crosses 12" and smaller. Also, add the provision that valves shall be located such that any section of main can be shut down without going to more than three valves to shut down any particular section of main (City of Roseville).</p>
<p>Consider requiring all new tees and crosses to have isolation valves on all branches.</p>	<p>Consider a new standard requiring all boring under creeks to be outside the zone of influence of any bridge structural element.</p>	<p>Directional Boring under creeks is a common practice. For small crossings, even open cuts (in sections, for creek diversions) have been done, with 30" min cover.</p>	<p>Proposed new standard may require new easements to be secured by the developer. Consider hanging pipes on bridges as an alternative to boring.</p>
<p>Currently pipes are allowed to be bored under creeks without alignment control. This has impacted bridge foundations.</p>	<p>Easement Width</p> <p>1.09</p> <p>1.09a</p> <p>1.10</p> <p>1.10a</p>	<p>See 12-31-14 Memo</p>	<p>It is recommended to require all boring under creeks to have both horizontal and vertical control, with a minimum cover (typically 30"). Hanging a water line on a bridge can be an alternative, if the bridge owner permits and if there is adequate structural integrity. Any required Permits (Fish and Wildlife, COE, etc) or Easements shall be the responsibility of the Developer.</p>
			min 10' Easement Width

1.18			add defn of Corp Stop		add defn of corp stop: 18. Corporation (Corp) Stop proposed addition: A District Control water service shut off Valve located at the street water main. The Corp Stop cannot be operated from the ground because it is buried and there is no valve box. 21. Curb Stop - proposed defn: A District Control water service shut off Valve located in a water service pipe near the curb and between the water main and the building. This valve is usually located in the main side of the service meter box and is operated with a valve key or wrench to stop and start flows in the water service line to the building. Lockable Curb stops are also used to lock out a water Service Connection at the Point of Responsibility.
1.20	Remove wording: "to a service connection" replace with " up to the point of responsibility"	update defn of Curb Stop, renumber			
1.20a	Place "to a service connection" back in wording				
1.26	Change period to a comma				
1.33	Eliminate Inactive Account	Generally, unless it is a vacation community or a community with a large % of lock outs, there is no Standby Charge. Property assessments for water projects, if any, will continue to be a part of the annual property tax.	Pros: will contribute to the overall ongoing system O&M costs. Cons: Bills may go to collections for absentee users. This adds to Admin costs, with little to gain (from 600 lock outs out of 45,000 connections)		Keep Inactive Account. At the time when service is requested, charge the actual time and materials needed to re-activate - as currently allowed. (34. Inactive Account - proposed revision): An account applicable to a Parcel with an existing service connection to which the District is not currently supplying water service (i.e. has been locked out, the meter has been removed, or otherwise has been physically disconnected) and for which water service bill is not being rendered.
1.35	Add "2012" remove 6.80				
1.40	Change the word "device" to "assembly"				
1.41	Comment regarding inactive services				
1.42	Add definition: "Non- Residential Parcel"				
1.42a	Second comment disagrees with adding non-residential parcel.				
1.51	Change the word "device" to "assembly"				
1.54	Insert indents, without bullets or numbering request				
1.62	Comment regarding the change of Residential Parcel and addition of non-residential properties by David E. Request for additional definition of "developer"				
2A	Regulation 1 goes by the numbering of 1-61 then regulations 2 thru the end are letters "A-A1 thru Z"				
2C	Change "connection" to "Point of Responsibility"				
2D	Delete: "by"				
	Remove "other facilities appurtenances" replace with "water system components"				



2E	Remove: "the outlet side of"		
2H	insert "the"		
	Add: /or		
2I	Paragraph insertion request		
2J	Add sentence to end of paragraph		
3A1	Delete first 2 columns of rates		
3A2	Delete first 2 columns of rates		
3A3	Delete first 2 columns of rates		
3B1	Change Rates based on new calculations		
3B2	Change Rates based on new calculations		
3B3	Change Rates based on new calculations		
3D	Change Rates based on new calculations		
3E	Delete first 2 columns of rates		
3F1	Change Rates based on new calculations		
3F2	Change Rates based on new calculations		
3H	Change Rates based on new calculations		
3H	Rates are being calculated at .48 cents postage instead of the current .49 first class postage, make sure to adjust other calculations including postage		
3I	Change Rates based on new calculations		
3N1	Delete first 2 columns of rates		
3Q1	Accurate cost		
3Q2	Accurate cost		
3Q3	Accurate cost		
3Y	Price adjustment		
3Z	Add penalty charge		
5B	Add wording "and payable" as well as, "can be made via website, telephone" delete "shall be by"		
5H	Possible text change		
5K	Change all words "late" to "penalty", change of rate?		
6A6	Change "Device" to "Assembly"		
6A9	Edits to text		
6B3	Text addition		
6F	Change "Device" to "Assembly"		
7A	Options regarding stopping water service request / comment		
	Sentence addition		

<p>Reg 7, Section H. 4. establishes the (actual cost) charge for installing a New Meter. Reg 7, Section H. 2. and Reg 3 Section U establishes the cost for a new service line, not to be less than \$3,000. Reg 7, Section H. 1. establishes a plan check charge for a new or improved service (a minimum of \$900 per Reg 3, Section R. (See RFP Exhibit A Property #5)</p>	<p>Reg 7 Section I. 1. (f) states that no more than one service connection per single family residential parcel. Reg 7 Section I. 1. (g) states that each residential unit is required to have its own District approved service connection (not meter). Under current regulations, a Plan Check Charge of \$900 per Reg 7, Section H. 1. would be charged. Also, a Service Line Charge, per Section 7, H. 2 shall be the actual cost incurred by the District, not less than \$3,000. If two 1" meters are installed, the Meter Service Charge per meter is established in Reg 7, H. 2. as well as a separate Facilities Charge per Reg 7, Section A. 3. Per Reg 3, Section B. 1. a one time accounting service charge will be assessed for the new account.</p>	<p>Pros (for keeping 1" meter): For existing 1" meter, Reg 3, Section N established a flat rate charge per unit for multi-family units, in addition to any metered water service fees. Only one bill would be required. Cons (for providing a new 1" service): One time service charge for new account; Min \$900 Plan Check Fee; Min \$3,000 Service Line Charge; Double meter service and facilities charges for owner.</p>	<p>No change in the regulations providing for an additional meter are recommended. The Plan Check Fee required by Reg 7, Section H. 1., Service line fees (if applicable) for a second 1" service per Reg 7, H. 2. and Charges per Reg 3, Section A. 2. and 3; Reg 3, Section A. 3. If a single meter for multiple residential services (up to a 4-plex) is maintained, then Reg 3, Section N charges per unit would remain.</p>
7H7	Flow tests paragraph inserted		
7H8	paragraph insert		
7H9	Text edit, sentence addition		
711a	Text addition		
711g	text edit		
711j	Text edit, sentence addition		
8A	Text edit, sentence addition		
8B2	Text Edit		
8B3	Format correction, paragraph addition		
8C	Text addition		
9I	Text edit		
9I2e	Text change		
9L	Text edit		
<p>Reg # 9, Section N, Minimum water main size for all NEW construction on Commercial Property shall be 12". (See RFP Exhibit A Property #1)</p>	<p>Under current Regulations, this new FS would not be allowed for this commercial property on the 10" line. The Owner may request a Variance, per Reg 17.</p>	<p>Some Districts have allowed Fees in Lieu, or Impact Fees, which are based on the incremental construction cost of the larger line, when more infill or new development requires the larger line to maintain minimum pressures or to not exceed maximum velocities.</p>	<p>Pros (for SSWD): Current commercial properties on lines smaller than 12" would have to install a new 12" main extension to install a new fire service. Cons (for Owner): May be cost prohibitive if a long line extension is needed, and may prohibit FS upgrades in areas where the existing SSWD distribution grid allows compliance with Reg 9, Section O.</p> <p>For Existing Services, the minimum pipe sizes per Reg 9, Section N, may be waived if the proposed project complies with Reg 9, Section O.</p>

<p>Reg # 9, Section N, Minimum water main size for all NEW construction on Single Family Commercial Property shall be 12". Reg #7, Section 1.1. (h) requires a separate metered irrigation service for all non-residential units. (See RFP Exhibit A Property #2)</p>	<p>Under current Regulations, this new 3/4" service for irrigation would not be allowed for this commercial property on the 8" line. The Owner may request a Variance, per Reg 17.</p>	<p>Pros (for SSWD): Current commercial properties on lines smaller than 12" would have to install a new 12" main extension to install a new irrigation service. Cons (for Owner): May be cost prohibited if a long line extension is needed, and may not allow upgrades to non-residential units to comply with Reg #7, Section 1.1. (h) for a separate metered irrigation service, even when requested upgrades are in areas where the existing SSWD distribution grid allows compliance with Reg 9, Section O.</p>	<p>For Existing non-residential services, the minimum pipe sizes per Reg 9, Section N, may be waived if the proposed project complies with Reg 9, Section O.</p>
<p>Reg # 9, Section N, Minimum water main size for all NEW construction on Residential Property shall be 8", with the exception of Cul-de-sacs and Single Family property with No Fire Hydrant Requirement, which allows a minimum main size of 6". (See RFP Exhibit A Property #3)</p>	<p>Under current Regulations, this new Single Family service would not be allowed on the existing 6" main, unless it is in a Cul-de-sac with no fire hydrant requirement.</p>	<p>Pros (for SSWD): Current unserved residential properties with existing 6" District main fronting the property would have to install a new 8" main extension to install a new water service. Cons (for Owner): May be cost prohibitive if a long line extension is needed.</p>	<p>For new single family service, the minimum pipe sizes per Reg 9, Section N, may be waived if the proposed project complies with Reg 9, Section O. If more infill or new impact water availability, the District reserves the right to impose a Fee in Lieu, or impact fee for proportional incremental cost to construct a larger water main.</p>
<p>Reg # 9, Section N, Minimum water main size for all NEW construction on Residential Property shall be 8". Single family on 3/4" meter on 6-inch line is being required by County to increase service size to 1". (See RFP Exhibit A Property #4)</p>	<p>Under current Regulations, this Single Family service size upgrade would not be allowed on the existing 6" main, unless it is in a Cul-de-sac with no fire hydrant requirement.</p>	<p>Pros (for SSWD): Current served residential properties with existing 6" District main fronting the property would have to install a new 8" main extension to do any new construction of any kind or size. Cons (for Owner): May be cost prohibitive if a long line extension is needed. May not be hydraulically necessary.</p>	<p>For existing single family service, the minimum pipe sizes per Reg 9, Section N, may be waived if the proposed project complies with Reg 9, Section O. If more infill or new development may impact water availability, the District reserves the right to impose a Fee in Lieu, or impact fee for proportional incremental cost to construct a larger water main.</p>
<p>90</p>	<p>Text edit</p>		
<p>11A</p>	<p>Text edit</p>		
<p>11B12</p>	<p>Text addition</p>		
<p>Reg 11 Section C. 1. Requires that a parcel to be served by the District be located within the service territory of the District.</p>	<p>This regulation should be reviewed by legal counsel to determine if we are obligated to provide free water to Cal-Fire. If we are not legally obligated, then we should amend this Regulation accordingly to limit the fire protection use to be within our District or within certain distance of our District.</p>		
<p>12B</p>	<p>Edit to text</p>		
<p>13D</p>	<p>Edits and additions to text</p>		
<p>14C</p>	<p>Text edit</p>		
<p>14D</p>	<p>Text edits, sections D1-5</p>		<p>revise 14, C, 3, to read: Any non-residential Parcel. Strike last sentence in 14, D, 2 which allows District the option to install Assemblies.</p>
<p>14E</p>	<p>Text edits, E1-2</p>		
<p>14G</p>	<p>Text Edits</p>		
<p>15A</p>	<p>Additions to text, A-A3</p>		
<p>15; Page 2</p>	<p>Additions to text15B1-2</p>		
<p>15; Page 3</p>	<p>Additional text comments;"Stage 2" revision consideration comment</p>		
<p>15; Page 4</p>	<p>Add wording to section 5; delete wording from stage 4</p>		
<p>15;Stage 4.2</p>	<p>Q: How will this impact health or emergency situations?</p>		
<p>15; Page 5</p>	<p>"Notice of Violation" clause addition</p>		
<p>15;Page 6</p>	<p>add "warning" to paragraph 1</p>		

	Add "and/" and "1st" to paragraph 2 delete " April 1st of the following" add "the conclusion of the current water" to paragraph 3				
	Delete "District's records" change wording to customer's record for the current water year. " to paragraph 4 and the word "2nd" and "and/" to paragraph 5 add the wording "on any non-metered service" to paragraph 6				
15; Page 7	Delete the word "servicing" add "and/" to paragraph 1 Add "and/" to paragraph 3 Add "and/" to paragraph 4 add "ion" to end of paragraph 5				
15; Page 8					

## Regulation No. 1 Definitions

Adopted: July 19, 2004

Amended: November 17, 2008; December 21, 2009; April XX, 2015

1. Adequate and Reserve Capacity

The amount of capacity in District water mains sufficient to supply potable and all other types of water service to an Applicant's Parcel in accordance with the velocity and pipe size specifications set forth in Regulation 9, Sections N and O.

2. Administration Cost

A charge that is assessed to accounts to pay certain costs of providing special District services, for example large landscape irrigation agreements, wholesale water contracts, and duplicate billing to tenants.

3. Agent

A person or company designated by the Landowner to manage a property or to act on behalf of a Customer.

4. Applicant

A person or entity, including a developer of a subdivision or any individual Parcel, that files an application for services with the District.

5. Application for Water Service

A formal, written application requesting water service from Sacramento Suburban Water District to a specific Premises, in a form provided by the District, together with such plans, specifications, and payment of all fees that the District's then-applicable Regulations shall require.

6. Auxiliary Water Supply

Any water supply on or available to a Premises other than water supplied by the District.

7. AWWA

American Water Works Association, a national nonprofit association that provides scientific and educational assistance to public and private water purveyors for managing and operating water resources and facilities~~association of water purveyors.~~

8. Backflow

The reverse flow of water or any other fluid or substance or any combination or mixture thereof from a Customer's System into the District's water system caused by Cross-Connection with Auxiliary Water Supplies or with sources of possible contaminated water.

9. Backflow Prevention ~~Device~~Assembly

Equipment used to protect the District's water system against actual or potential Backflow. All Backflow Prevention ~~Devices~~Assemblies installed within the District shall comply with state and local laws and regulations, including District regulations.

10. ~~Backflow-Cross-Connection Specialist~~Control Specialist

A person certified by the State of California to inspect Premises for potential Cross-Connection.

11. Certified Tester

A person who is certified as a Backflow Prevention Assembly General Tester by Sacramento County or other agency having jurisdictional authority.

12. Change of Ownership

The transfer of legal title to a Parcel of real property to which the District provides water service from the legal owner to another party, notification of which must be made to the District by the transferor or the transferee.

13. Check Valve Assembly

A mechanical device installed on either a main line or service line to restrict the flow of water in one direction only.

14. Claim of Lien

Written notice of a delinquent, unpaid sum of money owing to the District by any Water User recorded by the District in the official records of Sacramento County, and which becomes a debt secured by the Parcel that incurred the delinquent charge for services provided by the District.

15. Contract

A written agreement between the District and a second party that defines and creates one or more obligations to take or to refrain from taking a certain action or actions.

16. Control Valve

A device used to control or shut off the flow of water, including to a Service Connection.

17. Collectors Authorized by District

A designated District employee or agency authorized by the District General Manager to collect monies for services provided by the District.

18. Corporation (Corp) Stop

A District Control water shut off Valve located at the street water main, which -The Corp Stop cannot be operated from the ground because it is buried and there is nonot in a valve box.

198. Cross-Connection

Any connection or link between District's water distribution system and an Auxiliary Water Supply, piping system, plumbing fixture, appliance, container, receptacle, vessel or other device of any nature that may permit contaminated or used water or other fluid ~~which is of~~ questionable or unsafe quality, or any other substance of any nature other than the potable water supplied by District, to enter any part of the District's water distribution system.

2019. Cross-Connection Control Representative

A Certified Tester or Cross-Connection Control~~Backflow~~ Specialist authorized by the District to administer the Cross-Connection Control and Backflow Program.

210. Curb Stop

A District Control water service shut off Valve located in a water service pipe near the curb and between the water main and building. This valve is usually located in the main side of the service meter box and is operated with a valve key or wrench to stop and start flows in the water service line to the building. Lockable Curb stops are also used to lock out a water Valve used to control water to a Service Connection to a Service Connection at up to the Point of Responsibility.

221. Customer

Any Landowner, Tenant or other Water User who is entitled to service from or who pays a water bill to the District.

232. Customer's System

Non-Responsible Facilities located and attached to the outlet side of the Point of Responsibility.

243. District

The Sacramento Suburban Water District.

254. District Board of Directors

The governing body of the District composed of five Directors elected by divisions of voters residing within the District's boundaries.

265. District Water System

The water transmission and distribution system owned and operated by the District, including all piping, fittings, valves and other equipment used to supply water to Customers up to and including the Point of Responsibility.

276. Existing Non-Metered Water Service

Services installed on single-family residences prior to April 2, 1991 that do not include a Meter and which are billed on a flat rate. ~~Also~~ also known as "flat rate service."

287. Extension Facilities

~~Mainline extension~~ New pipelines and related water service facilities or plumbing equipment of whatever type installed for the purpose of improving existing District water service and/or extending it to unserved or annexed areas.

298. Facilities Development Charge

A charge imposed by the District to cover a portion of the District's costs incurred for installing wells, pumps, and treatment, storage and transmission facilities to serve increased demand for water service within the District.

3029. Facilities Development Fund

Eighty percent of the fees received from Facilities Development Charges are placed in this fund to offset District costs for infrastructure necessary to meet requirements of the District Master Plan or to serve new development.



| 310. Facilities Reimbursement Fund

Twenty percent of the fees received from Facilities Development Charges are placed in the fund to reimburse Applicants that upsize Extension Facilities as required by the District to meet planning requirements for future development and redevelopment as related to Master Plan requirements.

| 321. Final Approval

The District's written certification that installed water facilities are in compliance with all regulations, plans and specifications, that all plans and supporting documents have been delivered to the District as its property, that all documents have been approved by the District, and that all required fees have been paid, as evidenced by a District form dated and signed by the District General Manager or his/her designated representative.

| 332. Furnish Only Materials

Meters and related materials supplied by the District and required to be installed by an Applicant at its cost, which are supplied to an Applicant upon payment of furnish-only fees established by the District.

| 343. Inactive Account

An account applicable to a Parcel with an existing service connection to which the District is not currently supplying water service (i.e. has been locked out, the meter has been removed, or otherwise has been physically disconnected), and for which a Customer is being water service-billed only the capital facilities charge portion of the District's water service rate is not being rendered.

| 354. Intertie

A connection from the District's water system to another water purveyor's system to supply water for emergency, standby or permanent supply purposes.

| 365. ISO (Insurance Services Office) Fire Suppression Standards

Fire demand pipe size requirements specified by the fire suppression rating schedule published by the ISO, 2012 Edition-6.80, or most current edition.

| 376. ~~LAFCo~~ (Local Agency Formation Commission) (LAFCO)

A ~~state-mandated~~statutory, quasi-judicial, countywide commission responsible for approving boundary changes for, and the consolidation or reorganization of, local public agencies, including the District.

387. Landowner

A person who possesses a fee interest in a Parcel located within the District's boundaries.

398. Meter

A device capable of measuring ~~a~~the quantity of water delivered by the District to a Service Connection.

4039. Metered Rates

Water service fees and charges that are calculated from monthly consumption measured by a Meter attached to a Service Connection serving any Water User within the District.

410. Meter Setters

A prefabricated ~~copper assembly~~device constructed to house a ~~water~~ Meter with valves on the inlet and outlet side of the device.

424. New Service

A ~~metered water s~~Service Connection provided to a Parcel not previously served by the District or a reactivation of an ~~installed inactive s~~Service Connection~~that desires to reconnect to the District Water System.~~

432. ~~Non-Residential Parcels~~properties

A. Any commercial, industrial, institutional and/or Non-Residential multi-family parcel~~property~~ based on the land use code obtained from Sacramento County. ~~Multi-family parcels~~properties consist of the following:

B. Non- Residential Multi-family parcels consist of the following:

1. An improved Parcel containing five ~~two~~ or more residences each containing a family unit or group.  
— (~~duplex, triplex, fourplex, etc~~).

4432. Non-Responsible Facilities

Water service facilities that the District does not own and for which it is not responsible to install, operate, use, repair, maintain or replace. Non-Responsible Facilities include all

privately owned and maintained Service Connections located on any Parcel beyond the Point of Responsibility.

| 4543. Parcel

Any piece of real property within the District defined on a parcel or subdivision map or designated by any other legal means, and to which the Sacramento County Assessor has or will assign an assessor's parcel number.

| 4654. Plan approval

The District's services related to approval of an Applicant's final plans for an improved Parcel, as evidenced by the date and signature of an authorized District representative on the final plans.

| 4765. Planters

All non-lawn and non-turf portions of landscape areas located on a Parcel, excluding hard surfaces.

| 4876. Point of Responsibility

- a. Metered Service: The connection point of the Customer's System at the outlet side of the Meter Setter where a Landowner's responsibility for all conditions, maintenance, repairs, use and replacement of water service facilities begins, and the District's responsibility ends.
- b. Non-Metered Service: The connection point of the Customer's System at the outlet side of either a Curb Stop or an unmetered Meter Setter where a Landowner's responsibility for all conditions, maintenance, repairs, use and replacement of water service facilities begins, and the District's responsibility ends.
- c. Private Fire Service: The connection point at the District's main shut-off valve connecting the District's water main and the inlet side of the Private Fire Service facilities where a Landowner's responsibility for all conditions, maintenance, repairs, use and replacement of water service facilities begins, and the District's responsibility ends.

| 4987. Point of Service

- a. Private Fire Hydrants: The District's Point of Service begins at the District's main shut-off valve located at the District's supply water main.
- b. Private System: The District's Point of Service begins at the District's main shut-off valve located at the District's supply water main.

| 50498. Premises

| A residential or non-residential Parcel together with all buildings, facilities, equipment, and other fixtures and personal property appurtenances located thereon.

| 514509. Principal Boundary

All boundaries of an Applicant's Parcel that abut one or more public rights-of-way.

| 5210. Private System

| Non-Responsible Facilities utilized by a Landowner solely for private use on a Parcel. Private use can be, but is not limited to, fire suppression in the form of fire sprinklers or fire hydrants. Private systems shall be separated from a public system by an approved backflow ~~device~~assembly.

| 5321. Residential Flat Rates

Non-Metered water service fees and charges that are calculated according to estimated water consumption, size of service line and the size of the Parcel per the Sacramento County Tax Assessor's parcel maps.

| 5432. Residential Parcel

| An improved Parcel containing a single family residence, or an improved Parcel containing up to four residences each containing a family unit or group. A duplex, triplex, or fourplex shall be considered Residential Parcels.

| 55. Service Connection

| The water piping system connecting a Customer's System with a District water main beginning at the outlet side of the Point of Responsibility, including all plumbing and equipment located on a Parcel downstream of the Meter outlet, Curb Stop or Meter Setter required for the District's provision of water service to that Parcel.

| 5643. Service Valve

| The equipment located at the inlet side of the Point of Responsibility by which the District controls water service to a Parcel.

| 5754. Single Family Parcels~~Residential Parcels~~

| a. ~~Single Family Residence:~~ An improved Parcel used as a place of residence by one family unit or group.

~~b. Duplex: An improved Parcel containing two residences each containing a family unit or group.~~

~~e. 4-Plex: An improved Parcel containing four residences each containing a family unit or group.~~

5865. Standard Specifications and Plans

The District's specific requirements for water service plumbing, facilities, and equipment provided in, and the document entitled District's Improvement Standards and Specifications, ~~detailed drawings~~ approved by the Board of Directors and all subsequent amendments or replacements to any such requirements or documents.

5976. Standby Charges

A charge for service to a Parcel for emergency water that may be utilized on an as-needed basis by a Landowner.

~~60587~~. Surcharges

A limited-term, specific purpose charge assessed to all or to a class of Customers to repay certain costs incurred by the District, such as bond indebtedness issued to finance District capital projects.

~~61598~~. Tenant

A person or entity leasing or renting a Parcel or Premises from a Landowner.

~~62059~~. Unimproved Property

A Parcel that has not been improved with a Service Connection or other utility facilities.

~~6310~~. Up-Sized Lines

Mainline facilities having capacity in excess of that necessary to supply existing water demand to a specific area, ~~Parcel or Parcels~~ with an Adequate and Reserve Capacity of water, but which ~~are~~ is deemed necessary by the District to provide an adequate future water supply to the area, ~~Parcel or Parcels~~. The District will bear the cost of an Up-Sized Lines.

~~6421~~. Water User

Any person or entity, whether or not a Landowner or Customer, to which the District supplies water.

Annette, by changing the definition of Residential Parcel/Service and adding Non-Residential Properties like shown above, you would then trigger other areas of the Regulations that require that all Non-Residential services have back-flow devices. Currently duplex and 4-plexes are not required to have back-flow devices. Is the intent to require backflow devices on duplex and 4-plexes? – David E.

I agree with adding a definition for Non-Residential, but we have to be careful of how it will affect other areas of the regulations. On Regulation 7, page 12, letter (h) states that a separate metered irrigation service shall be required for all no-residential units. This would apply to a duplex and 4-plex, yet it does not make sense to enforce.

Can we also add a definition for DEVELOPER? ... Thank you. – David E.

## Regulation No. 2 Conditions of Service

Adopted: July 19, 2004

Amended: November 17, 2008; December 21, 2009; January 28, 2013; April XX, 2015

### A. Service Subject to District Regulations

Water supply and service will be provided by the District to Customers within defined District boundaries in accordance with regulations governing said service from time to time adopted and amended by the District's Board of Directors.

The District will exercise reasonable care and diligence to deliver to its Customers a continuous and sufficient supply of water under proper pressure and of good quality at the District Point of Responsibility ~~connection~~ to the Customer's Premises.

### B. Non-Liability of District

The District is not, and will not be, liable for any loss, damage, or inconveniences to any Customer by reason of shortage, insufficiency, suspension, discontinuation, shut off, increase, or decrease of water pressure, or by a water quality problem.

### C. Service Interruption

The District reserves the right at any and all times to shut off water delivery for the purposes of maintenance, emergency repairs, alterations, or improvements to the system. Whenever practical, advance notice of interruption of service will be given to all Water Users affected either by personal contact, mail, or by door hanger.

### D. Access Facilities

#### 1. Unrestricted Access

By applying for or receiving water service from the District, each Customer irrevocably licenses the District and its authorized employees and representatives to enter upon the Customer's property at all reasonable times for the purpose of reading, inspecting, testing, checking, repairing, maintaining, or replacing the District's Meters and Water System components ~~other facilities~~ appurtenances.

#### 2. Restricted Access to District Facilities

If ~~access to~~ District facilities ~~are~~ ~~is obstructed~~ ~~restricted~~, the responsible Customer will be required to move or modify the obstruction to allow access by authorized District employees or representatives. The Cost to move or modify an obstruction will be borne by the Customer. Removal or modification of any obstruction will be carried out in accordance with Regulation 16 hereof.

E. ~~Water Users~~Customers' Responsibility for Control of Water Delivered

Title to water furnished by the District, the risk of loss thereof, and full responsibility for the carriage, handling, storage, disposal, and use thereof shall pass from the District to the Customer at ~~the outlet side of the~~ Point of Responsibility. In all cases where a Parcel is leased or rented, the Landowner will retain total responsibility for control of and payment for water delivered.

F. Place of Use of Water: Resale Prohibited

Except with the prior written authorization of the District, no Customer shall use, or permit the use of, any water furnished by the District on any Premises other than specified in his/her Application for Water Service, nor shall any Customer resell any water furnished by the District, unless his/her business uses water in the process of producing a product for resale. The bottling of water for resale is not considered a process of producing a product for resale and is expressly prohibited.

G. Electric Grounds

No electric circuit shall be grounded to the District's facilities or to any plumbing or metal in contiguity therewith. Any ~~Water User~~Customer who makes, or permits to be made, such a connection will be liable for damages to the District's facilities and for personal injury resulting therefrom. Ground Rods may be installed per Sacramento County Standards by District staff or contractor when electrical grounds are found connected to service lines during the course of District business.

H. Water User's Compliance with Regulations

By applying for and/or receiving water service from the District, each Applicant and Customer agrees to be bound by and to comply with all regulations in effect, adopted or amended by the District Board of Directors from time to time. An Applicant or Customer who violates any District regulation is subject to termination of District Water Service if he or she does not immediately cure the violation to the satisfaction of the District.

I. Responsibility for Payment

Each Landowner is responsible for regular monthly payment for all services rendered by the District to his, her or its Premises, whether an invoice is received or not, until the District receives a notice from the Landowner to terminate such service. (Gov. Code Section 54347; Water Code Section 31007.5) A Landowner remains responsible for all



District fees and charges incurred on his, her or its Premises regardless of the time or manner in which the charges were incurred. A Landowner remains responsible for payment of all such fees and charges whether or not the Landowner enters into a financial responsibility agreement with the District in accordance with Section I of Regulation 5.

In the absence of such notice to terminate services, and/or when the Landowner has been notified of the District's intention to discontinue services, or in the event the Premises are vacant and service has been discontinued in accordance with the provisions of Regulation No. 6 hereof, and the District has given notice of its demand for payment against the Premises by attaching such notice to the front of or to the principal entrance or any structure located thereon, then water service will not be continued, restored, or re-established until all unpaid bills, charges, fees, and penalties have been paid by the Landowner, ~~tenant~~Tenant, aAgent, or by any subsequent Landowner, ~~tenant~~Tenant, or aAgent.

In some cases instances a homeowner's association may be receiving the water bills for each individual property or unit within the association and making payment for water service on behalf of its members. If there comes a time, that the homeowner's association requestswants to transition the billing to the property ownereach Landowner in the association, they association first will be required need to obtain and provide documentation to the District showing they have the authority to make this request. If said documentation is not available then each individual property owner will need to complete a signed Application for Water Service from each Landowner within the association as a condition ofbefore the District providing water service to individual Landownersean be placed in lieu of the homeowner's associationtheir name. The District also will require the homeowner's association to remain responsible for water bills rendered for District Water Service to all common areas within the association.

#### J. Reimbursement

Upon written application of a Customer or LandownerWater User, the District will consider a credit/refund against future water charges to the extent the Customer or LandownerWater User has paid water charges erroneously levied by the District in excess of the proper water charge, provided that the credit will not apply to any excess charges levied more than four (4) years before the application for credit was filed. The basis for the four year limitation on refunds is based on the statute of limitations for claims made upon a written contract. Nothing in this Section J excuses a Customer or Landowner from complying with the Government Claims Act if he/she applies for a reimbursement of overpaid water charges.

#### K. Contracts

The District, at the discretion of the District General Manager and with the approval of the Board of Directors, may enter into a Contract with third parties for the supply or delivery of water and/or other services. The Contract may specify price, delivery

conditions or limitations, schedule, duration, guarantees and/or liabilities as circumstances warrant, as determined in the best interest of the District.

# Regulation No. 3 Water Service Charges and Rates

Adopted: March 15, 2004

Amended: December 21, 2009; December 19, 2011; January 28, 2013; August 27, 2013; April XX, 2015

## A. Charges for Water Service

The District charges all Customers on a monthly basis. Customers billed on a Residential Flat Rate are billed in advance, while Metered Rate Customers are billed in arrears. All charges are based on the District's costs of providing District Water Service. Therefore, the basis for charges and rates are categorized on the same basis as District costs. Explanations of each charge and the related District costs are as follows:

1. Flat Service Charge: This charge is based on connection size. The charge is intended to cover District operations and maintenance fixed costs, attributable to Residential Flat Rate Customers.

Usage Charge: This charge is based on Parcel square footage. The charge is intended to cover District operations and maintenance variable costs, attributable to Residential Flat Rate Customers.

<b>Sacramento Suburban Water District Flat Rate Customers</b>						
	<b>01/01/09</b>	<b>01/01/14</b>	<b>01/01/15</b>	<b>01/01/16</b>	<b>01/01/17</b>	<b>01/01/18</b>
<b>Usage Charge (\$/1,000 sq. ft.)</b>	\$ 0.91	\$ 0.91	\$ 0.95	\$ 0.98	\$ 1.02	\$ 1.06
<b>Flat Service Charge</b>						
3/4" connection	\$ 14.89	\$ 14.89	\$ 15.49	\$ 16.11	\$ 16.75	\$ 17.42
1" connection	\$ 21.55	\$ 21.55	\$ 22.41	\$ 23.31	\$ 24.24	\$ 25.21
1 1/2" connection	\$ 40.69	\$ 40.69	\$ 42.32	\$ 44.01	\$ 45.77	\$ 47.60
2" connection	\$ 40.19	\$ 40.19	\$ 41.80	\$ 43.47	\$ 45.21	\$ 47.02

2. Meter Service Charge: This charge is based on meter size. The charge is intended to cover District operations and maintenance variable costs attributable to Metered Rate Customers.

Usage Charge: This charge is based on water usage. The charge is intended to cover District operations and maintenance fixed costs attributable to Metered Rate Customers, including the cost of water. The Usage Charge is based on ~~one hundred~~ (100) cubic feet of water (748 gallons.).

**Sacramento Suburban Water District  
Metered Rate Customers**

<b>Meter Usage Charge (\$/CCF) – 1CCF = 748 gallons</b>	<b>01/01/09</b>	<b>01/01/14</b>	<b>01/01/15</b>	<b>01/01/16</b>	<b>01/01/17</b>	<b>01/10/18</b>
Non-Residential-Off-Peak Rate (Nov-Apr)	\$ 0.81	\$ 0.81	\$ 0.84	\$ 0.88	\$ 0.91	\$ 0.95
Non- Residential. - Peak Rate (May-Oct)	\$ 1.01	\$ 1.01	\$ 1.05	\$ 1.09	\$ 1.14	\$ 1.18
Residential - 1st Tier (0-10 CCF)	\$ 0.80	\$ 0.80	\$ 0.83	\$ 0.87	\$ 0.90	\$ 0.94
Residential - 2nd Tier (11+ CCF)	\$ 1.00	\$ 1.00	\$ 1.04	\$ 1.08	\$ 1.12	\$ 1.17
<b>Meter Service Charge</b>						
5/8" meter	\$ 3.60	\$ 3.60	\$ 3.74	\$ 3.89	\$ 4.05	\$ 4.21
3/4" meter	\$ 5.25	\$ 5.25	\$ 5.46	\$ 5.68	\$ 5.91	\$ 6.14
1" meter	\$ 8.50	\$ 8.50	\$ 8.84	\$ 9.19	\$ 9.56	\$ 9.94
1 1/2" meter	\$ 16.60	\$ 16.60	\$ 17.26	\$ 17.95	\$ 18.67	\$ 19.42
2" meter	\$ 26.40	\$ 26.40	\$ 27.46	\$ 28.55	\$ 29.70	\$ 30.88
3" meter	\$ 49.20	\$ 49.20	\$ 51.17	\$ 53.21	\$ 55.34	\$ 57.56
4" meter	\$ 81.75	\$ 81.75	\$ 85.02	\$ 88.42	\$ 91.96	\$ 95.64
6" meter	\$ 163.15	\$ 163.15	\$ 169.68	\$ 176.46	\$ 183.52	\$ 190.86
8" meter	\$ 293.40	\$ 293.40	\$ 305.14	\$ 317.34	\$ 330.04	\$ 343.24
10" meter	\$ 472.50	\$ 472.50	\$ 491.40	\$ 511.06	\$ 531.50	\$ 552.76
12" meter	\$ 700.40	\$ 700.40	\$ 728.42	\$ 757.55	\$ 787.85	\$ 819.37

3. Capital Facilities Charge (Applies to Residential Flat and Metered Rate Accounts): This charge is based on meter or connection size and property location. This charge covers District capital improvement charges and debt-the periodic principal payment and interest payments due on District debtexpense.

**Sacramento Suburban Water District  
All Customers**

<b>Capital Facilities Charge</b>	<b>01/01/09</b>	<b>01/01/14</b>	<b>01/01/15</b>	<b>01/01/16</b>	<b>01/01/17</b>	<b>01/01/18</b>
5/8" meter	\$ 19.25	\$ 19.25	\$ 20.02	\$ 20.82	\$ 21.65	\$ 22.52
3/4" meter or connection	\$ 28.70	\$ 28.70	\$ 29.85	\$ 31.04	\$ 32.28	\$ 33.57
1" meter or connection	\$ 48.00	\$ 48.00	\$ 49.92	\$ 51.92	\$ 53.99	\$ 56.15
1 1/2" meter or connection	\$ 95.65	\$ 95.65	\$ 99.48	\$ 103.46	\$ 107.59	\$ 111.90
2" meter or connection	\$ 153.10	\$ 153.10	\$ 159.22	\$ 165.59	\$ 172.22	\$ 179.11
3" meter or connection	\$ 287.30	\$ 287.30	\$ 298.79	\$ 310.74	\$ 323.17	\$ 336.10
4" meter or connection	\$ 478.95	\$ 478.95	\$ 498.11	\$ 518.03	\$ 538.75	\$ 560.30
6" meter or connection	\$ 957.60	\$ 957.60	\$ 995.90	\$ 1,035.74	\$ 1,077.17	\$ 1,120.26
8" meter or connection	\$ 1,723.80	\$ 1,723.80	\$ 1,792.75	\$ 1,864.46	\$ 1,939.04	\$ 2,016.60
10" meter or connection	\$ 2,777.45	\$ 2,777.45	\$ 2,888.55	\$ 3,004.09	\$ 3,124.25	\$ 3,249.22
12" meter or connection	\$ 4,117.65	\$ 4,117.65	\$ 4,282.36	\$ 4,453.65	\$ 4,631.80	\$ 4,817.07

**B.** \_\_\_\_\_

**B. Service Charges**

1. For each new account to be established, a service charge shall be assessed and added to the first or opening water bill for payment in accordance with the following provisions:

Service charge with water service already on.	<del>\$6.00</del> <u>\$5.00</u>
Service charge during regular business hours, which requires restoration of water.	\$25.00

2. The following dispatch service charges shall be assessed in accordance to Section K.2, Regulation 5 and Section C, Regulation 6:

Dispatching personnel to deliver delinquency notice	\$35.00
Dispatching personnel to terminate water service	\$40.00

3. Other than in an emergency, to locate a service or shut-off water service after regular business hours the District will charge its actual cost of time and material for this service, but not less than a minimum charge of ~~\$125.00~~\$235.00.

**C.      Temporary Turn-On Charge**

When water service has been terminated for non-payment or put into an inactive status, and temporary (24-hour maximum) service is required for third-party inspection purposes, a non-refundable charge of \$20.00 shall be paid before service is turned on.

**D.      Cross-Connection Control Program**

A monthly charge shall be paid to fund the District's Cross-Connection Control Program (CCCP). This charge shall be billed monthly to each Landowner whose Parcel contains a Backflow Prevention Assembly (Assembly). The Assembly is the property of the Landowner. The services covered by this charge shall include, but are not limited to, administering the program, monitoring the program, notifying Customers for testing and retesting, compiling results and submittal of results to the State Water Resources Control Board Department of Public Health (SWRCBDPH). The charge shall be determined each year based on program expenses and the number of Assemblies within the District. The current monthly charge for the CCCP shall be \$4.00 per Assembly for all connection sizes.

If a Customer requests or the District is required to test an Assembly, the District will impose an Assembly test charge of \$72.00 per Assembly, plus labor and materials if repairs are required. The charge includes the fee for the required County tag.

E. Privately-Owned Fire Protection Systems

A monthly charge shall be paid for water service at un-metered connections to the District's Water System that are equipped with a detector check assembly satisfactory to the District and the State Water Resources Control Board's Division of Drinking WaterDPH and which supplies water to privately-owned and maintained sprinklers used exclusively for fire-fighting, irrespective of the quantity of water used and based on the size of the fire service assembly as follows:

Private Fire Service						
Size	01/01/09	01/01/14	01/01/15	01/01/16	01/01/17	01/01/18
2-inch	\$ <del>13.65</del>	\$ <del>11.35</del>	\$ 11.80	\$ 12.28	\$ 12.77	\$ 13.28
3-inch	\$ <del>25.60</del>	\$ <del>21.30</del>	\$ 22.15	\$ 23.04	\$ 23.96	\$ 24.92
4-inch	\$ <del>41.65</del>	\$ <del>34.70</del>	\$ 36.09	\$ 37.53	\$ 39.03	\$ 40.59
6-inch	\$ <del>82.90</del>	\$ <del>69.05</del>	\$ 71.81	\$ 74.68	\$ 77.67	\$ 80.78
8-inch	\$ <del>146.65</del>	\$ <del>122.15</del>	\$ 127.04	\$ 132.12	\$ 137.40	\$ 142.90
10-inch	\$ <del>229.15</del>	\$ <del>190.85</del>	\$ 198.48	\$ 206.42	\$ 214.68	\$ 223.27
12-inch	\$ <del>255.35</del>	\$ <del>212.70</del>	\$ 221.21	\$ 230.06	\$ 239.26	\$ 248.83

F.B. Security Deposits

Whenever an Applicant's or Customer's credit rating or payment history is or becomes unacceptable to the District because of poor credit history, non-payment of water bills, or frequent delinquent bill payment, a cash deposit may be required in accordance with the schedule set below:

1. Residential Customers shall be required to pay the sum equal to two (2) months water charge, but not less than ~~\$70.00~~90.00 (cost of ¾" flat base charges).
2. Business Customers shall be required to pay the sum equal to three (3) times the estimated water bill, but not less than ~~\$170.00~~180.00 (cost of 1" meter base charges).

The District may apply the security deposit to any account of a Customer owing to the District that is delinquent for more than 30 days and will notify the Customer of such application. Water service may be terminated if the account is not fully paid and the security deposit replenished, subject to the conditions and procedures described in Regulation 6, Section B.

The security deposit will be returned to the Customer without interest upon termination of the service and payment of all rates and charges owed to the District by the Customer, or at such earlier time as the District may determine that the credit of the Customer is satisfactory. Security deposits that remain unclaimed after five (5) years from the date the deposit became refundable will become property of the District.

For the purpose of this Regulation 3, the District shall determine whether a Customer's credit is satisfactory. The credit of a Customer who has paid all rates and charges without delinquency~~fault~~ for twelve months shall be deemed satisfactory.

G.C. Application of Payments

Any monies received on an account will be applied first to the oldest outstanding charges.

H. Returned Payments

The District shall levy a charge for each returned payment as defined in Regulation 5, Section C. The amount shall be the District's actual Bank Service Charge plus \$7.00.

I. Meter Testing Fee

This charge will be assessed to accounts that request a meter test with results within the range set by AWWA per Regulation 4, Section D. The fee will be ~~\$135~~235.00 per meter test for large meters (3" and above) and \$65.00 for small meters (1" and below).

J. Bacteriological Testing

The District will assess actual time and material costs but not less than a minimum charge of \$25.00 for each bacteriological test as defined in Regulation 7, Section H.8.

K. Annexation Fees

The District will charge annexation fees for each Parcel located outside of the District's legal boundaries that desires to be annexed into the District. The fee will be charged on an time and materials basis and reflect all District costs to apply for and complete the annexation of a Parcel, including without limitation staff time, attorneys' and consultant fees, LAFCO application fees, and costs of studies and environmental review. Upon application for an annexation into the District, staff will estimate the costs to process the annexation and the applicant shall deposit the estimated costs with the District. Upon conclusion of the annexation proceedings, if a portion of the deposit remains, it will be refunded to the applicant. If the District has expended the entire deposit and advanced additional funds to pay costs of the annexation proceedings, the applicant will repay the entire amount of any funds advanced by the District as a condition of LAFCO's recording of the Certificate of Completion approving the annexation and of the District's approval of the applicant's Application for Water Service.

L. Water Conservation Violation

In accordance with Section B of Regulation 15, the following charges may be imposed for a Water User's violation of the District's water conservation regulations:

1. A charge of \$50.00 will be added to the next billing for servieing the second water conservation violation as defined in Regulation 15, Section B.

2. A charge of \$100.00 will be added to the next billing for serving the third water conservation violation as defined in Regulation 15, Section B.

M. Variance Application Service Fees

1. A service fee of \$300.00 will be charged to any person or entity for a filing variance application as provided in Regulation 17, Section B.
2. If an Applicant desires a hearing at a special Board of Directors meeting, a fee of \$1,200.00 will be charged as provided in Regulation 17, Section E.

N. Multiple Unit Charge

An additional monthly per unit charge will be imposed on all multi-family accounts (i.e. duplex, triplex, etc.) billed by the District on a flat rate basis as defined below.

Multiple Unit Charge						
	01/01/09	01/01/14	01/01/15	01/01/16	01/01/17	01/01/18
Per Unit Charge	\$ <del>8.03</del>	\$ <del>8.03</del>	\$ 8.35	\$ 8.69	\$ 9.03	\$ 9.39

O. Facility Use Fees

District Facilities may be used only upon approval of the General Manager. Interested parties must apply for use of District Facilities by completing the District's "Facility Use Application." All charges for use of District Facilities, including insurance requirements, are as noted on the Application and are dependent on facility location, event duration and recovery of all District costs required for the event.

P. Public Information Request

A charge of \$0.10 per page shall be charged for requests for copying of disclosable District records. Additional charges and terms of reproduction and delivery of copies of records are provided in the District's Records Inspection, Retention and Disposal Policy, PL-Admin 002.

Q. Construction Water Charge

Water provided by the District for construction purposes will be charged subject to conditions of the service or project and in conformance with Regulation 12. The following charges will apply:

1. For a subdivision, \$16.00 per lot plus the permit fee of \$50.00, paid at plan approval. The contractor/developer will be required to pay \$2,300.00 deposit for the hydrant meter with backflow assembly or backflow



assembly provided by the District prior to taking water from the assigned District hydrant.

2. For development use other than a subdivision, \$3.00 per 1,000 square feet plus the permit fee of \$50.00, paid at plan approval. The contractor/developer will be required to pay \$2,300.00 deposit for the hydrant meter with backflow assembly or backflow assembly provided by the District prior to taking water from the assigned District hydrant.
3. For construction water taken through a District Fire Hydrant Meter, and not administered in 1 or 2 above, the contractor will be required to pay \$1.10 per hundred cubic feet of water taken, a \$50.00 permit fee, and \$2,300.00 deposit for the hydrant meter with backflow device.
4. Use of District Fire Hydrants is authorized by a permit issued by the District only, as conditioned in Regulation 13, Section D. Illegal use of a Fire Hydrant may be subject to a \$100.00 charge.

R. Plan Check Fee

An hourly rate of \$90.00 shall be assessed for review of an Applicant's construction plans as ~~defined~~ provided in Regulation 7 under Part H.1. The minimum plan check fee shall be \$900.00.

S. Supervision and Inspection

An hourly charge of \$75.00 shall be used to calculate the deposit for supervision and inspection of new or upgraded water facilities to be connected to the District system, as provided in Regulation 7, Section H.6. The minimum fee for Supervision and Inspection shall be \$600.00.

T. Hydrant Flow Test

A completed application for hydrant flow test and \$350.00 fee shall be paid in advance to supervise and perform a fire hydrant flow test and to provide written results of the test to the person or entity requesting it.

U. Service Line Charge

The charge for the installation of a new metered water service line from an existing water main as provided in Regulation 7, Section H.2. shall be not less than \$3,000.00. The estimated charge shall be paid to the District prior to scheduling the installation.

V. Service Line Relocation

The District charge for the relocation of an existing service line from an existing water main to the Applicant's parcel as provided in Regulation 7, Section H.3. shall be not less than \$3,000.00. The estimated charge shall be paid to the District prior to scheduling the relocation.

W. Abandonment of Service and Reinstallation of Abandoned Service

The District charge for abandoning an existing water service from the existing water main as provided in Regulation 7, Section K shall be calculated on a time and materials basis, with a minimum charge of \$3,000.00. The estimated charge shall be paid to the District prior to scheduling the abandonment. In addition, if requested by a Landowner, the District will restore an abandoned service connection by charging on a time and materials basis, with a minimum charge of \$3,000.00.

X. Administration Fee

This fee will be assessed to those accounts that participate in certain District programs, including without limitation the Large Irrigation Service, Wholesale Water, and Owner/Tenant Billing Agreement. Each fee is based on actual District costs for administering the individual program and is reviewed at least annually.

Y. Locking Device Replacement Fee

If the District has installed a locking device on a water meter, curb stop or service valve and such a device is damaged or removed, then the following charges shall be imposed on the Landowner:

- Lock \$10.00
- Standard Locking Device \$254.00
- Advanced Locking Device \$35.00

If installed locking devices on the same service connection continue to be damaged or removed, the District reserves the right to abandon the service. Charges for service abandonment and any subsequent reinstallation of service will be on time and materials for the abandonment of the service as provided in Section W of this Regulation 3. The charges will be added to the Customer's water bill and must be paid before service is restored.

Z. Penalty Charge

A 10% charge will be assessed on a bill that has not been paid at the time the next billing is generated as provided in Regulation No. 5.K.

# Regulation No. 4 Meter Reading

Adopted: July 19, 2004

Amended: December 21, 2009; April XX, 2015

## A. Measurement of Water Supplies

All metered water supplied by the District will be measured by means of Meters installed, owned, and maintained by the District. In accordance with Regulation No. 3, 100~~the~~ cubic feet ~~is~~ is the unit of measurement for Metered Service, and the amounts charged for Metered Service shall be based on the current rates established by the District's Board of Directors for each hundred cubic feet of water consumed ~~established by the District's Board of Directors~~.

## B. Frequency of Meter Reading

Meters normally will be read monthly. Because it is not always possible to read Meters at equal intervals, the period between reading dates may vary. Special readings will be made on commencement and termination of service and as required by special circumstances.

## C. Meters that Cannot be Read

When a Meter cannot be read because of an obstruction or other circumstances rendering the Meter inaccessible or unreadable, the Customer will be notified, ~~and if~~ if the problem lies with Customer or Premises, then the Customer shall correct the condition in accordance with Regulation 2, Section D and Regulation 16. A bill resulting from an inaccessible or unreadable Meter may be estimated for the billing period in accordance with Regulation No. 5, Section E. The account will be adjusted, if necessary, once a correct reading is obtained. Failure of a Customer to correct the obstruction within a reasonable amount of time may result in disconnection of service.

## D. Testing Meters

The District will test the accuracy of a Meter upon a Customer's written request. ~~The District may require the Customer to pay the cost of a meter test.~~ The Customer may witness the test. If a Meter is found to be working improperly, it will be repaired or replaced by the District at no cost to the Customer. If it is determined that the Meter is registering more than the actual quantities passing through the Meter as performed in accordance with the meter test procedure of the AWWA, then a credit will be applied to the Customer's account. In accordance with Regulation 2, Section J. ~~A~~ credit will not be issued for any overcharges levied more than four (4) years before the error was

| identified. If the Meter tests within the range as-set by AWWA, then the Customer may be charged for the cost of the meter test in accordance with Regulation 3, Section I.

## Regulation No. 5 Billing, Payments, and Miscellaneous Charges

Adopted: July 19, 2004

Amended: November 17, 2008; December 21, 2009; January 28, 2013; April XX,  
2015

District water service is a privilege and is maintained by prompt payment of all fees and charges and compliance with all District regulations and applicable laws governing water service. Under California law, the responsibility for paying District fees and charges results from possession of the property on which water is used, rather than from any personal obligation. California law also requires that each Parcel connected to the District water system pay its fair share of the costs to operate and maintain the system. Based on these legal principles, it is the District's policy to minimize the costs of administering the water system and to ensure each Parcel pays its fair share for operating and maintaining the District water system by requiring Landowners to be financially responsible for all fees and charges imposed on their Parcels for the privilege of receiving District water service, whether the Landowner occupies the Parcel or rents or leases it to another person or entity.

### A. Billing

#### 1. Flat Rate Service

Bills for flat rate water service will be mailed at the beginning of the monthly period. If the Customer owns and resides at the subject Premises, the District shall mail the bill to the Premises address or another address designated by the Customer. If a Landowner rents or leases the subject Premises, the District shall mail the bill to the Landowner's designated address or to his or her designated Agent. If a Premises is leased or rented, the District will mail a duplicate bill to a tenant at the Premises address only in accordance with the procedure provided below in section I. (Gov. Code section 54347, Water Code section 31007.5) Non-receipt of a bill shall not relieve a Landowner of any payment obligation to the District.

#### 2. Commercial Metered Rate Service

Bills for commercial metered rate water service will be mailed monthly, following the reading of the Meter, to the mailing address of each Landowner or designated lessee. The Landowner or his/her designated lessee shall be responsible to keep the District advised of the address to which bills are to be mailed. Non-receipt of a bill shall not relieve a Landowner or the lessee of any payment obligation to the District.

3. Residential Metered Rate Service  
Bills for residential metered rate water service will be mailed monthly, following the reading of the Meter. If the Customer owns and resides at the subject Premises, the District shall mail the bill to the Premises address or another address designated by the Customer. If a Landowner rents or leases the subject Premises, the District shall mail the bill to the Landowner's designated address or to his or her designated Agent. If a Premises is leased or rented, the District will mail a duplicate bill to a tenant at the Premises address only in accordance with the procedure provided below in section I. (Gov. Code section 54347, Water Code section 31007.5) Non-receipt of a bill shall not relieve a Landowner of any payment obligation to the District.

B. Payment

Bills are due and payable upon receipt. ~~Payment can be made viaby the District's web site, customer service telephone, shall be by mail or in person at the District Office, 3701 Marconi Avenue, Suite 100, Sacramento, California 95821, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. For billing disputes, see Section H hereof.~~

C. Returned Payments

The District shall levy a fee in accordance to Regulation 3, Section H for each check payment, electronic payment or credit card payment tendered to the District for water service charges that is returned unpaid.

D. Charges Against Deposits

The District may deduct the amount of any delinquent bill, including delinquent charges, against a security or any other deposit made to the District by the Customer liable for such bill.

E. Estimated Bills

If a Meter fails to register correctly or cannot be read, a water service bill will be based on the District's estimate of the quantity of water delivered, taking into consideration seasonal water demand and any other factors that are material and reasonable in determining a fair charge.

F. Prorated Bills

For water service bills calculated for less than a full billing period, flat rate Customers will pay a prorated amount from the first day of the billing period to the date of termination of service, or from the commencement of service until the last day of the billing period. For water meter fees and charges the bill will be calculated based on actual quantities used from the last billing date to the date the account is closed, plus the prorated charge for the fixed portion of the bill.

## G. Vacancies in Multiple Family Residences

No credit will be allowed or approved for any vacancies of multiple family residential water service accounts, unless each unit is separately metered or has a separate connection.

## H. Disputed Bills and Other Charges

Should a Customer dispute a current bill for water service, a written explanation must be received before the next regular billing. ~~All disputed bills must be paid before the due date to avoid discontinuance of water service.~~ District staff will review the account in question and contact the owner of the property to resolve the issue. If staff rules in favor of the Customer, the Customer's account will be credited for the disputed item. If the Customer is dissatisfied with the District's resolution, the Customer may appeal the staff decision to the District General Manager. If dissatisfied with the District General Manager's decision, then an appeal may be made to the District Board of Directors. All decisions made by the District Board of Directors are final. A Customer is required to pay any undisputed portion of a water service bill by the due date except as otherwise provided in Regulation 6, Section B.

If a Customer disputes any other rate, fee, charge, refund or reimbursement levied or rendered by the District, the Customer must comply with the formal claims presentation requirements of the Government Claims Act (Government Code sections 810 and following) and the District's local claims procedures ordinance, Ordinance No. 02-02. In all cases where a dispute requires a Customer to file a formal complaint, the District's action on the claim will be final and no appeal will be allowed.

## I. Duplicate Bill to Tenant; Tenant Non-Payment

1. The District will prepare and mail a duplicate bill to a €Tenant, provided the Landowner of the Premises at which the €Tenant resides satisfies all of the following terms and conditions:
  - a. The Landowner signs a financial responsibility agreement in the form provided by the District, in which the Landowner agrees to guarantee payment of any fees and charges incurred by his, her or its €Tenants as a result of District water service provided to the Landowner's Premises.
  - b. The Landowner pays a monthly duplicate mailing fee set by the District to reflect the costs of generating and mailing the duplicate bill.
  - c. If a €Tenant defaults on the payment of any fee or charge, the Landowner will promptly pay the fees and charges due upon receipt of a notice of delinquency.

2. The District reserves the right to require a Landowner to assume sole liability for payment of fees and charges if there is a history of non-payment of bills by a Tenant of the Landowner's tenants.

J. Payment of Outstanding Water Service Charges Upon Property Transfer

Consistent with the legal principles set forth in the preface of this Regulation 5, a Landowner who acquires real property in the District is responsible for paying any outstanding District fees and charges owing on the acquired Parcel regardless of the time or manner in which those charges were incurred. The District reserves the right to refuse to open an account and to provide water service to a Parcel until the acquiring Landowner pays all outstanding fees and charges. It will be the acquiring Landowner's sole responsibility to pursue any legal remedies it may have to seek reimbursement of such outstanding fees and charges from any former Landowner or occupant of the acquired Parcel. All prospective Landowners considering acquiring a Parcel within the District are urged to call the District prior to acquiring that Parcel to determine the status of its water service account.

K. Delinquency-Related Fees

1. ~~Late Fee~~Penalty Charges~~Fee~~

The District shall levy a charge in accordance to Regulation 3, Section Z4 if a District bill for water service is not paid in full by the time the District processes the next month's water bills, which in no case will be any earlier than 19 days after the bill was mailed or otherwise presented to a Customer. If a bill becomes delinquent, then a late penalty fee in the amount of 10 percent of the unpaid portion of the bill will be assessed on the account and will appear on the Customer's next water bill. The amount of a delinquent water bill and the assessed late penalty charge will continue to appear and be marked as delinquent on a Customer's bill until paid in full. The District may terminate a Customer's water service for non-payment as provided in Regulation 6.

The District also will charge interest at the rate of one-half of one percent per month on all delinquent water service bills until the principal, penalty charge and any accrued interest is paid in full. The amount of accrued interest on any delinquent water bill also will appear on a Customer's bill until it is paid in full.

In cases where a ~~penalty~~late fee is imposed on a water bill that has become delinquent, the District will have the discretion to waive the ~~penalty~~late fee in circumstances where a Customer:

- (a) ~~has filed a dispute of the subject water bill in accordance with the time limits and procedures provided in Section H of Regulation 5;~~



~~(b) — qualifies for an exemption from water service termination under Subsection 5, Section B of Regulation 6; or~~

~~(e) — upon receiving the month's bill showing the previous month's water bill as delinquent, contacts the District by no ~~late~~later than 19 days after receipt of the next month's bill to offer a reasonable and substantial excuse for non-payment of the previous month's bill, requests a waiver of the ~~late~~penalty chargefee, and is willing to immediately pay the full amount of delinquency (less the assessed ~~late~~penalty chargefee) by telephone or in person. In determining whether to grant or deny a Customer's request to waive a ~~late~~penalty chargefee, the District may request additional information from the Customer documenting the excuse and may consider the Customer's payment history and waiver request history.~~

## 2. Notice of Termination or Turn Off

The District shall levy a charge in accordance to Regulation 3, Section B.2 if a District employee must be dispatched to deliver a notice of termination due to delinquency, or terminate water service due to a delinquency or an illegal restoration of a water service in a disconnect status.

# Regulation No. 6

## Disconnection and Restoration of Service

Adopted July 19, 2004

Amended: November 17, 2008; December 21, 2009; January 28, 2013; April XX, 2015

### A. Disconnection by the District

The District reserves the right to disconnect any connection to the District Water System and to discontinue water service for any of the following reasons:

1. A ~~Water User~~Customer fails to comply with any of the District's regulations.
2. The District is furnishing service without a proper application on file.
3. There is evidence of unlawful tampering or interference with the District Water System.
4. The District or a state or county public health officer finds that there exists a condition hazardous to the health and safety of any ~~Water User~~Customer of the District.
5. A Customer fails, after notice from the District, to remove an obstruction that prevents reading of his/her Meter or observation or repair of any connection at the Point of Responsibility.
6. Failing to install or upgrade an authorized Backflow Prevention ~~Device~~ Assembly per Regulation 14, Section G.
7. Committing unlawful acts as defined in Regulation 13.
8. For failure to conserve water as provided under Regulation 15.
9. Failure to provide access to property for operation and maintenance of District facilities upon request.
- ~~9.10.~~ Failure to repair a leak on a Customer's System after being notified by the District.

### B. Nonpayment of Bills

The District reserves the right to terminate a Customer's water service for non-payment of any bill rendered by the District upon the following conditions:

1. A District bill for water service becomes delinquent because it is not paid in full by the time the District processes the next month's water bills, which in no case will be any earlier than nineteen (19) days after the bill was mailed or otherwise presented to the Customer, and the Customer is otherwise not excused from the delinquency as provided in Section K.2, Regulation 5 and this Section.
2. When an account is two billings delinquent, ~~t.~~ The District mails to the Customer at his or her last-known address a 15-day notice of impending service termination at least nineteen (19) days after the delinquent bill was mailed, and at least fifteen (15) days before water service is to be terminated. The 15-day notice will be included in the third bill statement.
3. The District gives final notice of a delinquent water bill and pending termination at least forty-eight (48) hours before water service is to be terminated. The 48-hour termination notice will be delivered to the Parcel where the service is provided and left at the front of or the principal entrance to any structure located thereon. At the District's discretion, this notice may be delivered by priority mail, certified mail, return receipt requested or overnight delivery service. By delivery in this manner the notice may be left where the Customer's typically receives mail delivery. The 48-hour period will commence upon delivery of the notice.
4. During the notice periods described above in subsections (2) and (3), the Customer fails to make full payment of the delinquent charges and any late fees, penalties or other charges accrued thereon, or to make satisfactory arrangements with the District for payment of those amounts.
5. Government Code section 60372 provides general procedures for terminating utility service by public agencies. Subdivision (b) states exceptions to the general rule provided in subdivision (a) that a public agency may terminate utility service for non-payment upon proper notice of the delinquency and impending termination. The exceptions in subdivision (b) are limited to: (1) the time during which a public agency is investigating a Customer dispute or complaint; (2) any extension period a public agency has given a Customer for paying a past due bill; or (3) a licensed doctor's certification that the Customer's life will be threatened if the utility service is terminated, and the Customer is unable to timely pay the bill and is willing to enter into an amortization agreement not exceeding 12 months to repay the delinquent balance.

C. Charge for Service Restoration After a Termination

The District will levy a termination charge in accordance with Regulation 3, Section B.2, which will be added to a bill for any service that has been terminated due to delinquency. The District will impose this charge in addition to the dispatch charge in accordance with

Regulation 3, Section B.2 if the District must deliver a 48-hour delinquency notice. A Customer must pay current all charges and fees before water service will be restored, except as provided in subsection B.5: hereof.

Upon service termination, if the District has installed a locking device and such a device is damaged or stolen, then a charge sufficient to cover the District's cost for replacing said device will be added to the Customer's water bill and must be paid before service is restored in accordance with Regulation 3, Section Y.

D. Termination of Service by Customer

The District will terminate water service on any business day during regular business hours (not a Saturday, Sunday, or Holiday) requested by a Customer, provided that the request is received by the District at least two (2) business days prior to the requested date of termination. The Customer must advise the District if the Premises is occupied. If the Premises is occupied, a 10-day notice of termination will be delivered to the Premises and left at the front of or to the principal entrance or any structure located thereon. Prior to termination, a 48-hour notice to terminate will be delivered to the Premises and left at the front of or the principal entrance to the residence or other structure located on the Premises. If the Premises is unoccupied, a 48-hour notice to terminate will be delivered to the Premises and left at the front of or the principal entrance to any structure located thereon. After the 48-hour period water service will be terminated. The Customer will be responsible for all service furnished by the District prior to the termination of his, her or its service.

E. Notice of Lien

When a Customer's water bill becomes delinquent and/or when the District terminates water service as provided in Sections A and B above, or when the District has determined that the recovery of the amount due may be uncertain due to abandonment of a Parcel and/or Service Connection, then the District may file with the Sacramento County Recorder a Notice of Lien, setting forth the legal description of the Parcel, the amount of the obligation owed, specifying that the same is owed to the District, and that all delinquent service charges, together with late fees, penalties and interest, are a lien against the Parcel to which the service was provided. (Govt. Code section 54354.) The District also may choose to collect any delinquent charges by any other legally-permitted means within its authority.

F. Restoration of Service

For service that the District has disconnected or terminated, a Customer desiring to restore such service shall pay current all delinquent rates, fees, and charges, and if the District so determines, pay a security deposit in accordance with section F of Regulation No. 3. In addition, as condition for restoring service, the District may require the Customer to upgrade the existing water service. The extent of upgrade shall be at the District's discretion, and shall conform to District Specifications and Standard Detail No.

13 for Single Family Residence and Nos. 14, 15 and 16 for Metered Services. A Backflow Prevention Device-Assembly will be required with each Meter that serves any non-domestic use, including for irrigation. Installation of such devices shall comply with Sacramento County Standard Drawing #8-8A, Drawing #8-8B and Drawing #8-8C for Backflow installation only.

I was wondering if there's any way we can spell out the options a customer has in regards to stopping water service. I've never fully understood what our policy was on stopping service, going on seasonal disconnect or suspending an account. I know it happens at McClellan, but it must happen all over the District, where customers are allowed to call in and suspend their accounts and not pay any monthly fee. This issue should be addressed since the District is still responsible for maintaining the system and providing water for fire suppression. In theory a customer can avoid having to pay for abandoning a service (per Regulation 3, Section W) and simply suspend their account for eternity. Seems wrong. – David E.

Regulation No. 7  
New or Additional Service Connections

Adopted: July 19, 2004

Amended: December 19, 2011; March 19, 2012; January 28, 2013;  
March 18, 2013; April 21, 2014; April XX, 2015

Requirements for New or Additional Service Connection

Water Service from Sacramento Suburban Water District is not transferable or assignable and is subject to full compliance with the District's Regulations Governing Water Service, including the following terms and conditions:

A. New or Additional Service Connections Generally

No New Service shall be connected to the District Water System unless there exists a District water main in a street or right-of-way fronting an Applicant's property accessible to the proposed location of the Applicant's service. ~~A Water-s New Services will be moved from the backyard to~~ located only in the front of a Parcelyard if a water mainline replacement project fronts the a eCustomer's property. No water-s New Services shall remain be permitted in a backyard applications for any reason. ~~The A~~ A District water main available to serve a New Service shall have Adequate and Reserve Capacity and pressure to provide safe and reliable water service for domestic and fire protection use as solely and conclusively determined by the District. The District, in determining the adequacy of the existing facilities, will take into consideration all factors such as the water requirements of the project to be served by a nNew Serviceeconnection, the flows required for fire protection, and whether the use of the water will significantly impair service to existing Customers. If the District determines that the New Service will not be connected into the District Water System unless the Applicant provides such adequate extensions or additions as may be necessary in accordance with District regulations, Master Plan and technical specifications, then the District shall determine the location, capacity, and design of such extensions or additions and provide its determination to the Applicant. In making this determination, the District may consider all factors, including but not limited to, anticipated future land uses, water requirements, the desirability of looping water mains to increase reliability and adequacy of service, required flows needed for fire protection, and the long range plans for capital improvements of the District Water System. The District's determination will be conclusive on the Applicant.

B. No Prior Service

1. Adequate Main Abuts Applicant's Parcel

A New Service will be connected provided the following conditions are fulfilled:

- (a) The Parcel to be served is within the District's geographical boundaries or is annexed to the District in accordance with an order of the Sacramento County Local Agency Formation Commission (LAFCO);
- (a)
- (b) The Applicant's Parcel is or has been made subject to applicable bonded indebtedness of the District, if any;
- (c) The District possesses adequate water supply to serve the Applicant's requested needs;
- (d) A District water main of Adequate and Reserve Capacity exists in a public right-of-way fronting the Principal Boundary or Principal Boundaries of the Applicant's Parcel, where the public right-of-way is less than 80 feet wide. For public rights-of-way 80 feet or wider, a water main of Adequate and Reserve Capacity shall exist fronting the Applicant's Principal Boundary from within the area measured from the centerline of the public right-of-way to the Applicant's property line contiguous to the public right-of-way; and
- (e) An Application for Water Service has been filed with the District in compliance with Section D, hereof.

2. No Adequate Main Abuts Applicant's Parcel

Service will be connected provided the following conditions are fulfilled:

- (a) The Parcel to be served is within the District's geographical boundaries or is annexed to the District in accordance with an order of LAFCO;
- (b) The Applicant's Parcel is or has been made subject to applicable bonded indebtedness of the District, if any;
- (c) The District possesses adequate water supply to serve the Applicant's requested needs;
- (d) The Applicant will provide a main of Adequate and Reserve Capacity at his/her own cost and expense, which main shall be constructed in a public right-of-way fronting the entire frontage of the Applicant's Parcel. Should the Applicant's Parcel front two or more rights-of-way, the Applicant shall be required to install the main along the Parcel's Principal Boundary as designated in the District's Master Plan as the right-of-way necessary to provide for future extension of the District's Water System capabilities and facilities. Should the Applicant be required to service the Parcel from a right-of-way other than the principal right-of-way (service shall also mean fire service if required by the applicable fire agency), then the

Applicant shall be required to install water mains of Adequate and Reserve Capacity along both the principal and the service frontage. All provisions for main extensions shall be in accordance with all applicable District Regulations, Master Plans, Plans and Specifications; and

(e) An Application for Water Service has been filed with the District in compliance with Section D, hereof.

### C. Prior Service

1. A Parcel to which service has been discontinued will be re-connected upon the filing of a new application together with the payment of all fees and the upgrade of all District facilities affected by the re-connection as required by District Regulations.
2. If any one of the following, but not limited to, conditions exists on an Applicant's Parcel, the District will require an upgrade of the existing service before reconnection to the District Water System will be permitted:
  - (a) An improvement on the Parcel requires an increase in water pressure or quantity. The District's increase of water pressure or quantity determination shall be based on the quantity of added water use facilities to be installed as a result of the improvement. The Applicant's engineer shall submit to the District a record of all the plumbing fixtures and flows required to serve all existing and proposed improvements on the Applicant's Parcel. Based on this information, the District shall determine, if the existing service is adequate to serve the Premises. The District shall use AWWA Standards to determine the adequacy of all services and the consequent need for upgrades.
  - (b) An improvement on the Parcel requires increased water pressure or quantity in order to satisfy ISO Fire Suppression Standards as more specifically described in Regulation No. 9, Section O, hereof.
  - (c) An improvement changes a multiple unit Premises from master-metered to individually-metered units.
3. In those cases when service has not been interrupted but the Parcel has been improved, the provisions and requirements of Regulations Nos. 7 and 9 hereof shall apply if any one of the conditions described above in subparagraph 2 exists.

### D. Application for Service

1. The District will not provide or continue service to any Parcel unless the present Landowner has filed an Application for Water Service with the District.



2. Application for service shall be made in writing on forms provided by the District and signed by the Landowner.
3. Applications shall be supported by plat maps and a legal description of the Parcel, and a project description that includes construction type and number of living units, plan of water distribution, project approval by the appropriate fire service district, the planned service date, the name and billing address of the Landowner, the domestic water requirements in gallons per minute, and the total fire-flow requirements, as well as the location of existing and/or proposed fire hydrants to meet applicable fire-flow requirements.
4. • The failure of an Applicant to request the connection of his or her Parcel to the District Water System within one year of the District's Plan Approval shall automatically terminate the application and entitle the Applicant to the return of all fees paid except the plan check fee, any annexation fee, and ~~any permit~~ other fees as described in Subsection G hereof. A request for refunding of fees shall be made in writing to the District.
5. The Applicant must deposit with the District, on or before the Plan Approval date, an amount equal to the cost of all Extension Facilities proposed to be constructed by the District, together with all service charges, fees, and Facilities Development Charges in effect on the date of the Final Approval.
6. Any decision by the District's staff concerning an application for service is appealable to the District Board of Directors or the Board's Facilities and Operations Committee. An Applicant's appeal must comply with the applicable requirements provided in Regulation 17, Procedures for Variance Application.
7. In situations where a retail municipal water supplier must allocate service connections due to supply limitations, Government Code section 65889.7 requires the District to provide a service priority to proposed residential developments that include units affordable to lower income households, as such are defined in Health & Safety Code sections 50052.5, 50053 and 50079.5. The District currently has sufficient supplies to serve all anticipated new demands and given its largely built-out condition, expects to have sufficient supplies to meet all future new demands. If, however, an allocation of new services becomes necessary, the following states the District's low income housing priority policy. An application for service to a proposed development that includes housing units affordable to lower income households, as defined by Government Code section 65589.7(d)(1), shall not be denied, conditionally approved, or the amount of service applied for reduced without specific written findings that the denial, condition, or reduction is necessary due to one or more of the following:
  - a. The District does not have "sufficient water supply," as defined in paragraph (2) of subdivision (a) of Section 66473.7, or is operating under a water shortage emergency or distribution capacity to serve the needs of the proposed development, as demonstrated by a written engineering analysis and report;

- b. The District is subject to a compliance order issued by the State Department of Public Health that prohibits new water connections;
- c. The Applicant has failed to agree to reasonable terms and conditions relating to the provisions of service generally applicable to development projects seeking service from the District, including, but not limited, the requirements of local, state, or federal laws and regulations or payment of a connection fee or capacity charge imposed pursuant to Government Code section 66013.

In accordance with Water Code section 10631.1, the District will include in its Urban Water Management Plans projections of water use by single- and multiple-family housing needed for low income families.

#### E. Water Main Sizes

1. The size of water mains to be installed in accordance with this Regulation 7 shall be in compliance with the provisions of Regulation 9, Sections N and O ~~hereof~~.
2. Whenever Extension Facilities are required to be installed in accordance with this Regulation 7, the District may require, in accordance with its approved Master Plan and for the purposes of public convenience, necessity, and safety, the installation of an Up-Sized main ~~Line larger than the size required to serve the Applicant's Parcel or Parcels ("Service Connection")~~. Whenever the District requires the installation of ~~such an Up-Sized Line~~, the line shall be designed in accordance with one of the following procedures at the District's option:
  - (a) An Applicant, with approval from the District, shall have his or her engineer design the Up-sSized ~~Line~~. The Applicant shall competitively bid and in accordance with the lowest responsive and responsible bid, construct the extension facility in accordance with the following conditions:
    - (1) The Applicant's engineer will prepare a spreadsheet detailing the Applicant's cost of installation of the line size required in accordance with provisions of Regulation 9, Sections N and O.
    - (2) The Applicant's engineer will prepare a spreadsheet detailing the cost of the installation of the Up-Sized Line.
    - (3) The Applicant's engineer shall design plans and specifications for both the main size required in accordance with District Regulations and the Up-Sized Line. The design of the water mains shall be according to District Standards with plan review, revisions, and Plan Approval by District staff.

- (4) The District shall pay to the Applicant, when the job is completed and accepted by the District, the difference in cost between the cost of the Up-Sized Line based on the lowest responsive and responsible bid and the cost of the installation of the line of the size required to adequately serve his or her Parcel, based on the average of the three lowest responsive and responsible bids. The District shall pay for the Up-Sized-Line in accordance with Regulation 9, Section L.
  - (5) The Applicant shall pay to the contractor the full cost of the main installed.
  - (6) The Applicant shall pay all of the District's fees, charges and costs ~~as related to~~ required for the installation of the water main.
  - (7) The Applicant shall comply with all applicable regulations of the District and any amendments adopted from time to time by the Board of Directors.
- (b) The District shall design plans and call for separate bidding to construct the Extension Facilities as follows:
- (1) District staff will prepare spreadsheets detailing the cost of installing the line size required in accordance with provisions of Regulation 9, Sections N and O.
  - (2) District staff will prepare spreadsheets detailing the cost of installing the Up-Sized Line.
  - (3) The Applicant shall pay to the District the full cost of the installation of the line of the size required to adequately serve his or her Parcel, based on the average of the three lowest responsive and responsible bids, and the District will pay the difference for the cost of the Up-Sized Line as contained in those bids. Applicant's payment to the District shall be no later than 30 calendar days after the District has awarded the project.
  - (4) The Applicant shall comply with all rules and regulations of the District and any amendments adopted from time to time by the Board of Directors.

#### F. District Final Plan Approval

The date of the District's final Plan Approval is defined as that date when the District shall, after receipt of all applicable fees, charges, applications and grants of easements, date and sign the Applicant's plans as approved for construction, or where no Extension

Facilities are required, on that date when the District shall, after receipt of all applicable fees, charges, application and grants of easements, approve and date the said application. Should Applicant not obtain District's approval of his or her plans, the Applicant shall not be allowed to connect to ~~any-the~~ District Water System facilities until he or she has obtained final Plan Approval. The District's Final Plan Approval is subject to all time limits and other restrictions provided in this Regulation 7 and such approval does not create any vested right in an Applicant except to the extent provided herein.

G. Expired Plans/Un-Built Projects

If construction of the required extension has not begun on the one-year anniversary date of Plan Approval or the District receives a written statement from an Applicant that the project will not be built, the District shall deem the plans void. The District will refund collected fees upon the Applicant's written request, except for plan review, hydrant permit, construction water, annexation, and fire hydrant flow test fees. Should an Applicant resubmit plans for approval, the District will review the plans in accordance with this Regulation 7 and Regulation 9. New and/or additional fees will be calculated and assessed for review of resubmitted plans. New Plan Approval shall be per Section F hereof.

H. Charges for New or Improved Service Connections

1. Plan Check Fee

A charge shall be assessed by the District for the review of the Applicant's construction plans for new or improved water service. The charge will be assessed at the rate of \$90.00 per hour for each District employee assigned to the review. In addition, the District may charge staff time or consultant fees at cost for any additional services required as part of the review, including but not limited to, hydraulic analyses, site verification, and research. The District shall estimate the cost of reviewing such plans and notify the Applicant of the estimated costs for the services required. The Applicant shall deposit with the District the estimated plan check costs as a condition precedent to plan review. In the event that the actual cost for plan checking incurred by the District exceeds the amount deposited, the Applicant shall pay the excess fees due to the District before final Plan Approval. The charge for Plan Review shall be in accordance with Regulation 3, Section R.

2. Service Line Charge

The District charge for the installation of a new-metered water service line from the existing water main to an Applicant's Parcel shall equal the District's actual cost of materials, installation, labor, equipment, and normal overhead charges. The charge for the installation of a new ~~Service Line Installation~~ shall be in accordance with Regulation 3, Section U.

3. Service Line Relocation

The District charge for the relocation of a service line from the existing water main to an Applicant's Parcel (which will be relocated according to current specifications) shall equal the District's actual cost of materials, installation, labor, equipment, and normal overhead charges. The charge for relocation of a Service Line Relocation shall be in accordance with Regulation 3, Section V.

4. Water Meters

District charges for installing and setting water meters will consist of the District's actual cost of materials, labor, equipment, installation, and overhead. The installation of a metered ~~new Metered~~ Service shall be charged according to Section H.2 of this Regulation 7, provided that all applicable conditions of the District's Regulations have been satisfied. When the only service rendered is restoring water service by reinstalling a Meter, a charge will be assessed in accordance to Regulation 3, Section I for each reinstallation.

5. Facilities Development Charge

To cover a portion of the District's costs incurred for the installation of wells, pumps, and storage and treatment facilities, and to provide a fund for reimbursement of a portion of Customers' costs of Extension Facilities pursuant to Regulation No. 9, Section A, a Facilities Development Charge will be imposed in accordance with the following following-schedule for each new or improved service:~~for each new or improved service:~~

<u>Service Size</u>	<u>Facilities Development Charge*</u>
<u>5/8"</u>	<u>\$3,130.00</u>
<u>3/4"</u>	<u>\$4,672.00</u>
<u>1"</u>	<u>\$7,802.00</u>
<u>1 1/2"</u>	<u>\$15,558.00</u>
<u>2"</u>	<u>\$24,902.00</u>
<u>3"</u>	<u>\$46,720.00</u>
<u>4"</u>	<u>\$77,882.00</u>
<u>6"</u>	<u>\$155,718.00</u>
<u>8"</u>	<u>\$249,158.00</u>

<u>10"</u>	<u>\$358,202.00</u>
<u>12"</u>	<u>\$525,600.00</u>

\* Each year the Facilities Development Charges will be adjusted to reflect cost changes in materials, labor or real property applied to projects or project capacity. This adjustment in cost is not considered a change in the Facilities Development Charge methodology. The cost adjustment shall be made by applying one or more specific cost indexes or other periodic data sources. A specific cost index or periodic data source must be:

1. A relevant measure of the average change in prices or cost over an identified time period for materials, labor, real property or a combination of the three;
2. Published by a recognized organization or agency that produces the index or data source for reasons that are independent of the Facilities Development Charges methodology;
3. Publicly-available and generally recognized in the utility industry as an authoritative resource for calculating periodic cost adjustments; and
4. Shall be adopted from time to time by Resolution of the Board

The effective date of the recalculated Facilities Development Charges will be April 1<sup>st</sup>. A comprehensive review and update of Facility Development Charge methodology shall occur at least every five years.

Private Fire Protection

<u>Size of Each Private Fire Service Connection</u>	<u>Private Fire Protection Connection Fee **</u>
<u>4 Inch and under</u>	<u>\$1,750.00</u>
<u>6-inch</u>	<u>\$1,825.00</u>
<u>8-inch</u>	<u>\$1,900.00</u>
<u>10-inch</u>	<u>\$1,975.00</u>
<u>12-inch</u>	<u>\$2,050.00</u>

\*\*Each year the Private Fire Protection Connection Fee will be adjusted to reflect cost changes in materials, labor and other relevant costs. The cost adjustment shall be made by applying one or more specific cost indexes or other periodic data sources. A specific cost index or periodic data source must be:

1. A relevant measure of the average change in prices or cost over an identified time period for materials, labor, real property or a combination of the three;

2. Published by a recognized organization or agency that produces the index or data source for reasons that are independent of the Facilities Development Charges methodology;
3. Publicly-available and generally recognized in the utility industry as an authoritative resource for calculating periodic cost adjustments; and
4. Shall be adopted from time to time by Resolution of the Board.

The effective date of the recalculated Private Fire Protection Connection Fee will be April 1<sup>st</sup>. A comprehensive review and update of Private Fire Protection Connection Fee shall occur at least every five years.

Service Size	Facilities Development Charge*
5/8"	\$2,762.00
3/4"	\$4,122.00
1"	\$6,884.00
1 1/2"	\$13,726.00
2"	\$21,970.00
3"	\$41,220.00
4"	\$68,714.00
6"	\$137,386.00
8"	\$219,826.00
10"	\$316,034.00
12"	\$463,725.00

\* Each year Facilities Development Charges will be recalculated using data as of or for the year ended December 31<sup>st</sup> of the prior calendar year which will include adjustments for (1) new water system facilities, (2) facilities no longer in service, (3) changes in cost indices and depreciation, (4) changes in work in progress and available reserves, (5) changes in outstanding debt principal, and (6) changes in the number of 3/4 inch equivalent meters. The effective date of the recalculated Facilities Development Charges will be April 1<sup>st</sup>.

Private Fire Protection

Size of Each Private Fire Service Connection	Facilities Development Charge**
--	---------------------------------

4 Inch and under	\$1,750.00
6 inch	\$1,825.00
8 inch	\$1,900.00
10 inch	\$1,975.00
12 inch	\$2,050.00

~~\*\*Each year the Facilities Development Charges for Private Fire Protection will be recalculated to recover District costs associated with plan review, inspection, instruction and maintenance of private fire service connection using data from the prior calendar year. The effective date of the recalculated Facilities Development Charges for Private Fire Protection will be April 1<sup>st</sup>.~~

The District will determine the Facilities Development Charge for services greater than twelve (12) inches at time of application.

- (a) In the event that the Facilities Development eCharges assessed to the Applicant impose a financial burden on his or her project, the Applicant may request that the District enter into a deferred payment plan on the all of following terms:
- (1) The written application includes a request for deferment of the payment of all or part of the Facilities Development Charge.
  - (2) The District Board of Directors must approve the request.
  - (3) The request is accompanied by a surety bond or an irrevocable letter of credit in an amount equal to the Facilities Development Charge imposed on the Applicant as specified above, and the specified security is issued by a surety or financial institution authorized to do business and in good standing with the appropriate agency of the State of California.
  - (4) The deferment request is accompanied by an executed Contract on a form provided by the District, which Contract includes the provisions of this subsection and provides for the payment of such Facilities Development Charges as may be in effect on the date of ~~said~~ payment, together with interest at the legal rate. The Contract also will provide that the Applicant will pay the Facilities Development Charge in full no later than a date that is no more than 12 months from the date of the filing of the Service Application with the District.



- (5) The written application and accompanying plans must comply with all applicable District Ordinances, Regulations, Plans and Specifications.
- (6) The deferment rights granted to an Applicant, if any, are not assignable except upon the District's written consent.

6. Supervision and Inspection Charges

A charge shall be assessed for District supervision and inspection of water system improvements based upon hourly rate of \$75.00 per hour. At the time of service application, the District will estimate the minimum cost for District supervision and inspection of the proposed water system improvements, which the Applicant shall deposit with the District in advance of Plan Approval, in addition to all other charges owing under the District's regulations. In the event that actual supervision and inspection costs for supervision and inspection incurred by the District exceed the amount deposited, the Applicant will pay the excess fees due to the District as a condition precedent to final District acceptance of the water system improvements and connection of service. Should any additional costs be required due to damage to District facilities by Applicant's contractor during construction, the cost shall be billed separately to the contractor. The contractor's payment of billed damages shall be due as a condition of commencing water service and final District acceptance of the improvements. The charge for Supervision and Inspection shall be in accordance with Regulation 3, Section S.

Should the need for an inspection occur weekdays ~~after~~ between 4:30 p.m. and 8:00 a.m. the following day, or on weekends or holidays, the requested inspection shall be scheduled through the District to ensure the availability of personnel for the time requested. Overtime costs for inspections outside of normal business hours by District personnel shall be calculated and paid by the Applicant in advance of scheduling the after-hours work. The overtime charge shall be at least one and one-half (1½) times the standard hourly rate for inspection.

7. Fire Hydrant Flow Test

When requested by the local fire agency having jurisdiction over a project within the District, a fire hydrant flow test will be performed to determine the flow available at the test date. The flow test will only demonstrate the pressure and distribution capabilities at the time and under the conditions existing when the test is performed. The District will not guarantee that the flow test results obtained will be consistent with flows available at all times and under all conditions.

Flow tests will be performed either in the field or using the District's updated water model. Tests will be performed by District staff as time allows but not to exceed 4- weeks after a request is made. For design purposes, Fire flow tests completed by using the water model will be run with the most conservative

assumptions reasonable in order to establish the be assumed projected the worst case conditions prevailing scenario of in the District's water system and are the most conservative for design purposes.

A charge will be assessed for the District to supervise and perform the test and to provide written results. The charge shall be in accordance with Regulation 3, Section T.

8. Bacteriological Testing

After installation and disinfection, the District will sample a-all new mainline eExtension Facilities and have the sample tested by a certified laboratory for bacteria. The Extension Facilitiesmainline will be super-chlorinated and flushed using at least three (3)-times the volume of water in the mainlinefacilities before bacteria testing is to begin. After flushing is complete, the first set of bacteria testing will be collected from the Extension Facilities. Twenty-four (24) hours after the first collection, a second set of bacteria testing will be collected. If the new mainline eExtension Facilities fails to meet applicable federal, state and local bacteriological standards, the Applicant will be responsible for re-disinfecting and re-testing those new Extension Ffacilities until they pass. A charge for this test and any required retests will be assessed in accordance to Regulation 3, Section J.

9. Backflow Test Charge

A charge will be assessed for the District to test all Backflow Prevention Devices Assemblies as part of a new development to verify the operating status of each such device. If thea bBackflow Prevention Assembly doeses not pass the first inspection, the contractorApplicant will be required to repair the bBackflow Prevention Assembly and re-test it at the contractorApplicant's expense. The Eachinitial backflow test charge shall be in accordance with Regulation 3, Section D.

10. Environmental Document Charge

Whenever the District determines that an environmental impact report or other environmental document is required for a proposed eExtension fFacility necessary to serve an Applicant's Parcel, the District will estimate the cost of preparing such a document, including overhead expenses, preparation, and hearings. In addition to all other costs that may be due to the District for provision of service, the Applicant shall deposit with the District the estimated Environmental Document Charge as a condition precedent to the District's approval of an environmental document. In the event that the actual cost to prepare an environmental document exceeds the amount deposited, the Applicant will pay the excess amount before Final Approval. If the deposit exceeds the cost, the District will refund the balance.

In the event that the Applicant delivers to the District a certified copy of an environmental document duly approved and filed by the County of Sacramento relevant to the Applicant's Parcel, the District may determine, in its sole discretion, that the provisions of this paragraph ~~may do not~~ apply.

## 11. Furnish-Only Fees

Meters, as shown on the standard detail drawing of the District's Improvement Standards and Technical Specifications adopted by the Board of Directors and any revision thereto, are required on all new or improved domestic Service Connections and shall be Furnish-Only Materials by the District. The District will charge ~~furnish-only fees~~ for Furnish-Only Materials to an Applicant in accordance with the number, the cost, and the District's inventory and overhead cost for furnishing the required Meter(s).

### I. Water Service

The District shall make water service available to an Applicant's new or improved Service eConnection subject to the following terms and conditions:

1. No service shall be granted or continued unless an Applicant has filed an application for service on a District-furnished form.
  - (a) All new construction and improved Parcels shall have a Meter installed street side of property on the Principal Boundary no more than one foot behind a sidewalk or curb. Backyard meters will only be installed if no waterline is available in Sacramento County ROW.
  - (b) Monthly water billing shall be computed on actual consumption based on the Metered Rates in Regulation No. 3.
  - (c) A separate Service Connection and Meter shall be installed on each Parcel. A separate Service Connection may include multiple meters except as otherwise limited by this Regulation 7.
  - (d) If a Parcel is found to be served by more than one Service Connection, it will be at the sole discretion of the District, in consultation with the Customer, to determine how the parcel will receive water through a metered connection(s). The owner of the parcel will be responsible for the cost of any changes to the service configuration, including the abandonment of any existing unused Service Connection or the upgrade to District current standards of additional Service Connections as determined necessary by the District.
  - (e) The minimum water service size for a new residential Service Connection shall be one inch in diameter.

- (f) No more than one Service Connection per Single Family Residential Parcel will be permitted unless otherwise determined by the District.
  - (g) Each residential unit is required to have its own District-approved Service Connection.
  - (h) A separate metered irrigation service shall be required for all non-residential units.
  - (i) No credit will be allowed for vacancies in multiple family residential units.
  - (j) All non-residential services and including multi-family residential structures containing 3 or more units fed from a single connection point) services shall have water meters with an approved Backflow devicePrevention aAssembly.
2. Use of a 5/8" meter shall be limited to multi-family residential units fed by a single water service such as, but not limited to, duplexes, triplexes, fourplexes, apartment buildings with five or more residential units, and condominiums.
  3. Voluntary Meter Installation on an Existing Residential Service
    - (a) At a Landowner's request, the District will install a permanent Meter on an existing un-metered Service Connection for a residential Parcel at no direct charge. However, should the Parcel be within a current main replacement project area that is scheduled for a new water service installation a new meter will be installed only after the installation of the new water main.
    - (b) Upon installation of a Meter, the District will compute and charge the Parcel's water bill based on actual consumption at the Metered Rates stated in Regulation No. 3.

J. Connection to Facilities Extended by District

1. If an Applicant for water service to a Parcel fronting Extension Facilities built with District funds desires to connect to such facilities, he or she shall deposit with the District, together with a New Service application, a portion of the total cost of designing and installing the Extension Facilities. The Applicant's cost share shall be determined by comparing the length of the Applicant's frontage along the right-of-way in which the water service facilities will or have been located to the total combined frontage along said right-of-way of all Parcels served by the Extension Facilities. The District also will calculate and charge all other applicable fees and charges established by District Regulations.

2. If an Applicant chooses, payment of the costs and charges to connect to District-constructed Extension Facilities as defined in Regulation 9, Section A may be deferred for a period not to exceed 12 months from the date on which the District approves the Application for Water Service, provided:
  - (a) The Applicant requests the District defer the charges in writing before the date the application is approved, and
  - (b) The full amount of such fees and charges together with interest thereon at the legal rate is guaranteed by a surety bond issued by a surety company acceptable to the District, and the Applicant executes an agreement to make such payment together with interest at the legal rate within the 12-month deferment period, and
  - (c) The deferment is not transferable.
3. Reimbursement for eligible costs of Extension Facilities as defined by Regulation 9, Section A will not be made until all connection charges have been paid by the Applicant.

#### K. Abandonment of Service Line

The District charge for the abandonment of an existing water service from the existing water main to the aApplicant's pParcel shall equal the District's actual cost of materials, labor, equipment and normal overhead charges. The charge for service abandonment shall be in accordance with Regulation 3, Section W.

#### L. Existing Services

All Service Connections that are not directly affected by an improvement, but which exist on a Parcel to be improved, shall be upgraded to current District Standards if the Landowner intends to use such service(s) in the future. If the unaffected Service Connection(s) will not be used, the Landowner shall be required to abandon such service(s) in accordance with District Standards. This requirement applies to all services that serve other buildings or appurtenances on the Parcel being improved.

District-required upgrades of existing Service Connection(s) shall include, but are not limited to, repair, upgrade and/or replacement of existing facilities to current District Specifications and Standard Details.

Credit will be given for existing unused services on improvement projects affecting the Parcel. Credit will be given in the amount of the existing Facilities Development Charge on the Plan Approval date, subject to abandonment of the unused Service Connection(s)

as required herein. Credit will only apply to new Facilities Development Charges and will not exceed the total for the project.

| M. Existing Services on Split Parcels

| After a parcel split, the existing service will serve only the Parcel on which it is installed. If any unserved portion of a split Parcel will be developed, the Landowner shall be required to install a New Service on such Parcel(s) in accordance with all applicable District ordinances, rules, regulations, plans and specifications.

# Regulation No. 8

## Location and Number of Meters

Adopted: July 19, 2004

Amended: December 17, 2007; December 21, 2009; April XX, 2015

### A. Number of Meters

A Service Connection and Meter shall be established for each Parcel in accordance with the provisions of Regulation 7, Section I. A Backflow Prevention ~~Device~~ Assembly shall be required on all non-residential services, irrigation services, and multi-family structures with (three or more units) fed from one sService Connectionpoint, and on all residential Meters used for business purposes as determined by the District. No more than one service shall serve a single Residential Parcel unless a Customer requests multiple Meters and, as determined by the District, the Parcel's service needs require multiple Meters.

### B. Location of Meters

The location of Meters shall be governed by the following:

1. Meters shall be installed along the Principal Boundary of a Parcel no more than one foot behind the Sacramento County right-of-way. The Meter shall be installed at a location convenient to Applicant and to the District, but shall be installed in accordance with the District's applicable detailed drawings and specifications.
2. ~~The Meters~~ shall be installed outside of driveways or areas used by heavy equipment and, when applicable, within an area with sufficient space for installation of a Backflow Prevention ~~Device~~ Assembly.
2. ~~Meter shall be installed street side of property no more than one foot behind Sacramento County right-of-way (ROW). No meters shall be installed in backyards unless no water main is available in ROW. However, upon installation of new water main in ROW; meter and appurtenances will be moved to street side of property on an agreed location with property owner.~~

### C. Size of Meter

The size of Meter for each Service Connection may be selected by the Applicant in accordance with AWWA Standards for recommended maximum flow rates for continuous operation of coldwater-type Meters that are in effect at the date of the service application. In general, the meter size shall match the service line size to the Parcel or as shown in the District's Specification and Standard Details. In no case will a meter be

installed that is less than one nominal size increment smaller than the service line size without approval of the General Manager or designee.

Residential buildings that have fire sprinklers shall not be allowed to downsize their meter without approval from design engineer and the Sacramento Metropolitan Fire District.

D. Change of Size

A Meter will be replaced with a different sized Meter upon a Customer's request. Any Facilities Development Charges in excess of the current value of the existing size service shall be paid by the Customer, together with any District costs for any necessary modifications or changes to the service line to accommodate the new Meter. If the Customer is downsizing from an existing Meter, no Facilities Development Charges will be refunded. In general, the meter size shall not be less than one nominal size increment smaller than the service line size to the Parcel.

E. Damage to Water Meter

Damage to an undersized water Meter caused by an Applicant's choice of Meter shall be corrected by the Applicant, who shall pay the costs of a replacement Meter, any related plumbing and the cost of the damaged Meter, and any additional Facilities Development Charges if a larger Meter is installed.



# Regulation No. 9

## Extensions of and Additions to District Facilities

Adopted: July 19, 2004

Amended: December 21, 2009, December 20, 2010; January 28, 2013

### A. Extension Facilities

Extension Facilities are a water distribution system, including without limitation, water mains, storage tanks, pumps, wells, and appurtenances, which provide for water transportation and/or production to a Parcel or Parcels not presently served by an adequate water supply as the same is defined in Sections N and O hereof. There are two classes of such facilities, namely:

1. Applicant's Cost: In those situations where the District does not maintain a main line capable of providing Adequate and Reserve supply of water in a street or public right-of-way completely fronting the Applicant's Parcel(s), the Applicant shall install, at Applicant's sole cost, Extension Facilities of the size defined in Sections N and O fronting his, her or its Parcel(s) in the public right-of-way. As used in this Section, street or public right-of-way shall be plural when the Applicant's Parcel(s) fronts streets or public rights-of-way on two (2) or more sides. In this situation, the Applicant shall provide Extension Facilities on the Principal Boundary that correlates to the District Master Plan as a necessary extension to provide for future extension of the District capabilities and facilities. Should the Applicant be required to service the Parcel(s) on the other right-of-way, then the Applicant shall be required to also provide a water main of Adequate and Reserve Capacity along this frontage; said mains shall be of the size defined in Sections N and O hereof from a point where a main of Adequate and Reserve Capacity to the point most distant from that main on the Principal Boundaries of the Applicant's Parcel(s).
2. District's Cost: There will be situations where additional water demand will require the installation of additional Extension Facilities beyond Applicant's principle boundaries or of Up-Sized Lines, or where future development will require the installation or construction of such facilities that otherwise would be prohibited from construction for a period of time by the County of Sacramento. In such cases, the District may authorize the construction of such Extension Facilities or Up-Sized Lines as are deemed necessary by the Board of Directors to comply with the current District Master Plan.

### B. Location, Design, and Specifications of Extension Facilities

The location, design, and specifications of all Extension Facilities shall be determined by the District's Master Plan and by the application of the provisions of this Regulation and

Regulation 7, and the application of the District's Standards and Specifications and all revisions thereof.

C. Ownership and Operation

Extension Facilities constructed in accordance with the District's requirements shall, upon acceptance by the District, be owned, operated, and maintained by the District as part of its water storage and distribution system. As a condition of approval of Extension Facilities, the Applicant will convey the new facilities to the District if constructed at Applicant's cost. Prior to acceptance by the District in writing, ownership and responsibility of all Extension Facilities shall remain the Applicant's or the Applicant's contractor, agent or other authorized representative. The Applicant shall provide and fund a one-year guarantee on all Extension Facilities beginning on the date of final acceptance by the District.

D. Location of Existing Facilities

All existing facilities located on an Applicant's Parcel or Parcels that are situated above ground or at ground level shall be relocated below ground as specified in the District's Technical Specifications and Standard Details. All such relocations shall be at Applicant's cost.

E. Location of Extension Facilities

Extension Facilities shall be located as determined in the District's sole discretion on land granted to or owned by the District in fee, in a public right-of-way, or in an easement granted to and accepted by the District. The Applicant will, without cost to the District, cause to be conveyed or granted such lands and/or easements as the District determines to be necessary for the Extension Facilities. The land and/or easement shall be conveyed to the District free and clear of all liens and encumbrances. An Applicant's failure to cause to be conveyed or granted the lands and/or easements required by the District as a condition of acceptance of Extension Facilities shall be grounds for the District to refuse to provide water service to the Applicant or cause discontinuance of any existing service until such facilities are furnished.

F. Payment of Cost of Extension Facilities

Except for the incremental cost of any required Up-Sized Lines, the Applicant shall pay all costs of constructing the Extension Facilities required to serve his, her or its Parcel or Parcels in accordance with the provisions of Section A.1. hereof and Regulation 7. In cases where the District constructs the Extension Facilities in accordance with Section A.2. of this Regulation 9, the District's actual costs will be determined solely by the District and shall include labor, materials, equipment, engineering, inspection, and usual overhead expenses related to such work.

## G. Deposit of Installation Costs

The Applicant shall deposit with the District, as a condition precedent to written District approval of plans for Extension Facilities, a sum equal to the estimated total cost of those facilities, including all charges defined in accordance with provisions of Regulation 7, Section F hereof. The required deposit shall be in cash or in irrevocable letter of credit, in a form and issued by a bank or financial institution acceptable to the District. Upon completion of the work, and if the amount theretofore paid to or deposited with the District is less than the actual cost, the difference shall be paid by the Applicant prior to the District's commencement of water service. Any amount paid, including Facilities Development Charges, Supervision and Inspection fees, overhead costs, and any other charges that may be owing, which are in excess of the actual cost of installation of the Extension Facilities, will be refunded by the District.

## H. Acknowledgement of Necessity for and Reasonableness of Extension Facilities

Anyone who pays, deposits, or agrees to pay all or part of the cost of Extension Facilities thereby acknowledges that such facilities are necessary and reasonable.

## I. Installation

Extension Facilities will be installed by the District or by the Applicant, unless the District elects to cause the installation of up-sized mains, in which case the District will install or pay the incremental cost of the up-sized facilities. The Applicant may, when permitted, hire a competent and experienced licensed contractor to install the Extension Facilities. Such contractor must have specific experience in the construction of water facilities and be approved in writing by the District. All work performed by an Applicant's contractor is subject to final inspection and approval by the District as a condition of its acceptance of the Extension Facilities and provision of water service to the Applicant. The District reserves the exclusive right to construct with its own personnel or by Contract, storage facilities, pumping plants, taps on existing mains, Facilities Extensions, including Up-Sized Lines, or complicated connections or extensions involving interference with the District's existing facilities.

## J. Reimbursable Costs

1. Whenever the Applicant is required in accordance with the provisions of this Regulation or Regulation 7 to install Extension Facilities that includes ~~the construction~~ the construction of an Up-Sized Line or the extension of facilities beyond the frontage of the Parcel or Parcels to be developed, the Applicant shall be entitled to a reimbursement for a portion of such installation, if the Parcel(s) the water main crosses is already developed with service from a backyard main or has not been developed. For Parcels that have service from an existing water main in the front yard, reimbursements for main extensions in addition to or replacing existing facilities as necessary per District regulations will not be eligible.

2. Reimbursement shall be made in accordance with the following terms and conditions:
  - a. The Applicant has furnished the District the bid or cost of the Facilities Extension.
  - b. The Applicant approves in writing of the reimbursement calculated by the District based on the supplied bidder costs.
  - c. The main extension is installed per plans and District standards with all deficiencies corrected to the satisfaction of the District.
  - d. The Extension Facilities are successfully completed, and all required tests are performed and satisfactorily passed (including a hydro-test, and sanitary test).
  - e. If applicable, performance of a certified on-site test of Backflow Prevention ~~Device~~ Assembly(s) demonstrating compliance with Sacramento County requirements.
  - f. The District has issued final written acceptance of all Extension Facilities as installed per the approved plans.
  - g. When the above items have been completed, the Applicant shall then request, in writing, the reimbursement. Reimbursements will not be provided if any of the above conditions are not satisfied.

#### K. Reimbursement Fund

There is established a separate Facilities Reimbursement Fund. The District will credit to said fund 20% of all Facilities Development Charges paid to the District during each fiscal year. The deposits so obtained shall be the sole source of income to said fund for that year. Any remaining balance in the said fund after payment in that fiscal year to all reimbursement entitlements shall be transferred into the District's General Fund.

#### L. Reimbursement Payments

On or before April 1st of each year, the District shall pay to Applicants eligible for reimbursement as provided in paragraph J above, that proportionate share of the total amount deposited into the Facilities Development Fund during the year of his/her ~~payment~~ payment for the work as his/her contribution bears to the total amount paid into the fund during the fiscal year.

On or before April 1st of the second and successive years, the District shall pay to the Applicant that proportionate share of the total amount credited to the Facilities Develop-

ment Fund during the year of payment as the balance due the Applicant bears to the total amount paid into said fund during the each of the second and successive years.

An Applicant’s reimbursement entitlement shall expire and terminate when the District has paid the same in full without interest, or has made payments for a ten (10) year period from the date of first payment, whichever comes first.

M. Assignment of Reimbursement Entitlement

The District will not recognize any assignment or attempted assignment of a reimbursement entitlement unless the assignment is on a form satisfactory to the District and is signed and acknowledged by the assignor. The District will furnish such forms of assignment upon request.

N. Minimum Water Main Size

The minimum size for water distribution mains necessary to adequately deliver domestic water and public fire protection to all new developments and construction of whatever kind or size shall be determined with reference to real property-use zones established by the County of Sacramento, including any variance granted thereto, and specifically in compliance with the following provisions:

Sacramento County Zoning	Minimum Water Pipeline Size
Industrial (All Types)	16-Inch
Commercial (PB, SC, LG, GC, AC, TC)	12-Inch
Mobile Home Park (RM-1)	12-Inch
High Density Residential (RD-20, RD-30, RD-40)	12-Inch
Public (Schools, Parks, etc.)	12-Inch
Quasi-Public (Hospitals, Churches, etc.)	12-Inch
All Other Zoning*	8-Inch
*Exception: Cul-de-sacs, Single Family (No Fire Hydrant Requirement)	6-Inch

For infill parcels, a variance for the minimum pipeline sizes in this section will be considered if the proposed new development or construction of whatever kind or size complies with Section O.

O. Maximum Water Velocity

All new Extension Facilities are required to be designed to provide for a maximum water velocity within those facilities of five (5) feet-per-second under maximum day and fire demand conditions, as fire demand is computed under the fire suppression rating

| schedule, published by the ISO California Fire Code (Editions ~~6-80~~2013, or latest edition). If a conflict between Sections N and O shall exist, the provisions of this Section O shall control.

Regulation No. 10  
Annexation to Improvement Districts

Adopted: July 19, 2004

A. Petitions

Annexation to the District or to an improvement District shall be made in compliance with a provision of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, Government Code Sections 56000 and following, or its successor. A request for annexation may be commenced by petition on forms provided by the District and executed by all said Landowners in the territory sought to be annexed.

B. Fees

A fee shall be paid for the annexation of each Parcel of land in accordance to Regulation 3, Section K.

C. Charges

The District's costs incurred in processing annexations shall be paid by the petitioners. Costs shall include expenses of giving notice of any necessary public hearing, map, and legal descriptions when prepared by the District, the processing fees charged by the State Board of Equalization, LAFCo, and by the District for costs of preparing any necessary analyses or reports of environmental impact.

D. Payment of Fees and Charge

Upon the filing of a petition for annexation, the petitioners shall pay the fees and charges therefore and necessary for filing.

# Regulation No. 11

## Fire Service

Adopted: July 19, 2004

Amended: December 21, 2009; December 19, 2011; January 28, 2013

### A. Condition of Service

The District will provide water service for fire hydrants and other facilities used for fire protection at such pressures and at such rates of flow as are available from time to time from the District's operation of its storage, transmission, and distribution facilities. The District shall not be liable for any damage in any manner arising out of the ~~nonavailability~~ unavailability of water or water pressure at any hydrant or facility used for fire protection.

### B. Public Fire Hydrants

1. A public fire hydrant will be installed and connected to the District's mains when requested by the public fire protection agency having jurisdiction, or when required as a condition of a building permit or subdivision.
2. When a hydrant is installed on an existing main at the request of a public fire protection agency, the work may be performed by the District and the agency will reimburse the District the actual cost of labor, materials, engineering, inspection, and usual overhead expenses in the installation of the hydrant assembly, hydrant lateral, Control Valve, and the connection of the hydrant to the District Water System.
3. When a hydrant is installed as a condition to the issuance of a building permit or subdivision approval, the District's cost of materials, labor, engineering, inspection, and usual overhead expenses in the installation of the hydrant assembly, hydrant lateral, Control Valve, and the connection to the District Water System shall be paid by the holder of the building permit or the developer of the subdivision.
4. The type of hydrant and site location of public fire hydrants will be jointly determined by the District and the responsible public fire protection agency, excluding those hydrants that are installed by the District for the District's sole use as a means of flushing the District's water mains.
5. All installed fire hydrants shall be for use by public fire protection agencies and for the protection of the public. The only exception to this rule is the permitted use, granted by the District, to contractors for construction water.



6. All fire hydrants installed and connected to the District distribution system are public fire hydrants and shall be available for use by public fire protection agencies for fire protection and suppression purposes.
7. Fire hydrants installed under the preceding provisions shall be owned by the District. The District shall bear the expense of performing hydrant maintenance resulting from normal wear and tear when such conditions are reported by the responsible agency or when otherwise brought to the attention of the District.
8. The hydrant design, corrected for inlet and outlet velocity head, shall not exceed the permissible head loss based on the following AWWA Standards: ANSI/AWWA C503-97 for wet-barrel fire hydrant Table 3. The District reserves the right to install a different style of fire hydrant as necessary pending conditions.
9. For hydrants designed or intended to deliver more than 1,000 GPM, the permissible head loss shall not exceed 5 PSI when discharging at the design or intended rate of flow. Design of hydrants for delivery greater than 1,000 GPM shall be submitted to District for approval prior to use.
10. A Hydrant installed within an easement abutting a street or right-of-way and for the sole and exclusive use of an Applicant will be considered a public hydrant. Public hydrants shall be installed within a permanent easement granted to the District by the Applicant and shall be maintained by the District.
11. Existing fire hydrants on improvement projects shall be upgraded at the developer's expense if the hydrant does not meet District standards requiring a 5-1/4 inch valve opening steamer design.
12. At all times, unobstructed access and visibility from the street shall be provided for all fire hydrants. A three (3) foot clear space shall be maintained around the circumference of the fire hydrant. (Reference - 2010 California Fire Code Sections 503.4, 503.2.1, 503.3, 507.5.4 and 507.5.5) Customer is responsible for maintaining clear space around hydrant on Premises.
13. Blue reflective markers shall be installed for all fire hydrants in accordance to the local fire department requirements.

#### C. Private Fire Protection System

A Private Fire Protection system is a Private System that is located totally within a Parcel or Parcels under an Applicant's common ownership and which is constructed to service an in-building fire sprinkler system or a private fire hydrant. In order to connect such a system to existing water mains of the District, the following conditions must be met:

1. The Parcel or Parcels to be served are located within the service territory of the District or will be annexed into the District's territory upon approval by the

LAFCo under a pending application for annexation, including assumption of that Parcel(s) fair share of the bonded indebtedness of the District, if any.

2. The District possesses an Adequate and Reserve Capacity capable of serving the Private System.
3. In applying for such service, the Applicant has complied with all of the applicable requirements of Regulation 7.
4. The Private System is for the exclusive benefit and use of the Applicant and is located entirely within the Applicant's Parcel or Parcels.
5. The Private System will be used exclusively for the suppression of fire and for the testing of the fire suppression system.
6. The design and location of the Private System for fire suppression has been approved by the responsible fire protection agency.
7. Except as otherwise provided in these Regulations, the Applicant assumes full responsibility for the operation, maintenance, repair, and replacement of the Private System from the outlet side of the District's Control Valve.
8. Hydrants not installed within an easement abutting a street or right-of-way that are for the sole and exclusive use of an Applicant will be considered Non-Responsible Facilities. Such hydrants will not be maintained by the District.
9. The size and design of the Service Connection and cold-water fire service meter shall all be determined by the District, taking into consideration such factors as the applicable California Fire Code (edition 2013, or latest edition) requirements ISO requirements and the AWWA requirements.
10. A double detector check valve assembly shall be required by the District and furnished by the developer or Landowner and installed in accordance with the requirements of the public fire protection agency having jurisdiction. No water service will be provided to the system until it has been finally reviewed and approved by the District.
11. The District reserves the right to disconnect a Private System for fire protection or to require installation of a cold-water/fire service type meter as defined in AWWA Standards C703-79 in lieu of an existing meter of another type in the event that the subject water service is also used for any purposes other than fire suppression.

++ This regulation should be reviewed by legal counsel to determine if we are obligated to provide free water to Cal-Fire. If we are not legally obligated, then we should amend this

Forn

Regulation accordingly to limit the fire protection use to be within our District or within certain distance of our District.

## Regulation No. 12 Temporary Service

Adopted: July 19, 2004

### A. Installation and Payment

Service which the District determines will be for less than one (1) year and will not require installation of a permanent connection shall be provided upon payment of the total estimated cost of installing and removing the connection and such reasonable security deposits for the Meter, service charges, and fees as shall be determined by the District.

In no event shall the District-estimated cost for installing the temporary service and removal of service be less than that stated in Regulation 7, Sections H.2 and K.

### B. Service through Fire Hydrants

Temporary services for water used in construction shall be provided at locations approved by the District through portable Meters and Backflow ~~devices~~ assemblies furnished by the District. The District shall require, as a condition to such services, the payment of a reasonable security deposit for the Meter, Backflow assembly, and its regular service charges and fees.

## Regulation No. 13 Interference with District Facilities

Adopted: July 19, 2004  
Amended: January 28, 2013

### A. Unlawful Acts

The District will prosecute all violations of Sections 498, 624, and 625 of the California Penal Code and all District ordinances and regulations that make it a crime to interfere with the orderly supply of water to the District's Customers.

Unless authorized by the District, it shall be unlawful for any person, firm or corporation, to do, commit or assist in committing any of the following acts:

1. To open or close any fire hydrant or stopcock connected with the District's water system or lift or remove the cover of any gate valve or shutoffs thereof.
2. To interfere with, destroy, deface, injure or force open any gate or door, or destroy, injure or deface any part of any engine house, reservoir, standpipe, tank, building, appurtenances, fences, trees, shrubs, fixtures or property pertaining to the District's water system.
3. To go upon or ascend the stairway or steps of any elevated water storage tank, reservoir, or standpipe owned, leased or possessed by the District.
4. To resort to any fraudulent device or arrangement for the purpose of procuring water to any person from private connection on Premises in violation of District regulations or ordinances.
5. To interfere with or injure any reservoir, tank, fountain, hydrant, pipe, cock, valve, or other apparatus pertaining to the District's water system, or to turn on or off the water in any street hydrant or other public water fixture within the District's boundaries.
6. To make or permit to be made any connection with the main or service pipes of the District's water system, or to turn on or use the water of said system without first obtaining a permit for such use.
7. To cover or conceal from view any water valve box, service or meter box placed within the District.

8. To remove any water Meter that has been placed by the District, or to in any manner change, interfere with or tamper with any such water Meter.
9. To turn on the water supply to any building or to any supply pipe where the supply has been turned off because of the nonpayment of any charge or because of the violation of any District rule, regulation or ordinance.

B. Damage to District Facilities

A Customer, by applying for water service from the District, agrees that in addition to any right or remedy available to the District by law, the Customer will pay to the District its costs for repairing or replacing any of its facilities damaged as a result of construction or other work on the Customer's property, or for any violation of the District's ordinances and regulations.

C. Failure to Apply for Service

In addition to any criminal and civil legal remedies available, the District shall charge an unauthorized user of the District's water system as follows:

1. Non-Metered Service. Anyone using water without having made application to the District for service shall be held liable for that service from the date of first use, as determined, in the absence of factual evidence to the contrary, by the District.
2. Metered Service. Anyone using water without having made application to the District for water service shall be held liable for the service from the date of any previous meter reading that most nearly coincides with the actual date the service was first used by the unauthorized person.

D. Fire Hydrant Use

Fire hydrants shall be used only by public fire protection agencies, District ~~forces-staff~~ or other persons designated by the District. The District shall permit water use provided through fire hydrants for construction, street cleaning and/or storm drain cleaning only by permit and only with proper metering and backflow ~~assembly~~ protection. Permitee shall cease using water at any time at the request of the District. The permit may be revoked at any time at the discretion of the District. The District shall have the right to immediately terminate any unpermitted or other unauthorized use of a fire hydrant and no further use will be authorized except if permitted by the District in accordance with this Section. The permit fee for a District-authorized use of a fire hydrant is provided in Regulation 3, Section Q.

Regulation No. 14  
Prevention of Contamination by Backflow  
and Cross-Connections

Adopted: July 19, 2004

Amended: November 17, 2008; December 21, 2009; January 28, 2013

A. Authority and Purposes

1. Title 17, Sections 7583 through 7605 of the California Code of Regulations provides rules and regulations governing Cross-Connections.
2. Title 17, Section 7584 of the California Code of Regulations provides in part: “The water suppliers shall protect the public water supply from contamination by implementation of a Cross-Connection Control Program.” The District is a water supplier within the meaning of Title 17, Section 7583 of the California Code of Regulations.
3. In order to provide for an orderly and adequate means of protection of the District Water System from Backflow, the requirements set forth below are reasonable and necessary for the protection of the District Water System and the public health and welfare. New Service Connections shall be installed and existing Service Connections shall be modified to conform to the requirements provided in this Regulation 14.

B. Incorporation of Title 17 of the California Code of Regulations

The regulations of the Department of Public Health, Title 17 of the California Code of Regulations, Sections 7583 through 7605, as amended from time to time, are hereby adopted, incorporated by reference herein and made a part hereof, insofar as the same are applicable to the protection of the District Water System.

C. Requirements for Backflow Prevention ~~Devices~~Assemblies

Backflow Prevention Assemblies (Assembly) ~~Devices~~ shall be required at the Service Connection of all Premises in the following categories:

1. Premises having an Auxiliary Water Supply.
2. Premises on which any substance is handled under pressure in such a fashion as to permit the substance’s possible entry into the District Water System, including water originating from the District Water System.

3. ~~All non-residential Parcels. Premises where the Customer's System has more than one Service Connection.~~
4. Premises that contain a Cross-Connection or the potential for a Cross-Connection that could result in the pollution or contamination of the District Water System in the event of backflow.
5. Premises having multiple use capabilities.
6. All Private Systems for fire suppression or other purposes.
7. Certain Metered Services. A Reduced Pressure Principal Device (RP) as identified in the District Specifications and Plans will be required to be installed with Meters serving all non-residential Parcels, including irrigation services, and any residential Parcels used for business purposes as determined by the District.

D. Installation of ~~Backflow Prevention Devices~~Assemblies

Installation of an ~~Backflow Prevention Device~~Assembly, where required by the District, shall be a condition of water service. The installation of a ~~Backflow Prevention Device~~Assembly shall be deemed permanent for all Service Connections described in Section C, Subsections 1 through 7 hereof.

1. New Service Connections. At the time a new Application for Water Service is made, the District's Engineering Services Department will review the application to determine, in accordance with applicable District regulations, whether a ~~Backflow Prevention Device~~Assembly is required to be installed on the Applicant's Service Connection. If a ~~Backflow Prevention Device~~Assembly is required, it shall be the Applicant's responsibility at his or her sole expense to install the device.

The ~~Backflow Prevention Device~~Assembly shall be furnished by the Customer as specified and when required by the District Engineer, installed per County Standards and inspected by District staff.

2. Existing Service Connections without ~~Backflow Prevention Devices~~Assemblies. The District may inspect a Premises' existing Service Connection and determine if the Premises requires an ~~Assembly Backflow Prevention Device~~Assembly in accordance with Section C of this Regulation 14. If it is determined that a ~~Assembly Backflow Prevention Device~~Assembly is required, the installation of such a ~~device~~an Assembly in compliance with this Regulation 14 shall be a condition of continued District water service. If required, the ~~Assembly Backflow Prevention Device~~Assembly shall be furnished and installed by the Customer, per County standards, and inspected by District staff.



If a Customer fails to install a required ~~Backflow Prevention Device~~Assembly within a reasonable time limit set forth in a written notification from the District, the District shall suspend water service to the Parcel being served. ~~Alternatively, at the District's option and upon notification to the Customer, the District may install the Backflow Prevention Device Assembly and charge the Customer the full cost of the device and its installation and testing.~~

3. ~~Upgrading of Existing Backflow Prevention Devices~~Assemblies. An existing ~~Backflow Prevention Device~~Assembly that fails to meet applicable state, county, and local standards and specifications and any amendments thereto, does not provide adequate protection from potential backflow hazard and shall be upgraded at the Customer's expense following the procedures provided in this Regulation 14.

Upgrading may include complete replacement of the ~~Backflow Prevention Device~~Assembly as determined by District staff.

4. ~~Repair of Existing Backflow Prevention Devices~~Assembly. In the event that an existing Backflow Prevention Device Assembly that fails its annual test, the customer will be notified by the District and will be responsible for the Assembly shall be repaired and/or replacement and is retested as described in this Regulation 14. The District will not perform repairs or replacements of Assemblies. If the Assembly is not repaired or replaced within the amount of time specified by letter, water service may be terminated. District staff must be notified of all replacements, so an inspection can be preformed. If a trench was opened for the replacement, an open-trench inspection is required.

5. ~~Ownership of Backflow Prevention Devices~~Assemblies. All ~~Backflow Prevention Devices~~Assemblies installed or upgraded either by a Customer or by the District shall be owned and maintained by the Customer after acceptance by the District.

#### E. ~~Testing of Backflow Prevention Devices~~Assemblies

1. Testing – As required by law, the District shall notify each Customer annually to have their ~~Backflow Prevention Device~~Assembly -tested by a District Approved Certified Tester. Each Customer shall have thirty (30) days to execute the test. Results of the test shall be submitted to the District within ~~ten (10)~~ two (2) days of the completed test. All letters will be sent to the current billing address on file unless otherwise specified. The District must receive notification within 24 hours if the Assembly fails its annual test. The Customer will be notified of the failed test via the District, and will be allowed 15 days for repair and 30 days for replacement from the date of the letter, unless otherwise specified (e.g. high hazards). If the Customer fails to have the ~~Assembly device~~Assembly tested in a timely manner, then the District shall test the device. Costs for such tests shall be

charged to the Customer. Charges shall include the test, and all labor, as described in Regulation 3, Section D.

2. Prior to acceptance by the District, all newly-installed ~~Backflow Prevention Devices~~Assemblies shall be tested by a District-approved Certified Tester at the expense of the Customer installing the device. Certified test results shall be furnished to the District prior to final acceptance of the Assembly~~device~~ and provision of water service by the District. The certified test results shall be provided to the Customer or Applicant upon request to the District.

#### F. Right to Enter Customer Property

As a condition of water service for new Customers, the District reserves the right of ingress and egress to determine compliance with Cross-Connection Control Program requirements. As a condition of continued water service for existing Customers, the right of ingress and egress is reserved by the District for the purpose of inspection to determine compliance with the District's Cross-Connection Control Program regulations.

#### G. Penalties

In addition to the other remedies granted to the District by law, the ~~also~~-District also may terminate water service to any Premises if a required ~~Backflow Prevention Device~~Assembly is removed by a Customer or if the District finds evidence that an installed ~~Backflow Prevention Device~~Assembly has been bypassed, altered, or allowed to remain ineffective and unmaintained.

Any Customer who willfully fails to install a ~~Backflow Prevention Device~~Assembly as required by this Regulation 14, or who willfully bypasses or alters such a Assembly~~device~~ may be subject to prosecution and, upon conviction thereof, shall be punishable by a fine not exceeding \$500.00 or by imprisonment in the County jail for a period not exceeding six months or by both fine and imprisonment. (California Health & Safety Code, § 116820)

Regulation No. 15  
Water Conservation  
Water Shortage Contingency Plan

Adopted: July 19, 2004

Amended: November 17, 2008; March 16, 2009; April 20, 2009;  
December 21, 2009; April 19, 2010; December 20, 2010

A. Water Conservation Stage Declaration

Each year, the District Board of Directors shall determine, based on data in the California Department of Water Resource's (DWR) Bulletin #120 and present water conditions, the water stage applicable to the District ~~for the coming year~~. The declaration shall consist of a "normal water supply" ~~year~~, or with one of the four (4) stages of varying water conservation measures. The applicable stage determined by the District shall be effective upon adoption by the Board of Directors each water year and shall remain in effect until changed by the Board ~~based on updated data from DWR, past water usage within the District, and existing water supply and use conditions~~. The water year shall be defined as the period starting October 1 and lasting until September 30 of the following year.

Regardless of water supply availability or service conditions within the District, the Board of Directors reserves the right to set water conservation goals and modify stage declarations as necessary to align with regional or state water conservation policies, agreements or declarations, or legal requirements. All wasteful practices or unreasonable uses of District water, whether willful or negligent, are always prohibited. The General Manager, following the guidelines set forth in this Regulation and other relevant Board policies, state laws and regulations, shall determine what constitutes a wasteful practice or unreasonable use of water.

In addition to Normal Water Supply Conditions, the following four stages, including their conservation requirements, shall be observed by all water users within the District:

**NORMAL WATER SUPPLY**

Water supply conditions are adequate to meet the demands of the District's Customers. The goal of this stage is the use of water efficiently in conformance with the water conservation Best Management Practices (BMPs) specified in the District's Urban Water Management Plan. Requirements specified in this stage are applicable to and in force at all times and in all other stages of this regulation. The following requirements shall be in force during Normal Water Supply and in all subsequent stage declarations unless the Board modifies or adds to these restrictions:

1. Water must not be permitted to discharge, flow, or run to waste into any gutter, sanitary sewer, water course, or storm drain, or to any adjacent lot, from any tap, hose, faucet, pipe, sprinkler, or nozzle. In the case of irrigation, "discharge,"

“flow,” or “run to waste” means that the earth intended to be irrigated has been saturated with water to the point that excess water flows over the earth to waste. In the case of washing, “discharge,” “flow,” or “run to waste” means the water in excess of that which is necessary to wash, wet or clean the dirty or dusty object, such as an automobile or boat, flows to waste.

2. Washing of vehicles is permitted only with the use of a water saver nozzle equipped with automatic shut-off and bucket, provided minimal runoff occurs on sidewalks or street. ~~(less than 3 gpm is considered minimal).~~
3. The use of water for washing down sidewalks, walkways, driveways, parking lots or buildings, except as necessary for health, sanitary, or fire protection purposes, is prohibited ~~except for health, sanitary or fire protection purposes~~. When used for these exceptions, high-pressure washers shall be used.
4. All water hoses or filling apparatus shall be equipped with a control nozzle capable of completely shutting off the flow of water except when positive pressure to the nozzle is applied.
5. All water fixtures or heating or cooling devices must not be allowed to leak or discharge. All known leaks must be repaired within seven (7) days or less depending on the severity of the leak.
6. The operation of an irrigation system that applies water to an impervious surface (example: concrete or asphalt) or that is in disrepair is prohibited.
7. Irrigation of landscaping during rainfall is prohibited.
8. Backwashing or overfilling, so as to discharge water to waste, swimming pools, decorative basins, or ponds in excess of the frequency reasonably necessary to maintain the clarity or cleanliness of the water is prohibited. Pool draining and refilling, between May 1 and October 1, will be allowed only for health, maintenance, or structural considerations upon submittal of a written report by a health official or pool consultant and approval provided by the District.
9. All pools, spas, decorative or ornamental fountains, ponds and waterways must be equipped with a recirculation pump and must be constructed to be leak-proof.
10. The use of water in new conveyer car washes and new commercial laundry systems that do not use a recirculation system shall be prohibited.

The following are recommended practices for this stage:

1. Water during cooler morning and evening hours to reduce evaporation and avoid peak energy demand times. Outdoor watering from 12:00 noon to 8:00 p.m. during the months of May - August is not recommended & watering from 12:00 noon to 6:00 p.m. during the months of September - April is not recommended.
2. Watering three (3) days or less per week is encouraged. Customers whose address ends with an odd number are encouraged to only water on Tuesdays, Thursdays and Saturdays. Customers whose address ends with an even number are encouraged to only water on Sundays, Wednesdays and Fridays. ~~No w~~Watering on Mondays is not recommended.
3. Pool covers for swimming pools and spas are recommended to reduce evaporation.
4. District Customers are encouraged to take advantage of the District’s conservation programs and rebates.

## **STAGE 1 – WATER ALERT**

Water supply conditions may be impeded by lack of available sources including surface water supplies conjunctively used by the District, regional circumstances or statewide climate influences. The goal of this stage is to reduce District-wide consumption of water by up to 10% in order to meet the needs of District Customers, comply with State mandates, cooperate with regional programs and/or comply with County regulations declaring water shortages. The following requirements shall be in force during Stage 1 and all subsequent increases in stage declarations:

1. All requirements of Normal Water Supply Conditions except that the District will make mandatory and will enforce the following:
  - a. No outdoor watering between 12 noon and 8:00 p.m. during the months of May - August & no outdoor watering from 12:00 noon to 6:00 p.m. during the months of September - April.
  - b. Three (3) day per week Odd/Even outdoor watering shall be followed.

The following are recommended practices for this stage:

1. All recommendations of Normal Water Supply Conditions unless modified to requirements.
2. District Customers with “smart” irrigation timers are encouraged to set their controllers to achieve watering efficiency equal to no more than 80% of the evapotranspiration (ET) rate for the Sacramento area.
3. New or expanded landscaping should be limited to drought tolerant trees, shrubs and ground cover. The planting of new turf or grass, whether hydro-seeded or laid, is discouraged.
4. Restaurants are encouraged to not serve water to their customers unless requested.

## **STAGE 2 – WATER WARNING**

Water supply conditions may be impeded by lack of available sources including surface water supplies conjunctively used by the District, regional circumstances or statewide climate influences. The goal of this stage is to reduce District-wide consumption of water by up to 25% in order to meet the needs of District Customers, comply with State mandates, cooperate with regional programs and/or comply with County regulations declaring water shortages. The following requirements shall be in force during Stage 2 and all subsequent increases in stage declarations:

1. All requirements of the previous stages unless further modified below.
2. Outdoor watering shall be limited to no more than two days per week, as determined by the Board of Directors at the time of a Stage 2 declaration.
3. Restaurants shall not serve water to their customers unless requested.
4. Hydrant permits for construction water will be issued only with the approval of the General Manager. Potable water must not be used for construction site street cleaning or dust control.

5. A County or State health official must verify all health and emergency conditions requiring potable water use for the purpose of any washing of sidewalks, walkways, streets, parking lots, driveways. An industry professional must verify all health and emergency conditions requiring potable water use for the purpose of any washing of ~~or~~ buildings.
6. New or expanded landscaping shall be limited to drought tolerant trees, shrubs and ground cover. No new turf or grass shall be planted, hydro-seeded or laid without prior approval of the General Manager.

The following are recommended practices for this stage:

1. All recommendations of the previous stages unless modified to requirements.
2. District Customers with “smart” irrigation timers are encouraged to set their controllers to achieve watering efficiency equal to no more than 75% of the evapotranspiration (ET) rate for the Sacramento area.
3. Washing of vehicles and other mobile equipment should be conducted at commercial establishments that use fully recycled water.

### **STAGE 3 – WATER CRISIS**

Water supply conditions are significantly impeded by interruption of available sources, a regional emergency, a county emergency or state mandates. The goal of this stage is to reduce District-wide consumption of water by up to 50% in order to meet the needs of District Customers. A declaration of this stage will be in conformance with the activation of the District’s Emergency Response Plan and/or Water Shortage Contingency Plan. The following requirements shall be in force during Stage 3 and any subsequent increase in stage declaration:

1. All requirements of the previous stages unless further modified below.
2. Outdoor landscape irrigation shall be limited to one day, as determined by the Board of Directors at the time of a Stage 3 declaration.
3. The planting of new or expanded landscaping is prohibited.
4. Except where non-potable water is used, all Large Landscape Irrigation Customers (CII) must cease turf irrigation.

The following are recommended practices for this stage:

1. All recommendations of the previous stages unless modified to requirements.
2. District Customers with “smart” irrigation timers are encouraged to set their controllers to achieve watering efficiency equal to no more than 70% of the evapotranspiration (ET) rate for the Sacramento area.

### **STAGE 4 – WATER EMERGENCY (Health and Safety Only)**

Water supply conditions are significantly impeded by interruption of available sources, a regional emergency, a county emergency or state mandates. The goal of this stage is to reduce District-wide consumption of water by greater than 50% in order to meet the needs of District Customers. A declaration of this stage will be in conformance with the activation of the District’s Emergency Response Plan ~~and/or Water Shortage Contingency Plan.~~ The following requirements shall be in force during Stage 4:

1. All requirements of the previous stages unless further modified below.
  2. Any use of water for washing down sidewalks and driveways is prohibited.
  3. Use of District water is prohibited for filling pools, ponds or spas.
  4. Outdoor landscape irrigation is prohibited.
  5. All washing of vehicles and other mobile equipment is prohibited unless conducted at a commercial establishment that uses fully recycled water.
  6. All metered services will be subject to additional tiered rates approved by the District Board of Directors.
  7. No commitments will be provided for new water service connections until the District has returned, at a minimum, to Stage 3 restrictions. The District reserves the right to limit or refuse new service connections until Stage 2 conditions exist.
- Recommended practices identified in previous stages are not applicable in Stage 4.

### **WATER USE PERMITTED**

Water used for the following purposes is considered essential for public health and safety and is therefore permitted during all stage declarations:

- A. Water use for firefighting or routine inspection of fire hydrants or from fire training activities.
- B. Water applied to abate spills of flammable or other hazardous materials, where water is an appropriate abatement methodology.
- C. Water applied to prevent or abate imminent health, safety, or accident hazards when alternate methods are not available.

### **B. ENFORCEMENT**

Enforcement of any violation of the water conservation requirements provided in this Regulation No. 15, as they may be amended from time to time by the District Board of Directors, is provided in this section. Service charges will be assessed for a violation of the District's conservation rules in accordance with the following provisions. A Customer will be notified when violations may result in service charges. The service charges that may be assessed are provided in Section L of Regulation No. 3. In cases of tenant occupancy, landowners retain full responsibility for the use of water by their tenants, including payment of any service charges imposed for violations of this Regulation 15.

Enforcement of the requirements of each water conservation stage will be conducted in a progressive manner and may ultimately lead to termination of service in cases where a violator refuses to discontinue activities constituting water waste. The enforcement steps are as follows:

Notice of Violation: Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of the existence of a violation, the District shall request Customer compliance with this Regulation via a notice of violation delivered in person.

Notice of Violation~~Warning~~: Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of the existence of a violation, the District shall request Customer compliance with this Regulation via a Warning~~Notice of violation~~ delivered in person.

**First Violation:** Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of the existence of the next violation after a Warning was issued, the District shall request Customer compliance with this Regulation via a notice delivered in person by District personnel, and/or by certified mail to the billing address of the Parcel upon which the 1st violation has occurred.

The first violation charged to a Parcel will begin the District's monitoring of that Parcel for water waste. Should there be no additional violations on the Parcel prior to April 1<sup>st</sup> of the following~~the conclusion of the current water year~~, then that Parcel's violation from the previous year will be expunged and the Parcel will be deemed to be free of violations and the counting of any violations incurred in the new water year will begin on a clean record. The District shall keep on file copies of all violations of the District's water conservation requirements that were incurred in the same water year.

For one time only, and upon request, a Customer may participate in a Water-Wise House Call to remove a first violation from the ~~District's records~~ customer's record for the current water year.

**Second Violation:** Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of a second water conservation violation of any kind on the same Parcel, the Customer and Landowner shall be notified of the 2nd violation in writing at the established billing address by District personnel and/or via certified mail. The District will assess a service charge for the violation, which will be added to the Customer's next bill. The second violation service charge will be billed in accordance with Regulation 3, Section L.1.

If a second violation occurs at a Stage 2 or higher water conservation stage in this Regulation on any non-metered service, the District shall install a permanent water meter on any existing Service Connection on the Parcel where the violation occurred and/or the District may impose an additional service charge as approved by the District Board of Directors. Metered rate billing will be initiated on the account at the next billing period following the meter installation.

A Customer may avoid paying a service charge for a second violation by attending a water conservation awareness workshop, at the customer's expense, and participating in a Water-Wise House Call if not completed following the first violation.



**Third Violation:** Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of a third water conservation violation of any kind on the same Parcel, the Customer and Landowner shall be notified of the violation in writing at the established billing address by District personnel and/or via certified mail. The District will assess a service charge for ~~servicing~~ the violation, which will be added to Customer's next bill in accordance to Regulation 3, Section L.2. The notice of violation also will state that a subsequent violation may result in disconnection or reduction of service.

**Fourth Violation:** Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of a fourth water conservation violation of any kind on the same Parcel, the Customer and Landowner shall be notified of the violation in writing at the established billing address by District personnel or via certified mail. The District will assess a charge for the fourth violation as follows:

Flat Rate Services: Upon the fourth water conservation violation of a non-metered account, the District may discontinue or reduce the water supply to the Parcel where the violation occurred. The District shall, in its sole discretion, decide whether to terminate or reduce service based on all of the facts and circumstances of the violation and the Customer's past water use history. The Landowner shall be notified in writing by District personnel and/or via certified mail of the violation that a water meter shall be installed on that Parcel. The Landowner shall bear the cost of installing the meter, which shall be based on the cost of the District's time and materials. The installation of this meter shall cause the billing for the Parcel to be changed from a flat rate to a metered rate. The monthly charge for a metered service will be computed on the current metered rate as more specifically set forth in the District's Regulation No. 3 and any additional tiered water conservation rates adopted by the Board. The installation of this Meter shall be deemed permanent.

Metered Services: Upon the fourth water conservation violation on an existing metered service, the District will notify the Landowner of the violation in writing at the established billing address by District personnel and/or via certified mail. The Landowner will be informed that an additional charge for servicing the violation will be included in his/her next billing. The amount of the charge is as follows:

- (i) 1-inch or smaller service: 25% of the amount of the water bill for the month in which the violation occurs.
- (ii) 1½ inch or larger service: 50% of the amount of the water bill for the month in which the violation occurs.

In addition, the District may discontinue or reduce the water supply to the Parcel where the violation occurred. The District shall, in its sole discretion, decide

whether to terminate or reduce service based on all of the facts and circumstances of the violation and the Customer's past water use history. To restore service or full flow capabilities, the affected Customer will be required to request a hearing of the District Board of Directors, where the Customer may present evidence to the Board concerning the violation and request the restoration of water service. At its next regular meeting after the hearing, the District Board shall enter into the record its findings and decision concerning the service restoration request and each issue there under. The Board's decision will be final. The Secretary of the Board will mail the Board's written findings and decision to the Customer within thirty days (30) after the date that the Board renders its decision.

Where compliance with the requirements of this Regulation 15 are beyond the control of the Customer or Landowner and written justification and supporting evidence has been provided by the Customer or Landowner and verified by a District representative, the General Manager may excuse the violation. Approval of such a variance by the General Manager shall be conditioned on the Customer's or Landowner's cooperation with the District in resolving the violation.

Where a water conservation violation occurs on a Parcel improved with multiple family units, and it is not practical to determine which unit is responsible for the violation, the District will assess the service charge described above for existing metered rates.

Where water is wastefully or negligently used on a water user's premises to the extent that the violation seriously affects the District's general service capability, the District may discontinue service to the premises if the water waste conditions causing the general service disruption are not corrected within twenty-four (24) hours after the District provides the water user with the violation notice. A door hanger (notice) shall be deemed sufficient written notice for this purpose.

When encountered in the course of routine daily activity, District personnel have the responsibility and authority to control leaks on any Premises at the point of connection or at the valve controlling the Customer's System. When water is shut off for control of a leak, the District will provide the Customer with notice of the condition.

Regulation No. 16  
Facilities Not Within a Public Right-of-Way

Adopted: July 19, 2004

Facilities Not Within a Public Right-of-Way

The plans for approval of sizes and flow requirements of facilities within any easement granted to the District shall be designed according to the Regulations and Requirements imposed on Extension Facilities as described in Regulation Nos. 7 and 9 of this Ordinance.

Easements containing District facilities shall be used exclusively for water facilities and other District purposes. No other buildings, facilities, fences or other structures or personal property shall be installed, erected or placed within the District's easements that would obstruct the District's ability to provide water service, perform routine or emergency maintenance, construct or replace facilities, access its easements and facilities, or perform any and all other operations and activities on its easements. The District, after finding any obstruction of or interference with its easements and facilities, will notify the owner of the affected property via certified mail to remove the obstruction or terminate the interference. If the Landowner fails to remove the obstruction or cease the interference, the District will notify the Landowner by certified mail that the District will remove the obstruction of or terminate the interference with its easement or facilities. Once the District removes the obstruction of or terminates the interference with its easement or facilities, the Landowner is prohibited from replacing the obstruction or recommencing the interference. If the Landowner recommences the obstruction of or the interference with the District's easement or facilities, the District has the right to terminate water service to the affected property and to require the Landowner to pay the District's reasonable attorney's fees, expert witness fees and costs of any litigation necessary to compel the Landowner to remove the obstruction or terminate the interference.

# Regulation No. 17

## Procedures for Variance Application

Adopted: July 19, 2004

Amended: October 16, 2006; January 28, 2008

### A. General Provisions

The following procedures will apply to all Applicants, whose project plans or requirements to receive water service have been so modified or conditioned by the District staff as to make the project unacceptable to the Applicant, and who, after a full review of the applicable Regulations, determines that the Applicant may be entitled to a variance from the staff decision.

The District Board of Directors has delegated to its Facilities and Operations Committee (“Committee”) the authority to review and make recommendations regarding certain decisions on service issues that concern or arise from Board-adopted policies. The General Manager shall have the discretion to route variance applications to the Facilities and Operations Committee for review when the subject matter is within the Committee’s jurisdiction. All other variance applications will be scheduled for hearing in front of the full Board of Directors. An Applicant for a variance who objects to a decision rendered by the Committee may appeal the Committee’s decision to the District Board of Directors.

On a form provided by the District, the Applicant will set forth:

#### 1. Application to Install New Facilities

When the Applicant proposes to install an extension facility that varies from the requirements of Regulation 7 and/or 9 and such plan of service has been rejected by District staff, the Applicant’s application and plan shall be reviewed as to its compliance with the District Master Plan and the District’s ability or provide water service for future needs. The Applicant must state on the application appropriate reasons for why a variance should be granted and must submit relevant materials supporting its application. Information concerning the variance request shall include but not be limited to the Applicant’s financial, project design and technical requirements for the project.

#### 2. Application to Use Existing Facilities

In those cases where the Applicant seeks permission to receive water service from an already existing main abutting the land to be served, but which service is not permitted by applicable provisions of the District’s Regulations, the Applicant’s application and proposed service plan shall be reviewed as to its compliance with

the Master Plan and how it relates to the District's future needs. The Applicant should provide the reasons why the Applicant should be allowed to use the District's existing facilities in lieu of providing new facilities to serve its proposed development. The reasons should not be limited to financial or technical requirements of the project. The Applicant shall attach any relevant materials supporting the application.

### 3. Compliance with Other Regulations

In cases where an Applicant objects to any other requirement or fee imposed on the Applicant by a District ordinance, regulation or policy, the Applicant shall state the reasons why the Applicant should be excused from complying with the disputed requirement, or fee and attach any relevant materials supporting the application.

## B. Application Form and Filing Date Requirements

An application for a variance must be completed, signed and dated, and filed with the District at least 45 days before the next scheduled District Board meeting. The Applicant must pay a service fee to the District at the time of filing in accordance to Regulation 3, Section M.

District staff will respond to the issues raised in the application for variance in a written staff report, a copy of which will be provided to the Applicant at least 10 working days before the next regularly scheduled Board meeting. The Applicant may file a written reply rebutting statements made by the staff and attach any supporting evidence to the reply. The Applicant must file the reply with the Secretary of the Board no later than 4 working days before the next regularly scheduled Board meeting. Any rebuttal filed by the Applicant will be limited to the issues raised in the original application for variance and the staff report. If the General Manager assigns the application to the Committee for hearing, the above filing deadlines will be counted from the date of the Committee meeting at which the application will be heard.

At the designated meeting of the Board or Committee, the Applicant may present such oral statements, documents, and testimony of witnesses as the Applicant may choose. Staff may respond by the production of such additional relevant evidence as staff deems appropriate.

An Applicant may only raise those issues in a hearing that were presented in the original application for variance and responding staff report, unless the Applicant can present good cause reasons and supporting evidence to show why the Board or Committee should entertain the presentation of any new issues. Any new issues will not be acted on at a hearing and will not be made part of the record unless such presentation is first approved by the Board or the Committee.

C. Amendment of Application

If circumstances warrant or if the Applicant later desires to raise issues not made a part of the original application (and either did not request or did not obtain leave of the Board or Committee to present such issues at an earlier hearing), the Applicant may raise such issues by amending its pending application, paying an additional service fee of one-half of the original fee and recommencing the time sequence specified above.

D. Board or Committee Decisions

The Board or Committee, at the scheduled meeting at which the application for variance will be heard, will hear and consider all arguments and evidence presented by the Applicant and Staff. At the conclusion of the hearing, the Board or Committee may choose to enter into the record of the meeting the facts and its findings with respect to each issue presented by the Applicant and render its decision concerning the application, or the Board or Committee may choose to take the matter under consideration and issue a written decision setting forth the facts and its findings. If the Board or Committee determines to issue a written decision, it shall do so within 15 days after the hearing date. All decisions of the Board are final.

E. Special Board Meeting

If an Applicant desires a hearing at a special Board meeting, the fee for scheduling the requested special meeting shall be payable at the time of the filing of the application in accordance to Regulation 3, Section M. 3. The time sequence specified in Section B will apply based on the date set for the special Board meeting.

## D R A F T

### RESOLUTION NO. 15-XX

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
SACRAMENTO SUBURBAN WATER DISTRICT  
AMENDING REGULATIONS NOS. 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, AND 15  
OF THE REGULATIONS GOVERNING WATER SERVICE**

WHEREAS, on July 19, 2004, the Board enacted Ordinance 2004-03, entitled “An Ordinance of the Board of Directors of Sacramento Suburban Water District Adopting Regulations Governing Water Service”;

WHEREAS, the Board now desires to amend Regulations Nos. 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, and 15 of the Regulations Governing Water Service as described in this Resolution; and

WHEREAS, none of the described amendments to Regulations Nos. 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, and 15 are subject to Proposition 218’s notice and hearing requirements as provided in Article XIII D, section 6 of the California Constitution.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Sacramento Suburban Water District as follows:

1. Regulations Nos. 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, and 15 are hereby amended as shown in Exhibit A, which is attached to and made a part of this Resolution.
2. The Board authorizes and directs the General Manager and staff to take all actions necessary to amend Regulations Nos. 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, and 15 and to enforce such amended regulations in accordance with the authority granted by this Resolution.
3. Except as modified by the terms of this Resolution, the existing District Regulations Governing Water Service shall remain in full force and effect. Any provisions in the existing regulations that conflict with the amendments set forth in this Resolution are deemed superseded and of no further effect.
4. This Resolution shall take effect immediately.

PASSED AND ADOPTED by the Board of Directors of the Sacramento Suburban Water District on the 18<sup>th</sup> day of May 2015, by the following vote:

AYES:  
NOES:  
ABSENT:

By: \_\_\_\_\_  
Neil W. Schild  
President, Board of Directors  
Sacramento Suburban Water District

\*\*\*\*\*

I hereby certify that the foregoing resolution was duly and regularly adopted and passed by the Board of Directors of Sacramento Suburban Water District at a regular meeting hereof held on the 18<sup>th</sup> day of May 2015.

(SEAL)

By: \_\_\_\_\_  
Robert S. Roscoe  
General Manager/Secretary  
Sacramento Suburban Water District





## Facilities and Operations Committee

### Agenda Item: 4

**Date:** March 24, 2015

**Subject:** 2015 Water Conservation Stage Declaration

**Staff Contact:** Greg Bundesen, Water Conservation Supervisor

**Recommended Board Action:**

Request a 20% reduction from customers by declaring a Stage 1 - Water Alert in accordance with Sacramento Suburban Water District's (District) newly defined Regulation No. 15 and the State Water Resources Control Board's emergency water conservation regulations; and the two Water Conservation Representatives.

**Discussion:**

On March 17, 2015, the State Water Resources Control Board (SWRCB) voted on and passed additional emergency water conservation regulations in response to California's ongoing drought conditions (see Exhibit 1). The regulations will require urban water suppliers to trigger water conservation actions in their Urban Water Management Plan's Water Shortage Contingency Plan that call for stricter actions that will affect the District's enforcement of the declared 2015 Water Stage Declaration. The regulations would also extend urban water supplier reporting requirements, as well as, impose additional statewide restrictions on all water users. The SWRCB is continuing to call for a 20% reduction in water use when compared to the baseline year of 2013.

The newly adopted regulations restrict the public from:

1. Washing down sidewalks and driveways;
2. Watering outdoor landscape in a manner that causes excess runoff;
3. Watering a motor vehicle with a hose, unless the hose is fitted with a shut-off nozzle;
4. Operating a fountain or decorative water feature, unless the water is part of a recirculating system;
5. Irrigating turf or ornamental landscapes during and 48 hours following measurable precipitation;
6. Restricts restaurants from serving water unless requested;
7. Mandates that hotel and motel operators provide guests with the option of choosing not to have towels and linens laundered daily and prominently display notice of the option.

The newly adopted regulations require urban water suppliers to limit the number of days per week that customers can irrigate outdoors. Urban water suppliers will be required to adopt a stage in their water shortage contingency plan (the District's Water Shortage Contingency Plan is its Regulation No. 15, see Exhibit 2) that restricts watering days. Urban water suppliers will also be required to notify their customers about possible leaks on their property. The SWRCB will also be expanding their monthly reporting requirements to include the number of watering days allowed, and a description of compliance and enforcement efforts (i.e. number of water waste notifications received from the public, number of water waste notifications given out to customers during a particular month, etc.). Urban water suppliers will have 45 days to implement the new regulations after review by the Office of Administrative Law.

When the emergency conservation regulations are approved by the Office of Administrative Law, staff will again review District activities for alignment with state law and will report back to the Board if additional action is needed.

### ***Conservation Community Outreach Efforts***

Water conservation is always an important message for District customers. The past couple of years have yielded less than average rainfall and, therefore, conservation messaging is even more crucial.

In 2014 water conservation messaging was prominent. District customers were reached on water conservation by the following methods:

- Monthly bill inserts. Nearly every bill insert had at least one water conservation related message.
- Spring and Fall newsletters. The mailing list reaches out to not only single family residential customers, but to multiple dwelling unit customers, e.g. mobile home parks, duplexes and apartments who do not receive a water bill. The newsletters contained multiple messages encouraging water use efficiency.
- Custom send envelopes. Water Use Efficiency messaging was placed on the back of every water bill envelope.
- Messages and other information on the customers' bill. District customers that receive a water bill are able to review their past water use and compare it to their current water use.
- Messages on hold. Conservation messages were rotated quarterly.
- Community outreach days. The District conducted 4 community outreach events where conservation devices and information were distributed directly to customers.
- Market bag promotion with ongoing messaging of "Conserve & Preserve" used with Water-Wise House Calls.

## 2015 Water Conservation Stage Declaration

March 24, 2015

Page 3 of 5

- Water conservation brochure, updated and available in the Marconi lobby, on the District's web site, and distributed to customers in the field.
- Along with the District's water conservation public outreach program, the Regional Water Authority's Public Outreach program focused water efficient messaging. RWA activities included:
  - Key messaging for newspapers, TV, and radio (including indoor & outdoor water use efficiency recommendations).
  - Water Spots Video Contest for high school students (January – February).
  - Blue Thumb Campaign Pledge campaign messaging (all year).
  - Save Our Water campaign updates (all year).
  - Project WET (Water Education for Teachers) offerings (training occurs at various times during calendar year).
  - "Change Your Clocks, Tune Up Your Sprinklers" messaging for daylight savings time (March).
  - "Fix a Leak Week" promotion (March).
  - Water Awareness month promotion (May).
  - Earth Day promotion (April)
  - Partnership with the Sacramento River Cats to promote the RWA's Blue Thumb Campaign.

The focus of the 2015 Community Outreach will continue to be water conservation messaging with an emphasis on dry year conditions. Staff has developed a new outreach theme of "Why Conserve" that will be promoted in the monthly bill inserts and newsletters throughout the year. While 2015 has just begun, staff continues to expand the promotion of water conservation in the following ways:

- Provide customers with 2 Water Efficient Landscape classes (Spring/Fall).
- Developing a special Water Use Efficiency post card relaying the Water Stage Declaration, the water use restrictions of the declared stage, and ways to use water more efficiently inside and outside the home.

Possible mechanisms to expand the existing outreach, which are not budgeted for 2015, are as follows:

1. Target customers with direct mail piece(s). Highlight that landscape irrigation is the largest use of water at the home and offer Water-Wise House Calls. Post cards, letters, mailers, etc. are possibilities.
2. Bill inserts. Additional inserts which would also be displayed in the Marconi Office lobby and mailed to customers several times as a double insert.

3. Newspapers. Provide print ads with our water conservation messaging to additional neighborhood newspapers.
4. Schools and presentations. Increase the effort to provide the opportunity for Staff to speak to schools, civic organizations, community groups and clubs.
5. Home Owners Association / Neighborhood Associations. Contact these groups and offer a presentation and/or water conservation information/devices.
6. Website updates. The District's website will be updated frequently to inform customers about the benefits of water conservation and how to conserve more water indoors and outdoors. A Water-Wise House Call page will be added to allow District customers to sign up for Water-Wise House Calls via the website.
7. Along with the District's Water Conservation public outreach program, the RWA's Public Outreach program will also focus on dry year messaging. RWA activities include:
  - a. Dry Year key messaging for newspapers, TV, and radio (including indoor & outdoor water use efficiency recommendations).
  - b. Water Spots Video Contest for high school students (January – February).
  - c. Blue Thumb Campaign Pledge campaign messaging (all year).
  - d. Save Our Water campaign updates (all year).
  - e. Project WET (Water Education for Teachers) offerings (training occurs at various times during calendar year).
  - f. "Change Your Clocks, Tune Up Your Sprinklers" messaging for daylight savings time (March).
  - g. "Fix a Leak Week" promotion (March).
  - h. Water Awareness month promotion (May).
  - i. Earth Day promotion (April)

If additional outreach for water conservation is of interest to the Board, Staff will pursue if given Board direction.

### ***Conservation Monitoring and Enforcement***

Each year staff budgets for the minimum increase in summertime water conservation enforcement for Normal Water Supply. However, due to the ongoing drought situation, staff budgeted approximately \$50,000 for CY2015. Labor consists of three part-time, temporary Water Conservation Representatives (WCR) and materials for conservation awareness and Water-Wise House Call handouts. The District has two pool vehicles that are utilized for the Summer Water Conservation Program. Labor typically consists of \$13,000 for a 10 month period. Material handouts are approximately \$8,000.

Due to the increase in Water Waste reporting and citations in 2014 (the District experienced a 125% increase in the number of water waste reports received from the public and a 144% increase in the number of water waste notification given out when compared to 2013) staff is requesting the same level of enforcement, though a Stage 1 - Water Alert is recommended.

Labor would consist of three Water Conservation Representatives and materials would consist of Water-Wise House Call & other conservation related handout materials. Due to the extended drought conditions, one Water Conservation Representative was retained through the winter months to continue to enforce the District's Water Conservation Program. Staff is recommending to hire 2 additional WCRs to begin enforcing the CY2015 Water Conservation Program.

**Fiscal Impact:**

Fiscal impacts of declaring a Stage 1 – Water Alert are unknown at this time. Additional water bill assessments may be made to a customer's water bill if they do not comply with mandatory water conservation stage regulations. WCRs and additional water conservation related material will cost approximately \$50,000.

**Strategic Plan Alignment:**

Water Supply – 1.C. Continue to implement and support demand management strategies and water conservation that comply with federal, state and regional<sup>4</sup> programs; support Water Forum Agreements goals and efficiently meet the needs of the District customers.

Facilities and Operations – 1.H. Implement water conservation programs that efficiently utilize potable water supplies.

Customer Service – 3.D. Provide effective customer and community relations by communicating, educating, and providing information on District operations, drinking water issues, resource sustainability and environmental stewardship.



# Media Release

## State Water Board Expands and Extends Emergency Water Conservation Regulation

For Immediate Release  
March 17, 2015

Contact: George Kostyrko  
gkostyrko@waterboards.ca.gov

SACRAMENTO -- As California enters a fourth year of severe drought, the State Water Resources Control Board Tuesday adopted an expanded emergency regulation to safeguard the state's remaining water supplies.

"We are experiencing the lowest snowpack and the driest January in recorded history, and communities around the state are already suffering severely from the prior three years of drought," said State Water Board Chair Felicia Marcus. "If the drought continues through next winter and we do not conserve more -- the consequences could be even more catastrophic than they already are. Today's action is just a tune-up and a reminder to act, and we will consider more significant actions in the weeks to come."

While communities and water suppliers have saved substantial amounts of water since the water conservation emergency regulation was first adopted in July 2014, there are many more opportunities for Californians to conserve in even greater amounts. The expanded emergency regulation captures some of these opportunities while continuing to give urban water suppliers flexibility to take actions that reflect their local conditions as long as they meet the minimum requirements. The State Water Board strongly encourages water suppliers to do much more than the minimum required by the regulation.

Today's action incorporates lessons learned from implementation of the emergency regulation approved in 2014 and feedback from urban water suppliers and the public.

### Prohibited Water Use

Under today's action, the prohibitions on potable water use, first adopted in 2014, will continue, and new prohibitions will go into effect. All Californian's are now prohibited from:

- washing down sidewalks and driveways;
- watering outdoor landscapes in a manner that causes excess runoff;
- washing a motor vehicle with a hose, unless the hose is fitted with a shut-off nozzle;
- operating a fountain or decorative water feature, unless the water is part of a recirculating system; and





## Media Release

- irrigating turf or ornamental landscapes during and 48 hours following measurable precipitation (new).

### **(New) Prohibitions affecting commercial businesses include:**

- restaurants and other food service establishments can only serve water to customers on request; and
- operators of hotels and motels must provide guests with the option of choosing not to have towels and linens laundered daily and prominently display notice of this option.

### **Water Agency Requirements**

The biggest change for urban water suppliers is the creation of a floor, or minimum standard, for outdoor irrigation restrictions. Urban water suppliers must now limit the number of days per week that customers can irrigate outdoors. The limit must either be specified in their drought contingency plans; or if their plan contains no specific limit, irrigation is limited to no more than two days per week.

Water agencies will also be required to notify customers when they are aware of leaks that are within the customer's control. Finally, monthly reporting requirements will be expanded to include the limit on days for outdoor irrigation and a description of compliance and enforcement efforts.

For smaller water suppliers, the expanded regulation clarifies that if they choose to implement alternate mandatory measures, in lieu of limiting outdoor irrigation to twice a week, those measures should be designed to achieve a 20 percent reduction in water consumption.

Local agencies can fine property owners up to \$500 a day for failure to implement conservation requirements and the State Water Board can issue cease and desist orders against water agencies that don't impose mandatory conservation measures upon their retail customers. Water agencies that violate cease and desist orders are subject to civil liability of up to \$10,000 a day.

"In a drought this severe, we need to think differently about our daily water use, and need to sacrifice emerald green lawns and other water use luxuries," Marcus said. "At a time when hundreds of thousands of acres of farmland lie fallow, thousands are out of work, communities are running out of water, and fish and wildlife are devastated, and when locally stored urban water supplies are shrinking, we need to step up the pace of conservation. Water agencies should be motivating customers to take even more responsibility for the amount of water used in homes, backyards, businesses, parks and everywhere else."

Following Board adoption, the regulation will be submitted to the Office of Administrative Law, which has 10 days to approve or deny the regulation. If approved by the Office of Administrative Law, the regulation will take effect immediately and remain in effect for 270 days from that date.



## Media Release

For more information, please visit the [Emergency Water Conservation](#) website.

Governor Brown has called on all Californians to reduce their water use by 20 percent and prevent water waste – visit [SaveOurH2O.org](#) and [SaveOurWater.com](#) to find out how everyone can do their part, and visit [Drought.CA.Gov](#) to learn more about how California is dealing with the effects of the drought.

###



## Exhibit 2

# DRAFT Regulation No. 15 Water Conservation Water Shortage Contingency Plan

Adopted: July 19, 2004

Amended: November 17, 2008; March 16, 2009; April 20, 2009;  
December 21, 2009; April 19, 2010; December 20, 2010; March 2015

### A. Water Conservation Stage Declaration

Each year, the District Board of Directors shall determine, based on data in the California Department of Water Resource's (DWR) Bulletin #120 and present water conditions, the water stage applicable to the District. The declaration shall consist of "normal water supply", or one of the four (4) stages of varying water conservation measures. The applicable stage determined by the District shall be effective upon adoption by the Board of Directors each water year and shall remain in effect until changed by the Board based on updated data from DWR, past water usage within the District, and existing water supply and use conditions. The water year shall be defined as the period starting October 1 and lasting until September 30 of the following year.

Regardless of water supply availability or service conditions within the District, the Board of Directors reserves the right to set water conservation goals and modify stage declarations as necessary to align with regional or state water conservation policies, agreements or declarations, or legal requirements. All wasteful practices or unreasonable uses of District water, whether willful or negligent, are always prohibited. The General Manager, following the guidelines set forth in this Regulation and other relevant Board policies, state laws and regulations, shall determine what constitutes a wasteful practice or unreasonable use of water.

In addition to Normal Water Supply Conditions, the following four stages, including their conservation requirements, shall be observed by all water users within the District:

#### **NORMAL WATER SUPPLY**

Water supply conditions are adequate to meet the demands of the District's Customers. The goal of this stage is the use of water efficiently in conformance with the water conservation Best Management Practices (BMPs) specified in the District's Urban Water Management Plan. Requirements specified in this stage are applicable to and in force at all times and in all other stages of this regulation. The following requirements shall be in force during Normal Water Supply and in all subsequent stage declarations unless the Board modifies or adds to these restrictions:

1. Water must not be permitted to discharge, flow, or run to waste into any gutter, sanitary sewer, water course, or storm drain, or to any adjacent lot, from any tap, hose, faucet, pipe, sprinkler, or nozzle. In the case of irrigation, “discharge,” “flow,” or “run to waste” means that the earth intended to be irrigated has been saturated with water to the point that excess water flows over the earth to waste. In the case of washing, “discharge,” “flow,” or “run to waste” means the water in excess of that which is necessary to wash, wet or clean the dirty or dusty object, such as an automobile or boat, flows to waste.
2. Washing of vehicles is permitted only with the use of a water saver nozzle equipped with automatic shut-off and bucket, provided minimal runoff occurs on sidewalks or street.
3. The use of water for washing down sidewalks, walkways, driveways, parking lots or buildings, except as necessary for health, sanitary, or fire protection purposes, is prohibited. When used for these exceptions, high-pressure washers shall be used.
4. All water hoses or filling apparatus shall be equipped with a control nozzle capable of completely shutting off the flow of water except when positive pressure to the nozzle is applied.
5. All water fixtures or heating or cooling devices must not be allowed to leak or discharge. All known leaks must be repaired within seven (7) days or less depending on the severity of the leak.
6. The operation of an irrigation system that applies water to an impervious surface (example: concrete or asphalt) or that is in disrepair is prohibited.
7. Water during cooler morning and evening hours to reduce evaporation and avoid peak energy demand times. Outdoor watering from 12:00 noon to 8:00 p.m. during the months of May - August is prohibited; & watering from 12:00 noon to 6:00 p.m. during the months of September – April is prohibited.
8. Irrigation of landscaping during rainfall is prohibited.
9. Backwashing or overfilling, so as to discharge water to waste, swimming pools, decorative basins, or ponds in excess of the frequency reasonably necessary to maintain the clarity or cleanliness of the water is prohibited. Pool draining and refilling, between May 1 and October 1, will be allowed only for health, maintenance, or structural considerations upon submittal of a written report by a health official or pool consultant and approval provided by the District.
10. All pools, spas, decorative or ornamental fountains, ponds and waterways must be equipped with a recirculation pump and must be constructed to be leak-proof.
11. The use of water from a fire hydrant without the expressed written permission from the District is prohibited.
12. The use of water in new conveyer car washes and new commercial laundry systems that do not use a recirculation system shall be prohibited.

The following are recommended practices for this stage:

1. Watering three (3) days or less per week is encouraged. Customers whose address ends with an odd number are encouraged to only water on Tuesdays, Thursdays and Saturdays. Customers whose address ends with an even number are

encouraged to only water on Sundays, Wednesdays and Fridays. Watering on Mondays is not recommended.

2. Pool covers for swimming pools and spas are recommended to reduce evaporation.
3. Customers are encouraged to wash only full loads of laundry and dishes.
4. Restaurants are encouraged to service water only upon customer request.
5. District Customers are encouraged to take advantage of the District's conservation programs and rebates.

### **STAGE 1 – WATER ALERT**

Water supply conditions may be impeded by lack of available sources including surface water supplies conjunctively used by the District, regional circumstances or statewide climate influences. The goal of this stage is to reduce District-wide consumption of water by up to 20% in order to meet the needs of District Customers, comply with State mandates, cooperate with regional programs and/or comply with County regulations declaring water shortages. The following requirements shall be in force during Stage 1 and all subsequent increases in stage declarations:

1. All requirements of Normal Water Supply Conditions except that the District will make mandatory and will enforce the following:
  - a. Three (3) day per week Odd/Even outdoor watering shall be followed.
    - a. Odd addresses water on Tuesday, Thursday, and Saturday.
    - b. Even addresses water on Wednesday, Friday, and Sunday.
    - c. Watering on Monday is prohibited.
  - b. Restaurants shall serve water only upon customer request.

The following are recommended practices for this stage:

1. All recommendations of Normal Water Supply Conditions unless modified to mandatory requirements.
2. District Customers with “smart” irrigation timers are encouraged to set their controllers to achieve watering efficiency equal to no more than 80% of the evapotranspiration (ET) rate for the Sacramento area.
3. New or expanded landscaping should be limited to drought tolerant trees, shrubs and ground cover. The planting of new turf or grass, whether hydro-seeded or laid, is discouraged.

### **STAGE 2 – WATER WARNING**

Water supply conditions may be impeded by lack of available sources including surface water supplies conjunctively used by the District, regional circumstances or statewide climate influences. The goal of this stage is to reduce District-wide consumption of water by up to 30% in order to meet the needs of District Customers, comply with State mandates, cooperate with regional programs and/or comply with County regulations declaring water shortages. The following requirements shall be in force during Stage 2 and all subsequent increases in stage declarations:

1. All requirements of the previous stages unless further modified below.
2. Outdoor watering shall be limited to no more than two days per week, as determined by the Board of Directors at the time of a Stage 2 declaration.
3. Hydrant permits for construction water will be issued only with the approval of the General Manager. A construction water use plan must be submitted to the District for review that addresses how impacts to existing water users will be mitigated (such as dust control). Potable water must not be used for construction site street cleaning or dust control.
4. A County or State health official must verify all health and emergency conditions requiring potable water use for the purpose of any washing of sidewalks, walkways, streets, parking lots, driveways. An industry professional must verify all health and emergency conditions requiring potable water use for the purpose of any washing of buildings.
5. New or expanded landscaping shall be limited to drought tolerant trees, shrubs and ground cover. No new turf or grass shall be planted, hydro-seeded or laid without prior approval of the General Manager.
6. Car washing is only permitted using a commercial carwash that recirculates water or by high pressure/low volume wash systems.
7. Decorative fountains that use potable water will be drained and kept dry.

The following are recommended practices for this stage:

1. All recommendations of the previous stages unless modified to requirements.
2. District Customers with “smart” irrigation timers are encouraged to set their controllers to achieve watering efficiency equal to no more than 75% of the evapotranspiration (ET) rate for the Sacramento area.

### **STAGE 3 – WATER CRISIS**

Water supply conditions are significantly impeded by interruption of available sources, a regional emergency, a county emergency or state mandates. The goal of this stage is to reduce District-wide consumption of water by up to 50% in order to meet the needs of District Customers. A declaration of this stage will be in conformance with the activation of the District’s Emergency Response Plan and/or Water Shortage Contingency Plan. The following requirements shall be in force during Stage 3 and any subsequent increase in stage declaration:

1. All requirements of the previous stages unless further modified below.
2. Outdoor landscape irrigation shall be limited to one day, as determined by the Board of Directors at the time of a Stage 3 declaration.
3. The planting of new or expanded landscaping is prohibited.
4. Watering restriction exemptions for new turf or hydro-seed will be revoked.
5. Except where non-potable water is used, all Large Landscape Irrigation Customers (CII) must cease turf irrigation.

The following are recommended practices for this stage:

1. All recommendations of the previous stages unless modified to requirements.

2. District Customers with “smart” irrigation timers are encouraged to set their controllers to achieve watering efficiency equal to no more than 70% of the evapotranspiration (ET) rate for the Sacramento area.

#### **STAGE 4 – WATER EMERGENCY (Public Health and Safety Only)**

Water supply conditions are significantly impeded by interruption of available sources, a regional emergency, a county emergency or state mandates. The goal of this stage is to reduce District-wide consumption of water by greater than 50% in order to meet the needs of District Customers. A declaration of this stage will be in conformance with the activation of the District’s Emergency Response Plan. The following requirements shall be in force during Stage 4:

1. All requirements of the previous stages unless further modified below.
2. Any use of water for washing down sidewalks and driveways is prohibited. Unless a condition of health and/or safety is verified by a Sacramento County Health Official.
3. Use of District water is prohibited for filling pools, ponds or spas.
4. Outdoor landscape irrigation is prohibited.
5. All washing of vehicles and other mobile equipment is prohibited unless conducted at a commercial establishment that uses fully recycled water.
6. All metered services will be subject to additional tiered rates approved by the District Board of Directors.
7. No commitments will be provided for new water service connections until the District has returned, at a minimum, to Stage 3 restrictions. The District reserves the right to limit or refuse new service connections until Stage 2 conditions exist.

Recommended practices identified in previous stages are not applicable in Stage 4.

#### **WATER USE PERMITTED**

Water used for the following purposes is considered essential for public health and safety and is therefore permitted during all stage declarations:

- A. Water use for firefighting or routine inspection of fire hydrants or from fire training activities.
- B. Water applied to abate spills of flammable or other hazardous materials, where water is an appropriate abatement methodology.
- C. Water applied to prevent or abate imminent health, safety, or accident hazards when alternate methods are not available.

#### **B. ENFORCEMENT**

Enforcement of any violation of the water conservation requirements provided in this Regulation No. 15, as they may be amended from time to time by the District Board of Directors, is provided in this section. Service charges will be assessed for a violation of the District’s conservation rules in accordance with the following provisions. A Customer will be notified when violations may result in service charges. The service

charges that may be assessed are provided in Section L of Regulation No. 3. In cases of tenant occupancy, landowners retain full responsibility for the use of water by their tenants, including payment of any service charges imposed for violations of this Regulation 15.

Enforcement of the requirements of each water conservation stage will be conducted in a progressive manner and may ultimately lead to termination of service in cases where a violator refuses to discontinue activities constituting water waste. The enforcement steps are as follows:

**Notice of Violation:** Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of the existence of a violation, the District shall request Customer compliance with this Regulation via a notice of violation delivered in person.

**Notice of Violation:** Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of the existence of a violation, the District shall request Customer compliance with this Regulation via a Warning Notice of Violation delivered in person.

**First Violation:** Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of the existence of the next violation after a Warning was issued, the District shall request Customer compliance with this Regulation via a notice delivered in person by District personnel, and/or by certified mail to the billing address of the Parcel upon which the 1st violation has occurred.

The first violation charged to a Parcel will begin the District's monitoring of that Parcel for water waste. Should there be no additional violations on the Parcel prior to the conclusion of the current water year, then that Parcel's violation from the previous year will be expunged and the Parcel will be deemed to be free of violations and the counting of any violations incurred in the new water year will begin on a clean record. The District shall keep on file copies of all violations of the District's water conservation requirements that were incurred in the same water year.

For one time only, and upon request, a Customer may participate in a Water-Wise House Call to remove a first violation from the customer's record for the current water year.

**Second Violation:** Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of a second water conservation violation of any kind on the same Parcel, the Customer and Landowner shall be notified of the 2nd violation in writing at the established billing address by District personnel and/or via certified mail. The District will assess a service charge for the violation, which will be added to the Customer's next bill. The

second violation service charge will be billed in accordance with Regulation 3, Section L.1.

If a second violation occurs at a Stage 2 or higher water conservation stage in this Regulation on any non-metered service, the District shall install a permanent water meter on any existing Service Connection on the Parcel where the violation occurred and/or the District may impose an additional service charge as approved by the District Board of Directors. Metered rate billing will be initiated on the account at the next billing period following the meter installation.

A Customer may avoid paying a service charge for a second violation by attending a water conservation awareness workshop, at the customer's expense, and participating in a Water-Wise House Call if not completed following the first violation.

**Third Violation:** Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of a third water conservation violation of any kind on the same Parcel, the Customer and Landowner shall be notified of the violation in writing at the established billing address by District personnel and/or via certified mail. The District will assess a service charge for the violation, which will be added to Customer's next bill in accordance to Regulation 3, Section L.2. The notice of violation also will state that a subsequent violation may result in disconnection or reduction of service.

**Fourth Violation:** Upon observation by authorized District personnel, or demonstrated to the District's satisfaction, of a fourth water conservation violation of any kind on the same Parcel, the Customer and Landowner shall be notified of the violation in writing at the established billing address by District personnel or via certified mail. The District will assess a charge for the fourth violation as follows:

Flat Rate Services: Upon the fourth water conservation violation of a non-metered account, the District may discontinue or reduce the water supply to the Parcel where the violation occurred. The District shall, in its sole discretion, decide whether to terminate or reduce service based on all of the facts and circumstances of the violation and the Customer's past water use history. The Landowner shall be notified in writing by District personnel and/or via certified mail of the violation that a water meter shall be installed on that Parcel. The Landowner shall bear the cost of installing the meter, which shall be based on the cost of the District's time and materials. The installation of this meter shall cause the billing for the Parcel to be changed from a flat rate to a metered rate. The monthly charge for a metered service will be computed on the current metered rate as more specifically set forth in the District's Regulation No. 3 and any additional tiered water conservation rates adopted by the Board. The installation of this Meter shall be deemed permanent.

Metered Services: Upon the fourth water conservation violation on an existing metered service, the District will notify the Landowner of the violation in writing at the established billing address by District personnel and/or via certified mail. The Landowner will be informed that an additional charge for servicing the violation will be included in his/her next billing. The amount of the charge is as follows:

- (i) 1-inch or smaller service: 25% of the amount of the water bill for the month in which the violation occurs.
- (ii) 1½ inch or larger service: 50% of the amount of the water bill for the month in which the violation occurs.

In addition, the District may discontinue or reduce the water supply to the Parcel where the violation occurred. The District shall, in its sole discretion, decide whether to terminate or reduce service based on all of the facts and circumstances of the violation and the Customer's past water use history. To restore service or full flow capabilities, the affected Customer will be required to request a hearing of the District Board of Directors, where the Customer may present evidence to the Board concerning the violation and request the restoration of water service. At its next regular meeting after the hearing, the District Board shall enter into the record its findings and decision concerning the service restoration request and each issue there under. The Board's decision will be final. The Secretary of the Board will mail the Board's written findings and decision to the Customer within thirty days (30) after the date that the Board renders its decision.

Where compliance with the requirements of this Regulation 15 are beyond the control of the Customer or Landowner and written justification and supporting evidence has been provided by the Customer or Landowner and verified by a District representative, the General Manager may excuse the violation. Approval of such a variance by the General Manager shall be conditioned on the Customer's or Landowner's cooperation with the District in resolving the violation.

Where a water conservation violation occurs on a Parcel improved with multiple family units, and it is not practical to determine which unit is responsible for the violation, the District will assess the service charge described above for existing metered rates.

Where water is wastefully or negligently used on a water user's premises to the extent that the violation seriously affects the District's general service capability, the District may discontinue service to the premises if the water waste conditions causing the general service disruption are not corrected within twenty-four (24) hours after the District provides the water user with the violation notice. A door hanger (notice) shall be deemed sufficient written notice for this purpose.



When encountered in the course of routine daily activity, District personnel have the responsibility and authority to control leaks on any Premises at the point of connection or at the valve controlling the Customer's System. When water is shut off for control of a leak, the District will provide the Customer with notice of the condition.



## Facilities and Operations Committee

### Agenda Item: 5

**Date:** March 25, 2015

**Subject:** Water Meter Asset Management Plan Update

**Staff Contact:** John E. Valdes, Engineering Manager  
David Espinoza, Associate Engineer

**Recommended Committee Action:**

Review Draft “Water Meter Asset Management Plan” update as prepared by staff and provide input as appropriate. Direct staff to present the final draft plan, together with a Committee recommendation on acceptance, to the full Board of Directors at the April 20, 2015 regular Board Meeting.

**Background:**

An earlier draft “Water Meter Retrofit Plan” (“Plan”) update was presented to the Facilities & Operations Committee at their meeting on January 21, 2015. Chair Wichert requested that staff make the maps, particularly Figure 10 - Table of Meter Retrofit Plan/Projected Scheduling, a little more legible in the updated report to the full Board. Director Thomas acknowledged the discrepancy between what the projected cost is to complete the meter retrofit program as compared to costs estimated in the District’s 2009 *Water System Master Plan*. The estimated remaining cost per the Master Plan is approximately \$22 million. However, staff believes the actual cost is closer to roughly \$18 million. Director Thomas recommended that staff readjust the total project completion budget closer to \$20 million. Chair Wichert agreed and recommended that staff review the budget again at the end of 2015. Staff informed the Committee that the budget discrepancy was due to the projected increase in costs associated with purchasing materials (meters, meter setters, etc.), and that each year staff monitors and makes any necessary budget adjustments. And finally, General Manager Roscoe requested to the Committee that the “Water Meter Retrofit Plan” change to the “Water Meter Asset Management Plan” by adding discussion on meter replacement. Chair Wichert agreed, stating he would like it presented at the next Facilities and Operations Committee and would then suggest staff bring it in front of the full Board for consideration and approval.

The District Board of Director’s adopted a “Water Meter Retrofit Plan” in principle on February 23, 2004. Then, in September 2007, the Board adopted an updated plan. A revised *Water Meter Asset Management Plan* (“2015 Plan”) has now been prepared, which is an updated version of the adopted 2007 Plan.

**Discussion:**

This 2015 Plan update provides a plan and strategy for retrofitting the District's remaining existing flat rate residential customers with water meters. The updated Plan includes revised and updated information on the number of metered and unmetered customers, updated maps, an updated schedule showing planned meter retrofits for the next eight years (through 2022) and updated cost information.

The purpose and goals of this 2015 Plan are:

- To comply with Assembly Bill 2572 (AB2572), which requires metering in California to be completed by January 1, 2025.
- To promote water conservation in compliance with Water Forum objectives.
- To comply with Water Forum requirements for Best Management Practices (BMP's), including BMP # 4 on residential meter retrofits.
- To prioritize areas to be metered based on objective and defensible criteria.
- To develop a realistic and phased approach to meter retrofits.
- To coordinate with the District's long-term Capital Improvement Program, including the Main Replacement Program.
- To provide customer outreach on meter retrofits and conserving water use.
- To provide for an organized transition from meter retrofits to meter replacements.
- To comply with the California Urban Water Conservation Council Water Conservation Element Best Management Practices.

Currently, at the end of 2014, out of a total of 46,174 services, 34,702 services are metered, or approximately 75 percent of all services. There are approximately 11,472 residential services within the District's service area that are not metered. However, the majority of the District's commercial and multi-family housing accounts are metered and have been for several years. In 2004, the District proposed to implement a 20-year installation program to complete meter retrofits in advance of the Water Forum commitment. Fortunately, this schedule also meets AB2572 requirements. This 20-year schedule also coincides with the expected life of a typical residential meter, allowing the Meter Retrofit Program to smoothly transition into a meter replacement program over the long term. The 2015 Plan updates the District's effort for the remaining eight years of the Meter Retrofit Program.

Obviously, with such a long program, there will be some customers metered well in advance of others. The 2015 Plan provides a basis for prioritizing the sequence in which remaining residential services will be metered. However, some flat rate residential customers will receive meters for reasons other than this 2015 Plan. Such reasons include voluntary metering, when a customer requests a new larger water service, and when a customer requests downsizing a service.

The 2015 Plan also proposes that water meters be installed when backyard water mains (located primarily in the District's South Service Area) are replaced with new water mains located in the street or public right-of-way fronting the customer's homes. Included with the installation of the new mains, new fire hydrants, etc., new water services are also installed, which includes water

meters. Due to the large number of residential flat rate accounts (approximately 9,578) that are currently served by backyard water mains, and the length of time that it will take to replace these backyard mains, water meters will need to be installed on backyard water services over the course of completing the meter retrofit program. However, all backyard Outside Diameter Steel (ODS) water mains, which are the most maintenance intensive in terms of leak repair, will be replaced in the next few years and, as a result, no water meters will be installed on backyard ODS mains. Note: On October 20, 2014, the District's Board adopted an updated "Distribution Main Asset Management Plan" that prioritizes areas with backyard water mains receiving new water mains.

Several criteria were developed that are considered important in determining the priority for metering, including: (1) average water consumption, (2) front yard water mains, (3) backyard water mains, (4) size of lot, and (5) water main material type. To prioritize the areas remaining to be metered, the areas with flat rate customers were divided up into smaller regions, or service area "blocks," based on various commonalities (i.e., large percentage of larger lot sizes, etc.). The criteria applied to the selected blocks were used to develop a metering prioritization list that is objective and defensible.

In 2009 a new Water System Master Plan was developed to lead the District into developing capital improvements for the next 15 years beginning in 2010. The 2015 Plan should be reviewed and/or revised as necessary every three years to align with future revenue available for funding both meter retrofits and main replacement projects. As the District completes the meter retrofit program over the next 8 years, by 2023, there will be transition to a meter replacement program. This program is addressed in an additional section of the Water Meter Asset Management Plan.

### **Fiscal Impact:**

The updated 2015 Plan does not constitute a financial commitment on behalf of the District. However, the District is obligated by AB2572 to meter all remaining customers by January 1, 2025. The Meter Retrofit Program retrofits approximately 950 front yard services, at an approximate cost of \$1.6 annually. This cost includes locating, retrofitting the existing service, labor and materials. Note that this does not include the cost of additional meters that are routinely installed as part of the District's Main Replacement Program. It is somewhat unknown how this cost will be affected as the District begins to install water meters in backyard easements starting in 2016.

The District's 2009 *Water System Master Plan* includes a summary of recommended capital improvements for the next 15 years beginning in 2010. Based on the average of the remaining balance of meters to be retrofitted as of the end of 2014 and past District experience, the total remaining cost of the Meter Retrofit Program is estimated at \$20 million. Note that this total is based on current cost for meter retrofits and does not include the cost of new-metered services installed on main replacement projects.

### **Strategic Plan Alignment:**

Water Supply 1.B. - Provide for the long-term future needs of the District through prudent planning that will ensure sufficient capacity to serve all customers.

Water Supply 1.C. - Continue to implement and support demand management strategies and water conservation that comply with federal, state and regional programs; support Water Forum Agreement goals and efficiently meet the needs of the District customers.

Water Supply 1.D. - Manage the District's water supplies to ensure its quality and quantity.

The installation of water meters will allow customers the opportunity to conserve water, which will reduce groundwater pumping demand.

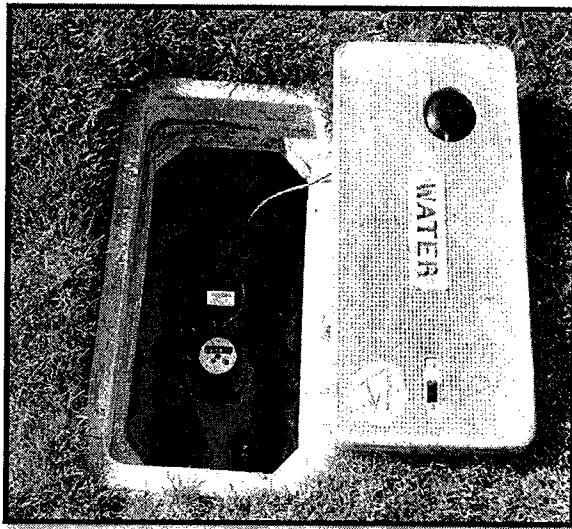
FINAL DRAFT

# Water Meter Asset Management Plan

Updated March 2015

(Updated September 2007 as “Water Meter Retrofit Plan”)

(Adopted February 2004 as “Water Meter Retrofit Plan”)



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## **EXECUTIVE SUMMARY**

The Sacramento Suburban Water District (District) Board of Director's adopted a "Water Meter Retrofit Plan" in principle on February 23, 2004. Then, in September 2007, the Board adopted an updated plan. This Water Meter Asset Management Plan ("Plan") is an updated version of the adopted 2007 plan. This 2015 Plan provides a plan and strategy for retrofitting the District's remaining existing flat rate residential customers with water meters. The purpose and goals of this Plan are:

- To comply with Assembly Bill 2572 (AB2572), which requires metering in California to be completed by January 1, 2025.
- To promote water conservation in compliance with Water Forum objectives.
- To comply with Water Forum requirements for Best Management Practices (BMP's), including BMP # 4 on residential meter retrofits.
- To prioritize areas to be metered based on objective and defensible criteria.
- To develop a realistic and phased approach to meter retrofits.
- To coordinate with the District's long-term Capital Improvement Program, including the Main Replacement Program.
- To provide customer outreach on meter retrofits and conserving water use.
- To comply with the California Urban Water Conservation Council (CUWCC) Water Conservation Element Best Management Practices.

Through execution of the Water Forum Agreement in 2003, the District agreed to install meters on all remaining residential services by 2030, or over the next 27 years. However, in 2005, Governor Arnold Schwarzenegger signed AB2572 which requires metering in California to be completed by January 1, 2025.

Currently, at the end of 2014, out of a total of 46,174 services, 34,702 services are metered or approximately 75 percent of all services. There are approximately 11,472 residential services within the District's service area that are not metered. However, the majority of the District's commercial and multi-family housing accounts are metered and have been for several years. In



2004, the District proposed to implement a 20-year installation program to complete meter retrofits in advance of the Water Forum commitment. Fortunately, this schedule also meets AB2572 requirements. This 20-year schedule also coincides with the expected life of a typical residential meter, allowing the meter retrofit program to smoothly transition into a meter replacement program over the long term. This 2015 Plan updates the District's effort for the remaining eight years of the meter retrofit program.

Obviously, with such a long program, there will be some customers metered well in advance of others. This Plan provides a basis for prioritizing the sequence in which remaining residential services will be metered. However, some flat rate residential customers will receive meters for reasons other than this Plan. Such reasons include: voluntary metering, when a customer requests a new larger water service, and when a customer requests downsizing a service.

This Plan also proposes that water meters be installed when backyard water mains (located primarily in the District's South Service Area (SSA)) are replaced with new water mains located in the street or public right-of-way fronting the customer's homes. Included with the installation of the new mains, new fire hydrants, etc., new water services would also be installed, which would include water meters. However, because of the large number of residential flat rate accounts (approximately 9,578) that are currently served by backyard water mains, and the length of time that it will take to replace these backyard mains, water meters will need to be installed on backyard water services over the course of completing the meter retrofit program. However, all backyard Outside Diameter Steel (ODS) water mains, which are the most maintenance intensive in terms of leak repair, will be replaced in the next few years and, as a result, no water meters will be installed on backyard ODS mains. Note: On October 20, 2014, the District's Board adopted an updated "Distribution Main Asset Management Plan" that prioritizes areas with backyard water mains receiving new water mains.

Several criteria were developed that are considered important in determining the priority for metering, including: (1) average water consumption, (2) front yard water mains, (3) back yard water mains, (4) size of lot, and (5) water main material type. To prioritize the areas remaining to be metered, the areas with flat rate customers were divided up into smaller regions, or service

area “blocks,” based on various commonalities (i.e., large percentage of larger lot sizes, etc.). The criteria applied to the selected blocks were used to develop a metering prioritization list that is objective and defensible. Since dividing the flat rate customers into blocks, further division of the areas into smaller sub-blocks (sub-regions) was required to obtain areas that equal the target number of customers to be metered each year. Based on the blocks and sub-blocks, the total regions now equal 183. As of the end of 2014, 124 sub-regions will have been metered. Note that some of these sub-regions are very small (i.e., less than 10 lots) due to carving out main replacement areas and areas that are already metered.

The number of meters installed in any one year will be made up first of meters that are installed for reasons other than the meter retrofit plan (i.e., voluntary metering, etc.). In addition, a certain number of meters will be installed each year as a result of planned distribution main replacement projects. Finally, the remaining meters needed to meet the District’s target will come from the prioritization list included in this Plan (see Figure 11). Due to uncertainties in the number of services located within the main replacement projects, smaller blocks (sub-blocks) will be used to combine with service replacement totals to reach target counts for the annual meter retrofit program.

In 2009 a new Water System Master Plan was developed to lead the District into developing capital improvements for the next 15 years beginning in 2010. The Water System Mater Plan estimated a cost of \$22.2 million to retrofit the remaining balance of meters as of the end of 2014. Based on past experience, District staff believes that the actual cost may be closer to \$20 million (approximately \$1,750 per service) for the remaining 11,472 services yet to be metered. Note that this total is based on current cost for meter retrofits and does not include the cost of new-metered services installed on main replacement projects.

## **INTRODUCTION / BACKGROUND**

Prior to consolidation on February 1, 2002, the former Northridge Water District (NWD) had executed the Water Forum Agreement, and began a program to meter residential customers. Non-residential customers in NWD were previously already metered. The former Arcade Water District (AWD) had not executed the Water Forum Agreement and, therefore, had not initiated a formal residential metering program. However, AWD had metered all known non-residential customers (commercial and multi-family) prior to the consolidation.

On June 5, 2003, the District executed the Sacramento Water Forum Agreement, which includes a Purveyor Specific Agreement (PSA) for the District. With this agreement, the District agreed to meter all remaining residential customers by 2030, or within 27 years, to comply with Best Management Practice (BMP) No. 4 in the agreement. This Plan outlines a strategic plan for the metering of all residential customers within the District's service area by 2023. All known commercial and multi-family accounts within the District are metered.

In 2005, Governor Arnold Schwarzenegger signed AB2572, which requires metering in California to be completed by January 1, 2025. This legislation supersedes the Sacramento Water Forum Agreement.

In December 2008, the California Urban Water Conservation Council (CUWCC) accepted the District for membership. The CUWCC is comprised of all signatories to the memorandum of understanding. The signatories represent urban water suppliers, public advocacy organizations and other interested groups. Joining CUWCC required the District to implement a water conservation program that is consistent with the Council's Memorandum of Understanding (Council MOU). The MOU:

- Recognizes California's economy, quality of life and environment.
- Recognizes the need to provide reliable urban water supplies and to protect the environment.
- Are intended to reduce long-term urban demands from what they would have been without implementation of these practices.

- Is to conserve water, which could be used for the protection of streams, wetlands and estuaries and/or urban water supply reliability.
- Intent is to have the individual signatory water suppliers develop comprehensive conservation BMP programs using sound economic criteria and consider water conservation on an equal basis with other water management options.
- Recognized that present urban water use throughout the State varies according to many factors including, but not limited to, climate, types of housing and landscaping, amounts and kinds of commercial, industrial and recreational development and the extent to which conservation measures have already been implemented.
- Recognized that many of the BMPs identified in this MOU have already been implemented in some areas and that even with broader employment of BMPs, future urban water use will continue to vary from area to area.
- Recognized that projections of future water demand should include estimates of anticipated demand reductions due to changes in the real price of water.

The Council MOU sets the guidelines for the bylaws, Best Management Practices (BMP), role of the Council and outlines the agencies BMP goals.

With a long-term program, the District's residential customers will receive water meters at varying stages in the program. This Plan was prepared to allow for an objective prioritization of areas to be metered. By analyzing and prioritizing certain defined criteria and factors, staff will be able to answer questions from customers as to why they are being metered in advance of others. Note, however, that this has become less and less of an issue since approximately 75% of the District's customers are already metered. The program considers such factors as ease of installation, average water consumption by system, front-yard versus back-yard water mains, lot size, etc. This Plan also includes a schedule/plan for completing meter installation and an estimated total cost.

## CURRENT METERING COMMITMENTS

### *Water Forum Agreement*

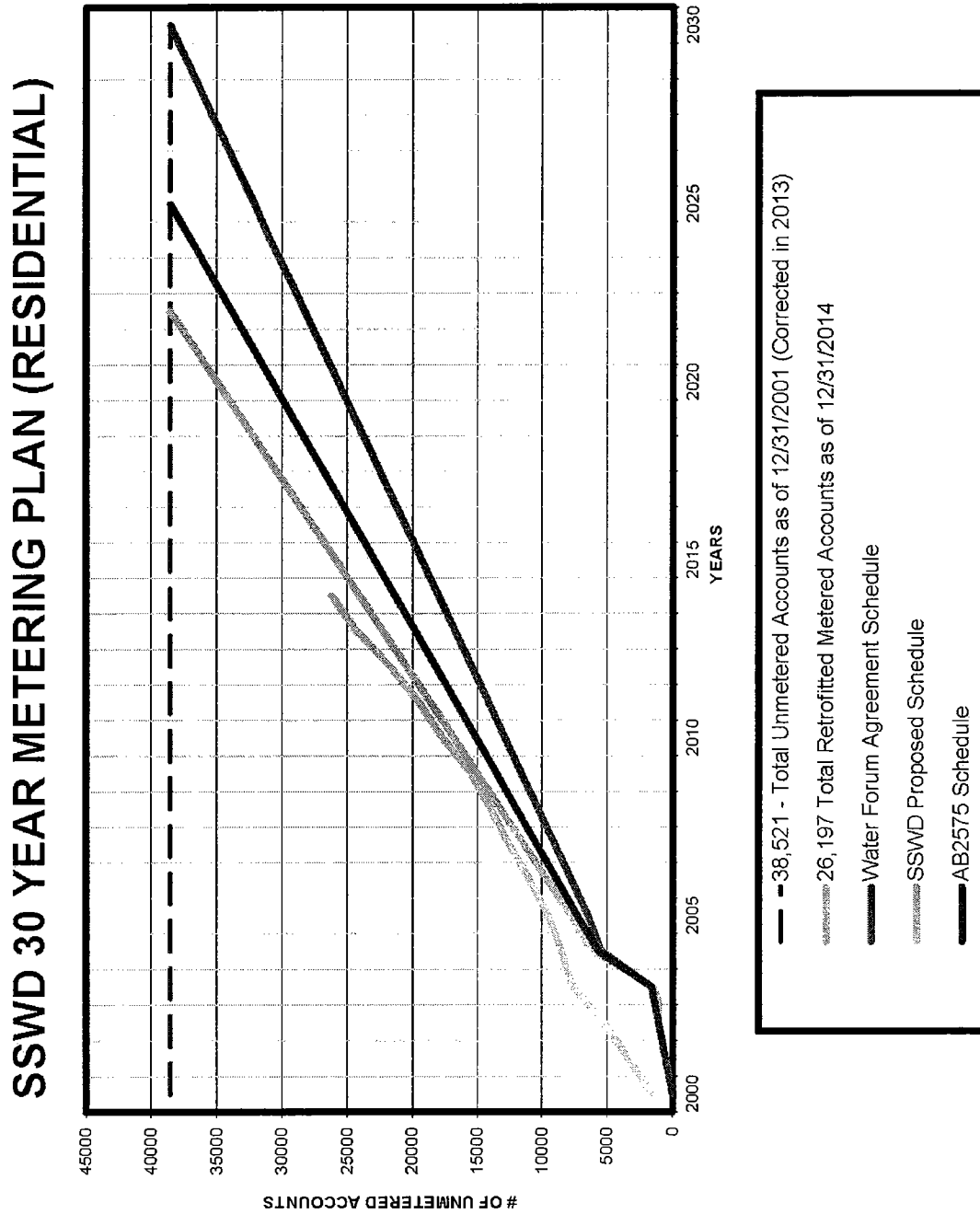
The District's Water Forum Purveyor Specific Agreement (PSA) is included in Appendix A of this report. This PSA includes a water conservation element that consists of the implementation of various BMP's. BMP No. 4 is a residential meter retrofit program that requires the District to retrofit existing residential services by the year 2030 (see Appendix B). Figure No. 1 below shows the current number of unmetered customers in the District at the signing of the Water Forum Agreement. As indicated, approximately 33,715 residential accounts were un-metered at signing of the Water Forum Agreement. Accordingly the Water Forum Agreement mandated that a yearly progression of metering be no less than 3.3% of the total number of un-metered residential accounts at signing of the Water Forum Agreement. Figure 1 shows several items of information. The figure shows:

- The rate of meters to be installed as per the Water Forum Agreement.
- The rate of meters to be installed per the District's accelerated Meter Retrofit Plan.
- The rate and number of meters the District has installed to date.

Based on Figure 1, the District is comfortably ahead of the required 3.3% schedule per the Water Forum Agreement with an accelerated schedule for completion by the end of calendar year 2022. Note however, that there is the possibility of having some remaining services to be metered in 2023 (or 2024) due to difficult field conditions.

Per this plan, the District is targeting completion of residential meter retrofits in eight years, or by 2023. This is seven years ahead of the Water Forum deadline and two years ahead of the AB2572 deadline. Providing a "safety factor," this schedule will assure that meters installed at the beginning of the meter retrofit program will continue to be in operation at the end of the program, as the life expectancy of a meter is typically 20 years. This self-imposed, expedited deadline will prevent the District from having to replace meters installed in 2004 before the retrofits are completed in 2023.

Figure 1 - Residential Metering Requirement per Water Forum Agreement



In 2009, Water Forum signatories agreed to replace previous water conservation policies with the CUWCC's MOU including its BMPs, schedules, targets, procedures, and requirements.

The new element allows purveyors to defer BMPs that are not locally cost-effective and invest an equivalent level of funding into other water conservation activities. Also under the updated element, signatories agreed to changes and modifications of Council processes and BMPs as they evolve over time, including the 2008 revisions and subsequent revisions.

### *California Urban Water Conservation Council*

According to the CUWCC BMP 1.3, Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections (Appendix C), the District would continue metering service connections similar to the previous Water Forum Agreement PSA. The CUWCC BMP 1.3 and the Water Forum BMP 4 are basically the same. Both BMP's require the metering of all new construction of which the District implemented in 1991 as well as retrofitting existing services with water meters, reading and billing customers by volume of use. The difference between the two BMP's is the term for metering. The Water Forum BMP requires metering to be completed 30 years after signing the agreement. The CUWCC's BMP 1.3 requires the metering of all services connections no later than July 1, 2012 or within 6 years of signing the MOU, but in no case later than one year prior to the requirements of state law. Per CUWCC BMP 1.3 metering in the District would need to be completed by 2018. The District's current schedule will complete metering prior to State law, which is 2025. The CUWCC MOU does allow agencies to exempt themselves from BMP compliance. The MOU states: "A signatory water supplier will be exempt from the implementation of specific BMPs for as long as the supplier substantiates each reporting period that based on the prevailing local conditions, one or more of the following applies: (part (b)) Adequate funds are not and cannot reasonably be made available from sources accessible to the water supplier including fund from other entities. However, this exemption cannot be used if a new, less cost-effective water management option would be implemented instead of the BMP for with the water supplier is seeking this exemption" (Section 4.5 (b), Exemptions, page 9). The District submitted BMP reports for 2011 & 2012 and were found to be "On Track" and in compliance with the CUWCC's BMP 1.3 requirements.

## ***Legislation***

Current State law requires that homes built after January 1, 1992, have a water meter installed on their service connection. It is also District's practice to bill these customers using a metered rate schedule. In 2005, Governor Arnold Schwarzenegger signed Assembly Bill 2572 requiring all cities in California to install water meters on all homes by 2025. A copy of AB 2572 is provided in Appendix D. The District's accelerated schedule meets this deadline.

## **TYPES OF METER RETROFITS AND COST FACTORS**

The District's current standard detail for a ¾-inch or 1-inch residential meter is shown in Appendix E. The majority of the District's residential customers have either a ¾-inch or 1-inch service. As indicated, the detail shows a meter box, water meter location and a meter setter with a copper service line. On new developments, the District supplies water meters to the contractor for installation; however, the developer pays a furnished only fee for the water meter. The District currently utilizes meters equipped with radio read transponders. Product Data Sheets are shown in Appendix F for meter equipment used in the District.

In June 2010, the District selected a meter reading system that would allow meters to be read at greater distances. The selection was made after preview and testing of six different systems (Badger, Sensus, Alclara, Mosiac and KP). One system (Itron) decline to participate. After testing and discussion the KP system was selected. The KP system uses a 2-watt system with a larger area of coverage. Various reasons were recognized, some of which included; 3 mile coverage versus 1 mile for some of the other systems, cost of infrastructure and ability to read multiple meter manufacture types. The benefits allowed the District more purchasing flexibility and competitive bidding, reliability, billing and software interface, customer service tools, conservation features and product support.

The current meter reading system consists of antennas placed throughout the District boundary that are used as repeater stations that collect transmitted meter reads within their coverage area and relays the meter read to the central station. Approximately 14 antennas were installed



throughout the District at a cost of \$115,000. To date approximately 5,200 existing metered services have been changed out with the KP units costing about \$130/each. The District has experienced the following benefits; hourly meter reads versus one monthly read, reduced operational costs associated with staff and vehicles, improved customer satisfaction by providing more up-to-date billing data, automatic detection of equipment tampering, theft of water and equipment malfunction.

Since 2005, the District has found the existing water services in the SSA are of mixed sizes of  $\frac{3}{4}$ -inch, 1-inch,  $1\frac{1}{4}$ -inch and  $1\frac{1}{2}$ -inch services lines. The plumbing systems were previously sized to handle the particular demands of the homes and the landscaping for each lot. To assure that ample pressures and flows are available for the plumbing systems, the services were modified for water meters as the same sizes and not reduced to the standard  $\frac{3}{4}$ -inch or 1-inch size. Meter sizes are being placed according to the billing for each house. On  $1\frac{1}{4}$ -inch water services, these are being replaced to a standard size of  $1\frac{1}{2}$ -inch (unless the customer requests a reduction in meter size). If the found service size is  $1\frac{1}{4}$ -inch, a new  $1\frac{1}{2}$ -inch water service, meter setter, and meter is installed that would match the billing for that home. The District does not have a rate for a  $1\frac{1}{4}$ -inch water service, therefore on these occasions the larger meter is installed.

There are numerous ways a meter may be installed on a home other than outlined in this Plan. These situations are described below.

- Voluntary Metering—the District has a voluntary metering program where any residential customer can request a meter and have it installed at their residence. It is noted that once the customer volunteers for a meter, the water service cannot return to a flat rate.
- New Water Service—when a customer requests a new water service, a meter is installed on that service.
- Remodels—when a customer remodels an existing home; a meter is installed on the service.
- Water Waste—the District has a policy of installing a water meter on a customer's service when there have been a high number of water waste complaints.

- Change of Size—when a customer requests a larger or smaller water service a meter is installed on that service. When a customer requests a larger service than what is presently installed at their residence, additional applicable connection fees will be applied and must be paid prior to upsizing the water service.

For the purpose of this Plan, there are three basic types of installation situations that will be encountered. These are described in detail below.

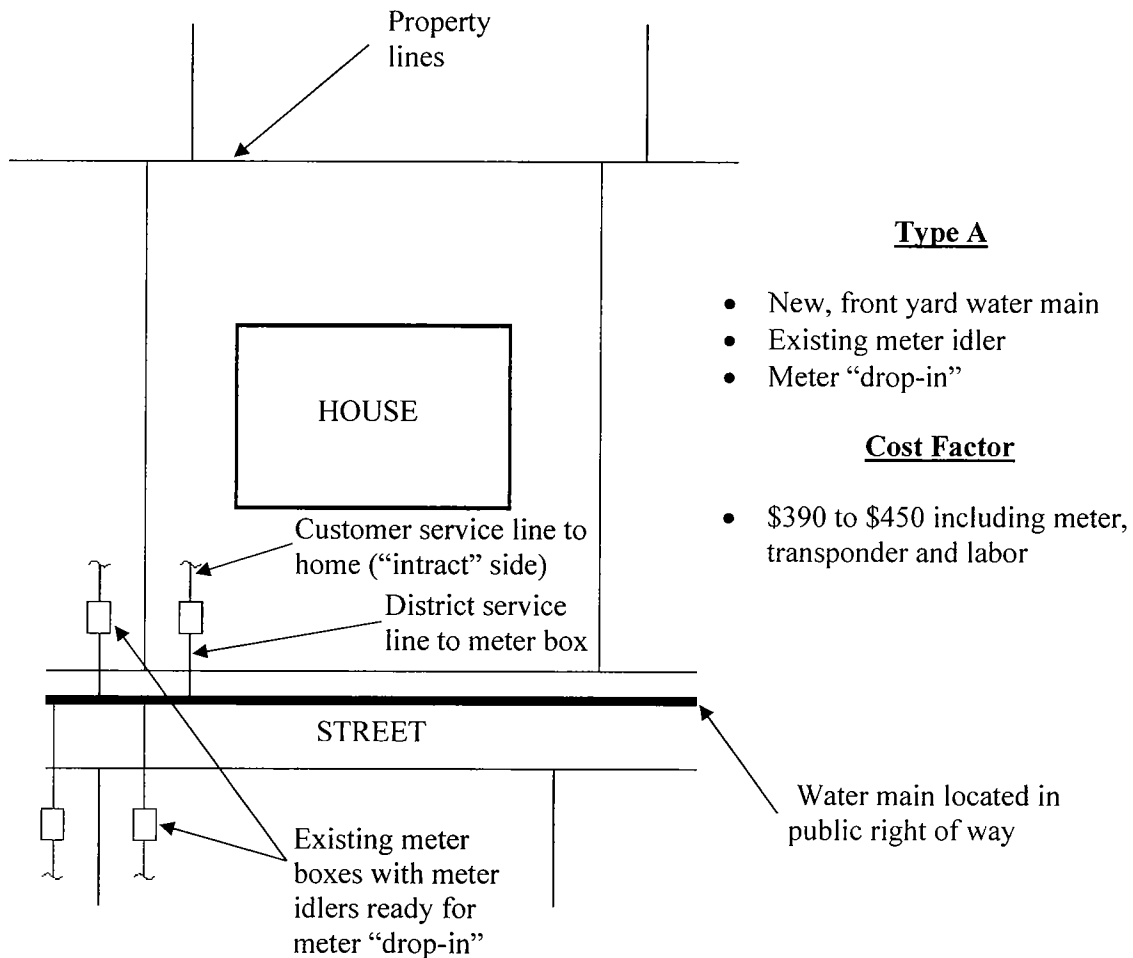
### **Type A. Front Yard Meter “Drop-Ins”**

Since 1993, 86 miles of aging ODS water mains located in back or side-yard easements in the SSA have been replaced. These mains were replaced by new water mains constructed in public right of ways fronting customer’s homes. When these new mains were installed, new District service lines, meter boxes and water meters. In some instances, meter idlers, instead of meters, were installed to allow water meters to be added at a later date. Those services with meter idlers were called “drop-in” meters. Drop-in meters will continue to be installed as situations are found.

The drop-in type of retrofit requires only removal of the existing idler and the installation of a standard water meter into the meter box. This can be performed in approximately 30 to 60 minutes each with the primary costs being for the meter and labor. Figure 2 shows the typical layout for the “drop in” metering scenario.

The estimated construction cost based on past projects for meter drop-ins is \$390 to \$450 per service. This price includes the cost of the standard ¾-inch or 1-inch residential meter and a radio read transponder, for a total approximate material cost of \$300 to \$360. The price of labor is approximately \$90.

**Figure 2 - Front Yard Drop-In Meter Installation**



**Type B. Front Yard Main, No Meter Box or Idler, All Service Line Types**

This type is very convenient for retrofitting, provided an existing water main in the public right of way is fronting the home, with a readily accessible curb stop, see Figure 3. The retrofit will consist of replacing the curb stop and installing a meter setter and meter box. All disturbed hardscape and landscaping will be restored to its existing condition. In some areas District service lines are constructed of non-compliant materials, such as plastic or galvanized pipes, which do not meet District specifications and have a tendency to leak over time. If non-compliant lines are found, they are replaced per District specifications with a more durable poly

wrapped copper pipe. Placement of the new meter box is located to within one-foot of the back of sidewalk. In all cases, landscaping and hardscape will be restored as closely as possible to the previous condition. Photographs are being taken prior to work to verify existing conditions.

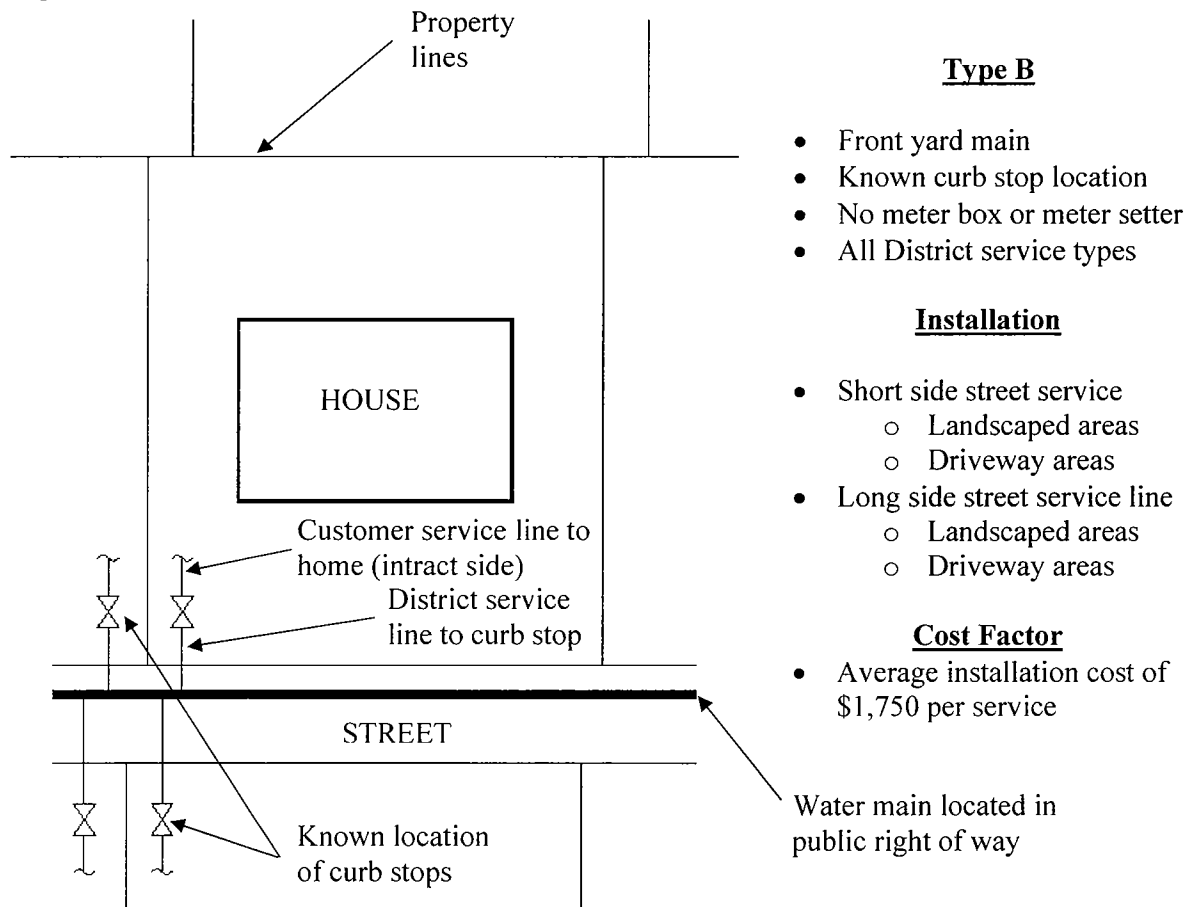
The average cost for these meter retrofits is estimated to be \$1,750 per service assuming a ¾-inch meter and no unusual above-ground conditions (such as unique landscaping concrete, etc.). This includes the cost for materials and labor including items furnished by the District to install a meter setter, meter box and a ¾-inch meter with a radio read transponder.

Several problems governing front yard meter retrofit installation have developed during the implementation of the program. These problems have impacted the cost to retrofit and increased customer outreach. The problems encountered are:

1. On streets where water mains are located at 3 to 5 feet from back of side walk or back of curb, the existing curb stop valve has been located at an additional 3 to 5 feet beyond the water main. The distance from the back of walk has been found to be 6 to 10 feet into the customer's yard. For these services additional piping is added to relocate the new water meter and box to one-foot back walk or curb with a new service line extended to re-connect the customer side service line.
2. The locations of curb stop valves are not uniformly located. Curb stop valves have been found all over the customer's yard ranging from the middle of the yard, under trees, under hardscape such as stamped concrete driveways and under sculptured evergreen bushes. Locations are being marked with white paint and/or with a blue flag and the customers are notified that the proposed location of the meter may be in conflict with existing facilities in the yard. The District requests that the homeowner look at the proposed location and if there are any problems or concerns to please call the District prior to installation so that the District can discuss an alternative location that is not as obtrusive. In these cases, the District will meet with each homeowner to discuss the requirement for placing the meter box at the existing curb stop location and possible alternative locations that could be made to avoid the conflict.

3. After the completion of a meter retrofit some customers have requested a relocation of the meter due to the location being aesthetically unpleasing to the customer. In these cases staff meets with the homeowner to discuss possible alternative locations including relocating the meter. However, the cost to relocate after the meter has been installed is to be paid by the homeowner.
4. After installation of the water meter customers have requested possible downsizing or upsizing of the water meter based on their current situation and use. In either case the homeowner is informed that increasing the size of the water meter will increase the monthly billing and subsequently reducing the size of the meter would reduce the monthly billing of the water service.

**Figure 3 - Front Yard Meter Retrofit Installation**



### **Type C. Backyard, Known or Unknown Service Location, Copper or Plastic Service**

Having the water main in the backyard makes retrofitting meters more complicated. The backyard mains are the oldest in the District and the rear location is non-optimal for service and repairs. Installing a meter on backyard piping is more difficult and time consuming than a front yard main as more items may need to be replaced and/or repaired. Ideally, the District would like to replace all backyard mains with new mains relocated in public right of way fronting the homes and then install meters as per the “drop in” program. In 2016 the current distribution main replacement program will fall short and water meters will need to be installed in backyards to meet the AB2752 obligations.

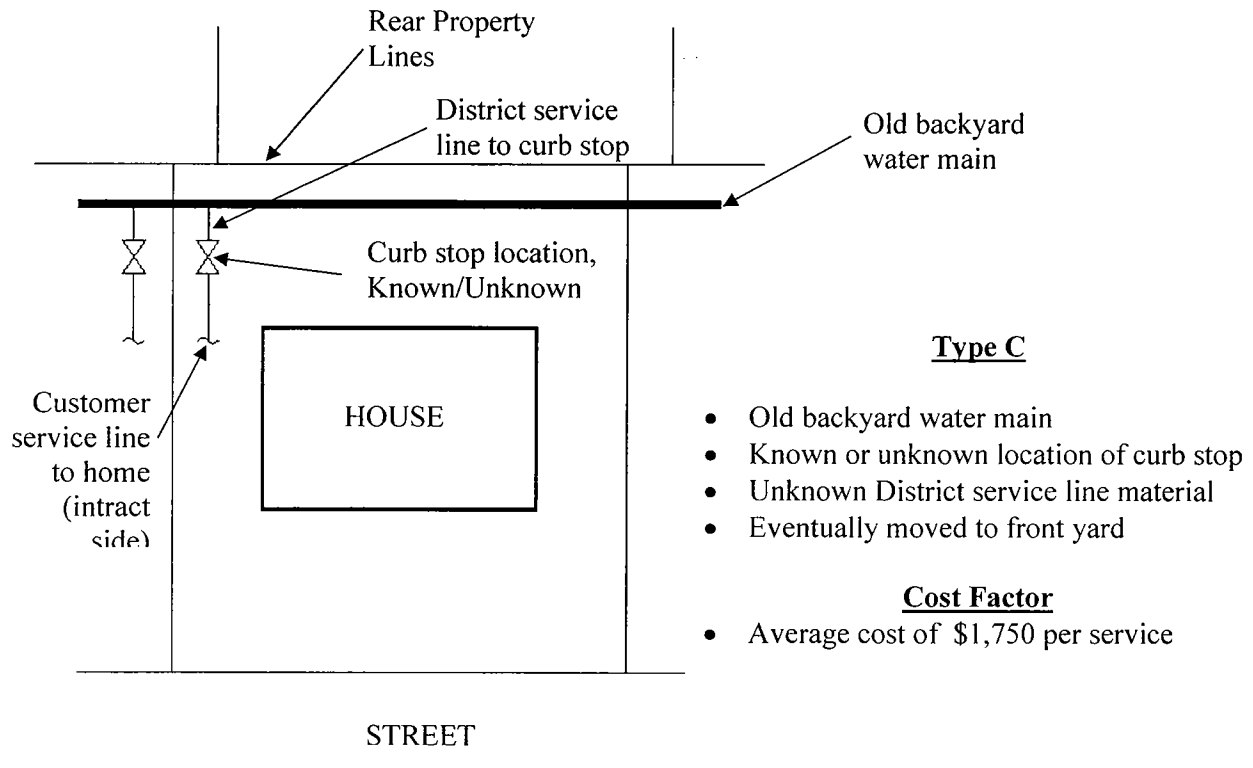
The Type “C” backyard installation, shown in Figure 4, is recognized as having either a known or unknown curb stop or shutoff valve location. Knowing the location of the existing curb stop is beneficial. If the location is unknown, it may prove to be difficult to locate and access. Another concern may be the type of existing District side service line material. If non-compliant, the service may require replacement prior to the installation of a water meter. If suitable then the service line could be retrofitted with a water meter. Only after excavating can the service line be inspected for adequacy.

Meters installed in backyards will be reused in the front yard as the water main relocation program catches up to that neighborhood. On those occasions where the water main is located in the side yard, the new water meter would be relocated to the front yard connected to the side yard water main at a location that matches the District’s specifications. At that time, along with a new main, a new copper service line will also be installed to connect into the relocated water meter.

Although the District has limited experience with metering back yard water services, for the purpose of this report, it is estimated that the cost of these meter retrofits will average approximately \$1,750 per service with a ¾-inch meter (similar to a front yard meter retrofit). This includes the cost for materials and labor to install a meter box and ¾-inch meter with a

radio read transponder. This assumes that the existing service line is adequate to retrofit and provide water to the customer.

**Figure 4 - Backyard Meter Retrofit Installation**



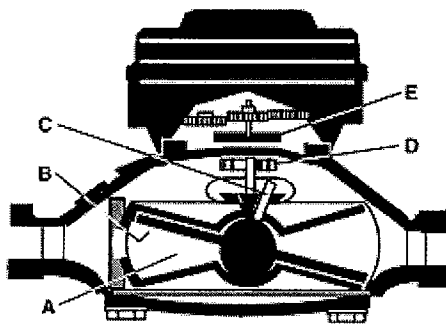
**METER REPLACEMENT**

For the District’s smaller water meters (5/8-inch through 1-inch in size), staff selects what is known as a “displacement” type of water meter. This type of water meter is most often used in residential and small commercial applications. Displacement meters are commonly referred to as positive displacement or "PD" meters. Two common types of PD meters are oscillating piston meters and “nutating” disk meters. The District has had success with nutating disk type meters which is the type currently specified for 5/8-inch, ¾-inch and 1-inch meters. The District specifies Badger meters, See Appendix F, which comply with AWWA Standard C700. The nutating disk type of meter relies on the water to physically displace a moving measuring element in direct proportion to the amount of water that passes through the meter. Figure 5

below shows how this type of meter works in measuring the amount of water that passes through the meter. This type of meter is generally very accurate at the low-to-moderate flow rates typical of residential and small commercial users. The nutating disk meter has a built-in strainer to protect the measuring element from small rocks or other debris that could stop or break the measuring element. These meters normally have bronze, brass or plastic bodies with internal measuring chambers made of molded plastics and stainless steel.

As the District finishes the Meter Retrofit Program over the next eight to ten years (by January 1, 2025) there will be a transition to a Meter Replacement Program. In fact, meter replacement is already underway within the District. There are various reasons why a water meter would need to be replaced such as age, use, malfunction, etc. District staff and other field professionals have found that the quantity of water that passes through the meter is more important than age. For meters 5/8-inch through 1-inch in size, the meter is typically ready for replacement when 4 to 5 million gallons (MG) of water have passed through the meter.

**Figure 5. Cross-Section of Nutating Disk Type Water Meter**



Liquid flowing through the meter chamber (A) causes a disc (B) to nutate or wobble. This motion, in turn, results in the rotation of a spindle (C) and drive magnet (D). Rotation is transmitted through the wall of the meter to a second magnet (E) which operates the transmitter.



The District's current Meter Replacement Program is described below.

1. Meter Replacement Criteria:

District staff is currently preparing a specific procedure for the preventative maintenance of distribution system meters. It is planned to have this procedure finalized and implemented starting in 2016. The procedure will provide specific guidelines for the replacement, repair and testing of all meter sizes. The basic premise is:

- 5/8", 3/4" and 1" meters will be replaced on a 20 year schedule or sooner if an excessive volume (typically 4 to 5 MG) has registered on the meter (estimated 2,100 meters per year)
- 1.5" and 2" meters will be rebuilt every ten years (estimated 100 meters per year)
- 3" and 4" meters will be tested every 5 years and rebuilt if the meters are operating outside AWWA standards (estimated 80 meters per year)
- 6" or larger meters will be tested annually and rebuilt if the meters are operating outside AWWA standards (currently 34 in our system)

2. Schedule for Meter Replacement:

The 2009 *Water System Master Plan* (Master Plan) included a 15-year schedule for meter replacement. The District has opted to take a slightly more conservative approach with a 20-year replacement schedule as noted above, but will randomly test 3% of the oldest meters based on the installation date. The results of this testing will be used to determine if the 20-year life cycle should be adjusted.

The meter replacement schedule will be updated when the Master Plan is updated in 2015.

3. Meter Replacement Budget

The Master Plan also included a recommended annual meter replacement budget. However, staff prepares its own independent annual budget based on the meter replacement criteria described above. For CY2015, the District's approved Capital Improvement Program budget includes \$100,000 for meter rebuilding or replacement (2"

meters and smaller). An additional \$140,000 is included for the repair and/or replacement of the District's larger meters (3" and larger in size). In most cases, it is unnecessary to replace the meters; instead the large meters are rebuilt. As a result, this account is generally used to upgrade the service to current District standards with a bypass to allow for future testing and maintenance without interrupting water service to the customer.

#### 4. Staffing Needs:

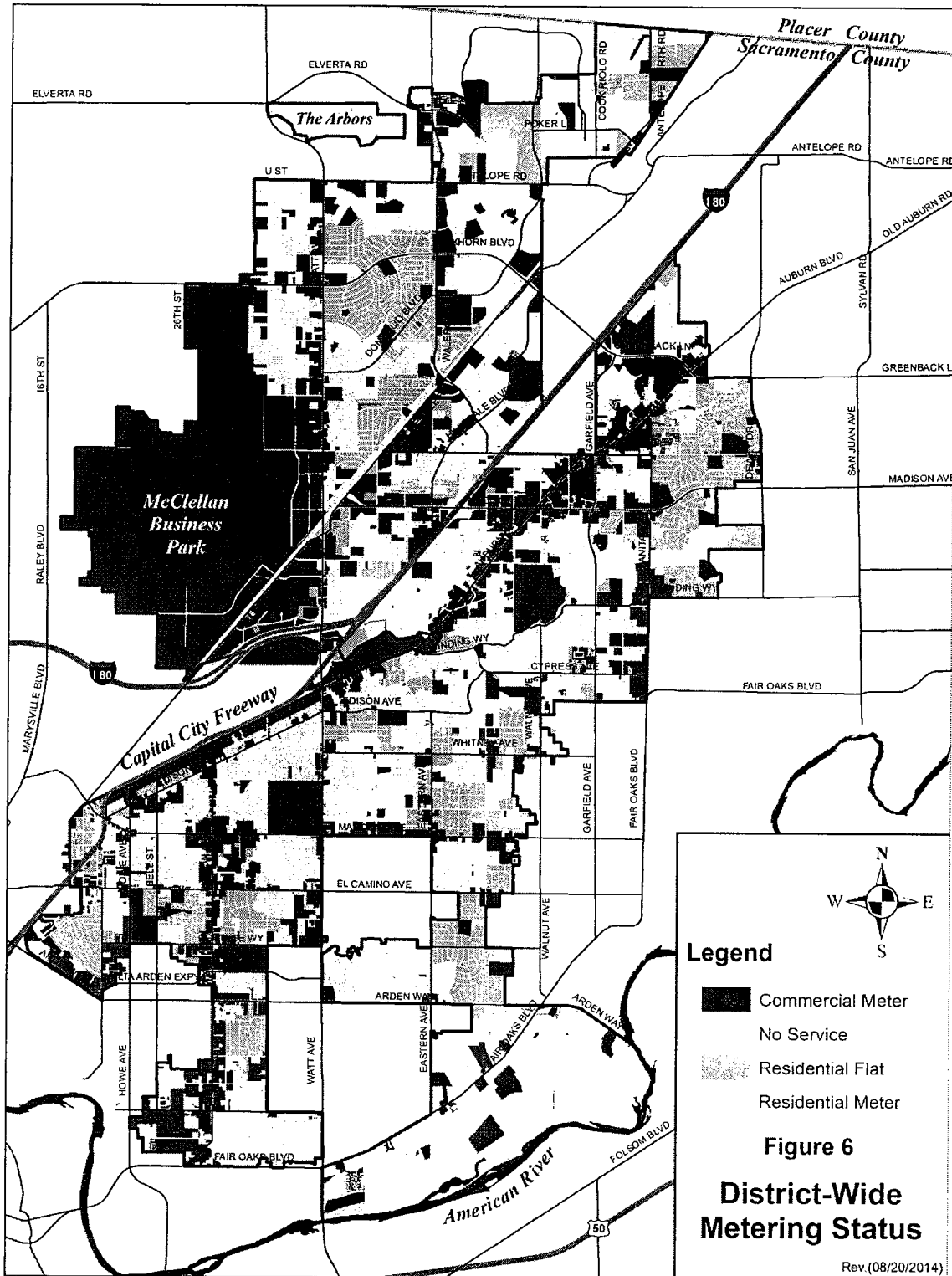
Over the next eight to ten years, the number of meters in service in the District will be increasing from approximately 34,000 to 45,000 at which point the District would be fully metered. Based on the schedule as outlined in Item 1 above, the District would need an estimated additional 3,000 man-hours per year. This would require two additional operators to provide meter replacement/rebuilds, reactive repair for broken meters, non-read meters, and transponder issues.

## METER RETROFIT PLAN

### *Analysis of District to Identify Areas of "Predominance"*

To define multiple distinct areas or "blocks" for the meter retrofit project, information about the entire District regarding metering status, average water use, water main location, water main type and lot sizes were used to produce maps showing a general grouping of areas of predominance. All areas have been separated by front and back yard main locations, as these two types require different installation methods. General lot size groupings, divisions by major streets, locations of current meter "drop in" areas further determine boundaries between these sections, and areas already planned for water main replacement projects. Figure 6 shows current residential and commercial metering status throughout the District. Figure 7 denotes updated un-metered residential areas separated into front and back yard main locations. Figure 8 shows existing water main types throughout the District. Figure 9 shows existing lot sizes throughout the District. Figure 10 shows the areas or blocks sequentially numbered from north to south.

Figure 6 - District-Wide Metering Status



**Figure 7 - Location of Non-Metered Residential Services with Front or Back Yard Mains**

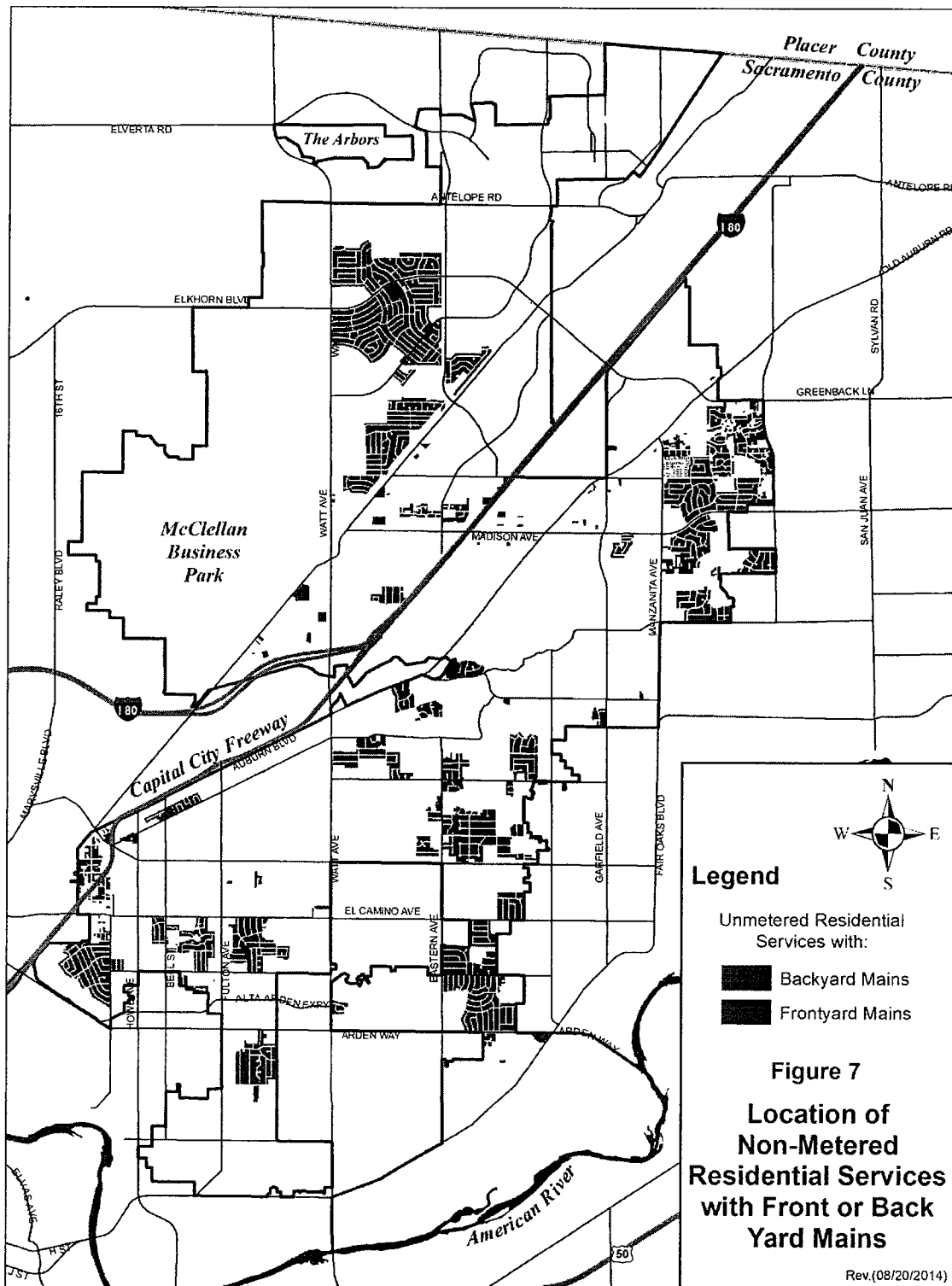


Figure 8 - Water Mains within District (by type)

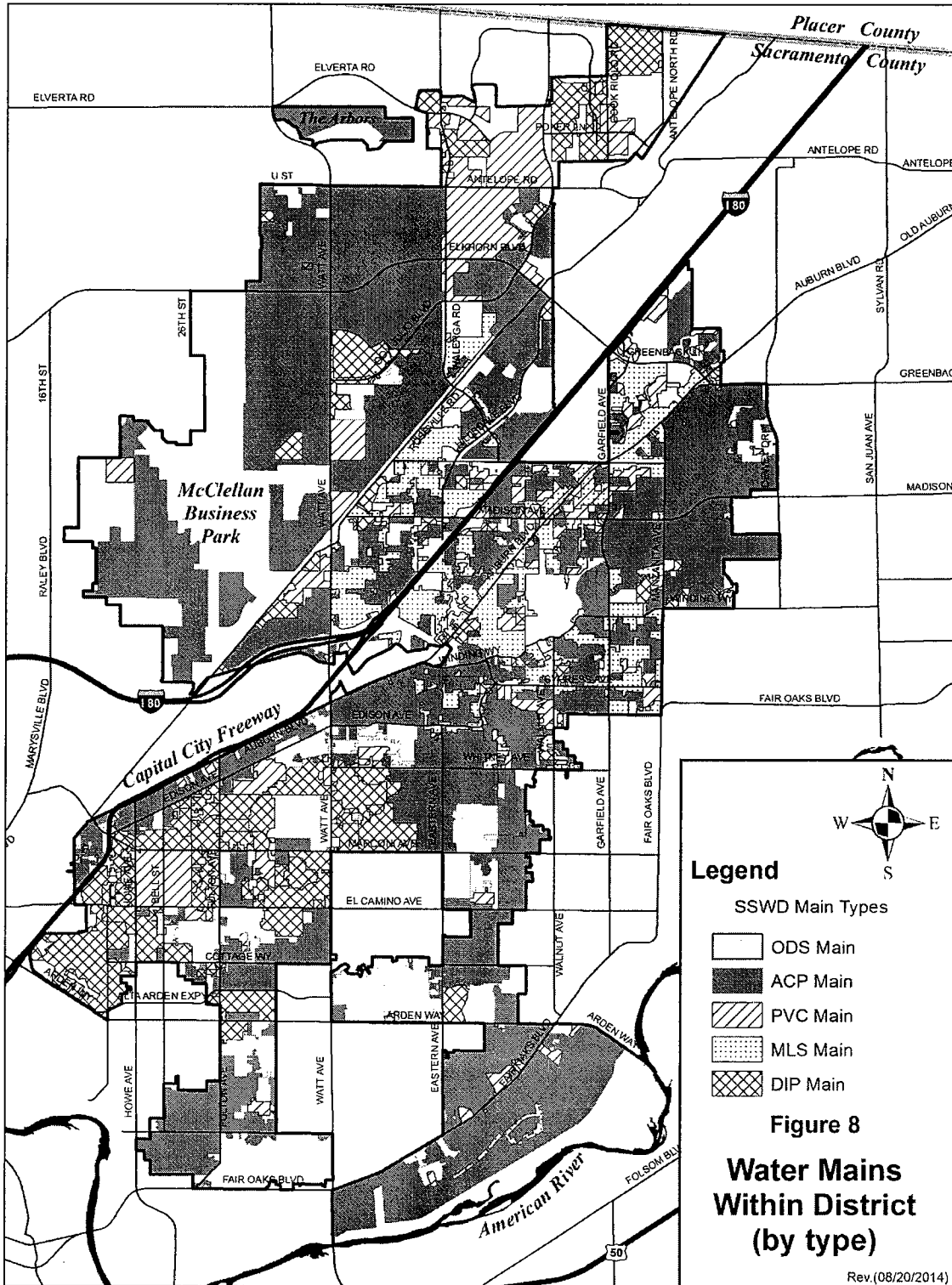


Figure 9 - Lot Sizes within District

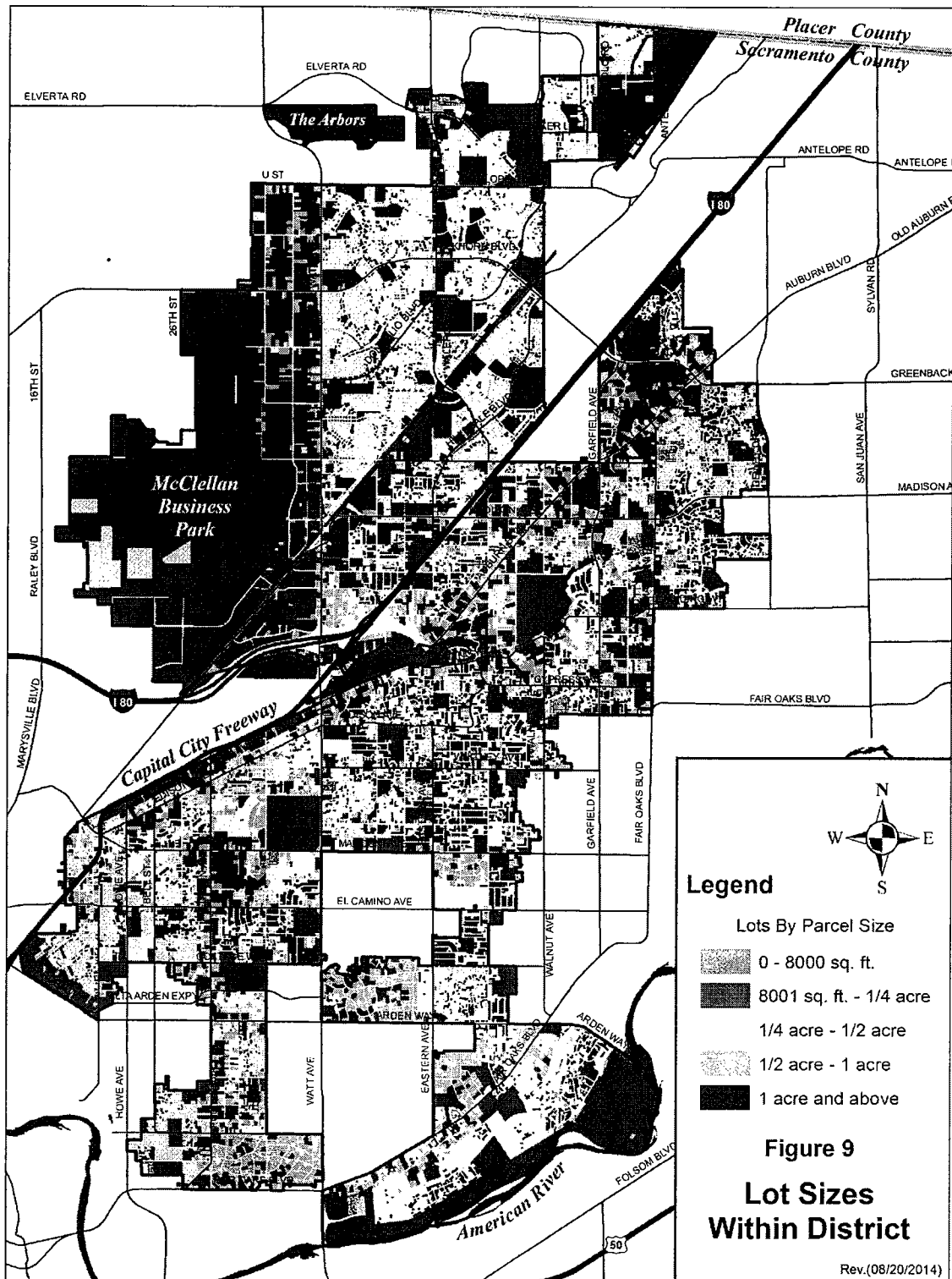
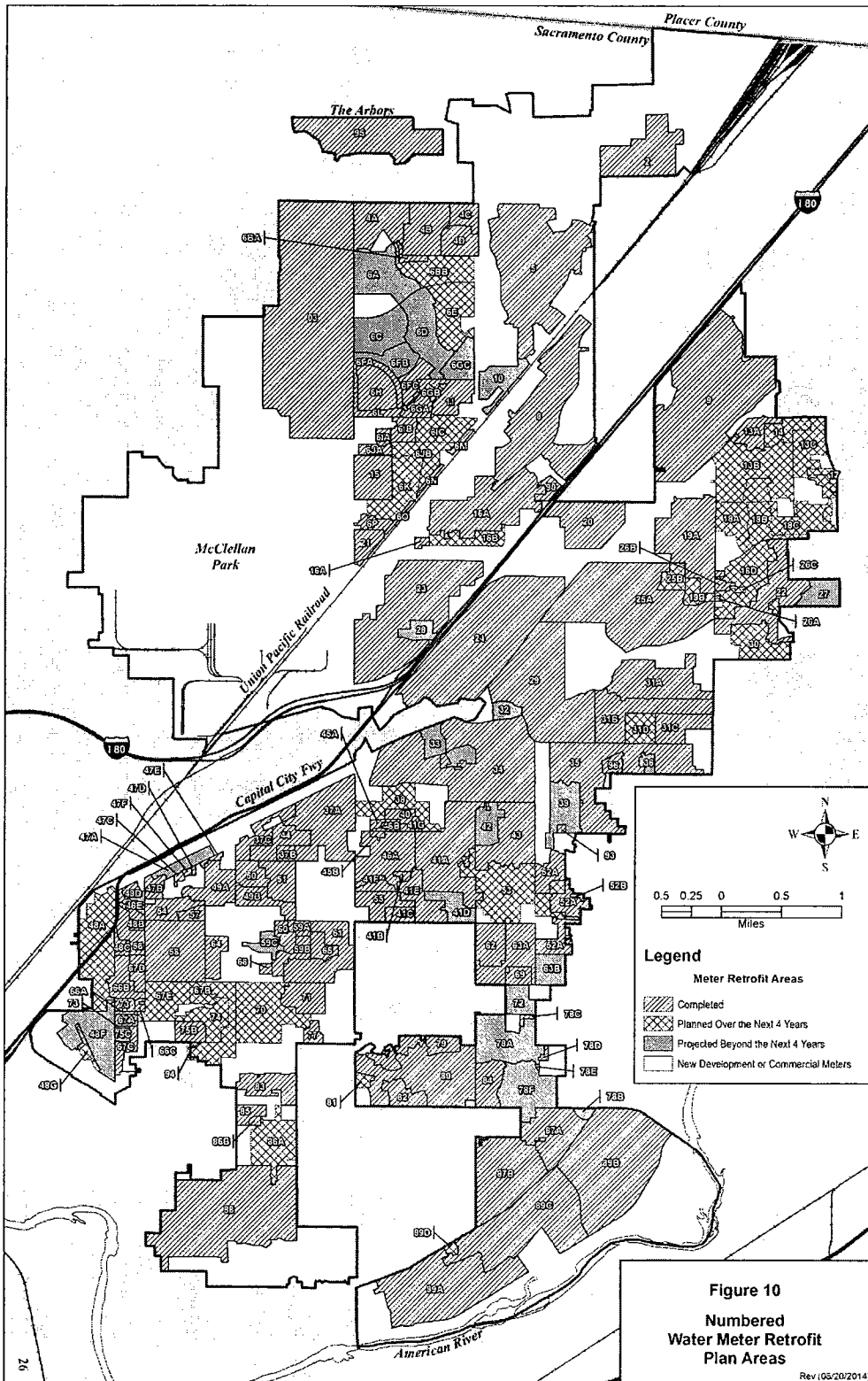


Figure 10 - Water Meter Retrofit Plan Areas



### ***Identified Areas with “Predominance” of Criteria***

#### Areas 15, 21, 40, 44, 58, 60, and 69

There are seven separate areas within the SSA where main replacement projects were completed prior to consolidation of the former NWD and AWD. All seven of these areas have been completed with meters.

#### Problem Areas 12, 50, 51, 54, 62, 65, 71, 73, 76, 83, 84, and 85

There were 12 “problem” areas in the SSA (formerly Arcade Service Area). The 12 areas were determined by the former AWD due to tremendous yearly maintenance required for repairs on the backyard water facilities. The areas were established based on leak history, age of facility, location of facilities and required excessive maintenance. They include a total of 1,112 homes. Water mains in all twelve of these problem areas have been replaced with new water mains in the public right of ways including fire hydrants and front yard water services. New water meters have also been installed as part of the completion of these areas.

#### Areas 48A, 48F, 48G and 48H (Formerly Area 48)

The District currently serves a portion of the City of Sacramento known as “Swanston Estates” which is within the SSA. A small portion of the unmetered services in this area have been retrofitted with meters under distribution main replacement projects. The remaining meter retrofit areas within “Swanston Estates” are broken into areas with front yard services, areas 48A and 48G, which will be metered in 2016 and Areas 48F and 48H both of which have services currently in the backyard. Area 48F is scheduled for installation of meters in the backyard in 2020, and Area 48H is scheduled for installation of meters in the backyard in 2019. There are a total of 720 services within these four Meter Retrofit Areas.

#### Area 3

Area 3 is located west of Watt Avenue in North Highlands, which consists mainly of front yard mains with an average parcel size of 1.39 acres. The services in this area were retrofitted with meters in 2010.



Areas 13B, 13C, 14, 17, 18A, 18B, 18C, 18D, 22B, 26C, 27 and 30

The Arvin Area consists of 2,762 residences with both front yard and backyard water mains. Areas 13B and 13C have front yard water mains and total approximately 697 services and are scheduled for meter retrofit in 2015. The remaining areas have backyard mains totaling approximately 2,065 services to be retrofitted. These backyard services are scheduled for retrofitted in 2016, 2017 and 2018. The services in Area 22B will be retrofitted under a main replacement project scheduled for 2016.

All Remaining Areas with Front Yard Mains

Areas 16B, 25B, 31D, 67B and 81 are scheduled for meter retrofit in 2015, while Area 19B is scheduled for 2020.

All Remaining Areas with Backyard Mains

The remaining residences with water mains in the backyard can be divided into two groups: 1) services with meter retrofits under the Meter Retrofit Program and 2) services with meter retrofits to be completed under the District's main replacement program in accordance with the Distribution Main Asset Management Plan.

- Meter Retrofit Program – the Meter Retrofit Areas in this group include 6BB, 6E, 6GB, 6IC, 6JB, 6K, 10, 28, 32, 33B, 36, 39, 41D, 42, 47A, 52B, 53B, 59C, 63B, 71, 67E, 75C, 78A, 78B, 87C and 89D.
- Distribution Main Replacement Program – the Meter Retrofit Areas in this group include 6A, 6C, 6D, 6FB, 6GC, 38, 53A, 70, 74, 78F and 86A. These areas have been designated by the Distribution Main Asset Management Plan as being those areas with the most critical need to have water mains relocated to the front yards. Water main replacement, and meter retrofit, is scheduled for the period between 2015 and 2022.

## **PUBLIC OUTREACH**

Public outreach is planned for each area as they are scheduled for meter retrofits. The District intends to prepare a detailed outreach plan that would include, at a minimum:

- Information in newsletters.
- Direct mailed letters to affected customers detailing the work that will be performed on the customer's property including a map of the affected area, contact phone numbers and a description of the meter box that will be placed in the front yard. Currently this is performed several times during the course of construction. The initial period is at the beginning of the year to each resident involved in present year's project and individual letters to each lot two weeks prior to actual meter retrofit.
- A "knock on every door" to provide door hangers notifying of pending work or placement of door hangers if no one is home.
- Water meter brochures explaining the reason for the water meter, the District's proposed plan for metering and a "most frequently asked questions" on metering.
- Water conservation information including an offer to perform a water audit.
- Information about billing, how it is calculated, when meter billing will go into effect and contact number for more information.
- Contact personnel for questions.
- Information on District website.

## **CONCLUSIONS AND RECOMMENDATIONS**

- This Water Meter Asset Management Plan update provides a reasonable plan and strategy for retrofitting the District's remaining flat rate residential customers (approximately 11,472 services as of December 31, 2014) with water meters.
- Water meters will be installed when backyard water mains are replaced with new mains installed in the street at the front of customer's homes.
- Because of the large number of residential flat rate accounts (approximately 9,578) that are currently served by backyard water mains, and the length of time that it will take to

replace these backyard mains, water meters will need to be installed on back yard water services over the course of the proposed 20-year meter retrofit program. However, all of the most maintenance intensive backyard ODS mains will be replaced in the next few years and, therefore, no backyard meters will be installed on ODS mains.

- A prioritization list has been established of the remaining areas/blocks to be metered that is objective and defensible to our customers.
- The number of meters to be installed in any one year will be made up first of meters that are installed for reasons other than the meter retrofit plan (i.e., voluntary metering, etc). In addition, a certain number of meters will be installed each year as a result of planned main replacement projects. Finally, the remaining meters needed to meet our annual obligation will come from the prioritization list included in this report (see Figure 11).

Figure 11 - Table of Meter Retrofit Plan/Projected Scheduling

## Meter Retrofit Plan / Projected Scheduling

Updated December 31, 2014

Project Description	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Total		
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
Distribution Main Asset Management			96	560	607	544	359	587	525	802	639	380	247	702	328	374	416	199	810	656		
Meter Retrofit Program - Backyard											48	8		1282	1216	1215	1258	1110				
Meter Retrofit Program - Front Yard		829	935	926	969	698	938	2144	1234	1139	1466	1269	1198	188		195						
<b>Totals</b>		829	1031	1486	1576	1242	1737	2731	1759	1941	2213	1657	1445	2172	1544	1589	1674	1504	810	656	29156	
Meter Retrofit Areas Affected By Proposed Distribution Asset Management Projects			75B / 89 / 83 / 80B / 50 / 51 / 54 / 57 / 71 / 67A / 70 / 75A	47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A	47D / 47E / 47B / 62 / 63A / 66C / 67A / 70 / 75A
Meter Retrofit Program - Backyard																						
Meter Retrofit Program - Front Yard																						

\*Number of replacement meters not known presently; to be determined yearly pending available annual report.

Meter Retrofit Areas Completed To Date	Meter Retrofit Areas Planned Over Next 4 Years	Meter Retrofit Areas Projected Beyond Next 4 Years
<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>

## LIST OF APPENDIX

- Appendix A. Water Forum Purveyor Specific Agreement (PSA)
- Appendix B. SSWD Water Forum Water Conservation Plan - Best Management Practices
- Appendix C. Best Management Practice 1.3 – Metering with Commodity Rates for all New Connections and Retrofit of Existing Connections
- Appendix D. Assembly Bill No. 2572
- Appendix E. SSWD Standard Detail No. 13 – Typical ¾” & 1” Metered Residential Water Service
- Appendix F. Badger Meter Recordall Disc Meters Specifications Sheet for ¾” and 1” Meters

# Appendix A

## Water Forum Purveyor Specific Agreement

**SACRAMENTO SUBURBAN WATER DISTRICT  
(JUNE 5, 2003)**

**A. INTRODUCTION**

Sacramento Suburban Water District (SSWD) was organized on February 1, 2002, through consolidation of the former Arcade Water District (AWD) and the former Northridge Water District (NWD).

The initial *Water Forum Agreement* recorded agreements among stakeholder organizations that could be entered into as the effective date of the initial *Water Forum Agreement*, April 24, 2000. However, it was also recognized that there were some stakeholder organizations that had remaining issues that could not be resolved by that time.

The NWD Purveyor Specific Agreement (PSA) was completed and is included in the *Water Forum Agreement*. The AWD signed a Procedural Agreement because there remained some unresolved issues between AWD and other stakeholder organizations.

SSWD's two former Water Districts are referred to hereinafter as the Arcade Service Area (ASA) and the Northridge Service Area (NSA). See page 2 for map of service areas.

**NORTHRIDGE SERVICE AREA (NSA)**

The NSA is located in the north central part of Sacramento County. A portion of this service area is contiguous with Placer County. The NSA currently encompasses 22,538 customers, of which 20,049 are residential customers.

Historically, the NSA principally extracted and delivered groundwater to meet its customer demands. Since 1998, however, the NSA has delivered treated surface water to its customers on an intermittent basis through the Cooperative Transmission Pipeline (CTP) and the Northridge Transmission Pipeline (NTP).

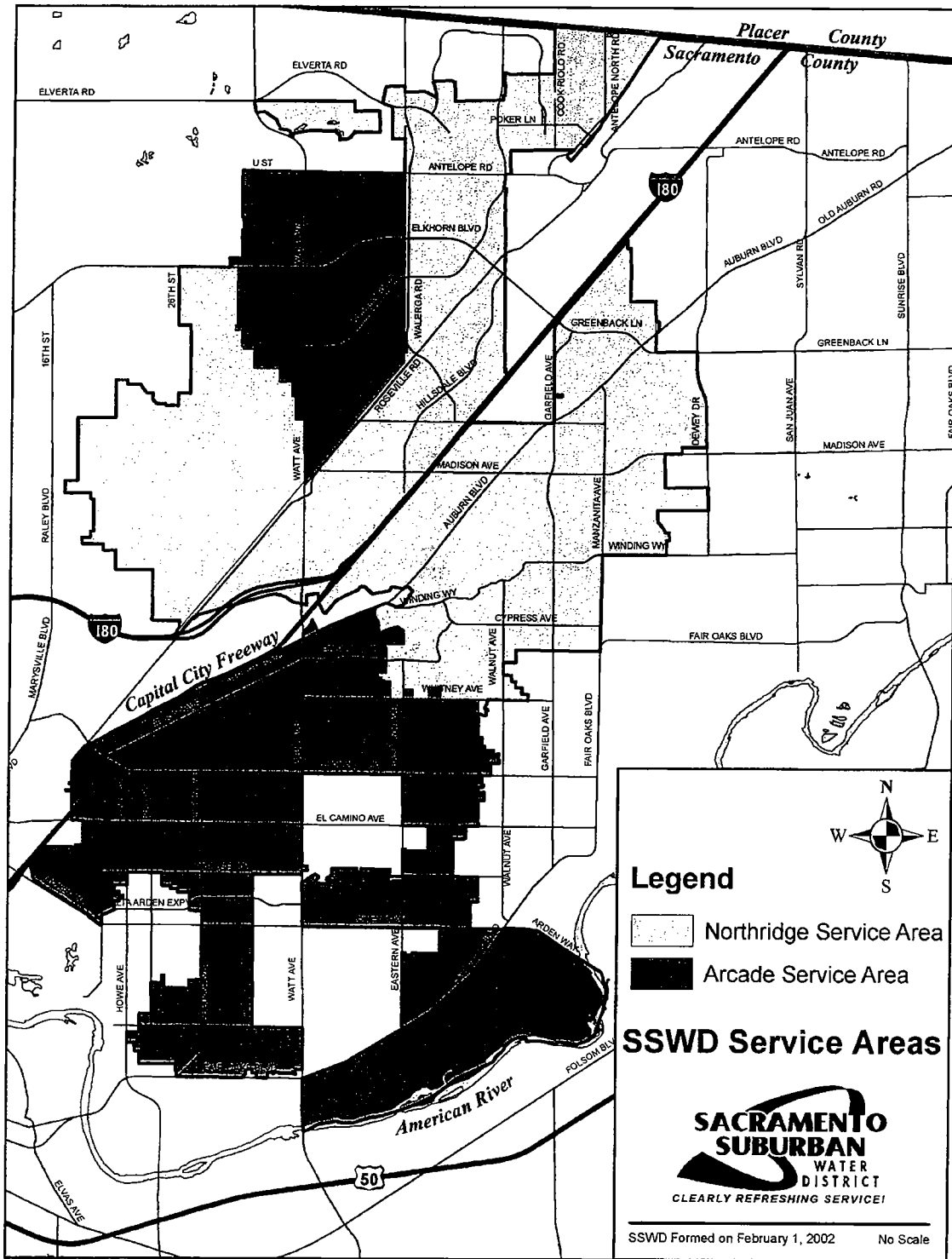
The former NWD and the Placer County Water Agency (PCWA) entered into an agreement for delivery of up to 29,000 acre-feet per year (AF/year) under PCWA's water right as part of a groundwater stabilization program. This agreement is referred to hereinafter as the "SSWD-PCWA Agreement." Surface water has been delivered within the NSA under this agreement since June 1, 2000.

**ARCADE SERVICE AREA (ASA)**

The ASA currently has about 22,775 connections, of which 20,117 are residential customers. The ASA is divided into the Town & Country and North Highlands sub-areas.

**Town & Country Sub-area**

The Town & Country sub-area is currently entirely dependent upon groundwater. However, this area lies within the place of use (POU) of the City of Sacramento's American River water rights.





The former AWD had an agreement with the City of Sacramento (City) for diversion of up to 26,064 AF/year of raw water under the City's American River water rights. This agreement provides for a floating point of diversion from the American River from below Nimbus Dam to the confluence of the American River with the Sacramento River. Current established points of diversion for this entitlement include the City's E.A. Fairbairn Water Treatment Plant (FWTP) and a site referred to as the "American River Wells." This agreement was assigned to SSWD under the consolidation. SSWD is working on an agreement with the City for diversion and treatment of this water supply at the FWTP.

### **North Highlands Sub-area**

The North Highlands sub-area is within the North Central Group of water purveyors (as defined by the Water Forum) in Sacramento County. This sub-area is currently entirely dependent upon groundwater. SSWD anticipates, however, that in the future the North Highlands sub-area will utilize a combination of groundwater and surface water supplies as part of the aforementioned groundwater stabilization program. Surface water supplies delivered to the North Highlands sub-area will likely come from the American River pursuant to the "SSWD-PCWA Agreement" or Section 215 water made available by the U.S. Bureau of Reclamation (Reclamation). These supplies will be delivered to North Highlands via the CTP and the NTP. The North Highlands sub-area lies within the POU of PCWA.

### **B. SEVEN ELEMENTS OF THE *WATER FORUM AGREEMENT*: INTEGRATED PACKAGE**

In order to achieve the Water Forum's two coequal objectives, providing a safe reliable water supply and preserving the values of the Lower American River, all signatories to the *Water Forum Agreement* need to endorse and, where appropriate, participate in each of seven complementary actions.

- X Increased Surface Water Diversions
- X Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years
- X Support for an Improved Pattern of Fishery Flow Releases from Folsom Reservoir
- X Lower American River Habitat Management Element
- X Water Conservation Element
- X Groundwater Management Element
- X Water Forum Successor Effort

For each interest to get its needs met, it has to endorse all seven elements. Based on this linkage, signatories agree to endorse and, where appropriate, participate in all seven of these elements.

### **C. BASELINE DIVERSIONS**

Baseline diversions represent the historic maximum amount of water diverted annually from the American River through the year 1995.

## **NORTHRIDGE SERVICE AREA (NSA)**

No American River diversion was included in the baseline for the NSA.

## **ARCADE SERVICE AREA (ASA)**

### **Town & Country Sub-area**

Because of operational and economic considerations, the Town & Country sub-area has limited its historical maximum amount of water diverted from the American River at the American River Wells to about 3,500 AF/year. [NOTE: The historical (and existing) nominal capacity of the American River Wells is about 10 million gallons per day (MGD) or about 15.5 cubic feet per second (CFS). On a continuous basis, such a diversion is equivalent to an annual volume of water of about 11,200 AF/year.]

### **North Highlands Sub-area**

No American River diversion was included in the baseline for the North Highlands sub-area.

## **D. AGREEMENT FOR MEETING SSWD'S WATER SUPPLY NEEDS TO THE YEAR 2030**

## **NORTHRIDGE SERVICE AREA (NSA)**

### **TEXT OF FORMER NORTHRIDGE WATER DISTRICT AGREEMENT NOW NORTHRIDGE SERVICE AREA (NSA):**

#### **INTRODUCTION**

Some signatories to the *Water Forum Agreement* have differing perspectives on the conditions under which Northridge Water District ("Northridge") should divert water from Folsom Reservoir. These differing perspectives are important for understanding the context in which the following agreement has been entered into. The perspectives of Northridge and the environmental organizations signatory to the *Water Forum Agreement* are also set forth below.

In the interest of coming to an agreement, signatories to the *Water Forum Agreement* agree to the compromise set forth in the agreement below.

#### Agreement

All signatories will support a project to divert, treat and convey Sacramento River water in a pipeline that would connect to the Northridge pipeline ("Sacramento River Pipeline"). They will support a Warren Act contract with the U.S. Bureau of Reclamation for diversion of 29,000 acre feet of Placer County Water Agency ("PCWA") water from Folsom Reservoir. They will also support the PCWA petition to the SWRCB for change in its place of use for water to be used in north central Sacramento County ("Expanded POU"), with the following conditions included in the SWRCB order:

1. For the first ten years that water is available for diversion by Northridge from Folsom Reservoir under the Northridge-PCWA agreement, but not more than twelve years from the effective date of the *Water Forum Agreement*, whichever occurs first,<sup>1</sup> Northridge's diversions under the Northridge - PCWA agreement, for its own use or delivery to other purveyors, will be subject to the following restrictions:

a. Northridge will be able to divert PCWA water only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet.

b. In December, January and February following a March through November period when the unimpaired inflow into Folsom Reservoir was less than 950,000 acre feet, Northridge will not divert PCWA water until such time as or after water is being released from Folsom Reservoir for flood protection.

c. In addition to the foregoing, Northridge's diversions of PCWA water will be limited during the ten year period pursuant to the water use schedule in the Northridge-PCWA agreement, which allows annually-increasing diversions of up to 24,000 acre feet per year during the first ten years of water deliveries under that agreement.

d. Nothing in this agreement is intended to restrict Northridge's ability to take delivery of Section 215 water from Folsom Reservoir from the U.S. Bureau of Reclamation whenever it may be available.

2. If Northridge is able to take delivery of Sacramento River water through the Sacramento River pipeline, Northridge will thereafter divert water from Folsom Reservoir under the Northridge-PCWA agreement, for its own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above-Hodge").

3. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, the SWRCB would hold a hearing ("SWRCB Hearing") if requested by Northridge, the City of Sacramento, County of Sacramento, Friends of the River, Sierra Club or Save the American River Association. The purpose of the SWRCB Hearing will be to determine whether to add or revise conditions to PCWA's water rights for diversion of water from Folsom Reservoir under the Northridge-PCWA agreement that are necessary to mitigate impacts from such diversions and/or prevent such diversions from adversely impacting diversion of American River water under the City of Sacramento's prior water rights. Nothing in this agreement determines the relative priority of the water rights of the City of Sacramento and PCWA. If Northridge is not able to take delivery of Sacramento River water through the Sacramento River Pipeline within the ten-year period, Northridge would thereafter divert water from Folsom Reservoir under the Northridge-PCWA agreement, for its

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<sup>1</sup>This time period is hereafter referred to as the "ten-year period," and it may be extended for a period of up to two additional years by agreement of the parties to this agreement.

own use or delivery to other purveyors, only in years when the projected March through November unimpaired inflow into Folsom Reservoir was greater than 1,600,000 acre feet (i.e., "above-Hodge") and under the conditions referred to in Section 1.b. of this agreement unless these conditions are revised by a SWRCB order issued following the SWRCB Hearing. In addition, Northridge could divert water under the conditions referred to in section 1.d. of this agreement.

The diversion restrictions set forth in this agreement reflect a compromise by the Water Forum parties in order to settle a dispute among them. If there is a SWRCB Hearing, the parties do not intend that the SWRCB consider the existence of this compromise as evidence of appropriate diversion conditions after the conclusion of the ten-year period. It is the intention of the parties that the SWRCB's determination following the SWRCB Hearing be based upon the best available scientific and other evidence available at the time of the SWRCB Hearing. Nothing in this agreement shall affect the right of PCWA to terminate the Northridge-PCWA agreement if PCWA reasonably determines that any term of the SWRCB order resulting from the SWRCB Hearing is unacceptable.

4. Northridge will neither divert nor accept diversions of PCWA water from Folsom Reservoir or the American River under the Northridge-PCWA agreement, for its own use or delivery to other purveyors, whenever such diversions alone or in conjunction with other diversions would limit or impair diversions from the American River by the City of Sacramento under its prior water rights.

Northridge's delivery to other purveyors of water diverted from the American River under the Northridge-PCWA agreement is subject to those purveyors signing and implementing their commitments under the *Water Forum Agreement*.

[End of provisions to be included in SWRCB order.]

In addition, the *Water Forum Agreement* specifies that:

a. With the support of all Water Forum signatories, Northridge will continue to work with other interested parties to pursue a project involving a diversion on the Sacramento River, a new water treatment plant and water conveyance facilities that connect to the Northridge pipeline for use of Sacramento River water within the area served by the Northridge pipeline.

b. In determining the amount of surface water available for growth in the north part of Sacramento County within the ten-year period referred to in this agreement, the parties agree that the long-term annual average yield of water diverted from Folsom Reservoir under the Northridge-PCWA agreement would be not more than 17,400 acre feet, which is the projected average annual water supply that would be available if diversions were restricted to above-Hodge conditions.

## **PERSPECTIVES OF THE PARTIES REGARDING DIVERSIONS BY NORTHRIDGE WATER DISTRICT OF AMERICAN RIVER WATER UNDER THE NORTHRIDGE-PCWA AGREEMENT**

Some signatories to the *Water Forum Agreement* have differing perspectives on the conditions under which Northridge Water District should divert water from Folsom Reservoir. These differing perspectives are important for understanding the context in which the attached agreement has been entered. The perspectives of Northridge Water District and the environmental organizations signatory to the *Water Forum Agreement* are set forth below.

It is the position of the environmental organizations signatory to the *Water Forum Agreement* that:

1. For purposes of a settlement, diversions by Northridge Water District of American River water under the Northridge-PCWA agreement in years when the projected March through November unimpaired inflow into Folsom Reservoir is greater than 950,000 acre feet are acceptable to members of the Environmental Caucus during the ten-year period following the effective date of the *Water Forum Agreement*. This is acceptable because other purveyors that divert upstream of the Lower American River who have fewer alternatives will not be substantially increasing their diversions under the *Water Forum Agreement* during the ten-year period.
2. After the ten-year period following the signing of the *Water Forum Agreement*, Northridge Water District should divert American River water under the Northridge-PCWA agreement only when the unimpaired March through November inflow into Folsom Reservoir is greater than 1,600,000 acre feet (i.e., "above Hodge"). This reflects the Environmental Caucus' belief that the north Sacramento County area groundwater basin could be stabilized at an acceptable level with Northridge diverting American River water under the Northridge-PCWA agreement in only above Hodge years.
3. Diversions of American River water under the Northridge-PCWA agreement below the Hodge threshold after the initial ten-year period would unreasonably affect the instream, wildlife, recreational and aesthetic values of the Lower American River. Such diversion below the Hodge threshold would also unreasonably affect the availability of water for instream uses downstream of the mouth of the American River.

It is the position of the Northridge Water District that:

1. Northridge believes that its dry year diversion restrictions under the *Water Forum Agreement* should be comparable to the requirements of other purveyors who divert water from Folsom Reservoir.
2. Northridge believes that diversions of PCWA water from Folsom Reservoir in below-Hodge years after the conclusion of the ten-year period referred to in the agreement need not be prohibited to avoid significant impacts to instream uses of the lower American River and downstream.

## **ARCADE SERVICE AREA (ASA)**

### **Town & Country Sub-area**

SSWD is pursuing a contract with the City of Sacramento for delivery of surface water from the Fairbairn Water Treatment Plant. Water delivered to SSWD by the City will be subject to (1) this Purveyor Specific Agreement, (2) the contract between SSWD and the City, and (3) the maximum diversion rates from the Fairbairn Water Treatment Plant agreed to by the City of Sacramento in its Purveyor Specific Agreement to the *Water Forum Agreement*.

**1. MOST YEARS: As applied to the Town & Country sub-area and the agreement between SSWD and the City for raw surface water from the American River, Most Years are defined as time periods when the flow bypassing the City's diversion at the FWTP exceeds the Hodge Flow Criteria (see Appendix C).**

In Most Years, SSWD may use up to 26,064 AF/year of surface water diverted from the American River to meet water demands within the Town & Country sub-area and for other conjunctive use purposes consistent with the groundwater management policies of the Sacramento Groundwater Authority. Operational considerations (e.g., peak demands during summer months) may require SSWD to use surface water diverted from the American River at an instantaneous rate of diversion up to 30 MGD, or 46.4 CFS. SSWD may also use groundwater to meet a portion of demands within the Town & Country sub-area. (see “**4. Additional Considerations**” below)

**2. DRIER YEARS: As applied to the Town & Country sub-area and the agreement between SSWD and the City for raw surface water from the American River, Drier Years are defined as time periods when the flow bypassing the City's diversion at the FWTP does not exceed the Hodge Flow Criteria (see Appendix C).**

In Drier Years, SSWD will use groundwater to meet the demands within the Town & Country sub-area subject to **Additional Considerations**” (No. 4) below.

**3. DRIEST YEARS (i.e. CONFERENCE YEARS): Defined for purposes of the *Water Forum Agreement* as follows: Years when the projected March through November Unimpaired Inflow to Folsom Reservoir is less than 400,000 acre feet.**

In Driest Years, SSWD will use groundwater to meet the demands within the Town & Country sub-area subject to **Additional Considerations**” (No. 4) below.

It is recognized that in years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 AF there may not be sufficient water available to provide the purveyors with the driest years quantities specified in their agreements and provide the expected driest years flows to the mouth of the American River. In those years, SSWD will participate in a conference with

other stakeholders on how the available water should be managed. The conferees will be guided by the Conference Year Principles described in Section Four, I. of the *Water Forum Agreement*.

#### **4. ADDITIONAL CONSIDERATIONS**

Signatories to the *Water Forum Agreement* acknowledge and agree that SSWD shall not relinquish control of or otherwise abandon the right to any quantity of water that it has foregone delivery and/or diversion of under this agreement, and that SSWD intends to pursue the potential diversion of these quantities of water from a point of diversion on the Sacramento River.

Signatories to the *Water Forum Agreement* also acknowledge and agree that if SSWD for any reason is not able to enter into a contract with the City for surface water delivery, SSWD is expected pursue a “project” for resuming the diversion from the American River Well System (including construction of a surface water treatment plant) or from another point of diversion on the American River below Nimbus Dam established pursuant to SSWD’s contract assignment from the City. If SSWD develops a specific proposal (“project”), SSWD will discuss it with other signatories to the Water Forum Agreement in the context of both the Water Forum’s two coequal objectives. Water Forum signatories retain their ability to support or oppose such a future proposal.

Recognizing SSWD’s diversion points on the American River, and that diversions lower on the river will increase flows in the river between the diversions points, SSWD will, taking into consideration economic factors, distribution capacity and legal constraints, make reasonable efforts to divert from the lower diversion point when SSWD has a choice of where to divert water.

#### **North Highlands Sub-area**

As discussed in the introduction, SSWD anticipates that in the future the North Highlands sub-area will utilize a combination of groundwater and surface water supplies as part of the groundwater stabilization program. Surface water supplies delivered to the North Highlands sub-area will come from the American River pursuant to the “SSWD-PCWA Agreement” or Section 215 water made available by Reclamation. These supplies will be delivered to North Highlands via the CTP and the NTP and will be subject to the same conditions described for the NSA (including the potential for delivery of surface water diverted from the Sacramento River).

#### **E. SPECIFIC AGREEMENTS FOR COMPLYING WITH THE SEVEN ELEMENTS** *(Agreements in italics are common in all Specific Agreements.)*

1. All signatories to the *Water Forum Agreement* will endorse all water entitlements needed for the diversions specified in each Purveyor Specific Agreement.
2. *All signatories will endorse construction of facilities to divert, treat and distribute water consistent with this Purveyor Specific Agreement and the Water Forum Agreement including diversion structures, treatment plants, pumping stations, wells, storage facilities, and major transmission piping. Endorsement is also to be provided for necessary rights-of-ways, permits, and other endorsements which may be needed, in the context of the following five points:*

- a. *All signatories agree that implementation of the Water Forum Agreement including an Improved Pattern of Fishery Flow Releases, the Updated Lower American River flow standard, the Lower American River Habitat Management Element, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, and the Water Conservation Element constitute reasonable and feasible mitigation for any cumulative impacts on the Lower American River caused by diversions included in the Water Forum Agreement.*
  - b. *Environmental impacts of facilities to divert, treat and distribute water will be subject to site-specific environmental review. It is understood that signatories may provide comments on site specific impacts. All signatories will work in good faith to agree on reasonable and feasible mitigation for any site-specific impacts.*
  - c. *To the extent that the water facilities are consistent with the Water Forum Agreement, signatories agree that they will not object to those water facilities based on the cumulative impacts to the Lower American River. Nor will signatories object to water facilities consistent with the Water Forum Agreement based on the planned growth to be served by those water facilities. (See Section Four IV, Relationship of Water Forum Agreement to Land Use Decision Making.)*
  - d. *In the planning for new water diversion, treatment, and distribution facilities identified in the Water Forum Agreement, water purveyors signatory to the Agreement will either provide for a public participation process, such as meeting with already established citizen advisory committees, or other appropriate means to help design and implement these projects.*
  - e. *All signatories retain their existing ability to provide input on specific details of facility design, financing, and construction.*
3. *Endorsement of the water entitlements and related facilities in the Water Forum Agreement means that signatories will expend reasonable efforts to:*
- a. *Speak before stakeholder boards and regulatory bodies,*
  - b. *Provide letters of endorsement,*
  - c. *Provide supportive comments to the media,*
  - d. *Advocate the Water Forum Agreement to other organizations, including environmental organizations that are not signatory to the Water Forum Agreement, and*
  - e. *Otherwise respond to requests from other signatories to make public their endorsement of the Water Forum Agreement.*
4. *All signatories agree that participation in the Water Forum and the Successor Effort is in the best interests of water consumers and the region as a whole. Participation in the Water*



*Forum is the most economically feasible method of ensuring that water demands of the future will be met. Furthermore, provisions for groundwater management, conjunctive use, conservation programs, improved pattern of fishery flow releases from Folsom Reservoir, habitat management, and a reliable dry year supply are in the public interest, and represent reasonable and beneficial use of the water resource.*

5. *All signatories will not oppose and will endorse where appropriate needed rates and fees applied equitably. This includes endorsement at the California Public Utilities Commission for investor owned utilities' ability to recover all costs of conservation programs, including residential meter retrofit, through rates.*

6. *All signatories will endorse an Improved Pattern of Fishery Flow Releases from Folsom Reservoir and reduced daily flow fluctuations for the Lower American River. (Reference Section Three, III.)*

7. *All signatories will endorse formal assurances that the diversions will be consistent with the conditions in the Water Forum Agreement and that an Improved Pattern of Fishery Flow Releases from Folsom Reservoir will be implemented.*

8. *All signatories will endorse and participate where appropriate in all provisions of the Water Forum Agreement, including all agreements pertaining to other signatories and executed as part of this agreement.*

9. *All signatories will participate in education efforts and advocate the Water Forum Agreement to regulatory bodies and signatory stakeholder boards as appropriate.*

10. *All signatories will participate in the Water Forum Successor Effort to oversee, monitor and report on the implementation of the Water Forum Agreement. (Reference Section Three, VII., Water Forum Successor Effort). This includes participating with other signatories in carrying out procedural agreements as identified in the Water Forum Agreement. To the extent that conditions change in the future, all signatories will work together in good faith to identify ways to ensure that the two coequal goals of the Water Forum will still be met.*

11. *All signatories will endorse and, where appropriate, financially participate in the Lower American River Habitat Management Element (Reference Section Three, IV., Lower American River Habitat Management Element).*

12. *All signatories will endorse and, where appropriate, implement the Water Conservation Element of the Agreement (Reference Section Three, V., Water Conservation Element). This purveyor's implementation of water conservation will be as specified in its Water Conservation Plan which is incorporated as Appendix J to the Water Forum Agreement. The signatories acknowledge that a portion of SSWD's Arcade service area is within the boundaries of the City of Sacramento.*

13. *All signatories will endorse and, where appropriate, participate in implementation of the Sacramento North Area Groundwater Management Authority to maintain a North Area estimated average annual sustainable yield of 131,000 acre feet.*

14. *All signatories will endorse development of a groundwater management arrangement for the South Area and where appropriate participate in its development, to maintain a South Area estimated average annual sustainable yield of 273,000 acre feet.*

15. *All signatories will endorse development of a groundwater management arrangement for the Galt Area and where appropriate participate in its development, to maintain a Galt Area estimated average annual sustainable yield of 115,000 acre feet.*

16. *Signatories authorizing individuals to represent them in matters included within the Water Forum Agreement will ensure that representations made by those individuals are consistent with the Water Forum Agreement and are upheld by the signatories.*

17. *This Agreement is in force and effect for all signatories for the term of the Memorandum of Understanding, December 31, 2030.*

18. *Any solution that provides for future needs will have costs. New diversion, treatment, and distribution facilities, wells, conservation programs, and required environmental mitigation will be needed. This Agreement identifies that these solutions must be equitable, fiscally responsible, and make the most efficient use of the public's money.*

*Water suppliers have both capital costs for facilities and operations and maintenance costs. This Agreement recommends that charges imposed to recover capital costs associated with water acquisition, treatment, or delivery be equitable. Any costs for facilities funded through bonds will be recovered as provided by law. In addition, signatories to the Water Forum Agreement agree that operational, maintenance and replacement costs should be recovered from beneficiaries of the system in accordance with California Government Code Sections 53720 to 53730 (Proposition 62) and California Constitution, Articles XIII, C and XIII, D (Proposition 218) and other laws to the extent they are applicable.*

19. *All signatories agree to endorse, and where appropriate, participate in Sacramento River Supply for North Sacramento County and Placer County (Reference Section Four, III).*

20. *All signatories will endorse, and where appropriate, participate in the section of the Water Forum Agreement entitled "Relationship of Water Forum Agreement to Land Use Decision Making" (Reference Four, IV).*

21. *All signatories will endorse, and where appropriate, participate in the Folsom Reservoir Recreation Program (Reference Section Four, V).*

22. *Purveyors signatory to the Water Forum Agreement will reference the Water Forum Agreement, including agreed upon estimated average annual sustainable yields of each of the three subareas of the groundwater basin in Sacramento County and limits to diversions from the*

*American River in their water master plans and urban water management plans, which are used in providing information to cities and counties as required under Chapter 881 of the Statutes of 1995.*

23. *Any transfers of American River water by signatories will be delivered in a manner consistent with an Improved Pattern of Fishery Flow Releases as referenced in the Water Forum Agreement.*

## **F. ASSURANCES AND CAVEATS**

Because the *Water Forum Agreement* is a comprehensive set of linked elements, it is absolutely essential that adequate assurances be secured for every element. In an agreement that will extend over three decades, the timing of these assurances is critical. Full implementation of all seven elements cannot occur simultaneously. Therefore all signatories agree with the provisions in the Assurances and Caveats Section of this *Water Forum Agreement*.

Two particularly important assurances are the updated Lower American River Flow Standard and Upstream American River Diversion Agreements.

All signatories agree they will recommend to the State Water Resources Control Board an updated American River flow standard and updated Declaration of Full Appropriation to protect the fishery, wildlife, recreational and aesthetic values of the Lower American River. The recommendation will include requirements for U.S. Bureau of Reclamation releases to the Lower American River. In addition, the City of Sacramento's Fairbairn diversion will be required to comply with the diversion limitations of the City's Purveyor Specific Agreement. The *Water Forum Agreement* also includes agreed upon dry year reductions by purveyors upstream of Nimbus Dam. The recommendation for an updated Lower American River standard will be consistent with:

*Water Forum Agreement* provisions on water diversions including dry year diversions,  
and  
Implementation of the Improved Pattern of Fishery Flow Releases which optimizes the release of water for the fisheries.

The recommendation will also address related issues such as principles to guide water management in the driest years, flexibility in the standard to allow adaptive management, and amending the existing "Declaration of Full Appropriation for the American River."

Purveyors signatory to the *Water Forum Agreement* who divert from upstream of Nimbus Dam agree they will enter into contract with the Bureau that will provide assurances that the upstream diverters will divert only the agreed upon amounts, which include provisions for reductions in dry year and/or other equivalent measures.

In order to have a durable agreement it is necessary to include the following caveats. These are statements describing actions or conditions that must exist for the *Agreement* to be operative.

1. As specified below, each purveyor's commitment to implementing all provisions of the *Water Forum Agreement* is contingent on it successfully obtaining its water supply entitlements and facilities.

a. If a purveyor receives support from the other signatories to the *Agreement* for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "Major Water Supply Projects that Will Receive Support Upon Signing the *Water Forum Agreement*" and if it receives all necessary approvals for some or all of those facilities and entitlements, then the purveyor will fully support and participate in the following provisions of the *Water Forum Agreement*:

- (1) Support for the Improved Pattern of Fishery Flow Releases
- (2) Water Forum Successor Effort
- (3) Water Conservation Element
- (4) Lower American River Habitat Management Element
- (5) Support for the Updated Lower American River flow standard
- (6) Restriction of diversions or implementation of other actions to reduce diversion impacts in drier years as specified in its Purveyor Specific Agreement.

and

b. If a purveyor is not successful in obtaining all necessary approvals for all of its facilities and entitlements as shown on the chart in Section Three, I., of the *Water Forum Agreement*, "Major Water Supply Projects that will Receive Support Upon Signing the *Water Forum Agreement*," that would constitute a changed condition that would be considered by the Water Forum Successor Effort.

2. All signatories agree that business, citizens, and environmental signatories' obligation to support, and where specified, implement all provisions of the *Water Forum Agreement* is contingent on implementation of those provisions of the *Agreement* that meet their interests.

3. A stakeholder's support for water supply entitlements and facilities is contingent on:

a. Project-specific compliance with the California Environmental Quality Act, and where applicable, the National Environmental Policy Act, federal Endangered Species Act and California Endangered Species Act.

b. Purveyors' commitment in their project-specific EIRs and CEQA findings to: all seven elements of the *Water Forum Agreement*; support for updating the Lower American River flow standard; commitment by those purveyors that divert from upstream of Nimbus Dam to entering into signed diversion agreements with the U.S. Bureau of Reclamation; commitment by the City of Sacramento to inclusion of the terms of the diversion provisions of its Purveyor Specific Agreement into its water rights.

c. Signed diversion agreements between purveyors that divert upstream of Nimbus Dam and the U.S. Bureau of Reclamation. Other signatories to the *Water Forum*

*Agreement* shall be third party beneficiaries to the diversion agreements solely for the purpose of seeking specific performance of the diversion agreements relating to reductions in surface water deliveries and/or diversions if Reclamation fails to enforce any of those provisions. The status of a signatory to the *Water Forum Agreement* as a third party beneficiary to the diversion agreements is dependent on that signatory complying with all the terms of the *Water Forum Agreement*, including support for the purveyor specific agreement for the purveyor's project. This is not to intend to create any other third party beneficiaries to the diversion agreements, and expressly denies the creation of any third party beneficiary rights hereunder for any other person or entity.

d. Adequate progress on the updated Lower American River standard. The schedule for obtaining the updated standard is in Section Four, I., of the *Water Forum Agreement*.

e. Adequate progress in construction of the Temperature Control Device.

f. Adequate progress in addressing the Sacramento River and Bay-Delta conditions associated with implementation of the *Water Forum Agreement*.

4. Environmental stakeholders' support for facilities and entitlements is dependent upon the future environmental conditions in the Lower American River being substantially equivalent to or better than the conditions projected in the Water Forum EIR. If the future environmental conditions in Lower American River environment are significantly worse than the conditions projected in the EIR, this would constitute a changed condition that would be considered by the Water Forum Successor Effort. Significant new information on the needs of the Lower American River fisheries, which was not known at the time of execution of the *Water Forum Agreement*, would also constitute a changed condition that would be considered by the Water Forum Successor Effort.

#### **G. REMAINING ISSUES**

None.

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# Appendix B

## SSWD Water Forum Water Conservation Plan – Best Management Practices

**BMP 4      RESIDENTIAL METER RETROFIT**

- A. In the first two years after the *Water Forum Agreement* is signed, the Sacramento Suburban Water District would plan for, budget, and prepare the public for a residential meter retrofit program. Beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed, the Sacramento Suburban Water District would annually retrofit at least 3.3% - 5% of their total number of unmetered residential connections as of the date of the *Water Forum Agreement*.



# SACRAMENTO SUBURBAN WATER DISTRICT WATER FORUM WATER CONSERVATION PLAN

## **BMP 1 INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND INSTITUTIONAL CUSTOMERS**

- A. Within three years of agreement signing, Sacramento Suburban Water District's will:
1. contract for trained water auditors;
  2. prepare and make available, as needed, multi-lingual interior and exterior water audit materials for customers;
  3. prepare and make available to customers seasonal climate-appropriate irrigation information; and
  4. investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents.
- B. Sacramento Suburban Water District's contractor will annually:
1. offer audits to all SF, MF and Institutional customers beginning metered billing;
  2. offer, through bill inserts or other means, water-use reviews to all customers receiving a meter; and
  3. survey past program participants to determine if audit recommendations were implemented.
- C. The water-use review program contractor will:
1. provide audits conducted by trained auditors;
  2. provide audits that may include device installation by contractor or customer (showerheads, faucet aerators, etc.), identification of water-use problems, recommend repairs, instruction in landscape principles (hydrozones, ET, etc.), irrigation timer use and, when appropriate, meter reading;
  3. provide program participants with seasonal irrigation schedules by hydrozone and/or station; and
  4. provide incentives to achieve 12% annual participation of the targeted 20% of customers.
- D. Sacramento Suburban Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

## **BMP 2 PLUMBING RETROFIT OF EXISTING RESIDENTIAL ACCOUNTS**

- A. Within three years of agreement signing, Sacramento Suburban Water District will:
1. provide high quality low-flow showerheads, faucet aerators and toilet leak detection tablets, as appropriate at time of audit, to customers without efficient fixtures;
  2. offer toilet leak test kits to all change of account customers who visit the signatory's office;
  3. work with the local "Welcome Wagon" or equivalent organization to provide water conservation materials to new residents;
  4. work with local hardware/home stores to offer free water conservation information and toilet leak test kits at the check-out counters; and
  5. investigate partnership programs with local energy utilities to provide water conservation audits, materials and devices.
- B. Sacramento Suburban Water District and its contractor will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

## **BMP 3 DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR**

- A. Within three years of agreement signing, Sacramento Suburban Water District will complete and be maintaining:
1. an annually updated 'system map' of type, size and age of pipes; pressures; leak history; and historic data;
  2. installation, where appropriate, of devices (such as pressure recorders) or use of other methods designed to identify area with greater than 10% losses;
  3. an ongoing meter calibration and replacement program for all production and distribution meters;
  4. an ongoing leak detection & repair program (as defined in the manual) focused on high probability leak areas identified by the system map; and
  5. a complete system-wide leak detection program when Sacramento Suburban Water District is completely metered.
- B. Sacramento Suburban Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

## **BMP 4 NON-RESIDENTIAL METER RETROFIT**

- A. Within three years of agreement signing, Sacramento Suburban Water District will:
1. identify all non-residential unmetered customers;
  2. provisionally identify any non-residential unmetered customers whom may be very difficult and expensive to retrofit;

3. adopt a plan to meter at least 20 percent of unmetered non-residential accounts yearly so that within five years of becoming a signatory 85-90 percent of non-residential customers are metered; and
  4. begin installation of meters at non-residential unmetered customer locations, with consideration of separate landscape meters.
- B. Within 60 days of meter installation, Sacramento Suburban Water District will provide newly metered non-residential customers with:
1. information on how to read their meter and a consumption-based water bill; and
  2. information on Sacramento Suburban Water District-provided water conservation programs and services.
- C. Sacramento Suburban Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

**BMP 4 RESIDENTIAL METER RETROFIT**

- A. In the first two years after the *Water Forum Agreement* is signed, the Sacramento Suburban Water District would plan for, budget, and prepare the public for a residential meter retrofit program. Beginning no later than the start of the fourth year after the *Water Forum Agreement* is signed, the Sacramento Suburban Water District would annually retrofit at least 3.3% - 5% of their total number of unmetered residential connections as of the date of the *Water Forum Agreement*.

**BMP 5 LARGE LANDSCAPE WATER AUDITS AND INCENTIVES FOR COMMERCIAL, INDUSTRIAL, INSTITUTIONAL (CII), AND IRRIGATION ACCOUNTS**

- A. Within three years of agreement signing, Sacramento Suburban Water District's will:
1. identify all Irrigation accounts and CII accounts with landscapes of one acre and larger and record that information in the customer database;
  2. contract for certified and/or trained landscape water auditors;
  3. prepare and distribute multi-lingual (as appropriate) irrigation system materials, seasonal climate-appropriate information on irrigation scheduling and offer training for customers and landscape workers;
  4. develop seasonal climate-appropriate information to determine irrigation schedules, for the three basic hydrozones identified in the DWR *Landscape Water Management Handbook*, and provided that information to the customers with one acre or larger landscapes; and
  5. begin installation of climate appropriate water efficient landscaping at landscaped Sacramento Suburban Water District facilities, phased in over the five years following agreement signing.

- B. Sacramento Suburban Water District's contractor will annually:
1. directly contact all Irrigation accounts and CII accounts with one acre and larger landscapes, not previously audited, and offer them landscape water-use reviews (audits);
  2. offer, through bill inserts or other means, landscape water-use reviews to all customers;
  3. survey past program participants to determine if audit recommendations were implemented; and
  4. offer program participants with separate irrigation meters information showing the relationship between actual consumption and their ET-based water demand.
- C. The Sacramento Suburban Water District landscape water-use review program contractor will:
1. provide audits conducted by certified landscape water auditors;
  2. provide audits that consist of a system review, to identify necessary irrigation system repairs, and, once repairs have been completed, a water-use review including measurement of landscaped area;
  3. provide program participants with seasonal irrigation schedules by hydrozone and/or station;
  4. provide program participants with regular reminders to adjust irrigation timer settings; and
  5. provide incentives to achieve at least 12 percent annual participation of targeted customers.
- D. Sacramento Suburban Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

**BMP 6 LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY DEVELOPMENTS**

- A. Sacramento Suburban Water District will:
1. attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance, and to monitor, and revise, when applicable, the ordinance;
  2. participate in the landscape task force's review of the implementation of the ordinance, including the landscape plan review and final inspection/certification process; and
  3. participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

- B. Sacramento Suburban Water District will publicly support the county's actions to enact and/or revise and then fully implement a landscape water efficiency ordinance.
- C. Sacramento Suburban Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

**BMP 7 PUBLIC INFORMATION**

- A. Within three years of agreement signing, Sacramento Suburban Water District's program will include:
  - 1. a combination of a Sacramento Suburban Water District specific program in conjunction with full participation by the Sacramento Suburban Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: media advertising campaigns, commercial consumer outreach, promotional materials, community events and fairs, evapotranspiration data availability, a Web site, and allied organizations outreach;
  - 2. elements implemented directly by the Sacramento Suburban Water District will include:
    - a. using utility bill inserts or messages on payment notices; and
    - b. providing information on residential metered customers' bills showing use in gallons per day for the last billing period compared to the same period the year before.

**BMP 8 SCHOOL EDUCATION**

- A. Within three years of agreement signing, Sacramento Suburban Water District's program will include:
  - 1. A combination of a Sacramento Suburban Water District specific program in conjunction with full participation by the Sacramento Suburban Water District in the Sacramento Area Water Works Association (SAWWA) Conservation Committee's Public Outreach Program or other equivalent regional program. This program includes programs such as: school outreach, promotional materials, community events and fairs, a Web site, and allied organizations outreach;
  - 2. Elements implemented directly by the Sacramento Suburban Water District include:
    - a. offering tours of Sacramento Suburban Water District xeriscape gardens to elementary schools in the Sacramento Suburban Water District service area; and
    - b. working with schools served by the Sacramento Suburban Water District to promote school audits, reduced water bills, and innovative funding for equipment upgrades.

**BMP 9 COMMERCIAL AND INDUSTRIAL (CI) WATER CONSERVATION**

- A. Within three years of agreement signing, Sacramento Suburban Water District's will have:
  1. contracted for trained commercial/industrial water auditors;
  2. the DWR Commercial / Industrial (CI) water-use materials available for CI customers;
  3. established, if possible, cooperative CI audit programs with other utilities; and
  4. a list of available CI water-use consultants.
  
- B. Sacramento Suburban Water District's contractor will annually:
  1. identify the top 10% of commercial water users and top 10% of industrial water users, not previously audited, and directly contact them or the appropriate customer's representative and offer them water-use reviews (audits). Provide these customers with data on their current water-related costs (supply, wastewater, energy, on-site treatment, etc.);
    - a. (for metered customers) annually determine the top 10% of commercial customers and of industrial customers based on water use, and when appropriate, special water-use factors (high water use, high wastewater flows, poor quality wastewater, high-energy use, etc.); and
    - b. (for unmetered customers) annually determine the top 10% of commercial customers and of industrial customers based on special water-use factors such as wastewater flows, poor quality wastewater, and high-energy use. etc.
  2. offer, through bill inserts or other means, CI water-use reviews to all CI customers; and
  3. survey past program participants to determine if audit recommendations were implemented
  
- C. The Sacramento Suburban Water District water-use review program contractor will:
  1. provide audits conducted by trained commercial/industrial water auditors;
  2. provide incentives to achieve at least 20% annual participation of the targeted 10% of existing customers; and
  3. contact past program participants for a follow-up audit at least every fifth year.
  
- D. Within three years of agreement signing, Sacramento Suburban Water District will:
  1. promote the use of efficient water-use technologies by commercial and industrial customers by offering incentives related to the benefits gained by the water and sewer service providers;
  2. coordinate with the city or county during the permitting of new, modified or change-of-water-use CI projects within the Sacramento Suburban Water District's service area to ensure that the submitted findings are reviewed by the Sacramento Suburban Water District to identify incentive program opportunities;
  3. consider separate landscape water meter(s) when the combined service would require a 1 1/2" or larger meter; and
  4. require efficient cooling systems, recirculating pumps for fountains and ponds, and water recycling systems for vehicle washing as a condition of service.

E. Sacramento Suburban Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

**BMP 11 CONSERVATION PRICING FOR METERED ACCOUNTS**

- A. Within three years of agreement signing, Sacramento Suburban Water District will:
1. identify all metered customers by account type (single family, multi-residential, commercial, industrial, institutional, landscape irrigation, reclaimed, wholesale);
  2. establish quantity-based rates for each account type;
  3. begin educating all customers about the quantity-based rate structure; and
  4. provide metered customers with monthly or bi-monthly information which shows current flat-rate charges, actual water use in ccf (hundred cubic feet), and what charges would have been if based on actual use.
- B. Sacramento Suburban Water District will, within six years of agreement signing, bill all metered customers utilizing rates designed to recover the cost of providing service as well as on quantity of water used.

**BMP 12 LANDSCAPE WATER CONSERVATION FOR NEW/EXISTING SINGLE FAMILY HOMES**

- A. Sacramento Suburban Water District's contractor will implement a program, which includes:
1. information on climate-appropriate landscape design, plants and efficient irrigation equipment/management provided to change-of-customer accounts and, in cooperation with the Building Industry Association of Superior California, to new customers. The availability of this information will be publicized to all existing Single Family Homes in the Sacramento Suburban Water District's service area on an annual basis;
  2. landscape audit/water-use survey program actively marketed to all SF customers at the beginning of metered billing; and
  3. annual pre-irrigation season notification to Single Family Homes served by the Sacramento Suburban Water District of Sacramento Suburban Water District-provided landscape assistance (audits/surveys, materials, special offers, etc.).
- B. Sacramento Suburban Water District's on-going program, in cooperation with the California Landscape Contractors Association, Sacramento Area Water Works Association, other purveyors, etc., will include:
1. participation in the development/maintenance of a local demonstration garden within five years following agreement signing (does not have to be located within Sacramento Suburban Water District's service area but should be convenient to the Sacramento Suburban Water District's customers);
  2. annual participation at local and regional landscape fairs and garden shows;
  3. annual cooperative education and marketing campaigns with local nurseries;
  4. annual irrigation season landscape media campaign; and
  5. annual post-irrigation season notification, to all customers, of the importance of timer resets/ sprinkler shut-offs.

C. Sacramento Suburban Water District will:

1. attend a landscape task force with other local governments and water purveyors, the building and green industries and environmental / public interest groups to review the existing ordinance to determine if it is at least as effective as the Model Water Efficient Landscape Ordinance as pertains to single family homes, and to monitor, and revise, when applicable, the ordinance;
2. participate in the landscape task force's review of the implementation of the ordinance, including builder compliance, landscape plan review, and final inspection/certification process; and
3. participate in the landscape task force's determination if program effectiveness is diminished by city/county staff time constraints, budget or lack of landscape knowledge/expertise.

D. Sacramento Suburban Water District will publicly support the county's actions to enact and/or revise and fully implement a landscape water efficiency ordinance.

E. Sacramento Suburban Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

### **BMP 13 WATER WASTE PROHIBITION**

Sacramento Suburban Water District has a water waste prohibition ordinance which includes measures and enforcement mechanisms.

A. The water waste prohibition measures include:

1. irrigation water shall not be allowed to run off to adjoining property or to a roadside ditch or gutter;
2. leaking pipes, fixtures, or sprinklers shall be repaired promptly;
3. open hoses not permitted - automatic shut-off nozzles are required; and
4. swimming pools, ponds and fountains shall be equipped with recirculating pumps. Pool draining and refilling only for health, maintenance or structural reasons - requires agency approval.

B. Other measures, such as the following, will be considered and may be permanent, seasonal or related to water shortage:

1. restricting irrigation hours or days;
2. use of a hose to clean sidewalks, driveways, patios, streets and commercial parking lots is not permitted, except for health and safety;
3. restaurants serving water only on request;
4. restricting the use of potable water for compaction, dust control or other construction purposes when non-potable water is available; and
5. limiting the flushing of sewers or fire hydrants, except for health and safety (may be permanent, seasonal or related to water shortage).



- C. The waste prohibition enforcement mechanisms are a graduated series of responses, which include: personal notification, monetary fees, and service termination.
- D. Within three years of agreement signing Sacramento Suburban Water District will:
  - 1. notify all customers at least annually of the waste prohibitions (by newspaper, public notice, mailings, utility billings or a combination of such) prior to the irrigation season;
  - 2. have staff will respond to reports of water waste in a timely manner;
  - 3. will have water waste patrols at least during water shortages; and
  - 4. will cooperate with the city or county in their program enforcement efforts.

#### **BMP 14 WATER CONSERVATION COORDINATOR**

Sacramento Suburban Water District's water conservation coordinator is Warren Jung, who will be responsible for preparing, implementing and monitoring the Plan.

Within three years of agreement signing, at least one Sacramento Suburban Water District staff member or employee of the Sacramento Suburban Water District's conservation program contractor will be an AWWA Certified Water Conservation Practitioner (Level II), if the program becomes an industry standard, or will pass equivalent training.

#### **BMP 16. ULTRA-LOW FLUSH TOILET REPLACEMENT PROGRAM FOR NON-RESIDENTIAL CUSTOMERS**

- A. Within three years of agreement signing, Sacramento Suburban Water District's contractor will:
  - 1. identify all non-residential customers, estimate the approximate number of non-ULF toilets at each account, and rank them by high, medium or low use (e.g., restaurant toilets are high use, warehouse toilets are low use); and
  - 2. if possible, established a cooperative district / sanitation district ULF rebate program.
- B. If a regional program is established, Sacramento Suburban Water District's contractor will annually:
  - 1. offer, through direct mail or other direct communication, ULF rebates to all non-residential accounts which do not yet have ULF toilets, with special focus on those with the highest number of high-use non ULF-toilets.
- C. The regional retrofit program will:
  - 1. offer the necessary incentive (which may include rebates, no interest loans, vouchers, billing surcharges/rebates, etc.) to insure that at least 10 percent of non-residential non-ULF toilets are replaced with ULF toilets each year, with a final installation target of 90 percent of all non-residential toilets being ULFs within ten years;
  - 2. consider larger rebates for the more expensive high-use flushometer-type ULF installations;

3. investigate opportunities for community based organizations (CBOs) to receive the training and financial incentives necessary for them to implement this BMP for their constituents; and
4. consider monitoring the change in water use at metered-accounts that install ULF toilets.

D. Sacramento Suburban Water District will be fully implementing the program described above no later than the beginning of the fourth year after agreement signing.

#### **CITIZEN INVOLVEMENT PROGRAM**

The Sacramento Suburban Water District is investigating ways to implement this aspect of the *Water Forum Agreement* by using existing citizen groups such as perhaps the various CPAC's (County Planning Advisory Committees such as the North Highlands – Foothill Farms Area CPAC, the Carmichael CPAC, and the Antelope CPAC) in their service area.

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# Appendix C

Best Management Practice 1.3 –  
Metering with Commodity  
Rates for all New Connections  
and Retrofit of Existing  
Connections

# EXHIBIT 1

*As Amended June 9, 2010*

## **1.3 METERING WITH COMMODITY RATES FOR ALL NEW CONNECTIONS AND RETROFIT OF EXISTING CONNECTIONS**

*(formerly BMP 4) As Amended March 14, 2007*

### **A. Implementation**

For consistency with California Water Code (Section 525b), this BMP refers to potable water systems. A water meter is defined as a device that measures the actual volume of water delivered to an account in conformance with the guidelines of the American Water Works Association. Implementation shall consist of at least the following actions:

- 1) Require meters for all new service connections.
- 2) Establish a program for retrofitting existing unmetered service connections.
- 3) Read meters and bill customers by volume of use.
  - a) Establish and maintain billing intervals that are no greater than bi-monthly (every two months) for all customers.
  - b) For each metered connection, perform at least five actual meter readings (including remotely sensed) per twelve month period.
- 4) Prepare a written plan, policy or program that includes:
  - a) A census of all meters, by size, type, year installed, customer class served and manufacturer's warranty accuracy when new;
  - b) A currently approved schedule of meter testing and repair, by size, type and customer class;
  - c) A currently approved schedule of meter replacement, by size, type, and customer class; and
- 5) Identifying intra- and inter-agency disincentives or barriers to retrofitting mixed use commercial accounts with dedicated landscape meters, and conducting a feasibility study(s) to assess the merits of a program to provide incentives to switch mixed use accounts to dedicated landscape meters.

## EXHIBIT 1

*As Amended June 9, 2010*

### **B. Implementation Schedule**

- 1) Agencies signing the MOU prior to December 31, 1997, shall:
  - a) Initiate volumetric billing for all metered customers no later than July 1, 2008; and
  - b) Complete meter installation for all connections no later than July 1, 2009.
- 2) Agencies signing the MOU after December 31, 1997, shall:
  - a) Initiate volumetric billing for all metered customers no later than July 1, 2008 or within one year of signing the MOU if later than July 1, 2008; and
  - b) Complete meter installation for all service connections no later than July 1, 2012 or within six years of signing MOU, but in no case later than one year prior to the requirements of state law.
- 3) For unmetered service areas newly acquired or newly operated by otherwise metered agencies, meter installation shall be completed in these service areas within six years of the acquisition or operational agreement.
- 4) A feasibility study examining incentive programs to move landscape water uses on mixed-use meters to dedicated landscape meters to be completed by the end of Year Four following the date implementation was to commence.
- 5) A written plan, policy or program to test, repair and replace meters [see Section A(4) above] shall be completed and submitted electronically by July 1, 2008 or within one year of signing the MOU if later than July 1, 2008, whichever is later.

### **C. Coverage Requirements**

100% of existing unmetered accounts to be metered and billed by volume of use within above specified time periods. Service lines dedicated to fire suppression systems are exempt from this requirement.

### **D. Requirements for Documenting BMP Implementation**

- 1) Confirmation that all new service connections are metered and are being billed by volume of use and provide:
  - a) Number of metered accounts;
  - b) Number of metered accounts read;
  - c) Number of metered accounts billed by volume of use;

## EXHIBIT 1

*As Amended June 9, 2010*

- d) Frequency of billing (i.e. six or twelve times per year) by type of metered customer (e.g. single family residential, multiple family residential, commercial, industrial, and landscape irrigation); and
  - e) Number of estimated bills per year by type of metered customer (e.g. single family residential, multiple family residential, commercial, industrial, and landscape irrigation) vs. actual meter readings.
- 2) Number of unmetered accounts in the service area. For the purposes of evaluation, this shall be defined as the baseline meter retrofit target, and shall be used to calculate the agency's minimum annual retrofit requirement.
  - 3) Number of unmetered service connections retrofitted during the reporting period.
  - 4) Estimated number of CII accounts with mixed-use meters.
  - 5) Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period.

### **E. Criteria to Determine BMP Implementation Status**

- 1) Agency with existing unmetered service connections has completed a meter retrofit plan by the end of Year Two following the date implementation was to commence.
- 2) Agency has completed a feasibility study examining incentive programs to move landscape water uses on mixed-use meters to dedicated landscape meters by the end of Year Two following the date implementation was to commence.
- 3) Agency with existing unmetered service connections is on track to meter these connections during the schedule shown in Section B. An agency will be considered on track if the percent of unmetered accounts retrofitted with meters equals or exceeds the following:

<b>Target Dates for "On Track" Compliance with BMP 4</b>	
<b>Percent of unmetered accounts retrofitted</b>	<b>Agency signed the MOU prior to December 31, 1997</b>
10 percent	December 31, 2000
24 percent	December 31, 2002
42 percent	December 31, 2004
64 percent	December 31, 2006
90 percent	December 31, 2008

# EXHIBIT 1

As Amended June 9, 2010

100 percent	July 1, 2009
-------------	--------------

Target Dates for "On Track" Compliance with BMP 4	
Percent of unmetered accounts retrofitted	All agencies signing the MOU after 1997
20 percent	December 31, 2004
40 percent	December 31, 2006
60 percent	December 31, 2008
80 percent	December 31, 2010
100 percent	July 1, 2012

- 4) Agency bills metered customers at least as often as bimonthly within four years.
- 5) Agency reads meters and bills metered customers using volumetric rates.
- 6) Agency has completed a written plan, policy or program to test, repair and replace meters.

## F. Water Savings Assumptions

Assume meter retrofits and volumetric rates combined will result in a 20% reduction in demand for retrofitted accounts.

## G. Commitment to Further Review

Within three years from the date this BMP revision is adopted, the CUWCC will complete an evaluation of the potential water use efficiency impacts and cost-effectiveness of the following for consideration as future BMP revision(s):

- 1) Criteria for meter testing, repair, replacement and accuracy;
- 2) Transition to installing automated meter reading (AMR) technologies; and
- 3) Transition to monthly billing schedules for all accounts.



# Appendix D

Assembly Bill No. 2572

**Assembly Bill No. 2572**

**CHAPTER 884**

An act to amend Section 521 of, to amend and renumber Sections 110 and 111 of, to add Sections 527, 528, 529, and 529.5 to, and to add the heading of Article 3.5 (commencing with Section 525) to Chapter 8 of Division 1 of, the Water Code, relating to water.

[Approved by Governor September 29, 2004. Filed with Secretary of State September 29, 2004.]

LEGISLATIVE COUNSEL'S DIGEST

AB 2572, Kehoe. Water meters.

Existing law generally requires the installation of a water meter as a condition of water service provided pursuant to a connection installed on or after January 1, 1992. Existing law declares that the state goal for measurement of water use is the achievement, on or before January 1, 1992, of the installation of water meters on all new water service connections after that date to systems owned or operated by a water purveyor.

This bill, with certain exceptions, would require an urban water supplier, as defined, on or before January 1, 2025, to install water meters on all municipal and industrial water service connections that are located in its service area.

The bill would require an urban water supplier, beginning on or before January 1, 2010, but subject to certain exceptions, to charge each customer that has a service connection for which a water meter has been installed, based on the actual volume of deliveries, as measured by a water meter.

The bill would require a water purveyor that becomes an urban water supplier on or after January 1, 2005, to install water meters on all municipal and industrial water service connections within 10 years of becoming an urban water supplier, and, with a certain exception, to charge each customer for which a meter has been installed, based on the actual volume of water delivered, as measured by the water meter, within 5 years of becoming an urban water supplier.

The bill would provide that these provisions supersede and preempt all enactments, including charter provisions and amendments thereto, and other local action of cities and counties, including charter cities and charter counties, and other local public agencies that conflict with these provisions, other than enactments or local action that impose additional or more stringent requirements regarding matters set forth in the bill.



The bill, on and after January 1, 2010, would require an urban water supplier that applies for financial assistance from the state for a wastewater treatment project, drinking water treatment project, or water use efficiency project, or a permit for a new or expanded water supply, to demonstrate that the applicant meets certain requirements.

The bill would authorize a water purveyor, including an urban water supplier, to recover the cost of providing services related to the purchase, installation, and operation of a water meter from rates, fees, or charges.

*The people of the State of California do enact as follows:*

SECTION 1. Section 110 of the Water Code is amended and renumbered to read:

525. (a) Notwithstanding any other provision of law, every water purveyor who sells, leases, rents, furnishes, or delivers water service to any person shall require, as a condition of new water service on and after January 1, 1992, that a suitable water meter to measure the water service shall be installed on the water service facilities in accordance with this chapter. The cost of installation of the meter shall be paid by the user of the water, and any water purveyor may impose and collect charges for those costs.

(b) Subdivision (a) applies only to potable water.

(c) Subdivision (a) does not apply to a community water system which serves less than 15 service connections used by yearlong residents or regularly serves less than 25 yearlong residents, or a single well which services the water supply of a single-family residential home.

SEC. 2. Section 111 of the Water Code is amended and renumbered to read:

526. (a) Notwithstanding any other provision of law, an urban water supplier that, on or after January 1, 2004, receives water from the federal Central Valley Project under a water service contract or subcontract executed pursuant to Section 485h(c) of Title 43 of the United States Code with the Bureau of Reclamation of the United States Department of the Interior shall do both of the following:

(1) On or before January 1, 2013, install water meters on all service connections to residential and nonagricultural commercial buildings constructed prior to January 1, 1992, located within its service area.

(2) On and after March 1, 2013, or according to the terms of the Central Valley Project water contract in operation, charge customers for water based on the actual volume of deliveries, as measured by a water meter.

(b) An urban water supplier that receives water from the federal Central Valley Project under a water service contract or subcontract



described in subdivision (a) may recover the cost of providing services related to the purchase, installation, and operation and maintenance of water meters from rates, fees, or charges.

SEC. 3. Section 521 of the Water Code is amended to read:

521. The Legislature further finds and declares all of the following:

(a) Water furnished or used without any method of determination of the quantities of water used by the person to whom the water is furnished has caused, and will continue to cause, waste and unreasonable use of water, and that this waste and unreasonable use should be identified, isolated, and eliminated.

(b) Water metering and volumetric pricing are among the most efficient conservation tools, providing information on how much water is being used and pricing to encourage conservation.

(c) Without water meters, it is impossible for homeowners and businesses to know how much water they are using, thereby inhibiting conservation, punishing those who conserve, and rewarding those who waste water.

(d) Existing law requires the installation of a water meter as a condition of water service provided pursuant to a connection installed on or after January 1, 1992, but the continuing widespread absence of water meters and the lack of volumetric pricing could result in the inefficient use of water for municipal and industrial uses.

(e) The benefits to be gained from metering infrastructure are not recovered if urban water suppliers do not use this infrastructure.

(f) This chapter addresses a subject matter of statewide concern. It is the intent of the Legislature that this chapter supersede and preempt all enactments and other local action of cities and counties, including charter cities and charter counties, and other local public agencies that conflict with this chapter, other than enactments or local action that impose additional or more stringent requirements regarding matters set forth in this chapter.

(g) An urban water supplier should take any available necessary step consistent with state law to ensure that the implementation of this chapter does not place an unreasonable burden on low-income families.

SEC. 4. The heading of Article 3.5 (commencing with Section 525) is added to Chapter 8 of Division 1 of the Water Code, to read:

#### Article 3.5. Metered Service

SEC. 5. Section 527 is added to the Water Code, to read:

527. (a) An urban water supplier that is not subject to Section 526 shall do both the following:



(1) Install water meters on all municipal and industrial service connections located within its service area on or before January 1, 2025.

(2) (A) Charge each customer that has a service connection for which a water meter has been installed, based on the actual volume of deliveries, as measured by the water meter, beginning on or before January 1, 2010.

(B) Notwithstanding subparagraph (A), in order to provide customers with experience in volume-based water service charges, an urban water supplier that is subject to this subdivision may delay, for one annual seasonal cycle of water use, the use of meter-based charges for service connections that are being converted from nonvolume-based billing to volume-based billing.

(b) A water purveyor, including an urban water supplier, may recover the cost of providing services related to the purchase, installation, and operation of a water meter from rates, fees, or charges.

SEC. 6. Section 528 is added to the Water Code, to read:

528. Notwithstanding Sections 526 and 527, any water purveyor that becomes an urban water supplier on or after January 1, 2005, shall do both the following:

(a) Install water meters on all municipal and industrial service connections located within its service area within 10 years of meeting the definition of urban water supplier.

(b) (1) Charge each customer for which a water meter has been installed, based on the actual volume of water delivered, as measured by the water meter, within five years of meeting the definition of urban water supplier.

(2) Notwithstanding paragraph (1), in order to provide customers with experience in volume-based water service charges, an urban water supplier that is subject to this subdivision may delay, for one annual seasonal cycle of water use, the use of meter-based charges for service connections that are being converted from nonvolume-based billing to volume-based billing.

(c) For the purposes of this article, an “urban water supplier” has the same meaning as that set forth in Section 10617.

SEC. 7. Section 529 is added to the Water Code, to read:

529. (a) This article addresses a subject matter of statewide concern.

(b) Subject to subdivision (c), this article supersedes and preempts all enactments, including charter provisions and amendments thereto, and other local action of cities and counties, including charter cities and charter counties, and other local public agencies that conflict with this article.



(c) This article does not supersede or preempt any enactment or other local action that imposes additional or more stringent requirements regarding matters set forth in this article.

SEC. 8. Section 529.5 is added to the Water Code, to read:

529.5. On and after January 1, 2010, any urban water supplier that applies for financial assistance from the state for a wastewater treatment project, a water use efficiency project, or a drinking water treatment project, or for a permit for a new or expanded water supply, shall demonstrate that the applicant meets the requirements of this article.

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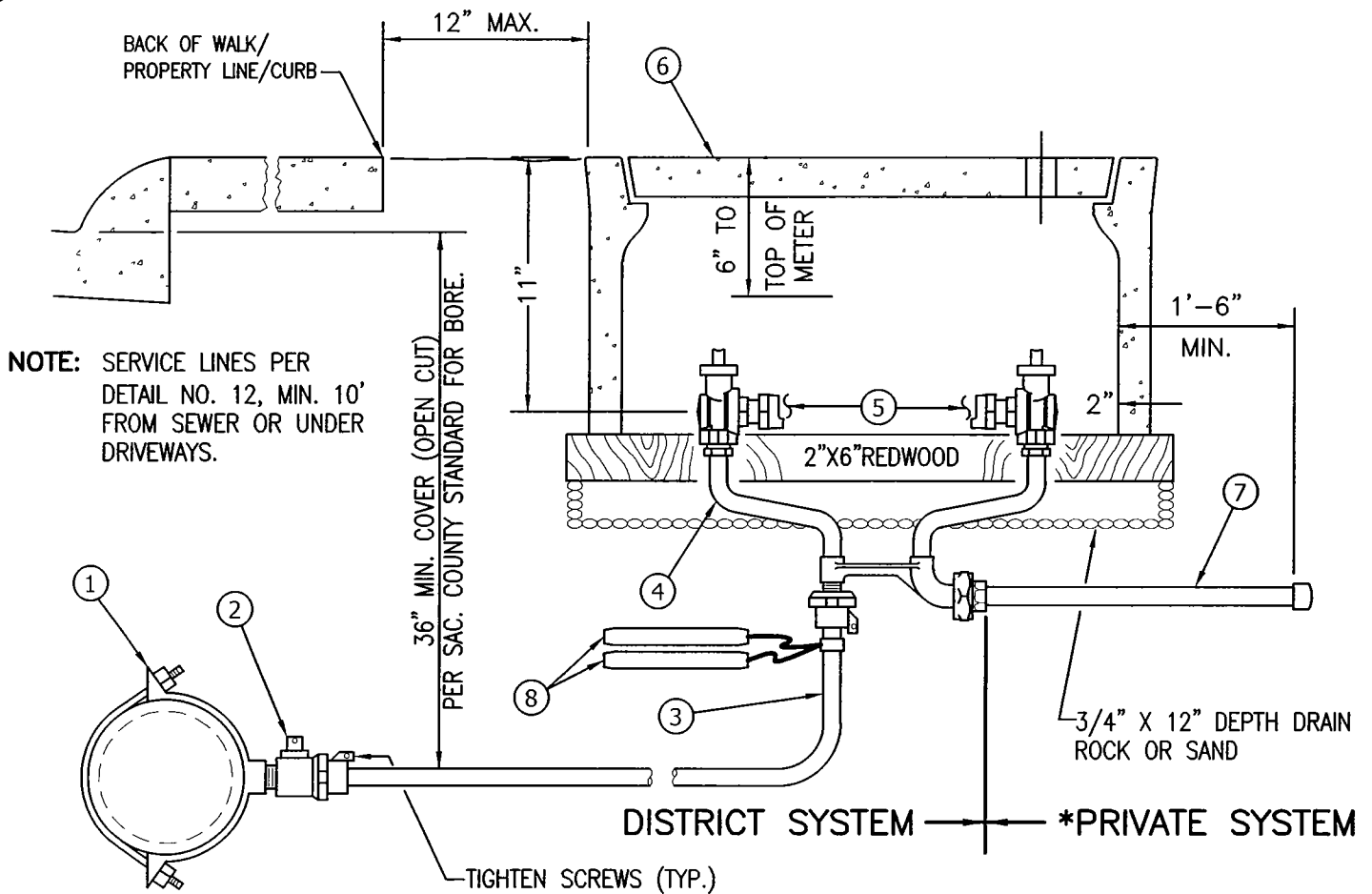


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# Appendix E

SSWD Standard Detail No. 13 –  
Typical  $\frac{3}{4}$ " & 1" Metered  
Residential Water Service





**NOTE:** SERVICE LINES PER  
DETAIL NO. 12, MIN. 10'  
FROM SEWER OR UNDER  
DRIVEWAYS.

1. 1" SERVICE SADDLE, FIP AS PER SEC. 2-1.08 (a), STD. SPECS.
2. 1" CORP. COCK, MIP X COMP., AS PER SECTION 2-1.08 (b), STD. SPECS.
3. 1" TYPE K POLYETHYLENE-COATED COPPER TUBING, AS PER SEC. 2-1.08 (c) STD. SPECS.
4. 1" COPPER SETTER: W/CT PACK JOINT INLET AND FIP OUTLET AS PER SECTION 2-1.08 (d), STD. SPECS.
5. WATER METER TO BE INSTALLED BY CONTRACTOR, PAID FOR BY DEVELOPER AT FURNISH ONLY FEE.
6. 1" CONCRETE METER BOX (MARKED "WATER"): AS PER SECTION 2-1.08 (d).
7. BRASS NIPPLE - 18" LONG, FIP CAP (1" MINIMUM).
8. 2 - 4# HIGH PURITY COPPER SERVICE LINE ANODES WITH INSULATED SOLID CORE COPPER WIRE 10 FEET LONG AND BRASS CABLE TO PIPE CLAMP. ANODES TO BE USED ONLY ON EXISTING COPPER SERVICE LINES, AS PER SECTION 2-2.11 STD. SPECS.

**NOTES:**

POLYETHYLENE ENCASEMENT WILL BE REQUIRED FOR ALL COPPER PIPE INSTALLATION. ENCASEMENT MATERIAL AND INSTALLATION METHODS SHALL CONFORM TO AWWA STANDARD C-105.

**\*PRIVATE SYSTEM TO CONFORM WITH SACRAMENTO CO. STANDARDS  
DISTRICT SYSTEM SHALL INCLUDE METER BOX**



PHONE (916) 972-7171  
3701 MARCONI AVENUE  
SUITE 100  
SACRAMENTO, CA  
95821-5346

STANDARD DETAIL

TYPICAL 3/4" & 1" METERED  
RESIDENTIAL WATER SERVICE

DATE: DECEMBER 2008 | STD. DET. NO. 13

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# Appendix F

## Badger Meter Recordall Disc Meters Specifications Sheet for $\frac{3}{4}$ " and 1" Meters



**Badger Meter**

## Recordall® Disc Meters

Model 35, Lead-Free Bronze Alloy, Size 3/4" (DN 20 mm)  
NSF/ANSI Standards 61 and 372 Certified

### DESCRIPTION

The Recordall Model 35 Disc Series meters meet or exceed the most recent revision of AWWA Standard C700 and are available in a lead-free bronze alloy. The Model 35 meters comply with the lead-free provisions of the Safe Drinking Water Act, are certified to NSF/ANSI Standards 61 and 372 (Trade Designation: M35-LL) and carry the NSF-61 mark on the housing. All components of the lead-free bronze alloy meter (housing, measuring element, seals, and so on) comprise the certified system.

**Applications:** For use in measurement of potable cold water in residential, commercial and industrial services where flow is in one direction only.

**Operation:** Water flows through the meter's strainer and into the measuring chamber where it causes the disc to nutate. The disc, which moves freely, nutates on its own ball, guided by a thrust roller. A drive magnet transmits the motion of the disc to a follower magnet located within the permanently sealed register. The follower magnet is connected to the register gear train. The gear train reduces the disc nutations into volume totalization units displayed on the register or encoder face.

**Operating Performance:** The Recordall Disc Series meters meet or exceed registration accuracy for the low flow rates (95%), normal operating flow rates ( $100 \pm 1.5\%$ ), and maximum continuous operation flow rates as specifically stated in AWWA Standard C700.

**Construction:** Recordall Disc meter construction, which complies with ANSI/AWWA standard C700, consists of three basic components: meter housing, measuring chamber, and permanently sealed register. The water meter is available in a lead-free bronze alloy with externally-threaded spuds. A corrosion-resistant engineered polymer material is used for the measuring chamber.

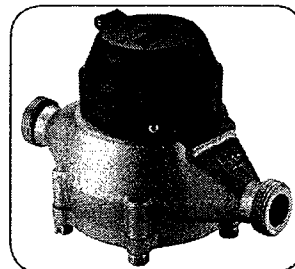
**Magnetic Drive:** Direct magnetic drive, through the use of high-strength magnets, provides positive, reliable and dependable register coupling for straight-reading or AMR/AMI meter reading options.

**Tamper-Proof Features:** Unauthorized removal of the register or encoder is inhibited by the option of a tamper detection seal wire screw, TORX® tamper-resistant seal screw or the proprietary tamper-resistant keyed seal screw. Each can be installed at the meter site or at the factory.

**Maintenance:** Badger Meter Recordall Disc Series meters are designed and manufactured to provide long-term service with minimal maintenance. When maintenance is required, it can be performed easily either at the meter installation or at any other convenient location.

To simplify maintenance, the register, measuring chamber, and strainer can be replaced without removing the meter housing from the installation. No change gears are required for accuracy calibration. Interchangeability of parts among like-sized meters also minimizes spare parts inventory investment. The built-in strainer has an effective straining area of twice the inlet size.

**Connections:** Tailpieces/Unions for installations of meters on various pipe types and sizes, including misaligned pipes, are available as an option.



### SPECIFICATIONS

#### Model 35 Disc Series Meter

<b>Typical Operating Range (100% ± 1.5%)</b>	3/4...35 gpm (0.17...7.9 m³/hr)
<b>Low Flow (Min. 97%)</b>	3/8 gpm (0.085 m³/hr)
<b>Maximum Continuous Operation</b>	25 gpm (5.7 m³/hr)
<b>Pressure Loss at Maximum Continuous Operation</b>	5 psi at 25 gpm (0.37 bar at 5.7 m³/hr)
<b>Maximum Operating Temperature</b>	80° F (26° C)
<b>Maximum Operating Pressure</b>	150 psi (10 bar)
<b>Measuring Element</b>	Nutating disc, positive displacement
<b>Meter Connections</b>	Available in NL bronze and engineered polymer to fit 3/4" (DN 20 mm) spud thread bore diameter sizes.

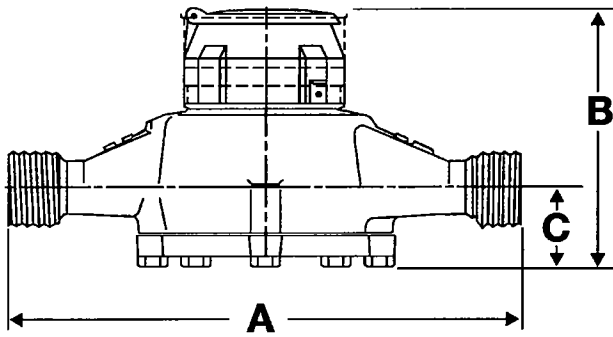
#### Meter Spud and Connection Sizes

Size Designation	x	"L" Laying Length	"B" Bore Dia.	Coupling Nut and Spud Thread	Tailpiece Pipe Thread (NPT)
3/4"	x	7-1/2"	3/4"	1" (3/4")	3/4"
3/4"	x	9"	3/4"	1" (3/4")	3/4"
3/4" x 1"	x	9"	3/4"	1-1/4" (1")	1"

#### Materials

<b>Meter Housing</b>	Lead-free bronze alloy
<b>Housing Bottom Plates</b>	Lead-free bronze alloy
<b>Measuring Chamber</b>	Engineered polymer
<b>Disc</b>	Engineered polymer
<b>Trim</b>	Stainless steel
<b>Strainer</b>	Engineered polymer
<b>Disc Spindle</b>	Stainless steel
<b>Magnet</b>	Ceramic
<b>Magnet Spindle</b>	Stainless steel
<b>Register Lid and Shroud</b>	Engineered polymer, bronze

## DIMENSIONS

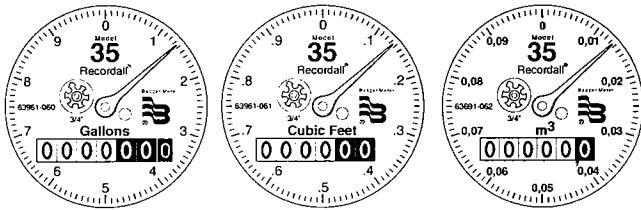


Meter Size	Meter Model	A Laying Length	B Height Reg.	C Centerline Base	Width	Approx. Shipping Weight
3/4" (20 mm)	35	7-1/2" (190 mm)	5-1/4" (133 mm)	1-5/8" (41 mm)	5" (127 mm)	5-1/2 lb (2.5 kg)
3/4" (20 mm)	35	9" (229 mm)	5-1/4" (133 mm)	1-5/8" (41 mm)	5" (127 mm)	5-3/4 lb (2.6 kg)
3/4" x 1" (20 mm)	35	9" (229 mm)	5-1/4" (133 mm)	1-5/8" (41 mm)	5" (127 mm)	6 lb (2.7 kg)

## REGISTERS / ENCODERS

### Standard—Sweep-Hand Registration

The standard register is a straight-reading, permanently sealed magnetic drive register. Dirt, moisture, tampering and lens fogging problems are eliminated. The register has a six-odometer wheel totalization display, 360° test circle with center sweep hand, and flow finder to detect leaks. Register gearing is made of self-lubricating engineered polymer, which minimizes friction and provides long life. The multi-position register simplifies meter installation and reading. The register capacity is 10,000,000 gallons (1,000,000 ft<sup>3</sup>, 100,000 m<sup>3</sup>).



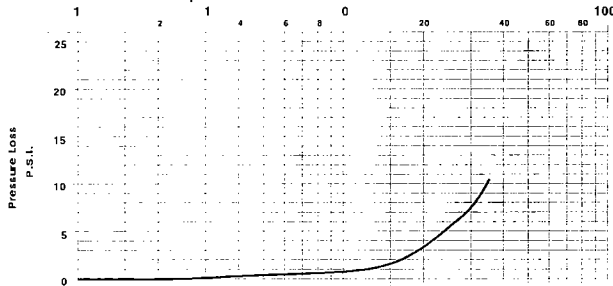
Meter Model	Gallon	Cubic Feet	Cubic Meter
35	10	1	0.1

### Optional—Encoders for AMR/AMI Reading Solutions

AMR/AMI solutions are available for all Recordall Disc Series meters. All reading options can be removed from the meter without disrupting water service. Badger Meter encoders provide years of reliable, accurate readings for a variety of applications and are also available pre-wired to Badger Meter approved AMR/AMI solutions. See details at [www.badgermeter.com](http://www.badgermeter.com).

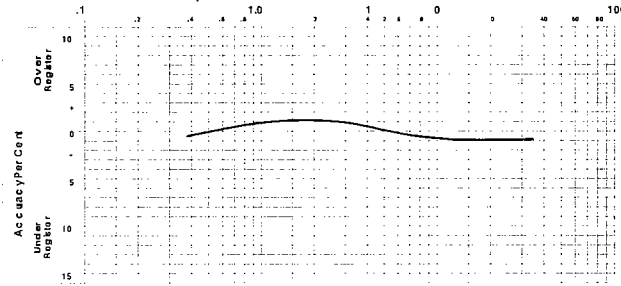
## PRESSURE LOSS CHART

Rate of Flow in Gallons per Minute



## ACCURACY CHART

Rate of Flow in Gallons per Minute



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[www.badgermeter.com](http://www.badgermeter.com)

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Legacy Document Number: RD-T-3/4



**Badger Meter**

## Recordall® Disc Meters

Model 70, Lead-Free Bronze Alloy, Size 1" (DN 25 mm)  
NSF/ANSI Standards 61 and 372 Certified

### DESCRIPTION

The Recordall Model 70 Disc Series meters meet or exceed the most recent revision of AWWA Standard C700 and are available in a lead-free bronze alloy. The Model 70 meters comply with the lead-free provisions of the Safe Drinking Water Act, are certified to NSF/ANSI Standards 61 and 372 (Trade Designation: M70-LL) and carry the NSF-61 mark on the housing. All components of the lead-free bronze alloy meter (housing, measuring element, seals, and so on) comprise the certified system.

**Applications:** For use in measurement of potable cold water in residential, commercial and industrial services where flow is in one direction only.

**Operation:** Water flows through the meter's strainer and into the measuring chamber where it causes the disc to nutate. The disc, which moves freely, nutates on its own ball, guided by a thrust roller. A drive magnet transmits the motion of the disc to a follower magnet located within the permanently sealed register. The follower magnet is connected to the register gear train. The gear train reduces the disc nutations into volume totalization units displayed on the register or encoder face.

**Operating Performance:** The Recordall Disc Series meters meet or exceed registration accuracy for the low flow rates (95%), normal operating flow rates ( $100 \pm 1.5\%$ ), and maximum continuous operation flow rates as specifically stated in AWWA Standard C700.

**Construction:** Recordall Disc meter construction, which complies with ANSI/AWWA standard C700, consists of three basic components: meter housing, measuring chamber, and permanently sealed register. The water meter is available in a lead-free bronze alloy with externally-threaded spuds. A corrosion-resistant engineered polymer material is used for the measuring chamber.

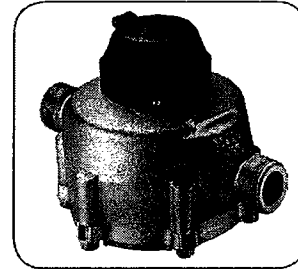
**Magnetic Drive:** Direct magnetic drive, through the use of high-strength magnets, provides positive, reliable and dependable register coupling for straight-reading or AMR/AMI meter reading options.

**Tamper-Proof Features:** Unauthorized removal of the register or encoder is inhibited by the option of a tamper detection seal wire screw, TORX® tamper-resistant seal screw or the proprietary tamper-resistant keyed seal screw. Each can be installed at the meter site or at the factory.

**Maintenance:** Badger Meter Recordall Disc Series meters are designed and manufactured to provide long-term service with minimal maintenance. When maintenance is required, it can be performed easily either at the meter installation or at any other convenient location.

To simplify maintenance, the register, measuring chamber, and strainer can be replaced without removing the meter housing from the installation. No change gears are required for accuracy calibration. Interchangeability of parts among like-sized meters also minimizes spare parts inventory investment. The built-in strainer has an effective straining area of twice the inlet size.

**Connections:** Tailpieces/Unions for installations of meters on various pipe types and sizes, including misaligned pipes, are available as an option.



### SPECIFICATIONS

#### Model 70 Disc Series Meter

<b>Typical Operating Range (100% ± 1.5%)</b>	1-1/4...70 gpm (0.28...16 m³/hr)
<b>Low Flow (Min. 95%)</b>	3/4 gpm (0.17 m³/hr)
<b>Maximum Continuous Operation</b>	50 gpm (11.3 m³/hr)
<b>Pressure Loss at Maximum Continuous Operation</b>	6.5 psi at 50 gpm (0.45 bar at 11.3 m³/hr)
<b>Maximum Operating Temperature</b>	80° F (26° C)
<b>Maximum Operating Pressure</b>	150 psi (10 bar)
<b>Measuring Element</b>	Nutating disc, positive displacement
<b>Meter Connections</b>	Available in NL bronze and engineered polymer to fit 1" (DN 25 mm) spud thread bore diameter sizes.

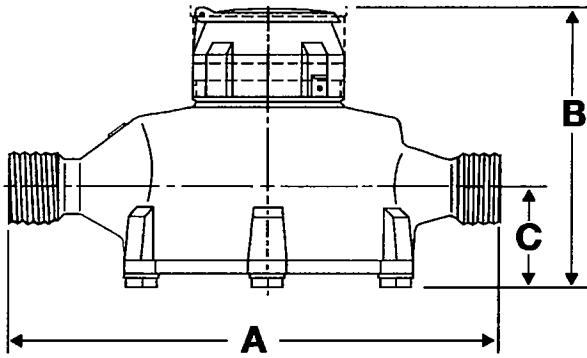
#### Meter Spud and Connection Sizes

Size Designation	x	"L" Laying Length	"B" Bore Dia.	Coupling Nut and Spud Thread	Tailpiece Pipe Thread (NPT)
1"	x	10-3/4"	1"	1-1/4" (1")	1"

#### Materials

<b>Meter Housing</b>	Lead-free bronze alloy
<b>Housing Bottom Plates</b>	Cast iron, lead-free bronze alloy
<b>Measuring Chamber</b>	Engineered polymer
<b>Disc</b>	Engineered polymer
<b>Trim</b>	Stainless steel
<b>Strainer</b>	Engineered polymer
<b>Disc Spindle</b>	Stainless steel
<b>Magnet</b>	Ceramic
<b>Magnet Spindle</b>	Stainless steel
<b>Register Lid and Shroud</b>	Engineered polymer, bronze

## DIMENSIONS

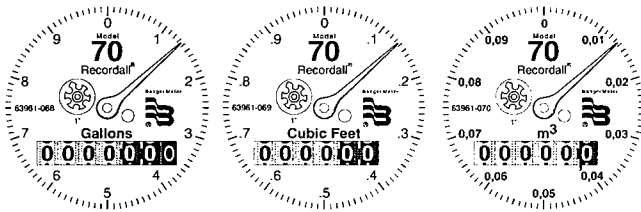


Meter Size	Meter Model	A Laying Length	B Height Reg.	C Centerline Base	Width	Approx. Shipping Weight
1" (25 mm)	70	10-3/4" (273 mm)	6-1/2" (165 mm)	2-5/16" (59 mm)	7-3/4" (197 mm)	11-1/2 lb (5.2 kg)

## REGISTERS / ENCODERS

### Standard—Sweep-Hand Registration

The standard register is a straight-reading, permanently sealed magnetic drive register. Dirt, moisture, tampering and lens fogging problems are eliminated. The register has a six-odometer wheel totalization display, 360° test circle with center sweep hand, and flow finder to detect leaks. Register gearing is made of self-lubricating engineered polymer, which minimizes friction and provides long life. The multi-position register simplifies meter installation and reading. The register capacity is 10,000,000 gallons (1,000,000 ft<sup>3</sup>, 100,000 m<sup>3</sup>).



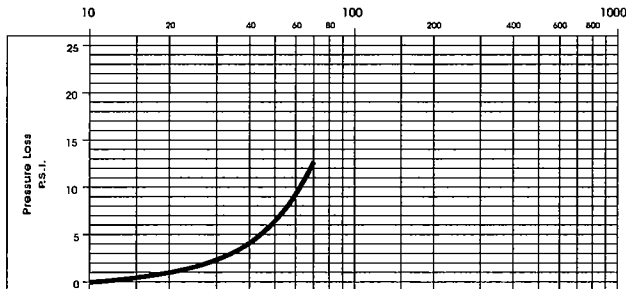
Meter Model	Gallon	Cubic Feet	Cubic Meter
70	10	1	0.1

### Optional—Encoders for AMR/AMI Reading Solutions

AMR/AMI solutions are available for all Recordall Disc Series meters. All reading options can be removed from the meter without disrupting water service. Badger Meter encoders provide years of reliable, accurate readings for a variety of applications and are also available pre-wired to Badger Meter approved AMR/AMI solutions. See details at [www.badgermeter.com](http://www.badgermeter.com).

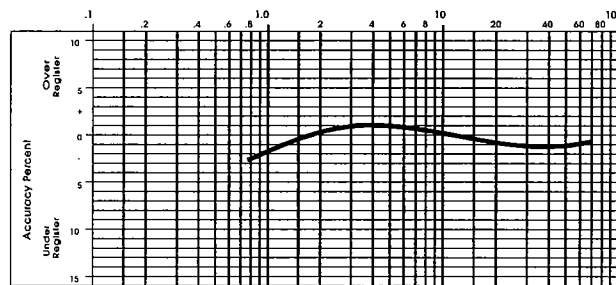
## PRESSURE LOSS CHART

Rate of Flow in Gallons per Minute



## ACCURACY CHART

Rate of Flow in Gallons per Minute



Recordall is a registered trademark of Badger Meter, Inc. Other trademarks appearing in this document are the property of their respective entities.

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[www.badgermeter.com](http://www.badgermeter.com)

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Legacy Document Number: RD-T1



## Facilities and Operations Committee

### Agenda Item: 6

**Date:** March 25, 2015

**Subject:** Sacramento Metropolitan Air Quality Management District – Notice of Violation

**Staff Contact:** Jim Arenz, Operations Manager

**Recommended Committee Action:**

Receive report regarding the status of a Notice of Violation (NOV) (see Exhibit 1) received from Sacramento Metropolitan Air Quality Management District (SMAQMD) on February 11, 2015 for the exceedance of annual hourly permit limit for maintenance operation of the emergency generator at the Marconi Administration building.

**Background:**

While preparing the 2014 Annual Engine Report for SMAQMD, staff discovered an exceedance of the annual hourly permit limit for maintenance operation of the emergency generator at the Marconi Administration building. Once staff had verified that the permit limit had indeed been exceeded, SMAQMD was immediately notified of the permit violation. On February 11, 2015, District staff met with a representative from SMAQMD to review the engine generator run logs for the generator in question. The representative confirmed the exceedance.

The District received the Settlement Proposal from SMAQMD on March 11, 2015 (See Exhibit 1). The amount of the civil penalty is \$3,750.00. The Settlement Proposal was agreed to and signed by District staff and the civil penalty paid on March 13, 2015, in accordance with the stated deadline on the settlement notice.

Title 17, Section 93115, California Code of Regulations, Airborne Toxic Control Measure, states that no emergency generator shall be operated in excess of the quarterly and annual limit on hours of operation for maintenance established by the Permit to Operate provided by the local permitting agency, in this case SMAQMD. The quarterly and annual time limits, designated by SMAQMD, are based on each generator's specifications and exhaust emission standards. This particular generator has a maximum of 200 operational hours per year. However, the SMAQMD Permit to Operate allows only 30 hours per quarter, or 30 hours per year, to be used for maintenance purposes.



The District had safeguards in place in its documentation system to warn staff, on a quarterly basis, if any of the 36 permitted internal combustion engines (Engine) throughout the District exceed 75% and 90% of their annual maximum hours for maintenance or emergency use. If an Engine gets to 90% of its maximum allowable hours, staff is instructed to limit its use by disabling the automatic exercising unit until the end of the calendar year (this scenario is extremely unusual).

The Engine in question had failed a standard load bank test late in the 2nd quarter of 2014. Repairs were made in the 3rd quarter, but when staff documented the operational hours for the 3rd quarter the unit was below the 75% threshold to activate the aforementioned alert. Subsequent load bank testing to verify the efficacy of the repairs was performed on October 1. This extra run time for testing, coupled with the weekly automatic exerciser run time in the 4th quarter, pushed the total maintenance run time over the 30 hour annual limit by one half hour. The error was not caught until the 4th quarter hours were tallied and documented after the calendar year ended, thus too late to make the necessary adjustments to the Engine's operations.

Staff is currently working on the following actions to prevent any such exceedances from occurring in the future:

- Amend the Production Data Collection Software (PDC) so that annual run time hours are tallied electronically each time a new value is entered so the operator can see the annual total in real time while at the site and not just at the end of each quarter. Additionally, utilize the e-mail notification alert capabilities present in the PDC to notify supervisory staff when run time limits are nearing their maximum.
- Provide a “dashboard” indicator on the Supervisory Control and Data Acquisition (SCADA) station screens or in the PDC to give operators a clearly definable visual reference of the annual maintenance hours.
- Provide on/off indicator on the SCADA trend screens for each Engine so operators can clearly see the exact start and stop time for each operational period.

In addition, staff is going to request SMAQMD staff to more closely examine the existing permit, as well as the specifications of the generator at this site, and determine if the hours of operation could be permanently increased to 50 hours per quarter/year and a total of 200 hours for the year, matching that of a number of similar generators operated by the District.

The Mutual Settlement Program (MSP) put in place by SMAQMD is a voluntary program designed to settle violations without time and expense of litigation. In settling violations under the MSP, a penalty typically is specified as part of the proposed settlement. The amount of the penalty is determined using SMAQMD's Monetary Component Formula (MCF), which is based on factors to be considered in recovering civil penalties as specified in the California Health and Safety Code §42403(b). The only way that proposed penalties can be reduced, within the framework of the MSP, is for new, mitigating information to be produced that affects the MCF

factors. Since no new mitigating information could be produced based on exceeding the allowable hours, staff did not pursue a dispute of the NOV or a reduction of the penalties.



March 5, 2015

Mr. James Arenz  
Sacramento Suburban Water District  
3701 Marconi Avenue, Ste 100  
Sacramento, CA 95821

Re: **SETTLEMENT PROPOSAL: NOTICE OF VIOLATION #10661; CASE #6011**

Dear Mr. Arenz:

On February 11, 2015, the Sacramento Metropolitan Air Quality Management District (SMAQMD) issued you a Notice of Violation (NOV) of SMAQMD Rule 201, *General Permit Requirements*. Specifically, the NOV documented your operation of an internal combustion engine located at 3701 Marconi Avenue in excess of the annual hourly maintenance limit specified by your SMAQMD permit to operate. A copy of the NOV issued is attached.

The California Health and Safety Code (CH&SC) provides that each rule violation may result in civil penalties as specified in CH&SC Sections 42402, 42402.1, 42402.2 or 42402.3 for each day the rule is violated. A copy of these statutes is enclosed for your ease in reference.

The SMAQMD has a policy of attempting to mutually resolve NOV's whenever possible. The facts surrounding this NOV have been reviewed by the Enforcement Section of SMAQMD. In an effort to resolve this NOV, the SMAQMD proposes the following settlement:

1. Agree the consequences of the NOV are fully settled by performance of the terms of this Agreement.
2. Agree that if any of the terms of this Mutual Settlement Agreement are breached, enforcement action may commence notwithstanding any of the terms of the Agreement.
3. Pay the sum of \$3,750.00 as a civil penalty.
4. Agree that this settlement proposal does not relieve you from the responsibility to comply with all SMAQMD rules in the future.

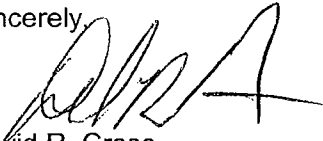
This settlement shall preclude the SMAQMD from seeking additional penalties concerning this alleged violation. In addition, this settlement shall not constitute an admission of violative conduct nor shall it be referred to be such an admission in any judicial or administrative proceeding.

The terms of this settlement proposal shall be deemed rejected if you have not communicated your acceptance to this office on or before April 5, 2015. If you wish to settle this matter as outlined,

please sign below and return this letter along with a check for \$3,750.00 payable to the SMAQMD. You may call Amy Roberts at (916) 874-6354 to request an informal office conference if you wish to discuss this matter further.

If you have not accepted this settlement proposal or requested an office conference within the time allotted, without further notice, this matter will be referred to District Counsel for enforcement proceedings.

Sincerely,



David R. Grose  
Manager, Stationary Source Division

L:\enflmspl\setltrs\6011 Sacramento Suburban Water District.doc

cc: Teresa Posey

Enclosures

I, the undersigned, hereby accept this offer of settlement.

Signed: James Arenz

Print name: James Arenz

Title: Operations Manager Date: 3/11/2015

(Return this original signature page with settlement check)

---

For SMAQMD Use Only

**MUTUAL SETTLEMENT PROGRAM REMITTANCE**

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Invoice # 6011 Amount Due: \$ 3,750.00 Settlement due date: April 5, 2015



## Facilities and Operations Committee

### Agenda Item: 7

**Date:** March 23, 2015

**Subject:** San Juan Unified School District Landscape Irrigation Services Customer Partnership Proposal

**Staff Contact:** Greg Bundesen, Water Conservation Supervisor

**Recommended Committee Action:**

Approve the alternate means of compliance Pilot Landscape Irrigation Service Customer (LISC) Agreement Program with the San Juan Unified School District. Direct staff, with Committee recommendation, to bring the proposed partnership to the full Board at the April 20, 2015 Regular Board meeting for approval.

**Discussion:**

Receive report on February 26, 2015, the District's General Manager and Water Conservation Supervisor met with the Director of Planning and Property Management for the San Juan Unified School District (SJUSD) as well as the SJUSD Grounds Supervisor. SJUSD stated they would like to partner with the District to develop an alternate means of compliance for the District's Water Conservation Regulations. The District received a letter from SJUSD outlining their concerns and intentions (see Exhibit 1). SJUSD is responsible for the safety of their students in the classroom and school grounds. One of the students' classrooms is the physical education class in the playing fields. SJUSD's main concern is the safety of their students during this time of drought. Due to the drought conditions in 2014, SJUSD struggled to keep their large playing fields in a condition that was safe for their students. SJUSD has approximately 25 schools within the District's boundaries (see map in Exhibit 2). SJUSD proposed a partnership with the District on a pilot program that will focus on both the safety of their students and achieving the water reduction goals of the District.

District staff believes an opportunity exists to partner with SJUSD to expand on the District's LISC program. Approved by the District's Board of Directors in 2004, the District has been offering its large landscape customers (1 acre or larger) an opportunity to participate in the LISC program (see Exhibit 3 for LISC Agreement details). Under the guidelines set forth in the LISC contract, participants can receive special billing rates by adhering to water conservation best management practices and an allocated amount of water. Both District staff and the SJUSD staff believe the goals of the District and SJUSD can be met by creating a pilot program which would

expand the LISC contract to include additional outdoor water conservation Best Management Practices.

On March 17, 2015, District staff met with SJUSD staff to make recommended changes to the LISC Agreement (see Exhibit 4 for the updated Agreement). The notable changes to the LISC Agreement are as follows:

1. Section A.3 – Ensures irrigation water is being used to ensure the outdoor education areas are being maintained in accordance with the schools safety standards.
2. Section A.4 – Defines how the District will calculate the landscape water allocation.
3. Section A.6 – Defines how the District will calculate the landscape and domestic water allocations for LISC properties with mixed use meters.
4. Section B.8 – Requires LISC properties that have mixed use meters to implement all BMP as outlined in Section C and consider implementing BMPs listed in Section D.
5. Section C – Defines mandatory BMPs.
6. Section D – Defines non-mandatory BMPs.
7. Section E.1 – Defines how the District will determine landscape water allocations.
8. Section E.2.g – Obligates the District to install Automated Metering Infrastructure (AMI) technology on all LISC properties for leak detection and water use tracking purposes.
9. Section E.2.h – Waives the mandatory watering day restrictions for all LISC properties in good standing.

Both District staff and SJUSD staff have agreed that the changes made to the LISC Agreement are both reasonable and achievable. The changes to the LISC Agreement were also designed to ensure that the District is in compliance with the State Water Resources Control Board's (SWRCB) 2015 mandatory drought regulations. On March 17, 2015 the SWRCB mandated that urban water suppliers shall enact a stage in their Water Shortage Contingency Plan that restricts the number of watering days allowed, however, if the urban water supplier is providing an allocation based water rates to a customer, the watering day restrictions can be waived.

Approving the above recommendation will assist the District's goals of complying with the California Urban Water Conservation Council's Memorandum of Understanding requirement of reducing the District's gallons per capita per day (GPCD) by 18% by 2018, assist the District in meeting the State of California's requirements of reducing its GPCD 20% by 2020, and assist the District in complying with the Urban Water Management Planning Act Demand Management Measures.

**Fiscal Impact:**

The fiscal impacts to the District would be estimated as follows:

1. Revenue impacts from waiving the connection fee outline in Section E.2.b. Actual revenue impacts will depend on the size of the water meter located at the LISC property.
2. Revenue impacts from allocation based water rates as outlined in Section E.2.c,d,e of the LISC Agreement.
3. Costs incurred for the installation of AMI technology on all LISC meters. Estimated cost of AMI technology is \$132 per unit plus staff time to install.

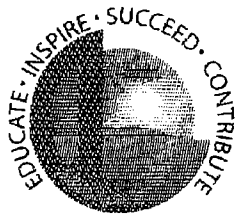
**Strategic Plan Alignment:**

Water Supply – 1.B. Provide for the long-term futures needs of the District through prudent planning that will ensure sufficient capacity to serve all customers.

Water Supply – 1.C. Continue to implement and support demand management strategies and water conservation that comply with federal, state and regional programs, support Water Forum Agreement goals and efficiently meet the needs of the District customers.

Water Supply – 1.E. Ensure the safety and security of the water system.

Leadership – 5.D. provide leadership within the community in a positive and progressive manner for the mutual benefit of the area (service groups, adjacent water purveyors, county/city/local government).



**San Juan**  
Unified School District

**San Juan Unified School District**

*Planning Department*

5320 Hemlock Street, Sacramento, CA 95841  
Telephone (916) 971-7073; FAX (916) 971-5789

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David Burke AICP LEED-AP,  
Director of Planning and Property Management

March 2, 2015

Received

MAR 03 2015

SSWD

Robert S. Roscoe, P.E.  
Greg Bundesen  
Sacramento Suburban Water District  
3701 Marconi Avenue, Suite 100  
Sacramento, CA 95821-5346

Mr. Roscoe and Mr. Bundesen;

Thank you very much for taking the time to meet with Chris Ralston, SJUSD Grounds Supervisor, and myself last week to discuss our Alternate Means of Compliance proposal.

The San Juan Unified School District is placed in an untenable situation in efforts to substantially reduce irrigation water use. As a public school district, we have legal obligations to provide safe and appropriate facilities (including fields) for our students and staff and at the same time we are being required by several of the ten water districts within our boundaries to irrigate on specific days and within specific hours. Unfortunately, we cannot provide safe playfields and sports fields and comply with day and hour irrigation requirements.

We feel there is a solution to this issue. The San Juan Unified School District requests your board consider and approve a one year Alternate Means of Compliance pilot project in which the school district would set a water reduction goal of 25% over 2013 usage. In return, the school district would request relief from day and hour irrigation restrictions.

More specifically our proposed Alternate Means of Compliance pilot project would include the following:

1. Water use reduction goal of 25% compared to 2013 usage
2. Continued implementation of irrigation best management practices
3. Continued deployment of water savings technology (smart controllers, etc.)
4. Moratorium on planting of ornamental landscape
5. Development of an aggressive water savings public outreach program
6. Increased coordination with the water district to identify means to determine actual water usage as close to "real time" as possible



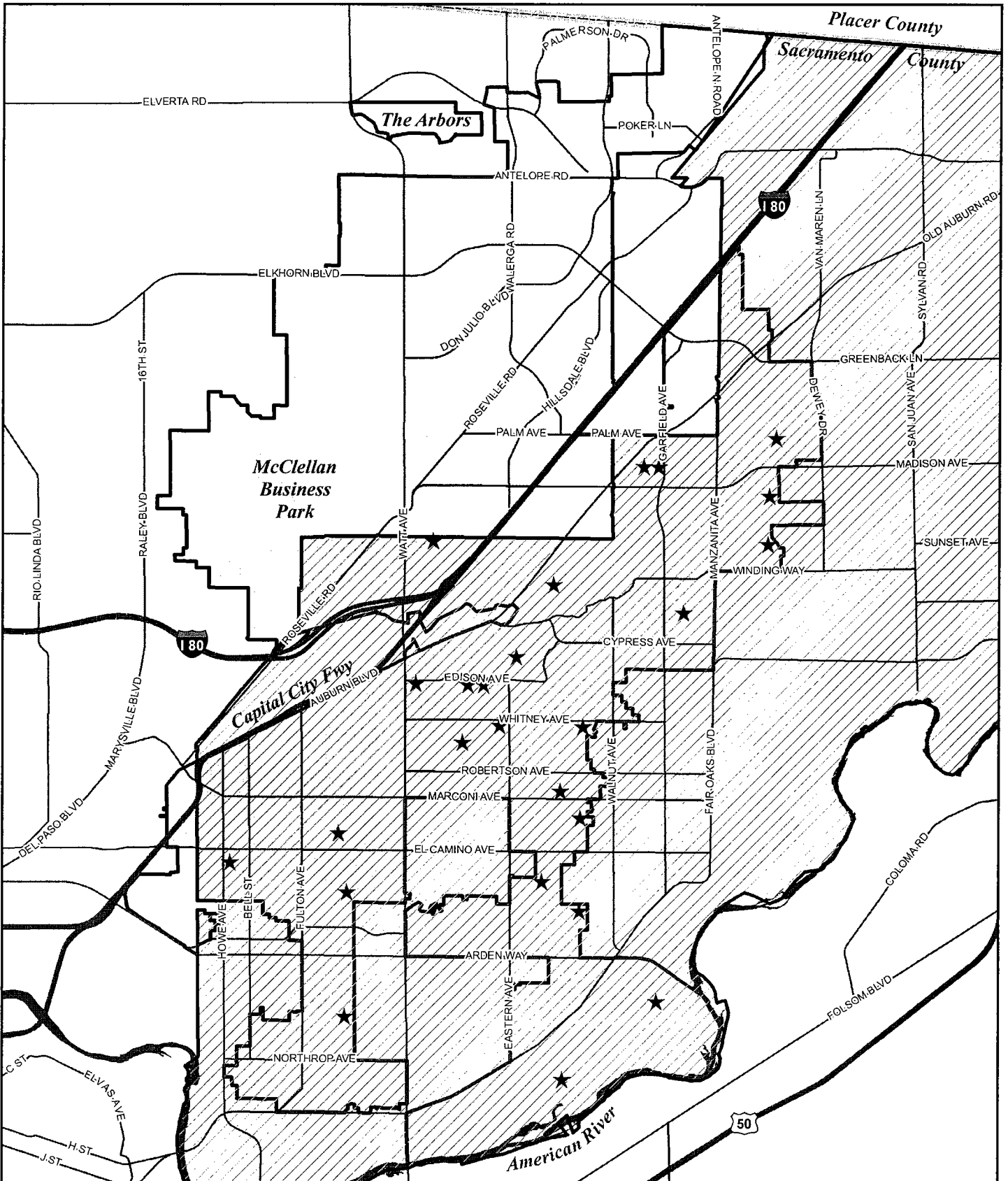
Page 2

As we discussed last week, the San Juan Unified School District would be pleased to attend your board meetings on March 16 and April 20 to support the consideration of this proposed pilot project. Please let me know if there is any additional information that you require.


The severity of the current drought requires the commitment of all Californians to meet water use reduction goals. As a public agency customer of the Sacramento Suburban Water District and an education institution, the San Juan Unified School District must help set the example to achieve water savings. We feel our proposed Alternate Means of Compliance will allow us to save water and at the same time meet our obligation to provide a safe environment for our students and staff.

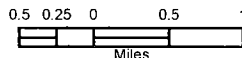
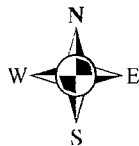
Sincerely,

David Burke  
Director of Planning and Property Management



**Legend**

- ★ San Juan Unified Schools within SSWD
-  San Juan Unified School District Boundary



**SSWD and San Juan Unified Schools**



Base Data: Sacramento County Gis Base Map  
 Projection: CA State Plane 2, NAD83  
 Scale: No Scale  
 Prepared by: J.W.S. SSWD  
 Date: February 27, 2015  
 SSWD-San Juan Unified Schools.mxd

Exhibit 3

**SACRAMENTO SUBURBAN WATER DISTRICT  
LARGE IRRIGATION SERVICE AGREEMENT**

This Agreement is entered into and made effective this \_\_\_\_\_, 20\_\_ between Sacramento Suburban Water District (“District”), a public agency, and \_\_\_\_\_ (a Large Irrigation Service Customer or “LISC”), for the account identified as (location)\_\_\_\_\_.

**RECITALS**

WHEREAS, the District has acquired and developed a distribution system to provide water and water-related services to all customers within its service boundaries, including those customers who irrigate large landscape areas consisting of one acre or more on a single parcel;

WHEREAS, the LISC is a District customer and has requested that the District provide it with water to irrigate the LISC’s large landscape area on certain terms and conditions benefiting the LISC;

WHEREAS, the District is willing to provide large landscape irrigation service to the LISC on certain beneficial terms and conditions in exchange for which the LISC will implement and maintain certain cost saving measures and best management practices for the District’s benefit;

WHEREAS, both the District and the LISC desire to conform to the requirements of the Water Forum Agreement’s Best Management Practices for Large Irrigation Systems; and

WHEREAS, the District finds that providing water service to the LISC on the terms and conditions specified in this Agreement is in the best interests of the District.

**AGREEMENT**

**A. LISC’S WARRANTIES.**

LISC warrants that:

1. It is a commercial, industrial or institutional customer serving one acre or more of landscape area on a single parcel within the District’s service boundaries.
2. Its water service is a dedicated irrigation service, except that it may provide minor incidental uses such as a drinking fountain or restroom service.
3. It is using a water meter that is appropriately sized for the demand that the LISC’s usage places on the District’s water system.

## **B. LISC'S OBLIGATIONS.**

LISC will comply with the following terms as a condition of receiving large landscape irrigation service from the District:

1. The District may interrupt water service to the LISC when peak system demands approach production capacity, when available water is required for potable purposes or in times of emergency, as determined in the District's sole discretion.
2. The LISC will submit and comply with a Water Conservation Plan approved by the District for each irrigation meter. At a minimum, the Water Conservation Plan will include:
  - (a) Monthly inspections of the irrigation system by LISC staff.
  - (b) Site map with irrigated area delineated.
  - (c) Irrigated area identified to within 0.1 acre.
  - (d) Irrigation schedule for each station.
  - (e) Description of irrigation controls and any incidental uses.
  - (f) LISC contact information.
  - (g) Annual report to the District on compliance and proposed water conservation improvements and/or changes to be implemented by the LISC.
3. The LISC will irrigate only during off peak hours, between 9:00 p.m. and 5:00 a.m., or in accordance with any different times specified in its approved Water Conservation Plan.
4. The LISC will perform an annual landscape water audit in accordance with District approved criteria, and submit a report of the annual audit to the District.
5. The LISC will implement all recommended improvements and changes identified in its annual water audit in a timely manner.
6. The LISC will apply for and maintain a Large Irrigation Service Agreement for each service provided by the District.
7. The LISC will comply with all District rules and regulations and all applicable federal, state and local laws and regulations governing users of the District's water system.

8. The LISC will actively support and participate in the District's other water management programs, including public information, education and demonstration projects.

**C. DISTRICT'S OBLIGATIONS.**

1. The District will provide water service to the LISC based on normal monthly standard evapotranspiration rates ("Eto") for Sacramento County, as determined by the State Department of Water Resources CIMIS data applied to the irrigated area associated with each irrigation service. Standard Eto data indicates annual water usage for turf grass landscape to be 52 inches per year.
2. The District will provide service to the LISC at the following incentive pricing rate structure:
  - (a) Fixed monthly administration cost of \$10.00.
  - (b) Waiver of the District's standard Monthly Service Charge.
  - (c) First Rate Tier - Initial volume charge at the District's applicable Metered Non-Residential Off-Peak Rate for use below 80% of Eto allocation based on irrigated area.
  - (d) Second Rate Tier – The District will charge the applicable Metered Non-Residential Peak Rate for use between 80% and 100% of Eto allocation of irrigated area.
  - (e) Third Rate Tier – The District will charge double the applicable Metered Non-Residential Peak Rate for use greater than 100% of Eto allocation of irrigated area.
  - (f) LISCs must pay the District's applicable Capital Improvement and Debt Service charges.

**D. TERM.**

The initial term will be twelve months commencing on the effective date of this Agreement. The Agreement will automatically renew for succeeding twelve month terms unless either party gives the other party written notice of its intent not to renew the agreement at least thirty days before the commencement of the succeeding renewal term. This Agreement is terminable at any time by either party by giving 30 days' prior notice to the other party.

**E. GENERAL PROVISIONS.**

**1. Notices.** Any notice given in connection with this Agreement will be given in writing and will be delivered either by hand to the other party or by certified mail, return receipt requested, to the other party at the other party's address stated below. Either party may change its address by giving notice of the change in accordance with this paragraph. Notice will be given as follows:

DISTRICT:

LISC:

Sacramento Suburban Water District  
Attn: General Manager  
3701 Marconi Avenue, Suite 100  
Sacramento, CA 95821-5303

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**2. No Authority to Bind District.** The LISC has no authority to enter into contracts or agreements on behalf of the District. This Agreement does not create a partnership or joint venture between the parties.

**3. Assignment.** This Agreement is personal to the LISC and may not be assigned by the LISC without the District's prior written permission. Any attempt by the LISC to assign or transfer this Agreement or any portion of it or interest herein without the District's consent will automatically terminate this Agreement.

**4. Waiver of Rights.** The waiver at any time by any party of its rights with respect to a default, breach or any other matter arising in connection with this Agreement will not be deemed a waiver with respect to any subsequent default, breach or matter.

**5. Paragraph Headings.** The paragraph headings used in this Agreement are for reference only, and will not in any way limit or amplify the terms and provisions hereof, nor will they enter into the interpretation of this Agreement.

**6. Cooperation.** Each party to this Agreement agrees to do all things that may be necessary, including, without limitation, the execution of all documents, which may be required hereunder, in order to implement and effectuate this Agreement.

**7. Entire Agreement.** This Agreement constitutes the sole, final and integrated expression of the terms of this contract among the parties concerning the subject matter addressed herein, and supersedes all prior negotiations, representations or agreements, either oral or written. The parties have freely and voluntarily entered into this Agreement after having had the opportunity to consult with their respective attorneys. The parties, in entering into this Agreement, do not rely on any inducements, promises, or representations made by each other, their representatives, or any other person, other than those inducements, promises, and representations contained in this Agreement.

**8. Interpretation of this Agreement; Authority to Bind.** The parties acknowledge that each party and its attorney have reviewed, negotiated and revised this Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the

drafting party will not be employed in the interpretation of this Agreement or any document executed and delivered by any party in connection with the transactions contemplated by this Agreement. The parties and the party representatives executing this Agreement have the power and authority to execute this Agreement, and once executed, this Agreement will be binding upon the parties.

**9. Indemnification and Hold Harmless.** The LISC will indemnify, protect, defend and hold harmless the District and its officers, employees, engineers, and agents, from any and all claims, demands or charges and from any loss or liability, including all costs, expenses, attorney's fees, litigation costs, penalties, and other fees arising out of or in any way connected with performance or failure to perform under this Agreement by the LISC or its officers, employees, contractors, subcontractors or agents.

**10. Severability.** The invalidity, illegality or unenforceability of any provision of this Agreement will not render the other provisions unenforceable, invalid or illegal.

**11. Amendment.** This Agreement may be modified or amended only by a subsequent written agreement approved and executed by both parties. Amendment by the District requires the approval of the District Board of Directors.

Sacramento Suburban Water District

LISC

By: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

Its: \_\_\_\_\_

**Exhibit 4**

**SACRAMENTO SUBURBAN WATER DISTRICT PILOT  
LARGE IRRIGATION SERVICE CUSTOMER AGREEMENT  
FOR SCHOOL OUTDOOR EDUCATION AREAS**

This Agreement is entered into and made effective this \_\_\_\_\_, 20\_\_ between Sacramento Suburban Water District (“District”), a public agency, and \_\_\_\_\_ (a Large Irrigation Service Customer or “LISC”), for the account identified as (location)\_\_\_\_\_.

**RECITALS**

WHEREAS, the District has acquired and developed a distribution system to provide water and water-related services to all customers within its service boundaries, including those customers who irrigate large landscape areas consisting of one acre or more on a single parcel;

WHEREAS, the LISC is a District customer and has requested that the District provide it with water to irrigate the LISC’s large landscape area on certain terms and conditions benefiting the LISC;

WHEREAS, the District is willing to provide large landscape irrigation service to the LISC on certain beneficial terms and conditions in exchange for which the LISC will implement and maintain certain cost saving measures and best management practices for the District’s benefit;

WHEREAS, both the District and the LISC desire to conform to the requirements of the Water Forum Agreement’s Best Management Practices for Large Irrigation Systems; and

WHEREAS, the District finds that providing water service to the LISC on the terms and conditions specified in this Agreement is in the best interests of the District.

**AGREEMENT**

**A. LISC’S WARRANTIES.**

LISC warrants that:

1. It is an institutional customer serving one acre or more of landscape area on a single school property located within the District’s service boundaries.



2. Its water service is a dedicated irrigation service, except that it may provide minor incidental uses such as a drinking fountain or restroom service.
3. It is utilizing irrigation water to ensure the outdoor learning areas (areas utilized for the schools physical education programs) are maintained in accordance with the school's safety requirements.
4. It will operate the irrigation system to apply no more than the monthly allocation amount provided by the District. Monthly allocation amounts will be based on the Maximum Applied Water Allowance (MAWA) formula as written and defined in the Model Efficiency Landscape Ordinance (Landscape x ETo (5 year average taken from CIMIS Station 131, Fair Oaks) x Plant Factor of 0.8 (cool season turf plant factor) x Conversion Factor of 0.62).
5. It is using a water meter that is appropriately sized for the demand that the LISC's usage places on the District's water system.
6. When the LISC property does not have an irrigation meter as described in Section A.2, the monthly allocation amounts will be based on the following:
  - i. The total monthly allocations will be the combined landscape allocation and the average domestic usage defined below.
  - ii. Monthly landscape allocation amounts for the landscape will be based on the MAWA formula as written and defined in the Model Efficiency Landscape Ordinance (Landscape Area x ETo (5 year average taken from CIMIS Station 131, Fair Oaks) x Plant Factor of 0.8 (cool season turf plant factor) x Conversion Factor of 0.62).
  - iii. The domestic allocation will be based on the average water consumption for the months of November, December, January and February.

Comment [A1]: Section added.

## **B. LISC'S OBLIGATIONS.**

LISC will comply with the following terms as a condition of receiving large landscape irrigation service from the District:

1. The LISC will submit and comply with a Water Conservation Plan (Plan) approved by the District for each irrigation meter. At a minimum, the Plan will include:
  - (a) Monthly inspections of the irrigation system by LISC staff listing any deficiencies noted and repairs made.
  - (b) Site map with irrigated areas differentiated by Hydrozone and irrigation equipment.
  - (c) Irrigated area identified to within 0.1 acre.

- (d) Monthly Irrigation schedule for each station.
  - (e) Description of irrigation controls and any incidental uses.
  - (f) LISC main contact information
  - (g) Annual report to the District on compliance and proposed water conservation improvements and/or changes to be implemented by the LISC.
2. The LISC will irrigate only during off peak hours, between 9:00 p.m. and 5:00 a.m., or in accordance with any different times specified in its approved Water Conservation Plan.
  3. The LISC will perform an annual landscape water audit in accordance with District approved criteria, and submit a report of the annual audit to the District.
  4. The LISC will implement all recommended improvements and changes identified in its annual water audit in a timely manner.
  5. The LISC will apply for and maintain a Large Irrigation Service Agreement for each service provided by the District.
  6. The LISC will comply with all District rules and regulations (including all water use restrictions in the District's Regulation No. 15 unless otherwise noted in this Agreement), as well as, all applicable federal, state and local laws and regulations governing users of the District's water system.
  7. The LISC will actively support and participate in the District's other water management programs, including public information, education and demonstration projects.
  8. LISC properties that do not have a dedicated irrigation meter as described in Section A.2 and cannot, in a cost effective manner, separate domestic water use and irrigation water use the LISC shall implement all of the mandatory best management practices listed in Section C. The LISC will also consider implementing the non-mandatory best management practices listed in Section D.

**Comment [A2]:** Moved from Section A to Section B.

### **C. MANDATORY BEST MANAGEMENT PRACTICES**

1. The LISC shall incorporate mandatory Large Landscape Best Management Practices (BMP) to ensure water use for outdoor education areas is used efficiently. Mandatory BMPs include:
  - i. The installation of weather-based irrigation controllers.
  - ii. The installation of drip irrigation for all non-turf areas.

- iii. Irrigation system is designed, installed and/or repaired to maximize its distribution uniformity.
- iv. High precision nozzles will either be installed on newly installed irrigation equipment and/or retrofitted on existing irrigation equipment replacing sprayer type sprinkler nozzles.
- v. Irrigation system zones will be designed, installed, and/or repaired with matching hydrozones.
- vi. Hydrozones will be designed, installed, and/or repaired with the appropriate irrigation equipment to maximize distribution uniformity and water use efficiency.
- vii. Install rain sensor equipment.
- viii. Apply soil amending practices to ensure optimal soil health.
- ix. Apply mulch to exposed soil areas around plants to increase moisture retention.

**D. NON-MANDATORY BEST MANAGEMENT PRACTICES**

- 1. The LISC is encouraged but not required to incorporate the following suggested Large Landscape BMPs:
  - i. Install soil moisture sensor equipment for all irrigated turf areas.
  - ii. Amend turf area soils with moisture retaining polymers.
  - iii. Install a centralized computer based irrigation control system capable of programing multiple LISC sites.
  - iv. Installation of flow sensors on individual irrigation valves.

**E. DISTRICT'S OBLIGATIONS.**

- 1. The District will provide monthly water allocations to the LISC based on the MAWA calculation as written in the Model Efficient Landscape Ordinance using the 5 year monthly standard evapotranspiration rates ("ETo") average for Sacramento County, as determined by data supplied from the State Department of Water Resources CIMIS station 131 in Fair Oaks
- 2. The District will provide service to the LISC at the following incentive pricing rate structure:
  - (a) Fixed monthly administration cost of \$10.00.
  - (b) Waiver of the District's standard Monthly Service Charge for all LISC accounts.
  - (c) First Rate Tier - Initial volume charge at the District's applicable Metered Non-Residential Off-Peak Rate for use below 80% of the MAWA allocation for the irrigated area.

- (d) Second Rate Tier – The District will charge the applicable Metered Non-Residential Peak Rate for use between 80% and 100% of the MAWA allocation for the irrigated area.
- (e) Third Rate Tier – The District will charge double the applicable Metered Non-Residential Peak Rate for use greater than 100% of the MAWA allocation for the irrigated area.
- (f) LISCs must pay the District’s applicable Capital Improvement and Debt Service charges.
- (g) District will install and maintain AMI technology on all qualified LISC service accounts. AMI technology will be equipped with hourly meter reading capabilities and maintained in a fashion that alerts the District whenever 72 hour continuous consumption occurs. The District will notify the LISC of any alerts as soon as possible.
- (h) District will waive any mandatory Water Conservation Stage watering day restrictions for all LISC accounts in good standing.

**Comment [A3]:** Sections edited to reflect dedicated irrigation meters and mixed use meters.

**F. TERM.**

The initial term will be twelve months commencing on the effective date of this Agreement. The Agreement will automatically renew for succeeding twelve month terms unless either party gives the other party written notice of its intent not to renew the agreement at least thirty days before the commencement of the succeeding renewal term. This Agreement is terminable at any time by either party by giving 30 days' prior notice to the other party.

**G. GENERAL PROVISIONS.**

**1. Notices.** Any notice given in connection with this Agreement will be given in writing and will be delivered either by hand to the other party or by certified mail, return receipt requested, to the other party at the other party’s address stated below. Either party may change its address by giving notice of the change in accordance with this paragraph. Notice will be given as follows:

DISTRICT:

Sacramento Suburban Water District  
 Attn: General Manager  
 3701 Marconi Avenue, Suite 100  
 Sacramento, CA 95821-5303

LISC:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**2. No Authority to Bind District.** The LISC has no authority to enter into contracts or agreements on behalf of the District. This Agreement does not create a partnership or joint venture between the parties.

**3. Assignment.** This Agreement is personal to the LISC and may not be assigned by the LISC without the District's prior written permission. Any attempt by the LISC to assign or transfer this Agreement or any portion of it or interest herein without the District's consent will automatically terminate this Agreement.

**4. Waiver of Rights.** The waiver at any time by any party of its rights with respect to a default, breach or any other matter arising in connection with this Agreement will not be deemed a waiver with respect to any subsequent default, breach or matter.

**5. Paragraph Headings.** The paragraph headings used in this Agreement are for reference only, and will not in any way limit or amplify the terms and provisions hereof, nor will they enter into the interpretation of this Agreement.

**6. Cooperation.** Each party to this Agreement agrees to do all things that may be necessary, including, without limitation, the execution of all documents, which may be required hereunder, in order to implement and effectuate this Agreement.

**7. Entire Agreement.** This Agreement constitutes the sole, final and integrated expression of the terms of this contract among the parties concerning the subject matter addressed herein, and supersedes all prior negotiations, representations or agreements, either oral or written. The parties have freely and voluntarily entered into this Agreement after having had the opportunity to consult with their respective attorneys. The parties, in entering into this Agreement, do not rely on any inducements, promises, or representations made by each other, their representatives, or any other person, other than those inducements, promises, and representations contained in this Agreement.

**8. Interpretation of this Agreement; Authority to Bind.** The parties acknowledge that each party and its attorney have reviewed, negotiated and revised this Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party will not be employed in the interpretation of this Agreement or any document executed and delivered by any party in connection with the transactions contemplated by this Agreement. The parties and the party representatives executing this Agreement have the power and authority to execute this Agreement, and once executed, this Agreement will be binding upon the parties.

**9. Indemnification and Hold Harmless.** The LISC will indemnify, protect, defend and hold harmless the District and its officers, employees, engineers, and agents, from any and all claims, demands or charges and from any loss or liability, including all costs, expenses, attorney's fees, litigation costs, penalties, and other fees arising out of or in any way connected with performance or failure to perform under this Agreement by the LISC or its officers, employees, contractors, subcontractors or agents.

**10. Severability.** The invalidity, illegality or unenforceability of any provision of this Agreement will not render the other provisions unenforceable, invalid or illegal.

**11. Amendment.** This Agreement may be modified or amended only by a subsequent written agreement approved and executed by both parties. Amendment by the District requires the approval of the District Board of Directors.

Sacramento Suburban Water District

LISC

By: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

Its: \_\_\_\_\_

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## Facilities and Operations Committee

### Agenda Item: 8

**Date:** March 25, 2015

**Subject:** Grant of Easement at 2163 Fulton Avenue

**Staff Contact:** Dave Jones, Associate Engineer  
John E. Valdes, Engineering Manager

#### **Recommended Committee Action:**

Receive report from District staff on the acquisition of a water pipeline easement at 2163 Fulton Avenue. Direct staff to present acquisition to the full Board, together with a Committee recommendation on acceptance, at the April 20, 2015 regular Board Meeting.

#### **Discussion:**

The District's process for acquisition of easements can be very time consuming and on occasion can hinder the installation/improvement of system infrastructure. Staff begins this process during the design phase, which is typically 12 months in advance of a project. The process is utilized for new development, re-development and District capital improvement projects. The number of steps necessary to acquire an easement are listed below:

- Determine if there is an existing easement (and if there are private water facilities)
- Determine the need for a new easement
- Determine fire flows on existing system and if fire hydrants and/or fire services are to be installed/upgraded
- Determine width parameters for potential easement
- Begin negotiations with property owner
- If monetary requirement, obtain property appraisal
- Receive verbal and/or written approval for easement from property owner
- Prepare Grant of Easement for new water facilities
- Legal description and plat map of new easement are prepared by licensed California Land Surveyor

- Grant of Easement is executed and notarized by property owner
- General Manager review/approval
- Board acceptance of easement
- Grant of Easement is recorded at County Clerk/Recorder's Office
- Begin installation of infrastructure

In addition to the easement acquisition process, where a customer development needs District approval, the District may require a minimum 20 feet wide easement. During design/construction of the Fulton/El Camino Right of Way Improvement Project (District Capital Improvement Project), staff discovered existing public water system facilities on private property without the benefit of an easement. In addition, staff determined an urgent need for a pipeline easement at 2163 Fulton Avenue due to a proposed County of Sacramento paving project. Staff proceeded to negotiate with the property owner to obtain a new easement. However, staff negotiated a 15-foot easement and not 20 feet as currently required by District standards. Because the project was not developer required, and because a 15 foot easement was offered at no cost to the District, a wider easement would require eminent domain actions. To expedite the infrastructure installation, staff directed the District's contractor to install new water appurtenances within the dedicated easement before that easement had been officially accepted by the Board.

The property at 2163 Fulton Avenue is a commercial property with tenant occupied buildings owned by the Braley & Graham Properties. As originally designed, there were two fire services, one fire hydrant, and two water meters at this location that were owned and maintained by the District. Staff determined the water lines were installed in the late 1950's without obtaining a dedicated easement, as shown in Exhibit 1.

Staff felt there was an urgent need for an easement after determining the lack of an existing easement, insufficient fire flows per today's standards, the pending need to install new services to support the proposed Santa Anita Water Main Project (District Capital Improvement Project), and a proposed County of Sacramento paving project. Therefore, District engineering staff met with Mr. Graham (one of the property owners of 2163 Fulton Avenue) in October 2013 to discuss the new Santa Anita Water Main Project and the need for an easement.

Staff began negotiations with Mr. Graham for a 20 foot wide easement per District standards. However, Mr. Graham was not in favor of a 20 foot easement without some proposed concessions. Mr. Graham requested two future 2-inch water services at no cost, and routing water mains favorable to his future improvement plans in exchange for the 20 foot easement. He was, however, agreeable to a 15 foot easement if the one existing fire service serving two buildings could be split, each serving one building and the existing fire hydrant improved to current requirements. This concession to split the fire services had a corresponding cost of less than \$500, and therefore, it was accepted by staff. To improve the public fire hydrants to current



requirements would be a function of the new water main and a responsibility of the District. Mr. Graham requested no compensation for the 15 foot easement.

The proposed easement allows the new water main to be connected to a proposed 12-inch water main in Brunton Way, allowing for improved fire flows and supporting the proposed Santa Anita Main Replacement Project. Furthermore, District design requirements call for a bisecting water line every 1,300 feet if available. The use of 2163 Fulton Avenue presents the best location for a bisecting main between Cottage Way and Hernando Road. This location is also one with least cost to the District and least disruption to the private property owners in the area. The attached Exhibits 2 and 3 show the proposed easement and the new water system facilities inside the easement.

District staff felt the 15 foot easement, as offered, would be adequate for repair and maintenance of the new water system facilities, especially considering the time constraints associated with the upcoming paving project and the proposed Santa Anita Water Main Project.

Mr. Graham, with his partner in Portland, Oregon, agreed to the terms of the easement and signed the easement on August 12, 2014, just days before the construction was scheduled to begin. However, there was an error on Mr. Graham's part in the identification of how title was held and the papers had to be resigned. In an effort to keep the project moving, a decision was made to proceed with the installation of the new water main and appurtenances before a formal grant of easement was signed by the property owners and returned to the District. The signed and notarized easement documents were finally returned to the District in late-December 2014. While this decision saved the District significant money, and avoided a construction shutdown, the easement acquisition was not done in accordance with District procedures.

The property owner did request that they have an option noted in the easement agreement to relocate the 12-inch line in the future, at no cost to the District, should they choose to redevelop the land. All future improvements will require District approval and shall meet or exceed District's regulations and standards. This is an option available to all developers.

District management understands that no easement is legal until such time that it is approved by the Board of Directors. Proceeding with the installation of the infrastructure prior to the easement being approved by the Board, and properly recorded, was a major oversight on the part of staff. Under current District procedures, the practice of installing water facilities within a signed easement ready for recording, but not yet approved by the Board was an accepted practice by a predecessor district and was apparently selectively continued by SSWD. Those conditions include, but are not limited to, timing of project, property owner approving the easement conditions, and economic parameters.

With immediate direction from the General Manager, steps are now in place to ensure that no construction activity related to the installation of infrastructure is conducted on private property until such time that an easement is formally approved by the Board. For easements on the development side, a flow chart has been prepared to provide to owners/developers and their engineers that will clearly indicate that the project plans will not be approved until such time that any easements are approved by the Board. Likewise, for District CIP projects, a project planning/design checklist is being prepared that will not allow the project to proceed to construction until easements are approved by the Board.

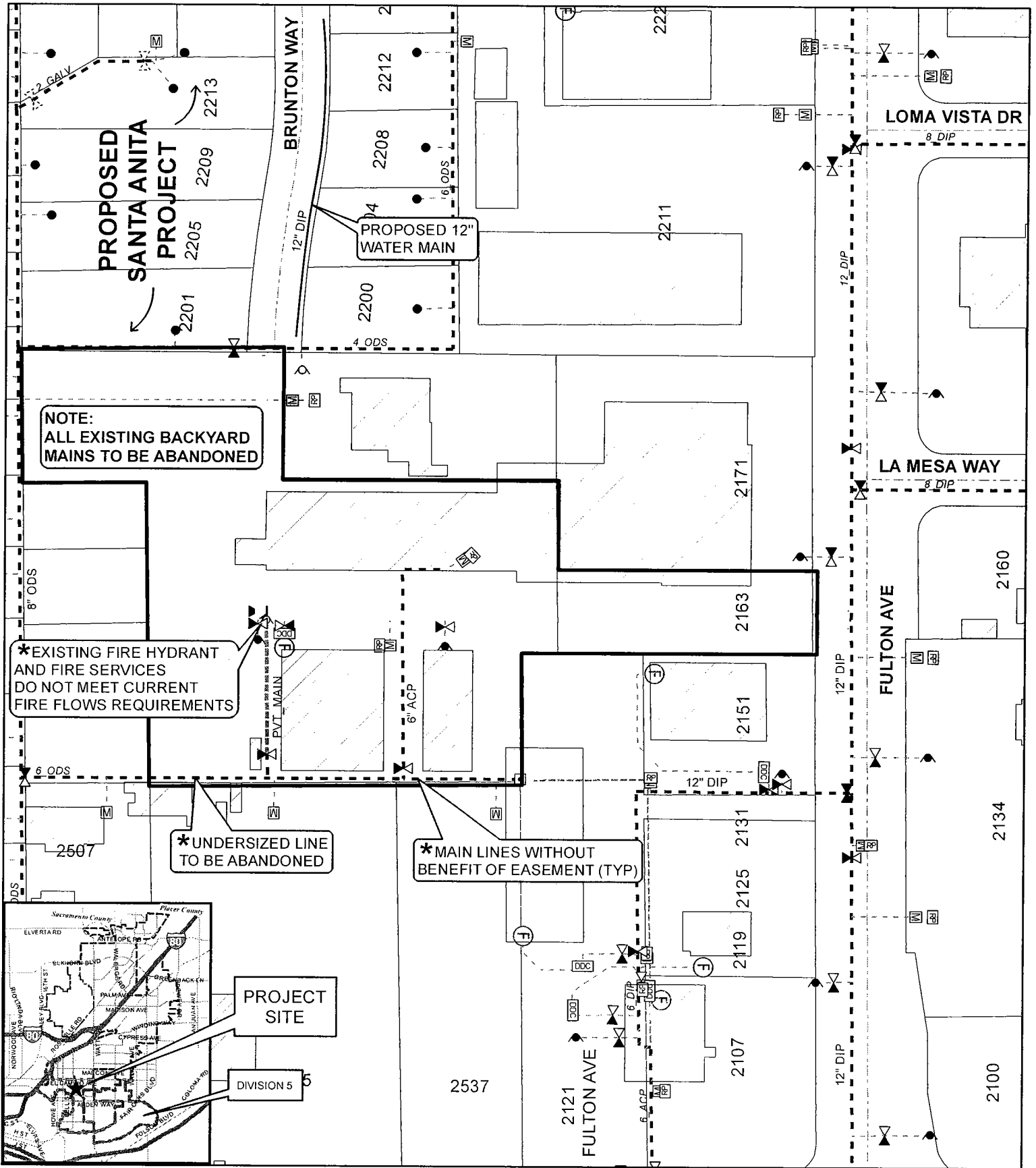
**Fiscal Impact:**

There is no significant fiscal impact for acquiring and accepting the easement as it has been offered at no cost to the District.

**Strategic Plan Alignment:**

Facilities and Operations – 2.B. Monitor and improve the District’s efficiencies in operating and maintaining system infrastructure.

The proposed easement allows the District the right to access the new water main, insures water quality, improves fire flows, and allows for maintenance of the infrastructure and operation of the system.



NOT TO SCALE

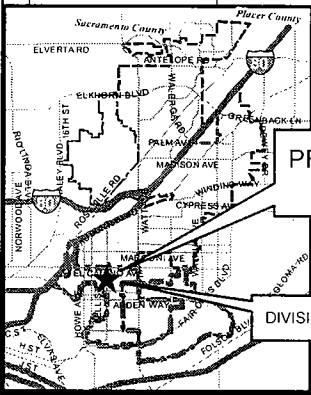
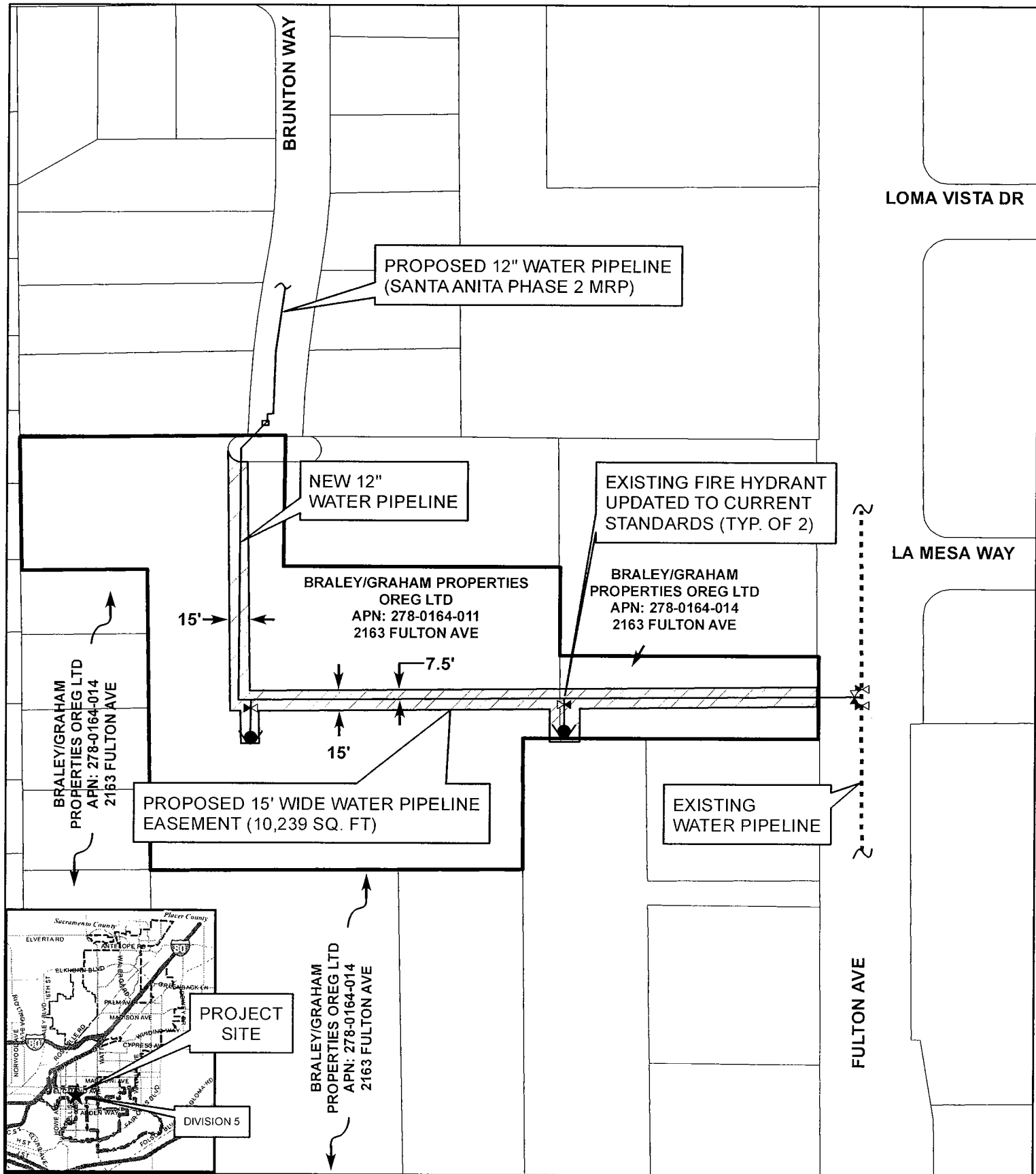
Portion of Sacramento Suburban Water District

# EXHIBIT 1



**NOT FOR RECORDING**  
 \*Condition Prior To New  
 Waterline Facilities Installation  
 2163 FULTON AVE  
 (Voting Div. 5)

Base Data: Sacramento County Gis Base Map  
 Projection: CA State Plane 2, NAD83  
 Scale: No Scale  
 Prepared by: D.A.V., SSWD  
 Sacramento, CA, Feb, 2015  
 Fulton\_2163\_Exist.mxd



NOT TO SCALE

Portion of Sacramento Suburban Water District



**EXHIBIT 2**

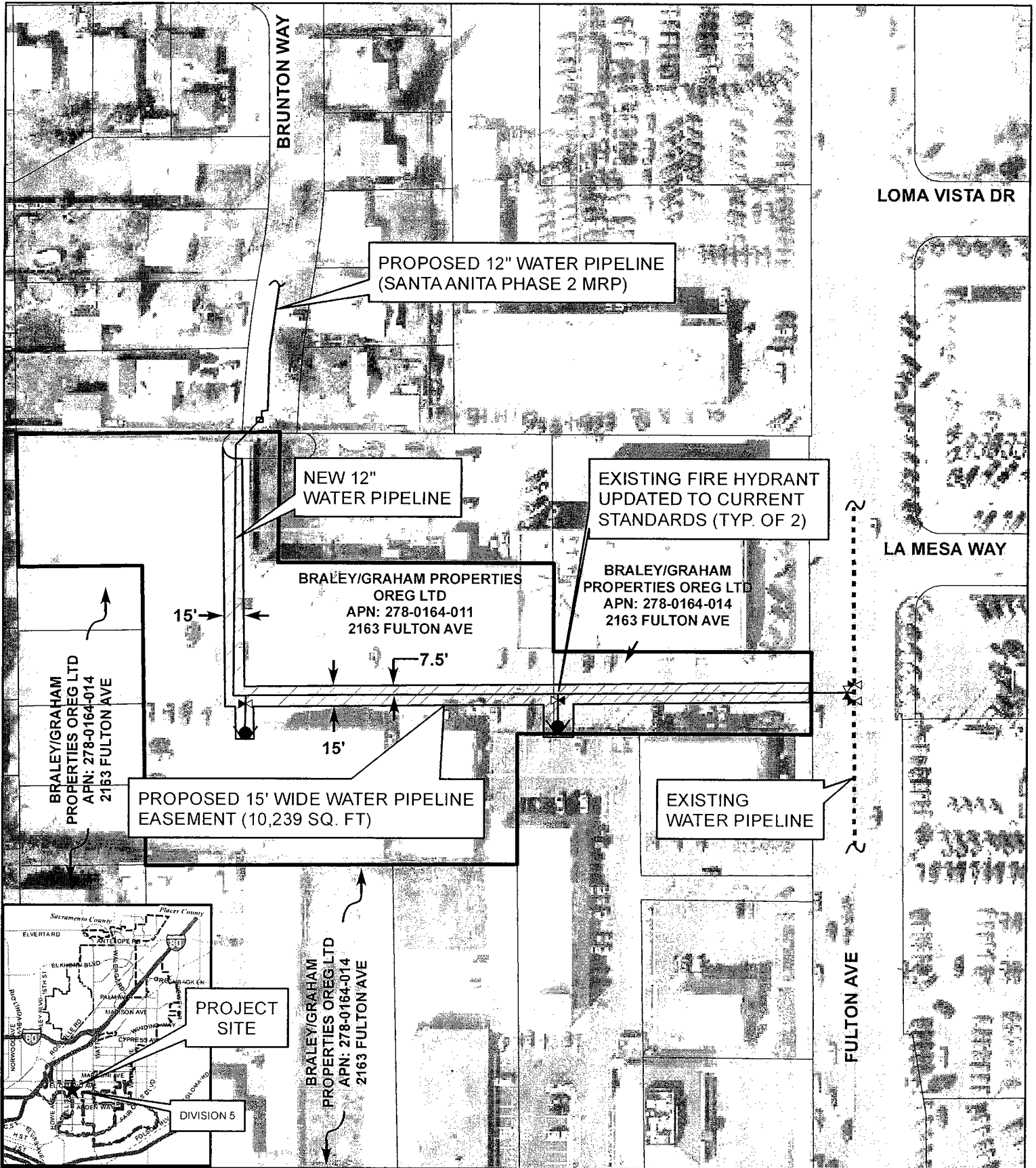
**NOT FOR RECORDING**

**PROPOSED 15' WIDE EASEMENT  
2163 FULTON AVE**

(Voting Div. 5)

Base Data: Sacramento County Gis Base Map  
 Projection: CA State Plane 2, NAD83  
 Scale: No Scale  
 Prepared by: D.A.V., SSWD  
 Sacramento, CA. Feb, 2015  
 Fulton\_2163.mxd



NOT TO SCALE

Portion of Sacramento Suburban Water District

### EXHIBIT 3



NOT FOR RECORDING

### PROPOSED 15' WIDE EASEMENT 2163 FULTON AVE

(Voting Div. 5)

Base Data: Sacramento County Gis Base Map  
Projection: CA State Plane 2, NAD83  
Scale: No Scale  
Prepared by: D.A.V., SSWD  
Sacramento, CA, Feb. 2015  
Fulton\_2163\_Aenall.mxd



## Facilities & Operations Committee

### Agenda Item: 9

**Date:** March 25, 2015

**Subject:** Grant of Easement at 2600 Fulton Avenue

**Staff Contact:** Dave Jones, Associate Engineer  
John E. Valdes, Engineering Manager

#### **Recommended Committee Action:**

Receive report from District staff on the acquisition of a water pipeline easement at 2600 Fulton Avenue. Direct staff to present acquisition to the full Board, together with a committee recommendation on acceptance, at the April 20, 2015 regular Board Meeting.

#### **Discussion:**

The District's process for acquisition of easements can be very time consuming and on occasion can hinder the installation/improvement of system infrastructure. Staff begins this process during the design phase, which is typically 12 months in advance of a project. The process is utilized for new development, re-development and District capital improvement projects. The number of steps necessary to acquire an easement are listed below:

- Determine if there is an existing easement (and if there are private water facilities)
- Determine the need for a new easement
- Determine fire flows on existing system and if fire hydrants or fire services are to be installed/upgraded
- Determine width parameters for potential easement
- Begin negotiations with property owner
- If monetary requirement, obtain property appraisal
- Receive verbal and/or written approval for easement from property owner
- Prepare Grant of Easement for new water facilities
- Legal description and plat map of new easement are prepared by licensed California Land Surveyor

- Grant of Easement is executed and notarized by property owner
- General Manager review/approval
- Board acceptance of easement
- Grant of Easement is recorded at County Clerk/Recorder's Office.
- Begin installation of infrastructure

In addition to the easement acquisition process, where a customer development needs District approval, the District may require a minimum 20 feet wide easement. During design/construction of the Fulton/El Camino Right of Way Improvement Project (District Capital Improvement Project) in 2014, staff discovered existing public water system facilities on private property without the benefit of an easement. Staff negotiated with the property owner to obtain a new easement. However, staff negotiated a 15-foot easement and not 20 feet as currently required by District standards. Because the project was not developer required, and because a 15 foot easement was offered at no cost to the District, a wider easement would require eminent domain actions. To expedite the infrastructure installation, staff directed the District's contractor to install new water appurtenances within the dedicated easement before that easement had been officially accepted by the Board.

The property at 2600 Fulton Avenue is a commercial property operated as a Lexus dealership owned by the Mr. Patrick Frink. As originally constructed, there was one public fire hydrant at the rear of the property that was owned and maintained by the District. The existing fire hydrant was supplied by a backyard 6-inch asbestos cement (AC) water main that runs south along the east property line towards El Camino Avenue. The water line was installed decades ago without the benefit of an easement as shown in Exhibit 1.

After the lack of an existing easement was discovered the fire flow was determined insufficient, the pending need to install new services to support the District's Drayton Heights Water Main Project, and provide improved fire flow for the public fire hydrant currently in use, District staff conversed over the phone with Mr. Frink (the owner of the property) early in 2014. District staff informed Mr. Frink of the new main replacement project, the installation of a new 8-inch water main serving the fire hydrant at the back of 2600 Fulton Avenue from Elvyra Drive, and the need for an easement. Mr. Frink was in agreement with providing an easement, but could only offer a 15 foot easement due to the fact that a portion of the existing dealership's building is only 15 feet from the east property line. The space between the building and the property line provides an alternate ingress and egress to the dealership's shop facility and varies from 25 feet to 40 feet, excluding the building portion that is 15 feet from the property line. Mr. Frink requested no compensation for the easement he was offering. The attached Exhibits 2 and 3 show the proposed easement and the new water system facilities inside the easement.

The need for this project was driven by the Sacramento Metropolitan Fire District's requirement to keep the public fire hydrant in service, the District's Drayton Heights Main Replacement Project (one year out) and the impending County of Sacramento's paving overlay of Fulton Avenue. Staff determined that the existing fire hydrant could not produce the current fire flow required by today's standards.

District staff believes the 15 foot easement as offered is adequate for repair and maintenance of the new water system facilities, especially considering the time constraints associated with the upcoming paving project and the Drayton Heights project. Mr. Frink noted that the dealership would be redeveloping the parcel in the future which could require additional fire demands that would change the placement of fire hydrants, and could result in new easements being drawn up that would meet all regulatory agency requirements. This possible future development also hindered the possibility of acquiring a 20 foot wide water line easement from Fulton Avenue to the current hydrant location.

In an effort to keep the project moving, a field decision was made to proceed with the installation of the new water main and fire hydrant before a formal grant of easement was approved by the Board. The proposed easement allows the new water main to be connected to a proposed 12-inch water main in Elvyra Drive, allowing for acceptable fire flows. While this decision saved the District significant money, and avoided a construction shutdown, the easement acquisition was not done in accordance with District procedures.

District management understands that no easement is legal until it is approved by the Board of Directors. Proceeding with the installation of the infrastructure prior to the easement being approved by the Board and properly recorded was a major oversight on the part of staff. Under current District procedures, the practice of installing water facilities within a signed easement ready for recording, but not approved by the Board, was an accepted practice by a predecessor District and apparently selectively continued by SSWD. Those conditions include, but are not limited to, timing of project, property owner approving the easement conditions, and economic parameters.

With immediate direction from the General Manager, steps are now in place to ensure that no work is constructed on private property until such time that an existing easement is approved by the Board and recorded by the County Clerk Recorder's Office. For easements on the development side, a flow chart is being prepared to provide to owner(s) and/or their engineers that will clearly show that the project plans will not be approved until any easements are approved by the Board. Likewise, for District CIP projects, a project planning/design checklist is being prepared that will not allow the project to proceed to construction until easements are approved by the Board.



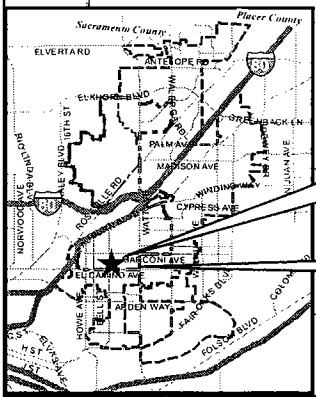
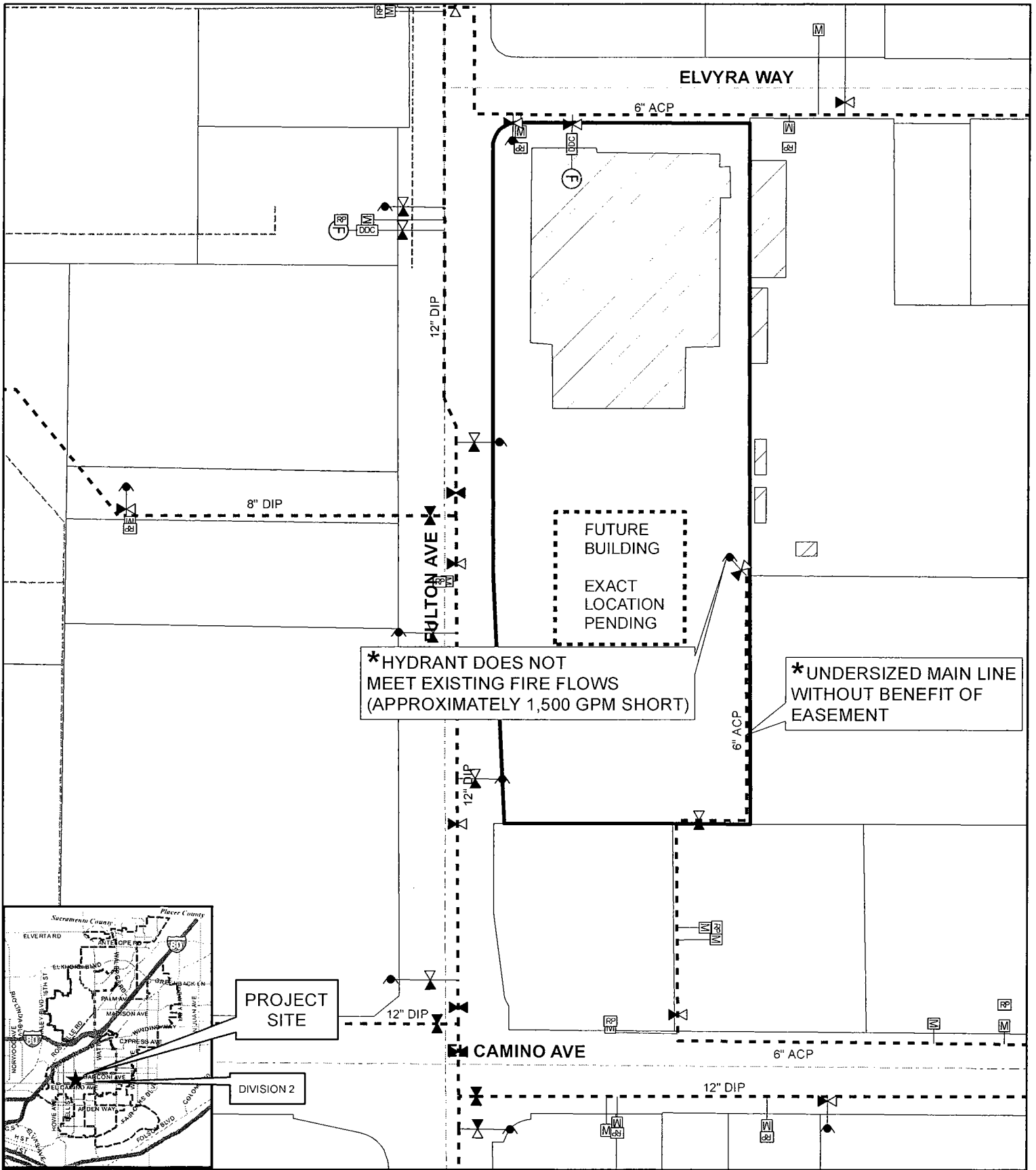
**Fiscal Impact:**

There is no significant fiscal impact for acquiring and accepting the easement as it has been offered at no cost to the District.



**Strategic Plan Alignment:**

Facilities and Operations – 2.B. Monitor and improve the District’s efficiencies in operating and maintaining system infrastructure.

The proposed easement allows the District the right to access the new water main, insures water quality, improves fire flows, and allows for maintenance of the infrastructure and operation of the system.



NOT TO SCALE

Portion of Sacramento Suburban Water District

**EXHIBIT 1**

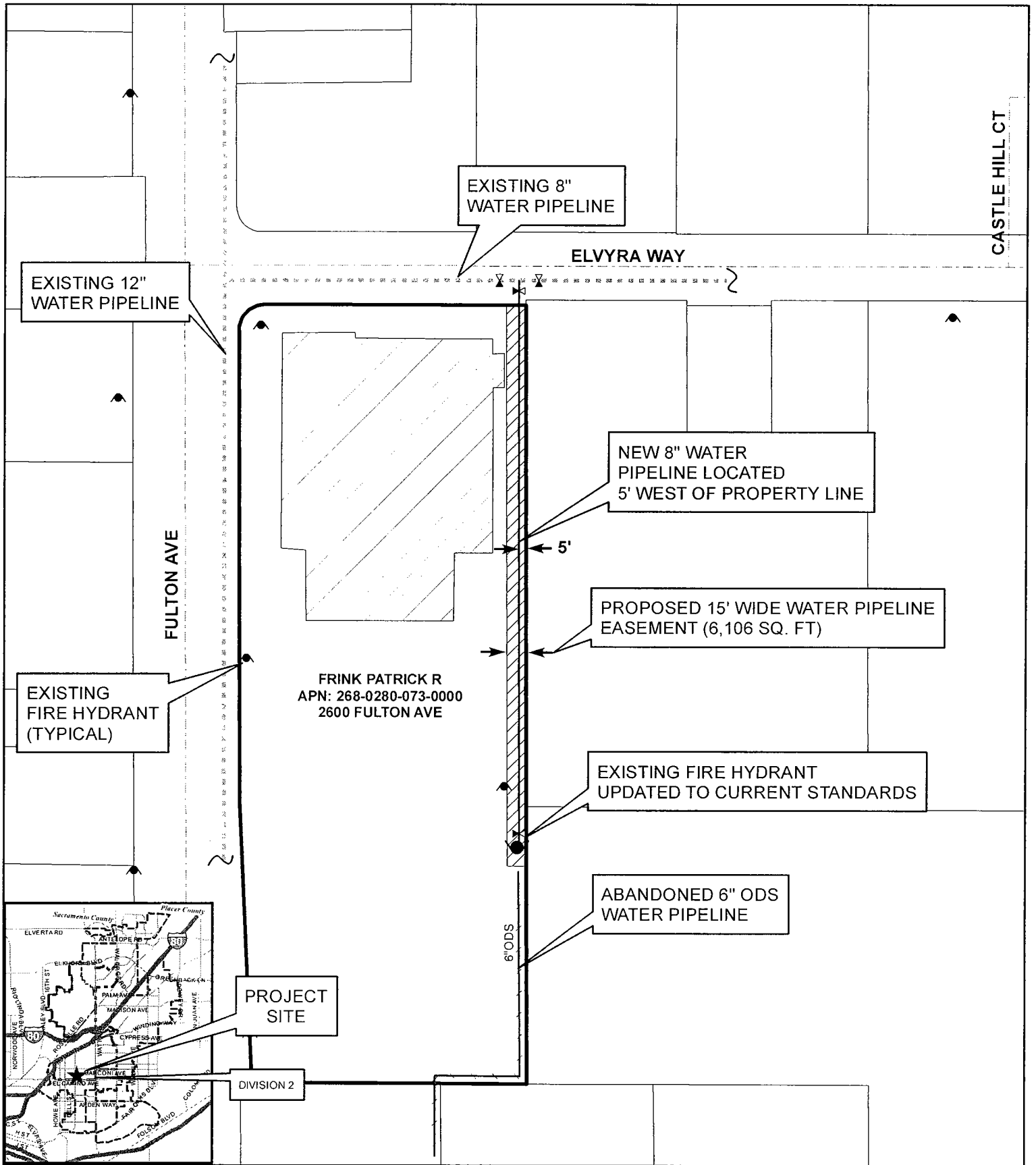
**NOT FOR RECORDING**

**\* Condition Prior To New Waterline Facilities Installation**

**2600 FULTON AVE**

(Voting Div. 2)

Base Data: Sacramento County Gis Base Map  
 Projection: CA State Plane 2, NAD83  
 Scale: No Scale  
 Prepared by: D.A.V., SSWD  
 Sacramento, CA. Feb, 2015  
 Fulton\_2600\_Exist.mxd



NOT TO SCALE

Portion of Sacramento Suburban Water District

**EXHIBIT 2**

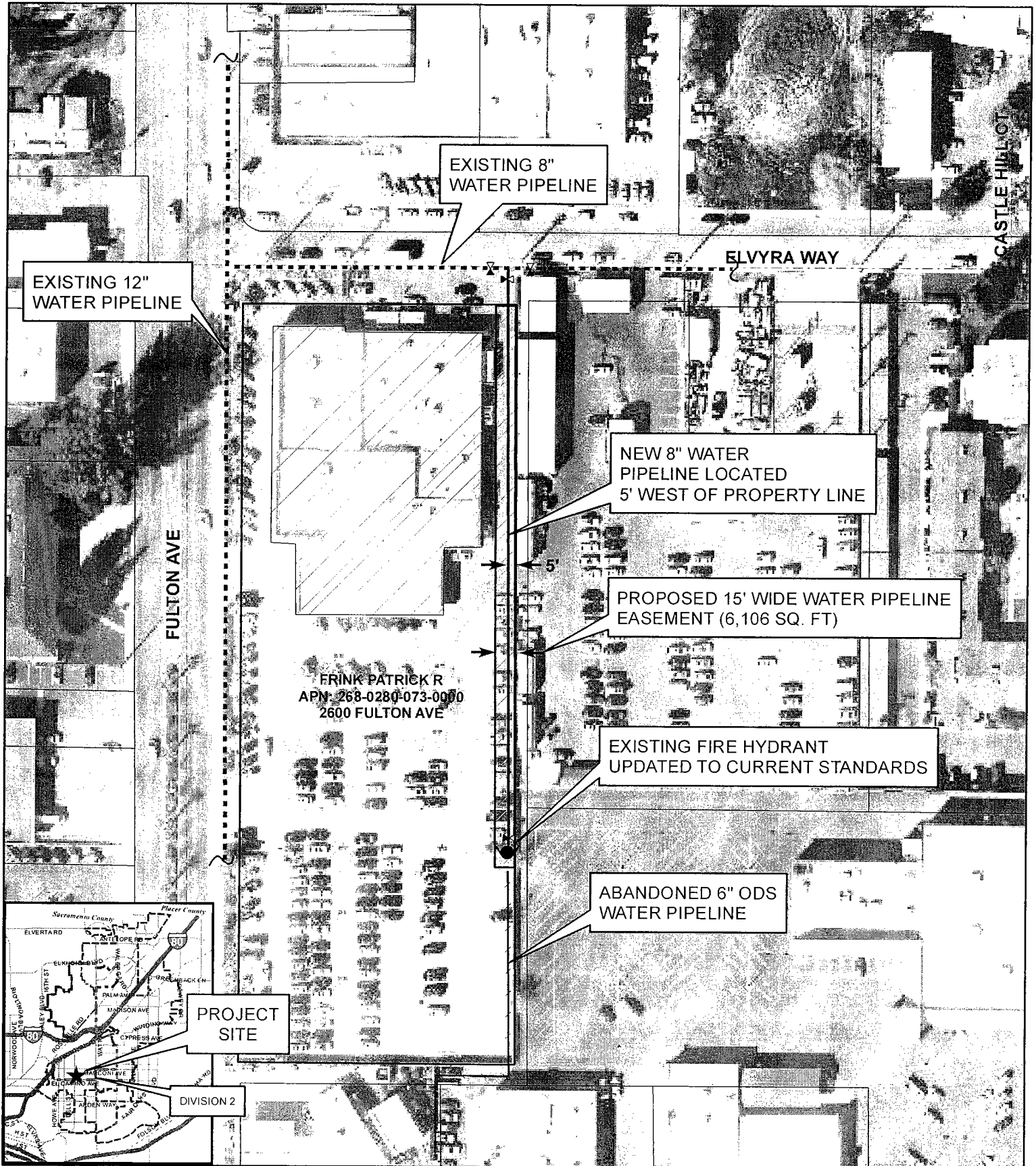


**NOT FOR RECORDING**

**PROPOSED 15' WIDE EASEMENT  
2600 FULTON AVE**

(Voting Div. 2)

Base Data: Sacramento County Gis Base Map  
 Projection: CA State Plane 2, NAD83  
 Scale: No Scale  
 Prepared by: D.A.V., SSWD  
 Sacramento, CA, Feb, 2015  
 Fulton\_Elvyra.mxd



NOT TO SCALE

Portion of Sacramento Suburban Water District

**EXHIBIT 3**

NOT FOR RECORDING

**PROPOSED 15' WIDE EASEMENT  
2600 FULTON AVE**

Base Data: Sacramento County Gis Base Map  
 Projection: CA State Plane 2, NAD83  
 Scale: No Scale  
 Prepared by: D.A.V., SSWD  
 Sacramento, CA, Feb, 2015  
 Fulton\_2600\_Aerial.mxd

(Voting Div. 2)

