

January 23, 2017

MEETING NOTICE

WATER CONSERVATION AND DEMAND MANAGEMENT COMMITTEE

Members of the Water Conservation and Demand Management Committee:

Director Nai Hsueh
Director Linda J. LeZotte, Vice Chairperson
Director Richard P. Santos, Chairperson

Staff Support of the Water Conservation and Demand Management Committee:

Norma Camacho, Interim Chief Executive Officer
Jim Fiedler, Chief Operating Officer, Water Utility
Stanly Yamamoto, District Counsel
Garth Hall, Deputy Operating Officer, Water Supply Division
Rick Callender, Deputy Administrative Officer, Office of Government Relations
Jerry De La Piedra, Water Supply Planning and Conservation Manager, Water Supply
Planning and Conservation Unit

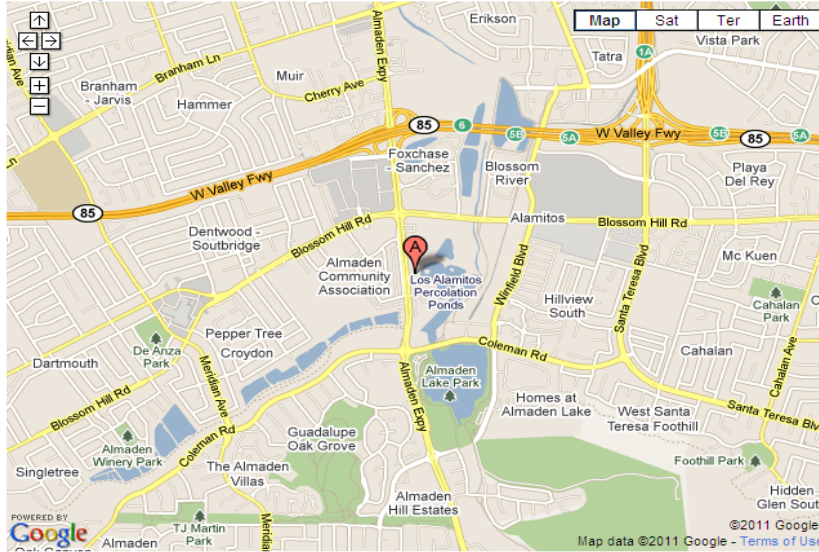
The regular meeting of the Water Conservation and Demand Management Committee is scheduled to be held on **Wednesday, January 25, 2017, at 10:30 a.m.** in the Headquarters Building **Conference Room A143**, located at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California.

Enclosed are the meeting agenda and corresponding materials. Please bring this packet with you to the meeting.

Enclosures



**Santa Clara Valley Water District - Headquarters Building,
5700 Almaden Expressway, San Jose, CA 95118**



From Oakland:

- Take 880 South to 85 South
- Take 85 South to Almaden Expressway exit
- Turn left on Almaden Plaza Way
- Turn right (south) on Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Morgan Hill/Gilroy:

- Take 101 North to 85 North
- Take 85 North to Almaden Expressway exit
- Turn left on Almaden Expressway
- Cross Blossom Hill Road
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Sunnyvale:

- Take Highway 87 South to 85 North
- Take Highway 85 North to Almaden Expressway exit
- Turn left on Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From San Francisco:

- Take 280 South to Highway 85 South
- Take Highway 85 South to Almaden Expressway exit
- Turn left on Almaden Plaza Way
- Turn right (south) on Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Downtown San Jose:

- Take Highway 87 - Guadalupe Expressway South
- Exit on Santa Teresa Blvd.
- Turn right on Blossom Hill Road
- Turn left at Almaden Expressway
- At Via Monte (first traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Walnut Creek, Concord and East Bay areas:

- Take 680 South to 280 North
- Exit Highway 87-Guadalupe Expressway South
- Exit on Santa Teresa Blvd.
- Turn right on Blossom Hill Road
- Turn left at Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

AMENDED AGENDA

WATER CONSERVATION AND DEMAND MANAGEMENT COMMITTEE

WEDNESDAY, JANUARY 25, 2017

10:30 a.m. – 12:30 p.m.

Santa Clara Valley Water District

Headquarters Building Conference Room A143

5700 Almaden Expressway

San Jose, CA 95118

Time Certain

10:30 a.m.

1. **Call to Order/Roll Call**
2. **Time Open for Public Comment on Any Item Not on the Agenda**
Comments should be limited to two minutes. If the Committee wishes to discuss a subject raised by the speaker, it can request placement on a future agenda.
3. **Approval of Minutes**
 - 3.1 Approval of Minutes – December 27, 2016, meeting
4. **Discussion/Action Items**
 - 4.1 Update on Golf Course Coalition Proposal (Jerry De La Piedra/Ron Zraick)
Recommendation: This is an information only item and no action is required.
 - 4.2 Stakeholder Engagement in Evaluating New Authorities under the Sustainable Groundwater Management Act (SGMA) (Vanessa De La Piedra)
Recommendation: Discuss the proposed plan to engage stakeholders in the evaluation of new SGMA authorities and provide direction to staff.
 - 4.3 Presentation On Conservation And Demand Management Elements of the Draft 2017 Water Master Plan (Tracy Hemmeter)
Recommendation: This is an information only item and no action is required.
 - 4.4 Receive Information on Conservation Measure Connections/Obligations addressed in the CA Waterfix (Cindy Kao)
Recommendation: This is a discussion item and the Committee may take action if applicable.
 - 4.5 Receive an Update on the District's Outreach Campaign (HOAs, Neighborhood Groups, Developers, Planning Agencies) (Marty Grimes)
Recommendation: This is an information only item and no action is required.
 - 4.6 Review of Water Conservation and Demand Management Committee Work Plan and the Outcomes of Board Action of Committee Requests (Committee Chair)
Recommendation: Schedule 2017 meetings and review the Committee work plan to guide the Committee's discussions regarding policy alternatives and implications for Board deliberation.

5. **Clerk Review and Clarification of Committee's Requests**

This is an opportunity for the Clerk to review and obtain clarification on any formally moved, seconded, and approved requests and recommendations made by the Committee during discussion of Item 4.

6. **Adjourn:**

REASONABLE EFFORTS TO ACCOMMODATE PERSONS WITH DISABILITIES WISHING TO ATTEND COMMITTEE MEETINGS WILL BE MADE. PLEASE ADVISE THE CLERK OF THE BOARD OFFICE OF ANY SPECIAL NEEDS BY CALLING (408) 630-2277.

Meetings of this committee will be conducted in compliance with all Brown Act requirements. All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the same time that the public records are distributed or made available to the legislative body, at the following location:

Santa Clara Valley Water District, Office of the Clerk of the Board
5700 Almaden Expressway, San Jose, CA 95118

Water Conservation and Demand Management Committee:

Purpose: To support the Board of Directors in achieving its policy to provide a reliable water supply to meet current and future water usage by making policy recommendations related to demand management.



WATER CONSERVATION AND DEMAND MANAGEMENT COMMITTEE MEETING

DRAFT MINUTES

**TUESDAY, DECEMBER 27, 2016
10:30 AM**

(Paragraph numbers coincide with agenda item numbers)

A meeting of the Water Conservation Ad Hoc Committee was held on December 27, 2016, in the Headquarters Building Boardroom at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California.

1. CALL TO ORDER/ROLL CALL

Chairperson, Director Richard P. Santos called the meeting to order at 10:30 a.m.

Board Members in attendance were: Director Linda J. LeZotte and Director Richard P. Santos.

Staff members in attendance were: Michelle Critchlow, Rachael Gibson, Garth Hall, Tracy Hemmeter, Karen Koppett and Melanie Richardson.

2. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON AGENDA

There was no one present who wished to speak.

3. APPROVAL OF MINUTES

It was moved by Director Linda J. LeZotte, seconded by Director Richard P. Santos, and unanimously carried, to approve the minutes of the December 9, 2016, Water Conservation and Demand Management Committee meeting, as presented.

4. DISCUSSION/ACTION ITEMS

4.1 UPDATE ON GOLF COURSE COALITION PROPOSAL

Mr. Ron Zraick reviewed the materials as outlined in the agenda item.

Director Richard P. Santos spoke on this agenda item.

No action was taken.

4.2 UPDATE ON STATE'S PROPOSED FRAMEWORK FOR WATER CONSERVATION AND DROUGHT PREPAREDNESS

Mr. Garth Hall reviewed the materials as outlined in the agenda item.

Directors Richard P. Santos and Director Linda J. LeZotte spoke on this agenda item. Ms. Tracy Hemmeter was available to answer questions.

No action was taken.

4.3 2017 WATER USE REDUCTION TARGET

Mr. Garth Hall reviewed the materials as outlined in the agenda item.

No action was taken.

4.4 DISCUSS LEGISLATION RELATING TO WATER CONSERVATION AND DEMAND MANAGEMENT

Ms. Rachael Gibson reviewed the materials as outlined in the agenda item.

Director Richard P. Santos spoke on this agenda item.

No action was taken.

4.5 REVIEW OF WATER CONSERVATION AND DEMAND MANAGEMENT COMMITTEE WORK PLAN AND THE OUTCOMES OF BOARD ACTION OF COMMITTEE REQUESTS

Chair Santos reviewed the materials as outlined in the agenda item. Follow-up to include the following at the next meeting.

1. Update on the Golf Course Coalition Proposal. Information Only.
2. Update on the District's Outreach Campaign (HOAs, neighborhood groups, developers, planning agencies). Discussion/Action.
3. Presentation on Conservation and Demand Management elements of the draft 2017 Water Master Plan. Discussion/Action.
4. Update on the California WaterFix. Discussion/Action.
5. Consideration of potential approaches for receiving input from key stakeholders on development of plans, where necessary, for implementation of authorities available to the District under the Sustainable Groundwater Management Act (SGMA). Discussion/Action.

5. CLERK REVIEW AND CLARIFICATION OF COMMITTEE'S REQUESTS

Ms. Michelle Critchlow reported there were no action items for Board consideration.

6. ADJOURNMENT

Chair Santos adjourned at 10:30 a.m. to the next regular meeting, Wednesday, January 25, 2017, at 10:30 a.m. in the Santa Clara Valley Water District Headquarters Board Conference Room A124.

Michelle Critchlow
Office of the Clerk of the Board

Approved:



Committee: Water Conservation & Demand Management
Meeting Date: 01/25/17
Agenda Item No.: 4.1
Unclassified Manager: Garth Hall
Email: ghall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Update on Golf Course Coalition Proposal

RECOMMENDED ACTION:

This is an information only item and no action is required.

SUMMARY:

At the request of the Water Conservation and Demand Management Committee (Committee), staff has discussed the draft Golf Course Coalition proposal, titled "Alternative Means of Compliance for Golf Courses and Sports Fields" with the water retailers at their October Water Retailers Meeting as well as a November Water Conservation Subcommittee meeting. District staff has since worked with the Conservation Subcommittee to initiate a small working group to discuss this concept further. The small working group is currently refining the language and if completed in time, the updated language will be provided to this Committee on January 25, 2017.

BACKGROUND:

Golf courses, typically a target of the public during a drought, have each responded in their own way to the ongoing drought. In many cases the response is dependent on their water provider and the restrictions in place, which can vary significantly from one jurisdiction to the next. To address this imbalance, as well as other issues, the majority of golf courses in Santa Clara County have organized to form a Golf Course Coalition (Coalition). The Coalition has been tasked with developing and promoting uniform requirements throughout the county for large landscapes that utilize potable water. This would include consistent water use reduction targets, reporting requirements, and potential consequences for non-compliance (e.g. fines). The specifics, including the definition of "large landscape", are still to be determined.

ATTACHMENT(S):

None



Committee: Water Conservation and Demand Management
Meeting Date: 01/25/17
Agenda Item No.: 4.2
Unclassified Manager: Garth Hall
Email: GHall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Stakeholder Engagement in Evaluating New Authorities under the Sustainable Groundwater Management Act (SGMA).

RECOMMENDED ACTION:

Discuss the proposed plan to engage stakeholders in the evaluation of new SGMA authorities and provide direction to staff.

SUMMARY:

The Sustainable Groundwater Management Act (SGMA) provides Groundwater Sustainability Agencies (GSAs), like the District, with various authorities to ensure groundwater sustainability. In November 2016, the District Board of Directors (Board) adopted the 2016 Groundwater Management Plan for the Santa Clara and Llagas Subbasins (GWMP) following a public hearing. The GWMP acknowledges new SGMA authorities, including the regulation of pumping and collection of different fee types, as potential tools that may be needed to ensure continued sustainability. Per the GWMP, the District will begin to evaluate these authorities in 2017 in coordination with water retailers and other interested stakeholders. Prior to adopting the GWMP, the Board affirmed a continued commitment to working with stakeholders, and referred consideration of stakeholder engagement on SGMA authorities to the Water Conservation and Demand Management Committee (Committee).

Staff is seeking the Committee's input on the proposed approach to engage stakeholders in the evaluation of new SGMA authorities, which is described in Attachment 1. Staff is also seeking preliminary input from the Committee, water retailers, and other interested stakeholders in terms of specific SGMA authorities and the District's evaluation of those potential tools.

BACKGROUND:

To meet SGMA planning requirements and DWR Emergency Groundwater Sustainability Plan (GSP) Regulations, the District prepared the GWMP as an alternative to a GSP. The Board adopted the 2016 GWMP on November 22, 2016 after a public hearing, and directed staff to work with the Committee on stakeholder engagement options with regard to evaluating new SGMA authorities. On December 9, 2016, the Committee discussed the GWMP public comment letters and the draft District responses. Comment letters from several water retailers focused on concerns related to water rights and the potential regulation of pumping. Several retailers present at the December 9, 2016 meeting indicated a need to clearly define the process by which the District will evaluate SGMA authorities and involve stakeholders in a meaningful way as these authorities have potentially significant impacts on water retailer operations.

The comment letters and related responses were included as an appendix to the GWMP, which was submitted to DWR on December 21, 2016. Any interested person may submit comments on the District's GWMP to DWR

at <http://sgma.water.ca.gov/portal/alternative/all> during a 60-day public comment period, which ends on February 20, 2017.

Several comment letters were submitted for the GWMP public hearing related to concerns over new SGMA authorities, and the Board noted the need to involve water retailers and other interested stakeholders as the District considers these potential tools. Staff is seeking Committee and stakeholder input on the proposed stakeholder engagement plan related to the evaluation of new SGMA authorities (Attachment 1). Staff is also seeking preliminary input on specific SGMA authorities and the related District evaluation of those authorities.

ATTACHMENT(S):

Attachment 1 – Proposed Stakeholder Engagement Plan

Evaluation of New Sustainable Groundwater Management Act (SGMA) Authorities Proposed Stakeholder Engagement Plan

The District will be evaluating new SGMA authorities to determine how they may support long-term groundwater sustainability and to develop a related framework for implementation should they be needed. This stakeholder engagement plan describes how the District plans to involve water retailers and other interested stakeholders in the evaluation of new SGMA authorities.

Background

The Sustainable Groundwater Management Act (SGMA) provides Groundwater Sustainability Agencies (GSAs), like the District, with various authorities to ensure groundwater sustainability. In November 2016, the District Board of Directors (Board) adopted the 2016 Groundwater Management Plan for the Santa Clara and Llagas Subbasins (GWMP) following a public hearing. The GWMP acknowledges the need to involve stakeholders in the evaluation of new SGMA authorities in GWMP Section 1.4.2:

“Potential new authorities under SGMA include the ability to regulate groundwater pumping and assess different types of groundwater charges. The District plans to evaluate these new authorities in cooperation with water retailers and other interested stakeholders and consider what conditions might necessitate their implementation to sustainably manage groundwater into the future.”

Several water retailers submitted comment letters related to the GWMP public hearing expressing concern with the potential regulation of pumping and interference with water rights and retailer operations. Letters from both San Jose Water Company and Great Oaks Water Company included a proposed Memorandum of Agreement (MOA) between the District and public water retailers based on a shared governance approach. This draft MOA proposed the development of a Water Rights Committee composed of public water retailers and an at-large representative for other pumpers. The draft MOA proposed that this Water Rights Committee develop and implement plans to curtail or allocate pumping, if needed.

Pursuant to groundwater management authority granted by the Santa Clara Valley Water District (District Act), the District has sustainably managed groundwater for the benefit of the community for many decades. While the District maintains sole authority with regard to groundwater management, continued coordination and collaboration with water retailers and stakeholders will help ensure effective management of groundwater resources. New SGMA authorities may have significant implications for water retailers and are of interest to other basin stakeholders. In addition to considering potential groundwater management benefits from these tools, stakeholder input should be carefully considered.

Proposed Forum for Stakeholder Engagement

Prior to adopting the GWMP, the Board affirmed a continued commitment to working with stakeholders, and referred consideration of stakeholder engagement on SGMA authorities to the Board's Water Conservation and Demand Management Committee (Committee). Committee meetings are publicly-noticed and open to any interested person. This forum also allows for interested stakeholders to provide input directly to Board Committee members. Promoting dialog and exchange through this Committee ensures an open and transparent process as the District evaluates new SGMA authorities.

The District maintains a list of stakeholders interested in the development and implementation of the GWMP, and will notify these stakeholders in advance of Committee agenda items related to the evaluation of SGMA authorities. District staff will also provide related updates to water retailers through meetings of the Water Retailers Committee and/or Groundwater Subcommittee.

Preliminary Evaluation of New SGMA Authorities

Potential authorities to regulate pumping or collect different types of fees are complex and have limitations related to water rights, land use authorities, and regulatory requirements. District staff will conduct a preliminary analysis of new SGMA authorities and bring related information to the Committee to facilitate Committee and stakeholder discussion and input. Questions to be considered during the preliminary District analysis of these authorities include:

- What basin conditions might trigger the use of SGMA authorities?
- Which specific SGMA tools are best suited to help ensure sustainability or further the District's ability to manage groundwater?
- What process or steps would be followed prior to implementing these tools?
- How might these authorities be implemented – who would be affected, what actions would be required, etc.?

Evaluation of new SGMA authorities will rely on a phased approach, with Committee and stakeholder input at various milestones as outlined below.

Phase 1 – Evaluation of SGMA Fees

SGMA allows GSAs to impose fixed fees and fees charged on a volumetric basis, including, but not limited to, fees that increase based on the quantity of groundwater produced annually, the year in which the production of groundwater commenced from a groundwater extraction facility, and impacts to the basin. As noted in the GWMP, fees imposed pursuant to SGMA must comply with applicable provisions of Proposition 218.

Currently, the District collects volumetric fees based on the quantity of groundwater produced in accordance with the District Act. The District will conduct a preliminary analysis of the various fees that can be collected pursuant to SGMA to determine if they further sustainable groundwater management or reduce volatility in revenue and rates.

Staff will further define fee types consistent with SGMA and conduct a preliminary analysis of these fee types by August 2017. This analysis will be included on a Committee agenda in late summer 2017 for review and input by the Committee and stakeholders.

Phase 2 – Evaluation of Groundwater Extraction Regulation

SGMA provides GSAs with various authorities related to the regulation of groundwater extraction, including the ability to:

- Impose spacing requirements on new well construction to minimize interference;
- Impose reasonable operating regulations on existing wells to minimize interference, including requiring extractors to operate on a rotation basis;

- Regulate, limit, or suspend groundwater extraction, construction of new wells, enlargement of existing wells, or reactivation of abandoned wells;
- Establish groundwater extraction allocations;
- Authorize temporary and permanent transfers of groundwater extraction allocations; or
- Establish rules to allow unused groundwater extraction allocations to be carried over from one year to another and voluntarily transferred.

SGMA acknowledges limitations related to controlling pumping. Local agencies are not authorized to make a binding determination of the water rights of any person or entity, and must also consider the land-use authority of cities and counties, which is not superseded by SGMA. The potential regulation of pumping is a complex and controversial topic that will require thoughtful analysis and meaningful exchange with those potentially affected.

The preliminary District staff analysis will evaluate specific pumping regulation authorities listed in SGMA to consider when they might be needed (e.g., basin condition triggers) and what would be required for implementation.

Staff will complete the preliminary analysis of SGMA pumping regulation authorities by August 2017. This analysis will be included on a Committee agenda in late summer 2017 for review and input by the Committee and stakeholders.

Phase 3 – Draft Implementation Framework

Based on the preliminary technical analysis and stakeholder input, staff will prepare a draft implementation framework for the new SGMA authorities. This framework will identify the triggers and process for the implementation of these authorities, should they be needed. The proposed process is expected to range from voluntary, collaborative measures to more stringent, mandatory measures based on an increasing threat of harm to the groundwater subbasins. In developing the draft framework, staff will consider Committee and stakeholder input from previous phases, as well as concepts identified in the MOA proposed by San Jose Water Company and Great Oaks Water Company.

The draft implementation framework will be included on a Committee agenda item in December 2017 for review and input by the Committee and stakeholders. The Committee will provide direction to staff in terms of next steps with regard to new SGMA authorities. This could include additional technical analysis, stakeholder engagement, or discussion with the full Board of Directors.



Committee: Water Conservation and Demand Management
Meeting Date: 01/25/17
Agenda Item No.: 4.3
Unclassified Manager: Garth Hall
Email: ghall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Presentation on Conservation and Demand Management Elements of the Draft 2017 Water Master Plan

RECOMMENDED ACTION:

This is an information only item and no action is required.

SUMMARY:

The Committee has requested that staff present information on water conservation and demand management elements of the 2017 Water Supply Master Plan (WSMP) to the Committee prior to presenting the information to the full Board. A special Board workshop on the WSMP is scheduled for January 31, 2017. This item provides highlights of the information that will be presented to the full Board on January 31, 2017 and provides specific information on water conservation and demand management elements of the WSMP.

BACKGROUND:

Staff will be presenting information on the long-term water supply outlook, risks, an alternative water supply scenario and outlook, costs and yields for various projects, and different portfolios of projects to the Board on January 31, 2017.

The Board received information on and discussed staff's approach to preparing the 2017 Water Supply Master Plan (WSMP) on September 27, 2016. At the time, staff presented the scope and schedule for preparing the WSMP, draft planning objectives/assessment criteria, and a list of projects that would be considered during the planning process. Since that time, staff has updated the long-term water supply outlook, conducted a risk assessment, developed an alternative scenario against which to evaluate projects and portfolios, defined costs and yields for various projects, began evaluating different portfolios of projects, and convened three expert panel meetings. This memorandum summarizes staff's work since the last Board update on the WSMP and provides an update on next steps.

Long-Term Water Supply Outlook

One of the first steps in planning is to identify and assess what gaps need to be filled. For long-term water supply planning, this equates to assessing water supply reliability under future demand and supply scenarios and comparing it to a level of service goal. The Baseline Scenario for the WSMP includes retailer demand projections, the Fisheries and Aquatic Habitat Collaborative Effort (FAHCE) flow and release requirements, future imported water deliveries at today's levels, and full implementation of the District's 2012 Water Supply and Infrastructure Master Plan is fully implemented. The 2012 Water Supply and Infrastructure Master Plan includes completion of dam seismic retrofit projects before 2025, construction of 24,000 acre-feet per year

(AFY) of potable reuse capacity by 2025, and 99,000 AFY of water conservation savings by 2030. Table 1 shows modeled reliability for this baseline scenario at five-year intervals through 2040.

Table 1. Modeled Reliability in the Baseline Scenario

Parameter	2020 Scenario	2025 ¹ Scenario	2030 Scenario	2035 Scenario	2040 Scenario
Average Annual Supply (Acre-Feet, AF)	374,800	414,700	423,900	431,300	440,000
Normal Year Demand (AF)²	361,400	383,400	401,500	418,500	435,000
Maximum Level of Shortage	Stage 3 (15%)	Stage 2 (10%)	Stage 3 (15%)	Stage 3 (15%)	Stage 3 (15%)
Number of Years with Shortage	11	5	6	8	13
Number of Years with Stage 2 (10%) Shortages	6	5	4	4	7
Number of Years with Stage 3 (15%) Shortages³	5	0	2	4	6

The District’s current reliability level of service goal is to develop supplies to meet 100 percent of demands in normal years and at least 90 percent of demands in drought years. This equates to having the maximum level of shortage be Stage 2 or 10 percent. Except in the 2025 scenario, the maximum level of shortage in the water supply outlook is Stage 3 or 15%. In other words, the District would not achieve the current reliability level of service goal in up to six of 94 years of modeled years.

Risk Analysis

Understanding risks associated with the water supply outlook is another important step in water supply planning. Staff conducted a Strengths, Weakness, Opportunities, and Threats (SWOT) exercise in August 2016. The information was used to evaluate different risks to water supply reliability. Some of the key risks that were identified include changes in demands due to multiple factors; changes in supplies because of climate change; regulatory uncertainty related to the Delta, instream recharge operations, and potable reuse; development and land use (impacts can be both positive and negative); and funding. Water supply planning outside of the WSMP context was identified as a risk to our ability to make effective and efficient investments in supply reliability. The two greatest vulnerabilities, or risks with the highest likelihood and consequence, are reductions in Delta-conveyed imported water supplies and uncertain demand projections.

Level of Service Goal

The level of service goal is a key driver for the level of additional investment the District will need to make in reliability. Higher levels of service require more investments in reliability. Lower levels of service require fewer investments in reliability. If the District revises its level of service goal to meet 85 percent of demands in drought years (or shortages up to Stage 3 – 15 percent), then no additional investments are needed beyond those already included in the Capital Improvement Plan and water rate forecast. However, to achieve the current level of service goal, additional investments of up to \$2,700 million could be necessary. The timing and magnitude of additional investments will depend on the level of service the Board chooses to provide, as well as how demands and supplies change over time. While the District will likely need to make

¹ Reliability in Year 2025 is better than in Year 2020 because potable reuse and dam retrofit projects are completed between 2020 and 2025, resulting in additional supplies.

² The normal year demands listed here are lower than those listed in the District’s 2015 UWMP because the retailers’ final demands projections are lower.

³ The modeling to date did not indicate a significant difference in associating at 15 percent water use reduction with Stage 3 of the WSCP or associating a 20 percent water use reduction with Stage 3. Given that lower water use reduction levels are more generally more acceptable to the community, staff decided to associate a 15 percent water use reduction (or shortage) with Stage 3 of the WSCP.

some investment decisions over the next year, such as whether to invest in California WaterFix, many other decisions can wait. In other words, even if the Board decides to invest in a portfolio that achieve the current level of service and avoids shortages/calls for water use reductions of greater than 10 percent, those investments can be phased in over time as they are needed.

Water Supply Alternatives

The next step in the planning process is to identify projects and portfolios for filling the gap between the water supply outlook and the level of service goal. Staff evaluated over 20 projects for their ability to meet the level of service goal and other objectives in the Baseline Scenario. The projects include:

- Water Conservation and Demand Management – Advanced metering infrastructure, gray water rebate program expansion, local land fallowing, model new development ordinance, rain barrel rebate program, and rain garden rebate program
- New or Expanded Storage – Sites Reservoir, Los Vaqueros Reservoir Expansion, groundwater banking, Anderson Reservoir Expansion, Pacheco Reservoir Expansion, Calero Reservoir Expansion, and Uvas Reservoir Expansion
- Additional Recharge Capacity in South County
- California WaterFix
- Raw Water Pipelines to Increase Operational Flexibility
- Morgan Hill Recycled Water
- North County Potable Reuse
- Regional Desalination
- Stormwater Capture and Reuse – Centralized and Decentralized
- Transfers
- Imported Water Contract Purchase

The costs and yields associated with the water conservation and demand management projects and programs are summarized in Attachment 1. No individual project is sufficient to meet the Board's current level of service goal of having supplies meet 90 percent of demands in drought years. Portfolios of projects will be needed. Staff anticipates that cost-effective water conservation and demand management programs will be included as "no regrets" options in future portfolios

Next Steps

The next steps in the WSMP process are to continue to develop and refine portfolios based on the Board's input and then bring preferred portfolios to the Board for consideration. Staff anticipates returning to the Board in March or April 2017 to get additional input on portfolios and then in May or June 2017 with preferred portfolios (see the updated schedule in Attachment 2). Then, staff would develop a recommended implementation program and compile the WSMP for Board consideration.

ATTACHMENT(S):

Attachment 1: Project Summary
Attachment 2: Project Schedule

Preliminary Project Analysis Results

Project	Lifecycle Cost (2016\$)	Average Annual Yield	Average Annual Drought Yield ¹	Cost/AF ²	Comments
Agricultural Land Flooding	TBD	TBD	TBD	TBD	Similar water supply benefits as Stormwater – Regional Basins.
Advanced Metering Infrastructure	\$30 million	4,000	4,000	\$500	
Graywater Rebate Program Expansion	\$1.5 million	100	100	\$1,500	
Local Land Fallowing	\$90 million	1,000	5,000	\$2,500	7,400 AF savings in critical dry years
Model Ordinance	\$1.4 million	5,000	5,000	\$500	
Stormwater – Regional Basins	\$9 million to \$60 million	100 to 1,000	100 to 1,000	\$500 to \$23,000	Range of cost and yield for three stormwater retention basins. Costs depend on whether additional land needs to be purchased. Yield depends on contributing watershed area (size, percent imperviousness, etc).
Stormwater – On-Site Capture	\$20 million to \$50 million	100 to 300	200 to 500	\$3,500 to \$20,000	Range of costs for rain gardens, cisterns, and rain barrels. Rain gardens would provide more yield at a lower cost.

¹ None of the individual projects reduced the maximum level of shortage (15 percent) compared to the Baseline Scenario. Staff are in the process of developing and evaluating portfolios that reduce the frequency and/or magnitude of shortages.

² The methodology for calculating cost per acre-foot has been updated from prior analyses, including the California WaterFix business case analyses presented in July 2016, based on input from the Expert Panel. Specifically, repair and replacement costs are included and the yield is discounted along with the costs.

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Santa Clara Valley Water District

2017 Water Supply Master Plan

Scope of Work

This summarizes the planned scope of work for the 2017 Water Supply Master Plan (Water Master Plan). The purpose of the Water Master Plan is to guide water supply investments to provide for reliability and ensure investments are effective and efficient. The Water Master Plan is scheduled to be completed in 2017 and needs to support other Board investment decisions such as potable reuse program components and timing and California WaterFix participation. The following schedule is designed to support Board decisions on the potable reuse program components and California WaterFix participation, which are currently anticipated for the first half of 2017.

Activity	Timeframe	Notes
Conduct Stakeholder Engagement	Ongoing	
Establish Expert Panel	Completed	The Expert Panel has met three times to date.
Develop Planning Objectives (aka Assessment Criteria)	Completed	
Evaluate Risk Scenarios	July 2016 – January 2017	
Update Water Supply System Model	July 2016 – January 2017	
Prepare Baseline System Outlook	August 2016 – January 2017	
Identify and Define Projects and Programs to Address Shortages and Risks	July 2016 – January 2017	Board workshop planned for January 31, 2017 on initial analysis results, including storage options
Assemble and Evaluate Portfolios	December 2016 – May 2017	Continue analysis of project and projects and incorporate Board input from the planned January workshop
Identify Recommended Water Supply Strategy	March 2017 – July 2017	Board workshops to be scheduled for March/April 2017 and June/July 2017 to get Board input on preferred portfolios and Level of Service Goal
Develop Implementation Program for Water Supply Strategy	July 2017 – October 2017	Board workshop to be scheduled for September/October 2017 to get Board input on implementation program
Compile Water Supply Master Plan	September 2017 – December 2017	Board workshop to be scheduled for December 2017 to adopt Water Master Plan



Committee: Water Conservation and Demand Management
Meeting Date: 01/25/17
Agenda Item No.: 4.4
Unclassified Manager: Garth Hall
Email: ghall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Receive Information on Conservation Measure Connections/Obligations addressed in the CA WaterFix

RECOMMENDED ACTION:

This is a discussion item and the Committee may take action if applicable.

SUMMARY:

This agenda item is in response to a request from the Committee for more information about the water conservation measure connections/obligations addressed in the California WaterFix.

The California WaterFix consists of upgrades to the water conveyance facilities in the Delta and new operational criteria for the State Water Project (SWP) and Central Valley Project (CVP). The conveyance upgrades include 3 new intakes on the Sacramento River, each with a capacity of 3,000 cfs, and each equipped with state-of-the-art fish screens. These new fish screens would be designed to minimize entrainment and would be more effective at protecting fish than the existing South Delta pumping plants. Two forty-foot diameter tunnels up to 150 feet below ground would convey the water from the Sacramento River to a new pumping plant in the south Delta that would lift the water from the tunnels into a newly configured Clifton Court Forebay. The existing SWP and CVP pumping plants would then pump the water to meet immediate demands or to storage south of the Delta.

The California WaterFix CEQA/NEPA analysis does not include any explicit water conservation measures/obligations. Implicitly, analysis of WaterFix benefits relative to alternatives such as conservation is the prerogative of potential urban and agricultural participants in the project. The State has adopted a separate plan to reduce per capita water consumption by 20 percent by 2020 (*20X2020 Water Conservation Plan*).

ATTACHMENT(S):

None



Committee: Water Conservation and Demand Management
Meeting Date: 01/25/17
Agenda Item No.: 4.5
Unclassified Manager: Rick Callender
Email: rcallender@vallewater.org

COMMITTEE AGENDA MEMO

SUBJECT: Receive an Update on the District's Outreach Campaign (HOAs, Neighborhood Groups, Developers, Planning Agencies)

RECOMMENDED ACTION:

This is an information only item and no action is required.

SUMMARY:

The Committee will receive a verbal presentation on current and future outreach efforts to promote water conservation as an ongoing way of life in California and our county. Staff will be prepared to discuss how messaging should change in light of the significant changes in our water supply outlook thus far in 2017.

BACKGROUND:

The Water Conservation Ad Hoc Committee has asked to receive updates of the District's outreach efforts during this drought season.

ATTACHMENT(S):

None.



Committee: Water Conservation and Demand Management
Meeting Date: 01/25/17
Agenda Item No.: 4.6
Unclassified Manger: Michele King
Email: mking@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Review of Water Conservation and Demand Management Committee Work Plan and the Outcomes of Board Action of Committee Requests

RECOMMENDED ACTION:

Review the Committee work plan to guide the Committee's discussions regarding policy alternatives and implications for Board deliberation.

SUMMARY:

The attached Work Plan outlines the topics for discussion to be able to prepare policy alternatives and implications for Board deliberation. The work plan is agendized at each meeting as accomplishments are updated and to review additional work plan assignments by the Board.

BACKGROUND:

Governance Process Policy-8:

The District Act provides for the creation of advisory boards, committees, or commissions by resolution to serve at the pleasure of the Board.

The Board Ad Hoc Committee is comprised of less than a quorum of the Board and/or external members having a limited term, to accomplish a specific task, is established in accordance with the Board Ad Hoc Committee procedure (Procedure No. W723S01), and will be used sparingly. Annually, the purpose of an established Ad Hoc Committee will be reviewed to determine its relevance.

In keeping with the Board's broader focus, Board Committees will not direct the implementation of District programs and projects, other than to receive information and provide advice and comment.

ATTACHMENT(S):

Attachment 1: Water Conservation and Demand Management Committee 2017 Work Plan

2017 Work Plan: Water Conservation and Demand Management Committee

Update: January 2017

ITEM #	WORK PLAN ITEM	MEETING	ACTION/DISCUSSION OR INFORMATION ONLY	ACCOMPLISHED OUTCOMES
1	Update on Golf Course Coalition Proposal	1-25-17	Discussion/Action Item	
2	Receive Information on Conservation Measure Connections/Obligations addressed in the CA Waterfix	1-25-17	Discussion/Action Item	
3	Consideration of potential approaches for receiving input from key stakeholders on development of plans, where necessary, for implementation of authorities available to the District under the Sustainable Groundwater Management Act (SGMA)	1-25-17	Discussion/Action Item	
4	Presentation On Conservation And Demand Management Elements of the Draft 2017 Water Master Plan	1-25-17	Discussion/Action Item	
5	Receive an Update on the District's Outreach Campaign (HOAs, Neighborhood Groups, Developers, Planning Agencies)	1-25-17	Discussion/Action Item	
6	Review of 2017 Water Conservation Ad Hoc Committee Work Plan and the Outcomes of Board Action of Committee Requests	1-25-17	Discussion/Action Item	
7	Pending Legislation Relating to Water Conservation and Demand Management	TBD	Discussion/Action Item	
8	Water Budget-based rates	TBD	Discussion/Action Item	
9	Upcoming Board Agenda Item related to Water Conservation and Demand Management	TBD	Discussion/Action Item	

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

Attachment 1
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ITEM #	WORK PLAN ITEM	MEETING	ACTION/DISCUSSION OR INFORMATION ONLY	ACCOMPLISHED OUTCOMES
10	Update on District Outreach Campaign (reaching out to HOA's, neighborhood groups, developers, planning agencies)	TBD	Information	
11	Water Use Efficiency Standards and Requirements <ul style="list-style-type: none"> • Green Business Program • LEED certification • CalGreen • Ordinances 	TBD	Discussion/Action Item	
12	Information on new technology related to water conservation, including: <ul style="list-style-type: none"> • Smart metering (AMI), • Leak detection/repair • Others? If needed, invite experts to present to the Committee	TBD	Discussion/Action Item	
13	Should District invest/get involved in development of new local water, i.e. <ul style="list-style-type: none"> • Rainwater harvesting • On-site storm water retention • Infiltration of high quality storm water • Gray Water Committee to review the issue question, and include working with cities on building codes and future planning, offering incentives, and identifying District role.	TBD	Discuss/Action Item	

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

ITEM #	WORK PLAN ITEM	MEETING	ACTION/DISCUSSION OR INFORMATION ONLY	ACCOMPLISHED OUTCOMES
14	<p>Change from "Water Conservation is only necessary during drought," to "Water Conservation is a way of life."</p> <p><u>Strategies/Opportunities:</u></p> <ul style="list-style-type: none"> A. Legislative Mandates B. Local Governmental Partnerships C. Local Governmental Mandates D. Education E. Promote Smart Meters-New Technology F. Hold conversations with cities and development communities on demand management and micro-storage G. Promote new startups in demand management (innovative). District should volunteer for pilots when possible. <p><i>Assigned to Committee for review and recommendation to full Board.</i></p>	TBD	Discuss/Action Item	

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors