

December 22, 2017

MEETING NOTICE & REQUEST FOR RSVP

TO: AGRICULTURAL WATER ADVISORY COMMITTEE

Jurisdiction Representative District 1 Russ Bonino, Mitchell Mariani James Provenzano District 2 William Cilker, David Vanni District 3 District 5 Jan F. Garrod. Michael Miller District 6 Robert Long Sheryl O. Kennedy Santa Clara County Farm Bureau Private Well Owner (Non Retail) Dhruv Khanna

The regular meeting of the Agricultural Water Advisory Committee is scheduled to be held on **Monday**, **January 8**, **2018**, **at 1:30 p.m.**, in the Headquarters Building Boardroom located at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California. Refreshments will be served.

Enclosed are the meeting agenda and corresponding materials. Please bring this packet with you to the meeting. Additional copies of this meeting packet are available on-line at http://www.valleywater.org/About/AgriculturalWaterAdvisoryCommittee.aspx.

A majority of the appointed membership is required to constitute a quorum, which is fifty percent plus one. A quorum for this meeting must be confirmed at least <u>48 hours</u> prior to the scheduled meeting date or it will be canceled.

Further, a quorum must be present on the day of the scheduled meeting to call the meeting to order and take action on agenda items.

Members with two or more consecutive unexcused absences will be subject to rescinded membership.

Please confirm your attendance no later than Thursday, January 4, 2018, by contacting Ms. Glenna Brambill at 1-408-630-2408, or gbrambill@valleywater.org

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 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 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 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 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 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



Committee Officers

Mitchell Mariani, Committee Chair David Vanni, Committee Vice Chair

Board Representative

Nai Hsueh, Alternate Richard P. Santos, Board Representative John L. Varela, Board Representative

AGENDA

AGRICULTURAL WATER ADVISORY COMMITTEE

MONDAY, JANUARY 8, 2018

1:30 p.m. – 3:30 p.m.

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

Time Certain:

1:30 p.m. 1. Call to Order/Roll Call

2. <u>Time Open for Public Comment on Any Item Not on Agenda</u>

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 October 2, 2017, meeting
- 4. Election of Chair and Vice Chair
- 5. Action Items
 - 5.1 Review and Approve 2017 Annual Accomplishments Report for Presentation to the Board (Committee Chair)

Recommendation: This is an action item to provide comments to the Committee Chair to share with the Board as part of the Accomplishments Report presentation pertaining to the purpose, structure, and function of the Committee.

5.2 Sustainable Groundwater Management Act (SGMA) Update – SGMA Authority Implementation Framework Concepts (Vanessa De La Piedra)

Recommendation: This is a discussion item and the Committee may provide comments, however, no action is required.

5.3 Review Agricultural Water Advisory Committee Work Plan, the Outcomes of Board Action of Committee Requests and the Committee's Next Meeting Agenda (Committee Chair)

Recommendation: Review the Board-approved Committee work plan to guide the committee's discussions regarding policy alternatives and implications for Board deliberation.

6. Information Only Items

Informational only items are not for discussion or action. However, clarifying questions may be asked, and will be called for by the Chair.

6.1 Winter Preparedness Briefing (Raymond Fields)

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

7. Clerk Review and Clarification of Committee Requests to the Board

This is a review of the Committee's Requests, to the Board (from Item 5). The Committee may also request that the Board approve future agenda items for Committee discussion.

8. Reports

Directors, Managers, and Committee members may make brief reports and/or announcements on their activities. Unless a subject is specifically listed on the agenda, the Report is for information only and not discussion or decision. Questions for clarification are permitted.

- 8.1 Director's Report
- 8.2 Manager's Report
- 8.3 Committee Member Reports
- **9.** Adjourn: Adjourn to next regularly scheduled meeting at 1:30 p.m., April 2, 2018, in the Headquarters Building Boardroom, 5700 Almaden Expressway, San Jose, CA 95118

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 Office of the Clerk of the Board at the Santa Clara Valley Water District Headquarters Building, 5700 Almaden Expressway, San Jose, CA., 95118, at the same time that the public records are distributed or made available to the legislative body.

The Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to attend committee meetings. Please advise the Clerk of the Board office of any special needs by calling 1-408-630-2277.

Agricultural Water Advisory Committee Purpose and Duties

The Agricultural Water Advisory Committee of the Santa Clara Valley Water District (District) is established per the District Act to assist the District Board of Directors (Board) with policies pertaining to agricultural water supply and use.

The specific duties are:

- Providing input on policy alternatives for Board deliberation, when requested by the Board.
- Providing comment on activities in the implementation of the District's mission that the Board will consider or refer
 to staff.
- Producing and presenting to the Board an Annual Accomplishments Report that provides a synopsis of the Committee's discussions regarding specific topics and subsequent policy recommendations, comments, and requests that resulted from those discussions.

In carrying out these duties, the Board's Committees bring to the District their respective expertise and the interests of the communities they represent. In addition, Board Committee members may bring information regarding District activities to the communities they represent.



AGRICULTURAL WATER ADVISORY COMMITTEE MEETING

DRAFT MINUTES

MONDAY, OCTOBER 2, 2017 1:30 PM

(Paragraph numbers coincide with agenda item numbers)

A regularly scheduled meeting of the Agricultural Water Advisory Committee was held on October 2, 2017, in the Headquarters Boardroom at the Santa Clara Valley Water District Headquarters, 5700 Almaden Expressway, San Jose, California.

1. CALL TO ORDER/ROLL CALL

Chair Mitchell Mariani called the meeting to order at 1:34 pm.

Members in attendance were:

<u>Representative</u>
Russ Bonino*
Mitchell Mariani
James Provenzano
William Cilker
David Vanni
Jan Garrod*
Robert Long
Sheryl O. Kennedy
Dhruv Khanna

Members not in attendance were:

<u>Jurisdiction</u> <u>Representative</u>
District 5 <u>Michael Miller</u>

Board members in attendance were: Director Nai Hsueh, Board Alternate, Director Richard P. Santos, and Director John L. Varela, Board Representatives.

Staff members in attendance were: Kurt Arends, Erin Baker, Glenna Brambill, Frances Brewster, Usha Chatwani, Jerry De La Piedra, Vicki Elam, and Tracy Hemmeter.

^{*}Committee member arrived as indicated below.

^{*}Mr. Russ Bonino arrived at 1:35 p.m.

^{*}Mr. Jan Garrod arrived at 1:36 p.m.

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

3.1 Approval of Minutes

It was moved by Mr. James Provenzano, seconded by Mr. Robert Long, and unanimously carried to approve the minutes of the July 10, 2017, Agricultural Advisory Committee meeting, as presented.

4. ACTION ITEMS

4.1 JOINT USE TRAILS ON DISTRICT PROPERTY: STATUS AND UPDATES

Ms. Usha Chatwani reviewed the materials as outlined in the agenda item.

Mr. Robert Long and Mr. Dhruv Khanna spoke regarding the trails and their concerns and issues. Directors Richard P. Santos and Nai Hsueh were available to answer questions regarding responsibility of maintaining the trails.

No action was taken.

4.2 WATER SUPPLY MASTER PLAN

Ms. Tracy Hemmeter reviewed the materials as outlined in the agenda item.

Mr. Jan Garrod, Mr. Robert Long, Ms. Sheryl O. Kennedy, Mr. Mitchell Mariani, Mr. Dhruv Khanna and Mr. David Vanni spoke regarding concerns and issues with the Water Supply Master Plan.

No action was taken.

4.3 DISCUSS UPDATE ON CA WATERFIX

Ms. Frances Brewster reviewed the materials as outlined in the agenda item.

Directors Nai Hsueh, Richard P. Santos and John Varela, were available to answer questions and provide the Board's perspective on the WaterFix.

No action was taken.

4.4 REVIEW AGRICULTURAL WATER ADVISORY COMMITTEE WORK PLAN, THE OUTCOMES OF BOARD ACTION OF COMMITTEE REQUESTS AND THE COMMITTEE'S NEXT MEETING AGENDA

Chair Mariani and Ms. Glenna Brambill reviewed the materials as outlined in the agenda item. There were two handouts, the 2017-2018 Board Policy Planning Calendar and Performance Monitoring Calendar.

Mr. Jerry De La Piedra was available to answer questions.

No action was taken.

5. INFORMATION ONLY ITEMS

5.1 RECEIVE INFORMATION ON THE DISTRICT'S ASSET MANAGEMENT PROGRAM

Ms. Erin Baker reviewed the materials as outlined in the agenda item and was available to answer any clarifying questions.

Directors Nai Hsueh and Richard P. Santos were available to provide further clarification on the Asset Management Program.

6. CLERK REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS TO THE BOARD

Ms. Glenna Brambill reported there were no action items for Board consideration.

7. REPORTS

7.1 Director's Report

Directors John Varela reported on the following:

• The Board will be discussing rates/adjustments in the near future.

7.2 Manager's Report

None.

7.3 Committee Member Reports

None.

8. ADJOURNMENT

Chair Mitchell Mariani adjourned at 3:27 pm to the next regular meeting on Monday, January 8, 2018, at 1:30 pm, in the Santa Clara Valley Water District Headquarters Building Boardroom.

Vicki Elam Committee Clerk Office of the Clerk of the Board

Approved:



Committee: Agricultural Water

Meeting Date: 01/08/18

Agenda Item No.: 4

Unclassified Manager: Michele King

Email: mking@valleywater.org

Est. Staff Time: 10 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Election of 2018 Committee Chair and Vice-Chair

RECOMMENDED ACTION:

Elect the 2018 Chair and Vice-Chair

SUMMARY:

Per the Board Resolution, the duties of the Chair and Vice-Chair are as follows:

The officers of each Committee shall be a Chairperson and Vice-Chairperson, both of whom shall be members of that Committee. The Chairperson and Vice-Chairperson shall be elected by the Committee, each for a term of one year commencing on January 1 and ending on December 31 and for no more than two consecutive terms. The Committee shall elect its officers at the first meeting of the calendar year. All officers shall hold over in their respective offices after their term of office has expired until their successors have been elected and have assumed office.

The Chairperson shall preside at all meetings of the Committee, and he or she shall perform other such duties as the Committee may prescribe consistent with the purpose of the Committee.

The Vice-Chairperson shall perform the duties of the Chairperson in the absence or incapacity of the Chairperson. In case of the unexpected vacancy of the Chairperson, the Vice-Chairperson shall perform such duties as are imposed upon the Chairperson until such time as a new Chairperson is elected by the Committee.

Should the office of Chairperson or Vice-Chairperson become vacant during the term of such office, the Committee shall elect a successor from its membership at the earliest meeting at which such election would be practicable, and such election shall be for the unexpired term of such office.

Should the Chairperson and Vice-Chairperson know in advance that they will both be absent from a meeting, the Chair may appoint a Chairperson Pro-tempore to preside over that meeting. In the event of an unanticipated absence of both the Chairperson and Vice-Chairperson, the Committee may elect a Chairperson Pro-tempore to preside over the meeting in their absence.

BACKGROUND:

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

Accordingly, the Board has established Advisory Committees, which bring respective expertise and community interest, to advise the Board, when requested, in a capacity as defined: prepare Board policy alternatives and

provide comment on activities in the implementation of the District's mission for Board consideration. In keeping with the Board's broader focus, Advisory Committees will not direct the implementation of District programs and projects, other than to receive information and provide comment.

Further, in accordance with Governance Process Policy-3, when requested by the Board, the Advisory Committees may help the Board produce the link between the District and the public through information sharing to the communities they represent.

The Board may also establish Ad-hoc Committees to serve in a capacity as defined by the Board and will be used sparingly.

ATTACHMENT(S):

None



Committee: Agricultural Water

Meeting Date: 01/08/18

Agenda Item No.: 5.1

Unclassified Manager: Michele King

Email: mking@valleywater.org

Est. Staff Time: 10 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Approve 2017 Annual Accomplishments Report for Presentation to the Board

RECOMMENDED ACTION:

- 1. Approve the 2017 Accomplishments Report for presentation to the Board.
- 2. Provide comments to the Committee Chair to share with the Board as part of the Accomplishments Report presentation pertaining to the purpose, structure, and function of the Committee

SUMMARY:

The Accomplishments Report summarizes the committee's discussions and actions to prepare Board policy alternatives and implications for Board deliberation throughout 2017. The Committee Chair, or designee, presents the Accomplishments Report to the Board at a future Board meeting.

The Committee may provide feedback to the Committee Chair, at this time, to share with Board as part of the Accomplishments Report presentation pertaining to the purpose, structure, and function of the Committee.

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.

Accordingly, the Board has established Advisory Committees, which bring respective expertise and community interest, to advise the Board, when requested, in a capacity as defined: prepare Board policy alternatives and provide comment on activities in the implementation of the District's mission for Board consideration. In keeping with the Board's broader focus, Advisory Committees will not direct the implementation of District programs and projects, other than to receive information and provide comment.

Further, in accordance with Governance Process Policy-3, when requested by the Board, the Advisory Committees may help the Board produce the link between the District and the public through information sharing to the communities they represent.

ATTACHMENT(S):

Attachment 1: Agricultural Water Advisory Committee 2017 Accomplishments Report

GP8. Accordingly, the Board has established Advisory Committees, which bring respective expertise and community interest, to advise the Board, when requested, in a capacity as defined: prepare Board policy alternatives and provide comment on activities in the implementation of the District's mission for Board consideration. In keeping with the Board's broader focus, Advisory Committees will not direct the implementation of District programs and projects, other than to receive information and provide comment.

The annual work plan establishes a framework for committee discussion and action during the annual meeting schedule. The committee work plan is a dynamic document, subject to change as external and internal issues impacting the District occur and are recommended for committee discussion. Subsequently, an annual committee accomplishments report is developed based on the work plan and presented to the District Board of Directors.

ITEM	WORK PLAN ITEM	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
1	Annual Accomplishments Report	 Review and approve 2016 Accomplishments Report for presentation to the Board. (Action) Submit requests to the Board, as appropriate. 	Accomplished January 9, 2017: The Committee reviewed and approved the 2016 Accomplishments Report for presentation to the Board. The Board received the 2016 Accomplishments Report at their March 28, 2017, meeting.
2	Election of Chair and Vice Chair for 2017	Committee Elects Chair and Vice Chair for 2017. (Action)	Accomplished January 9, 2017: The Committee elected the 2017 Committee Chair and Vice Chair, Mr. Mitchell Mariani and Mr. David Vanni respectively.
3	Update on Water Supply and Drought Response	 Receive update on water supply and drought response. (Information) Provide comments to the Board as necessary. 	Accomplished January 9, 2017: The Committee received information on the water supply and drought response, the January 2017 Water Tracker and took no action.

ITEM	WORK PLAN ITEM	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
4	Riparian Corridor Report	 Review the Riparian Corridor Report. (Action) Provide comments to the Board, as necessary. 	Accomplished January 9, 2017: The Committee received information on the Riparian Corridor Report and took no action.
5	Review of Agricultural Water Advisory Committee Work Plan, the Outcomes of Board Action of Committee Requests and the Committee's Next Meeting Agenda	 Receive and review the 2017 Board-approved Committee work plan. Submit requests to the Board, as appropriate. (Action) 	Accomplished January 9, 2017: The Committee reviewed the 2017 Work Plan and took the following action: The Committee approved adding to the April 3 rd agenda, an update on the One Water Plan. Accomplished April 3, 2017: The Committee reviewed the 2017 Work Plan and took the following action: The Committee approved adding to their work plan, receiving information on the District's Asset Management Program. Accomplished July 10, 2017: The Committee reviewed the 2017 Work Plan and took no action. Accomplished October 2, 2017: The Committee reviewed the 2017 Work Plan and took no action.

ITEM	WORK PLAN ITEM	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
6	Review and Comment to the Board on the Fiscal Year 2017 - 2018 Proposed Groundwater Production Charges.	Review and comment to the Board on the Fiscal Year 2018 Proposed Groundwater Production Charges. (Action) Provide comments to the Board, as necessary.	Accomplished April 3, 2017: The Committee reviewed the Fiscal Year 2017-2018 Proposed Groundwater Productions Charges and took the following action: Committee action: The Committee approved supporting the Fiscal Year 2017-2018 Proposed Groundwater Productions Charges.
7	Update on One Water Plan	 Receive an update on the One Water Plan. (Action) Provide comments to the Board, as necessary. 	Accomplished April 3, 2017: The Committee received an update on the One Water Plan and took no action.
8	Socially Responsible Investment Policy	Receive information regarding the principles of socially responsible investment policy and provide comments to staff. (Information)	Accomplished July 10, 2017: The Committee Receive information regarding the principles of socially responsible investment policy and took the following action: Committee action: The Committee approved that the Board not adopt the Socially Responsible Investment Policy.
9	Santa Clara Valley Water District Communications and Community Engagement Program Update	Receive an update on the District's Communication Programs. (Information)	Accomplished July 10, 2017: The Committee received an update on the District's Communication Programs and took no action.

ITEM	WORK PLAN ITEM	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
10	Board Feedback on Safe, Clean Water and Natural Flood Protection Program	Receive information on the Board's feedback on the Safe, Clean Water and Natural Flood Protection Program. (Information)	Accomplished July 10, 2017: The Committee received information on the Board's feedback on the Safe, Clean Water and Natural Flood Protection Program and took no action.
11	Joint Use Trails on District Property: Status and Updates	Receive a status and update on the joint use of trails on District property. (Information)	Accomplished October 2, 2017: The Committee received a status and update on the joint use of trails on District property. and took no action.
12	Water Supply Master Plan Update	 Receive Water Supply Master Plan Update. (Information) Provide comments to the Board, as necessary. 	Accomplished October 2, 2017: The Committee received a Water Supply Master Plan update and took no action.
13	Discuss Update on CA WaterFix	 Discuss update on CA WaterFix. (Action) Provide comments to the Board, as necessary. 	Accomplished October 2, 2017: The Committee discussed update on the California WaterFix and took no action.
14	District's Asset Management Program	Receive information on the District's Asset Management Program. (Information)	Accomplished October 2, 2017: The Committee received information on the District's Asset Management and took no action.



Committee: Agricultural Water

Meeting Date: 01/08/18

Agenda Item No.: 5.2

Unclassified Manager: Garth Hall

Email: ghall@valleywater.org

Est. Staff Time: 10 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Sustainable Groundwater Management Act (SGMA) Update – SGMA Authority Implementation

Framework Concepts

RECOMMENDED ACTION:

This is a discussion item and the Committee may provide comments, however, no action is required.

SUMMARY:

The Sustainable Groundwater Management Act (SGMA) provides Groundwater Sustainability Agencies (GSAs) like the District with various authorities to ensure groundwater sustainability. Per the District's 2016 Groundwater Management Plan (GWMP), the District is evaluating the regulation of pumping and implementation of different fee types as potential tools that may be needed to ensure continued sustainability. The Board of Directors (Board) referred related stakeholder engagement to the Water Conservation and Demand Management Committee (Committee).

The Committee and stakeholders have indicated interest in further exploring the use of a fixed charge as a component of the groundwater production charge, and the concept will be presented to the full Board. Committee items on the potential regulation of pumping have resulted in a proposed implementation framework (Attachment 1). The framework identifies guiding principles that support ongoing sustainability, while clarifying the process to regulate pumping, should it ever be needed. Given the uncertainty in the timing, location, and severity of potential future issues, the framework avoids prescriptive triggers and requirements and instead focuses on the process to respond to worsening conditions.

BACKGROUND:

In 2014, SGMA was enacted as California's first comprehensive, statewide regulatory program for groundwater. SGMA requires GSAs to managed groundwater and avoid "undesirable results." Under SGMA, the following conditions constitute an undesirable result if they are determined to be significant and unreasonable: chronic lowering of groundwater levels, reduction of groundwater storage, seawater intrusion, degraded water quality, land subsidence, or depletion of interconnected surface water. SGMA provides GSAs with various authorities to regulate groundwater extraction by restricting or suspending well production, prohibiting new well construction, and imposing well spacing or operating requirements. As noted in the GWMP, the potential regulation of pumping is a complex and controversial topic, and SGMA acknowledges related limitations.

The existing groundwater management framework, which includes coordination with large groundwater pumpers and other interested stakeholders, is expected to support continued, sustainable conditions as it has for nearly 50 years. While the SGMA authorities to regulate pumping may never be needed, a proposed implementation framework has been developed to clarify the process to respond to worsening conditions. As opposed to a highly prescriptive approach, this maintains maximum flexibility for the District and major pumpers to respond to changing conditions and avoids unnecessary or ineffective actions. The framework also identifies important guiding principles related to water supply planning, investments, and management, as well as continued collaboration with large pumpers and other interested stakeholders as the preferred approach to address future challenges. Acting in accordance with these principles is expected to result in continued sustainability and avoid the need to regulate pumping.

ATTACHMENT(S):

Attachment 1: Implementation Framework for Groundwater Extraction Regulation Under SGMA

Attachment 2: PowerPoint Presentation

Implementation Framework for Groundwater Extraction Regulation

Introduction

The Santa Clara Valley Water District (District) has sustainably managed the Santa Clara and Llagas Subbasins for many decades under the authority of the District Act. In 2014, the Sustainable Groundwater Management Act (SGMA) was enacted as California's first comprehensive, statewide regulatory program for groundwater. SGMA provides Groundwater Sustainability Agencies (GSAs), like the District, with various authorities to manage groundwater.

In Santa Clara County, new authorities include the ability to regulate pumping and assess different types of groundwater charges. These have been discussed in various meetings of the District Board of Directors (Board) Water Conservation and Demand Management Committee (Committee) in an open forum and with input from interested stakeholders.

The existing, proven groundwater management approach, which includes strong partnerships with large groundwater pumpers, is expected to result in continued, sustainable groundwater management in the future and is the preferred approach to addressing future challenges. This document describes the approach to implementing SGMA authorities to regulate groundwater extraction, should such regulation become needed in the future.

Background

SGMA established new requirements for GSAs, including the development of Groundwater Sustainability Plans (GSPs) or prescribed Alternatives. In 2016, the District prepared the 2016 Groundwater Management Plan (GWMP), which was approved by the Board following a public hearing on November 22, 2016. The District submitted the GWMP as an Alternative to the California Department of Water Resources (DWR) in December 2016. The GWMP acknowledged the new SGMA authorities and committed the District to work collaboratively with groundwater pumpers and other stakeholders to further evaluate the authorities. The Board referred related stakeholder engagement to the Committee.

The Committee and stakeholders have indicated interest in further exploring the use of a fixed charge as a component of the groundwater production charge, and the concept will be presented to the full Board. Committee items on the potential regulation of pumping and related discussion with stakeholders have led to the development of this framework.

SGMA provides GSAs with various authorities to ensure groundwater management and use do not cause undesirable results, which are defined as one of more of the following per Water Code §10721:

- (1) Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon.
- (2) Significant and unreasonable reduction of groundwater storage.
- (3) Significant and unreasonable seawater intrusion.
- (4) Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies.
- (5) Significant and unreasonable land subsidence that substantially interferes with surface land uses.
- (6) Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

Per Water Code §10726.4(a), in regulating groundwater extraction, SGMA allows a GSA to:

- impose spacing requirements on new wells and impose reasonable operating regulations on existing wells to minimize well interference by restricting or suspending well production;
- 2) control groundwater extractions by regulating, limiting, or suspending extractions, new well construction, well enlargement, or abandoned well reactivation, or by establishing allocations:
- 3) authorize temporary and permanent transfers of extraction allocations; and
- 4) establish rules to allow unused extraction allocations to be carried over from one year to another and voluntarily transferred.

However, SGMA also acknowledges limitations on the regulation of pumping. Local agencies are not authorized to make a binding determination of the water rights of any person or entity (Water Code §§ 10720.5(b) and 10726.8(b)). Also, any actions to control extractions must be consistent with the city or county general plans unless there is insufficient sustainable yield and extraction transfers are subject to applicable city and county ordinances (Water Code §§ 10726.4, 10726.8(f), and 10726.9).

Research into the use of similar authorities in other jurisdictions indicates that few agencies regulate pumping, and highlights related challenges. Where used, it has been in response to significant basin problems like long-term overdraft or salt water intrusion, most commonly through the well permitting process. These agencies have struggled with well owner concerns, enforcement, and legal challenges. Others have decided against regulation due to concerns with water rights and the potential to trigger adjudication, focusing instead on financial incentives or groundwater replenishment.

Guiding Principles

The District's existing groundwater management framework has maintained sustainable groundwater conditions over many decades. This proven framework, including strong collaboration with stakeholders, is the preferred approach to address future challenges. However, SGMA authorities are available as potential tools if the need arises. The implementation framework is based on these guiding District principles:

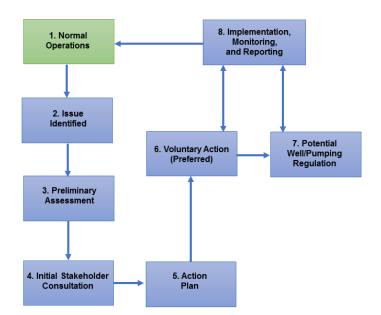
- 1) The District will sustainably manage local groundwater as part of our mission to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.
- 2) The District will continue to conduct comprehensive water supply planning and invest in diverse water supplies to ensure reliability and avoid chronic shortages.
- 3) Through ongoing water supply operations, the District will continue to optimize the use of available water supplies while protecting groundwater storage.
- 4) Transparency in fulfilling the District mission remains an important driver and the District will continue to encourage input and participation from all interested stakeholders.
- 5) The District will continue to seek solutions that effectively and efficiently address identified water supply issues as they arise.
- 6) Strong partnerships with water retailers and other large groundwater users have been effective in avoiding undesirable results and are critical to future sustainability.

- 7) Collaboration with groundwater users and interested stakeholders will continue to be the preferred approach to address observed or projected undesirable results, and District regulation of pumping will only be considered if there is no viable alternative.
- 8) Given the uncertainty in the timing, location, and severity of potential future undesirable results, the implementation framework avoids prescriptive triggers and requirements; instead, it clarifies the process to respond to worsening conditions. This will maintain maximum flexibility to respond to changing conditions and avoid unnecessary or ineffective actions.

Implementation Framework

The existing groundwater management framework is expected to support continued, sustainable conditions, and pumping regulation may never be needed. The implementation framework described below and summarized in Figure 1 describes the fundamental approach to respond to worsening basin conditions, including the steps that would be taken prior to implementing SGMA authorities to regulate extraction. As mentioned above, the focus is on providing some certainty as to the process, while avoiding prescriptive requirements that may not be appropriate. This process allows for moving between the various steps linearly or using feedback loops.

Figure 1. Implementation Framework



- Evaluate groundwater conditions, coordinate with water retailers, and receive stakeholder input
- Identify new regulatory requirement or observed/projected undesirable result
- Prepare memo describing issue and potential mitigation (e.g., additional supplies and/or demand reduction)
- 4. Meet with affected pumpers and/or other stakeholders to discuss issue and preliminary assessment
- Develop draft action plan including desired outcome, roles, actions, schedule, monitoring, and reporting
- Agree to implement voluntary actions to address issue (preferred)
- 7. Develop Board ordinance to implement SGMA authorities through Committee and public process
- Implement voluntary and/or mandatory actions described in action plan and/or ordinance, monitor and report out to Board and stakeholders

Note: Depending on the severity and challenges of the issue identified, the implementation of any step could be elevated to the Committee and/or Board.

Step 1: Normal Operations

Comprehensive planning through the District's Urban Water Management Plan and Water Supply Master Plan ensures long-term water supply reliability (including groundwater) in accordance with level of service targets. Development of these plans includes coordination with water retailers and land use agencies, and the District encourages input from interested stakeholders. This regular, proactive planning avoids chronic shortages.

Operations planning helps meet near-term demands, protect groundwater reserves, and ensure adequate carryover supplies. Through this ongoing process, District staff develops operations

scenarios based on the availability of imported and local supplies, including their optimal use and distribution. Water supply conditions are discussed with water retailers at least quarterly through Water Retailers Committee and Groundwater Subcommittee meetings, but operational or water supply issues often require more frequent communication and coordination. Current water supply information is also communicated to interested stakeholders through monthly Water Tracker updates and Groundwater Condition Reports, and the availability of groundwater level and other water supply data at www.valleywater.org.

Receiving input on groundwater management issues from interested stakeholders is an important part of normal operations. Accordingly, the District maintains a list of interested parties that includes water retailers, land use agencies, regulatory agencies, adjacent GSAs, non-governmental organizations, community groups, agricultural users, and private individuals, among others. The District notifies these interested parties of upcoming groundwater-related Board and Committee items and relevant information such as completion of the Annual Groundwater Report. The District also provides updates to all well owners on general topics of interest through regular mailings.

The District will continue to explore ways to ensure interested stakeholders are aware of groundwater management activities and opportunities for engagement, including participation in public meetings, Board correspondence, Access Valley Water inquiries, or direct communication with staff. The District evaluates all input and inquiries to determine if additional action is needed to protect groundwater resources.

Step 2: Issue Identified

Through the ongoing assessment of groundwater conditions described above, an issue requiring further action may be identified. This could be a new regulatory requirement, such as the need to limit water supply well construction near an indirect potable reuse project, or an observed or projected undesirable result as defined in Water Code §10721 and listed above. If an issue requiring further action is identified, the District will inform potentially affected stakeholders and immediately move to the next step in the framework.

Step 3: Preliminary Assessment

Once an issue requiring further action has been identified, District staff will use available information to evaluate the issue and summarize the findings in a technical memorandum. The memorandum will describe the nature and extent of impacts, suspected cause(s), potential effects of taking no action, and potential mitigation options. These options may include District action, such as more focused monitoring, recommended shortage response per the Water Shortage Contingency Plan, efforts to acquire supplemental supplies, or incentives for the use of treated water. Mitigation options could also include the reduction of pumping within the impacted area.

Step 4: Initial Stakeholder Consultation

After completing the prior step, District staff will meet with selected stakeholders within the affected area to discuss groundwater conditions and the preliminary assessment. This initial consultation targets those likely needing to take action to help address the issue. In most cases this is expected to include higher-volume pumpers like water retailers that more strongly influence basin conditions. Depending on the nature of the issue, other affected stakeholders may also be consulted during this stage.

The District will work with stakeholders to evaluate additional data and update the preliminary assessment as necessary. The District and affected stakeholders will identify the schedule to develop an action plan as well as related roles and responsibilities.

It should be noted that this consultation may result in quick consensus on the need to act and what needs to be done. This occurred in 2014 when the District met with staff from the San Jose Water Company and City of Santa Clara to discuss concerns with groundwater levels approaching subsidence thresholds within their service areas. In that case, a single meeting led to quick agreement on the need to voluntarily adjust pumping. This framework is intended to support similar decisive action at the staff level when possible.

Step 5: Action Plan

Based on the timeline and roles identified during the initial stakeholder consultation, District staff and/or affected stakeholders will develop a draft action plan to address the issue. This action plan will identify the desired outcome and clearly define actions needed, roles and responsibilities, implementation schedule, and how the issue will be monitored. The action plan will also explain the mechanism and timing of status reports to the Board and interested stakeholders. If the proposed mitigation involves pumping curtailment, staff recommends that affected pumpers have the first opportunity to propose an action plan to meet the desired outcome.

In the 2014 example mentioned above, District and retailer staff collaborated quickly and effectively to reduce localized pumping and minimize the risk of subsidence. Similarly, it is expected that some issues can be effectively resolved at the staff level, with ongoing reporting to the Board Committee and stakeholders as appropriate. However, effective action plans for more severe, challenging, or widespread issues may need to be elevated to allow for more extensive input. In these cases, it may be appropriate to develop the action plan in consultation with all potentially interested stakeholders through the open forum of the Board Committee.

Step 6: Voluntary Action (Preferred Option)

Staff, affected pumpers, and other interested stakeholders will work to finalize an action plan that is likely to be effective in addressing the identified issue. This is the preferred option, which avoids resorting to the need to potentially regulate pumping under SGMA authorities. If agreement for voluntary action is reached, all entities responsible for implementing the action plan will need to concur with the action plan prior to implementation.

Step 7: Potential Well/Pumping Regulation

The District and affected pumpers may not reach consensus on a voluntary action plan or implementation of a voluntary action plan may not prove effective in addressing the identified issue. In those cases, the District may need to consider implementing any of the authorities provided by SGMA under the following process:

- 1. Discuss groundwater conditions and the potential need for pumping regulation at the Water Conservation and Demand Management Committee and receive input from the Committee and stakeholders:
- 2. Implement action recommended by the Committee, which may include, but not be limited to, discussion with the full Board, further District action, or additional attempts to reach consensus on voluntary action;
- 3. Prepare a draft ordinance to regulate groundwater extraction in accordance with Water Code §10726.4 or otherwise exercise authorities provided by SGMA; and
- 4. Conduct a public hearing for Board consideration of the proposed ordinance.

Step 8: Implementation, Monitoring, and Reporting

The District, affected pumpers, and other identified stakeholders will implement the voluntary and/or mandatory actions described in the action plan and/or ordinance. District staff will monitor the status of action commitments, groundwater conditions, and performance in meeting the desired outcome. Related reporting to the Committee and/or Board as well as interested stakeholders will be in accordance with the action plan or ordinance. Based on the monitoring results and progress toward meeting the desired outcome, operations may return to normal or the voluntary/mandatory action may need to be modified. Successful execution of this step will require close tracking/monitoring and good communication.

Time Frame for Implementation Framework

There are no fixed time frames assigned to each step above due to the wide range of possibilities in terms of potential issues and related action needed, including whether it is voluntary or mandated. Staff anticipates that, for more manageable issues, effective voluntary action could be implemented within six months. More severe or widespread issues may take longer to address, even through voluntary action, as they may require consideration by a city council, board, or regulatory agency, or due to implementation lead time.

It is expected that if pumping regulation became necessary, implementation of the process listed under Step 7 would take several months to provide adequate noticing and opportunity for input. This time frame should be considered to correspond to the most extreme and severe conditions, with more time likely needed to fully engage potentially affected pumpers and interested stakeholders on this complex and controversial issue.

The severity of the issue will correspond to the response, with more resources and urgency allocated to more extreme issues. In any case, the District will work to expedite an effective response to minimize the risks to beneficial users or groundwater resources, and will remain committed to prioritizing voluntary collaboration over regulation whenever possible.

Sustainable Groundwater Management Act Update

Agricultural Water Advisory Committee



Sustainable Groundwater Management Act (SGMA)

- Framework for sustainable management in CA
 - Applies to basins designated as medium or high priority by the state
 - ▶ Provides for formation of local Groundwater Sustainability Agencies (GSAs)
 - Requires development of Groundwater Sustainability Plan (GSP) or prescribed Alternative
 - Provides tools to GSAs



Groundwater Sustainability Agencies (GSAs)

- ▶ Who can form a GSA?
 - Local agency/agencies overlying a basin
 - Agencies with statutory authority (exclusive)
- ▶ Recent, major milestone for GSA formation (6/30/17)

Agencies with Statutory Authority to Manage Groundwater (Water Code Section 10723)

Alameda County Water District Desert Water Agency Fox Canyon GWMA Honey Lake Valley GWMD Long Valley GWMD Mendocino City CSD Mono County Tri-Valley GWMD Monterey Peninsula WMD Ojai GWMA Orange County Water District Pajaro Valley WMA Santa Clara Valley Water District Sierra Valley Water District

Willow Creek GMA

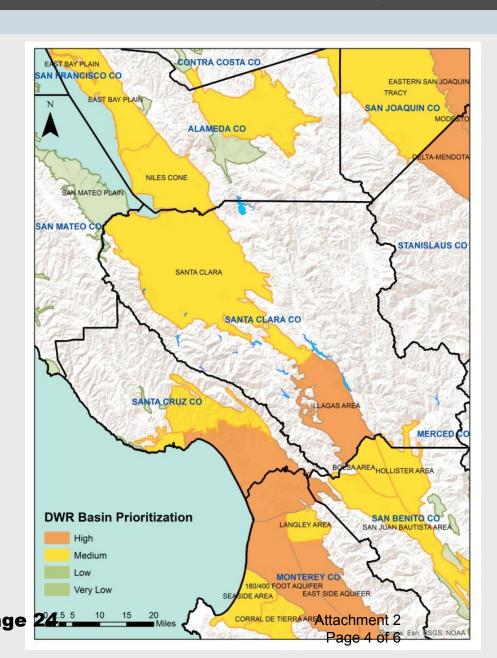
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Attachment 2
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How does SGMA affect Santa Clara County?

- Santa Clara and Llagas Subbasins
 - Submitted Groundwater Management Plan as Alternative to GSP
- Hollister and San Juan Bautista Subbasins
 - Develop GSP with San Benito County Water District by 2022
- ▶ New tools under SGMA
 - Regulate pumping
 - Collect different types of fees



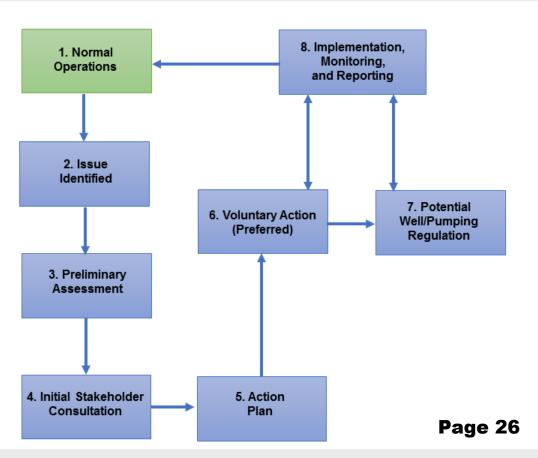
Evaluation of new SGMA authorities

- Open forum of Board's Water Conservation and Demand Management Committee
- ▶ Interest in exploring fixed charges as part of the groundwater production charge
- Proposed implementation framework to regulate pumping, should it ever be needed
 - Avoid prescriptive requirements
 - ► Focus on the process to respond to worsening basin conditions



Proposed implementation framework

Strong groundwater management, including coordination with large pumpers, supports ongoing sustainability. Continued collaboration is the preferred approach to address future challenges.



- Evaluate groundwater conditions, coordinate with water retailers, and receive stakeholder input
- Identify new regulatory requirement or observed/projected undesirable result
- Prepare memo describing issue and potential mitigation (e.g., additional supplies and/or demand reduction)
- Meet with affected pumpers and/or other stakeholders to discuss issue and preliminary assessment
- Develop draft action plan including desired outcome, roles, actions, schedule, monitoring, and reporting
- Agree to implement voluntary actions to address issue (preferred)
- Develop Board ordinance to implement SGMA authorities through Committee and public process
- Implement voluntary and/or mandatory actions described in action plan and/or ordinance, monitor and report out to Board and stakeholders

Note: Depending on the severity and challenges of the issue identified, the implementation of any step could be elevated to the Committee and/or Board.

Attachment 2 Page 6 of 6



Committee: Agricultural Water

Meeting Date: 01/08/18

Agenda Item No.: 5.3

Unclassified Manager: Michele King

Email: mking@valleywater.org

Est. Staff Time: 5 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Review Agricultural Water Advisory Committee Work Plan, the Outcomes of Board

Action of Committee Requests; and the Committee's Next Meeting Agenda.

RECOMMENDED ACTION:

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

SUMMARY:

The attached Work Plan outlines the Board-approved 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.

Accordingly, the Board has established Advisory Committees, which bring respective expertise and community interest, to advise the Board, when requested, in a capacity as defined: prepare Board policy alternatives and provide comment on activities in the implementation of the District's mission for Board consideration. In keeping with the Board's broader focus, Advisory Committees will not direct the implementation of District programs and projects, other than to receive information and provide comment.

Further, in accordance with Governance Process Policy-3, when requested by the Board, the Advisory Committees may help the Board produce the link between the District and the public through information sharing to the communities they represent.

ATTACHMENT(S):

Attachment 1: Agricultural Water Advisory Committee 2018 Work Plan

Attachment 2: Agricultural Water Advisory Committee April 2018 Draft Agenda

2018 Work Plan: Agricultural Water Advisory Committee

GP8. Accordingly, the Board has established Advisory Committees, which bring respective expertise and community interest, to advise the Board, when requested, in a capacity as defined: prepare Board policy alternatives and provide comment on activities in the implementation of the District's mission for Board consideration. In keeping with the Board's broader focus, Advisory Committees will not direct the implementation of District programs and projects, other than to receive information and provide comment.

The annual work plan establishes a framework for committee discussion and action during the annual meeting schedule. The committee work plan is a dynamic document, subject to change as external and internal issues impacting the District occur and are recommended for committee discussion. Subsequently, an annual committee accomplishments report is developed based on the work plan and presented to the District Board of Directors.

ITEM	WORK PLAN ITEM BOARD POLICY	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
1	Annual Accomplishments Report	January 8	 Review and approve 2017 Accomplishments Report for presentation to the Board. (Action) Submit requests to the Board, as appropriate. 	
2	Election of Chair and Vice Chair for 2018	January 8	Committee Elects Chair and Vice Chair for 2018. (Action)	
3	Winter Preparedness Update	January 8	Receive an update on the District's Winter Preparedness Program (Information)	
4	Review of Agricultural Water Advisory Committee Work Plan, the Outcomes of Board Action of Committee Requests and the Committee's Next Meeting Agenda	January 8 April 2 July 2 October 1	 Receive and review the 2018 Board-approved Committee work plan. Submit requests to the Board, as appropriate. (Action) 	

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

Attachment 1 Page 1 of 2

Update: December 2017

ITEM	WORK PLAN ITEM BOARD POLICY	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
5	Review and Comment to the Board on the Fiscal Year 2018 - 2019 Proposed Groundwater Production Charges.	April 2	 Review and comment to the Board on the Fiscal Year 2019 Proposed Groundwater Production Charges. (Action) Provide comments to the Board, as necessary. 	
6	Civic Engagement	April 2	Receive Committee feedback on transparency audit report. (Action)	
7	Climate Change Mitigation – Carbon Neutrality by 2020 Program Update, Climate Change and Sea Level Rise Adaptation – Water Supply, Flood Protection, Ecosystems Protection	July 2	 Receive information on climate change mitigation – carbon neutrality by 2020 program update. (Action) Provide comments to the Board, as necessary. 	

Update: December 2017



Committee Officers

Mitchell Mariani, Committee Chair David Vanni, Committee Vice Chair

Board Representative

Nai Hsueh, Alternate Richard P. Santos, Board Representative John L. Varela, Board Representative

DRAFT AGENDA

AGRICULTURAL WATER ADVISORY COMMITTEE

MONDAY, APRIL 2, 2018

1:30 p.m. – 3:30 p.m.

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

Time Certain:

1:30 p.m. 1. Call to Order/Roll Call

2. <u>Time Open for Public Comment on Any Item Not on Agenda</u>

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 January 8, 2018, meeting
- 4. Action Items
 - 4.1 Review and Comment to the Board on the Fiscal Year 2018 2019 Proposed Groundwater Production Charges (Darin Taylor)

Recommendation: Provide comment to the Board in the implementation of the District's mission as it applies to staff's groundwater production charge recommendation for FY 2018–19.

4.2 Civic Engagement (Rick Callender)

Recommendation: This is a discussion item and the Committee may provide comments if applicable, however no action is required.

4.3 Review Agricultural Water Advisory Committee Work Plan, the Outcomes of Board Action of Committee Requests and the Committee's Next Meeting Agenda (Committee Chair)

Recommendation: Review the Board-approved Committee work plan to guide the committee's discussions regarding policy alternatives and implications for Board deliberation.

5. Clerk Review and Clarification of Committee Requests to the Board

This is a review of the Committee's Requests, to the Board (from Item 4). The Committee may also request that the Board approve future agenda items for Committee discussion.

6. Reports

Directors, Managers, and Committee members may make brief reports and/or announcements on their activities. Unless a subject is specifically listed on the agenda, the Report is for information only and not discussion or decision. Questions for clarification are permitted.

- 6.1 Director's Report
- 6.2 Manager's Report
- 6.3 Committee Member Reports
- 7. Adjourn: Adjourn to next regularly scheduled meeting at 1:30 p.m., July 2, 2018, in the Headquarters Building Boardroom, 5700 Almaden Expressway, San Jose, CA 95118

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 Office of the Clerk of the Board at the Santa Clara Valley Water District Headquarters Building, 5700 Almaden Expressway, San Jose, CA., 95118, at the same time that the public records are distributed or made available to the legislative body.

The Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to attend committee meetings. Please advise the Clerk of the Board office of any special needs by calling 1-408-630-2277.

Agricultural Water Advisory Committee Purpose and Duties

The Agricultural Water Advisory Committee of the Santa Clara Valley Water District (District) is established per the District Act to assist the District Board of Directors (Board) with policies pertaining to agricultural water supply and use.

The specific duties are:

- Providing input on policy alternatives for Board deliberation, when requested by the Board.
- Providing comment on activities in the implementation of the District's mission that the Board will consider or refer to staff.
- Producing and presenting to the Board an Annual Accomplishments Report that provides a synopsis of the Committee's discussions regarding specific topics and subsequent policy recommendations, comments, and requests that resulted from those discussions.

In carrying out these duties, the Board's Committees bring to the District their respective expertise and the interests of the communities they represent. In addition, Board Committee members may bring information regarding District activities to the communities they represent.



Committee: Agricultural Water

Meeting Date: 01/08/18

Agenda Item No.: 6.1

Unclassified Manager: Anil Comelo

Email: acomelo@valleywater.org

Est. Staff Time: 5 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Winter Preparedness Briefing

RECOMMENDED ACTION:

Accept information on the Santa Clara Valley Water District's preparedness for winter operations.

SUMMARY:

As the agency responsible for local flood protection, the District works diligently to protect Santa Clara Valley residents and businesses from the devastating effects of flooding. Since the early 1980s, the District and its partners have invested approximately \$900 million in flood protection programs, including constructing major flood protection projects that have removed approximately 100,000 parcels from previously flood-prone areas. Despite these efforts, 67,000 parcels continue to be at risk of flooding during a 100-year storm event.

Over the last one year, the District has carried out several efforts to prepare for extreme weather events, respond effectively and minimize the impacts of flooding. In October 2017, the National Weather Service (NWS) recertified the District as Storm Ready. The certification is valid through October 2020.

This report provides information regarding various measures the District has taken to prepare for the Winter season. Specifically, it includes information on the following:

- Weather outlook
- Flood protection and conveyance capacity
- Public engagement
- Preparing and responding to flood emergencies
- Monitoring and flood forecasting
- Reservoir management
- Emergency management systems and response

BACKGROUND:

Winter Hazards

Winter brings an additional set of seasonal hazards that threaten both watersheds and water utility operations. Severe and/or extended precipitation can overwhelm engineered and natural channels and has the potential to damage District flood protection infrastructure. The resulting flooding can prompt municipalities to initiate evacuations and sheltering, and disrupt transportation. Severe storms can also bring high winds and cause landslides that have the potential to impact power, communication and water utility infrastructure.

Weather Forecast

National Weather Service (NWS) seasonal weather models predict about a 75% chance of a La Niña ENSO conditions and a 25% chance of neutral El Niño Southern Oscillation (ENSO) occurring this 2017/2018 fall-winter season. Current expectations are a near normal precipitation for the first part of the water year with a higher likelihood for drier than normal conditions for Santa Clara County January through March of 2018.

NWS forecasters will also be watching how the Pacific Decadal Oscillation (PDO) and Madden-Julian Oscillation (MJO) develop for the winter season. These, and other, seasonal oscillations could bring swings in precipitation amounts, fluctuating snow levels, and/or atmospheric rivers. Medium range forecast capabilities will help to distinguish these events with as much lead time as 10-14 days, though the details may not be worked out until within a few days of any given event. Keep in mind that a season with near normal rainfall can still produce flooding especially if much of the rainfall occurs over a short period of time.

Near-term weather forecasts enable the District to anticipate the location and intensity of rainfall to better mobilize response efforts. The District receives weather forecasts from multiple sources, including meteorology consultants and the NWS. Using this data, District staff makes decisions for flood fighting and for reservoir operations.

Climate Change

Climate change impacts challenge the District's core business. Global climate models and regional or local climate projections indicate the potential for changes in the amount, intensity, and duration of precipitation in the future. To adapt to the effects of climate change, the District has established a Climate Change Framework and team to identify impacts and ways to adapt to climate change scenarios. The District's core service area of flood protection is challenged by climate change, particularly by changes in precipitation patterns and sea-level rise. Even though some effects of climate change, such as sea-level rise will not be fully realized for decades, the long-life expectancy of flood protection projects means those projects must be designed to account for likely future conditions.

Board Natural Flood Protection Ends Policies

The District Board of Directors has established Natural Flood Protection (NFP) Goals 3.1 and 3.2 to provide flood protection for residents, businesses and visitors; and to reduce the potential for flood damages. These goals establish the following five natural flood protection objectives:

- o Protect parcels from flooding by applying an integrated watershed management approach that balances environmental quality and protection from flooding (Objective 3.1.1)
- Preserve flood conveyance capacity and structural integrity of stream banks, while minimizing impacts on the environment and protecting habitat values. (Objective 3.1.2)
- o Promote the preservation of flood plain functions (Objective 3.2.1)
- Reduce flood risks through public engagement (Objective 3.2.2)
- Prepare and respond effectively to flood emergencies countywide to protect life and property (Objective 3.2.3)

This memorandum describes how District staff is working to achieve each of these objectives.

1. Protect Parcels from Flooding (3.1.1)

The District's Watersheds Design and Construction Division plans, manages, and implements capital improvements to comply with the Board's Ends Policy to protect parcels from flooding. A total of 15 flood protection projects are underway in Fiscal Year 2017-18 with a total FY18 budget of \$59.6 million. Five of these projects are Safe, Clean, Water projects and 10 are funded by property taxes. All have the primary objective of

providing natural flood protection for residents, businesses and visitors. As specified in the 5-year Capital Improvement Plan, approximately 25,500 parcels will be protected and/or eligible for removal from the flood hazard zone when these projects are completed.

2. Preserve Flood Conveyance Capacity (3.1.2)

The District's Watershed Operations and Maintenance Division performs sediment removal, levee inspection and maintenance, debris removal, vegetation management, and erosion protection and repairs to comply with the Board's Ends Policy to preserve flood conveyance capacity. These efforts have improved the channel conveyance capacities of many local streams and channels. Work that has been accomplished through the District's Stream Maintenance Program this year includes the following:

- o Completion of 390* acres of in-stream vegetation control over 116*miles of streams
- o Removal of 33,946* cubic yards of sediment
- About 2,959* linear feet of bank stabilization

*These are year-end estimates and will be revised once all projects have been completed and the end of the year totals are calculated.

District staff continues to receive calls from throughout the county to service problematic trees plagued by disease or die off associated with the recent drought. Field crews continue to remove trees that could potentially block flows in local creeks or cause other hazards. Staff is also coordinating with owners of properties where trees have been reported as a potential issue and could pose additional blockage threats in local creeks.

3. Promote the preservation of flood plain functions (3.2.1)

The District preserves floodplain functionality and other watershed assets and interests from external land-use activities by promoting streamside setbacks through implementation and enforcement of the District's Water Resources Protection Ordinance and by participating on municipal General Plan update committees reviewing and commenting on development proposals.

The District's Community Projects Review Unit issues encroachment permits that regulate the third-party use of District lands adjacent to local waterways and acts on enforcement cases. Additionally, the District annually reviews environmental documents and plans for projects outside the District right-of-way to promote District's water resource interests. Through these processes, the District advocates the development setbacks and site layouts that strive to maximize protection of stream and riparian corridors and floodplain function.

4. Reduce flood risks through public engagement (3.2.2)

The District engages the public through its Office of External Affairs to provide flood awareness and safety messages and direct residents to resources. Additionally, through its Office of Water Resource Planning and Policy, the District works with municipal partners and the Community Rating System (CRS) to provide a direct financial benefit to the public through reduced premiums for flood insurance.

Community Rating System, National Flood Insurance Program

The National Flood Insurance Program's (NFIP) Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements.

As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three CRS goals:

- o reduce flood damage to insurable property;
- o strengthen and support the insurance aspects of the NFIP; and
- o encourage a comprehensive approach to floodplain management.

CRS activities that the District carries out are verified by the Federal Emergency Management Agency (FEMA) and then claimed by the participating CRS communities in Santa Clara County where those activities apply. This simplifies FEMA's CRS bookkeeping and avoids duplicating efforts. Total annual savings on flood insurance premiums are estimated to be over \$2.3 million from the 10% to 20% discount earned through the CRS program for approximately 16,000 policy holders in Santa Clara County.

The District receives CRS points for our outreach program, mapping of flood risks, open space preservation in floodplains, and maintenance and management of our creeks. A CRS Users Group, consisting of the District and participating CRS communities, was formed in 2013. The Users Group has proven to be very useful not only for discussion of activities that earn CRS points, but also allows dialogue ongoing flood risk reduction efforts and related topics among all cities in the county and serves as an information sharing platform.

Public Education and Community Engagement

This winter, the District will continue to deliver flood-safety messages throughout Santa Clara County. The main public education objectives are the following:

- Convey to the general public that flooding can be a serious threat (even if you don't live in the floodplain)
- Explain what people can do to protect themselves and reduce risk to life and property
- o Direct the public to appropriate District resources on valleywater.org for additional information
- Earn credit towards FEMA's Community Rating System through our Program for Public Information, which helps communities earn discounted flood insurance premium rates for residents

In early December, a targeted mailing of the annual floodplain mailer will be distributed to about 53,000 parcelowners and residents in or near flood-prone areas. The piece provides information on flood-protection projects and flood-safety resources. The mailer is written in English, Spanish, Vietnamese and Chinese. This year, we are including a watershed-specific insert in each mailing which includes a watershed map that shows sandbag sites and 100-year FEMA flood zones.

This year we are preparing for a full-scale paid advertising campaign to launch by December and continue through the end of April of 2018. To reach diverse ethnic audiences, media messages will be delivered through Spanish, Chinese and Vietnamese media outlets. The campaign may be further expanded if the winter turns out to be particularly wet.

During the winter months, the District will convey flood preparedness messages through a selected range of communications platforms including radio spots, newspaper ads, online ads, social media and web videos. The focus of the District's flood awareness outreach is to inform the community of flooding hazards in the county and to provide information on what community members can do to protect their family and property before, during and after a potential flooding event. Flood-safety tips and messages will also be heard by callers to the District when placed on hold.

This fall we participated in 16 community events to distribute flood-preparation materials and answer questions about flood safety. We have chosen events that are in areas most prone to flooding. These include parts of South County in Morgan Hill and Gilroy, as well as vulnerable areas in San Jose, including along Senter Road, across from the Rock Springs neighborhood. District staff has pursued partnership opportunities with local community-based organizations in cities with flood-prone areas to identify opportunities for outreach. This outreach was added to our annual outreach effort to foster a more direct, grassroots connection to communities at risk of flooding. We have also made sure to incorporate flood safety materials during the fall months for all community events in which the district has sponsored a booth.

Through our outreach, we are also promoting Santa Clara County's AlertSCC emergency notification system and their ReadySCC app. AlertSCC is a free, easy, and confidential way for anyone who lives or works in Santa Clara County to get emergency warnings sent directly to their cell phone, mobile device, e-mail, or landline. It is one of the most effective ways for local jurisdictions to communicate flood hazards and evacuation orders, but it requires residents to opt into the system. The ReadySCC App allows residents to prepare a family emergency plan with five simple questions, send status updates to contacts, receive advisories and alerts via push notifications, and includes a detailed guide with step-by-step instructions for creating an emergency kit. As an incentive to download ReadySCC, residents who download the app receive a free emergency starter kit. These kits were first introduced to the community last year and include basic supplies such as a hand-operated flashlight, mylar blanket, rain poncho, safety whistle, gloves and glow stick. While these kits are basic and serve to encourage residents to begin preparedness on a larger scale. Residents who do not have a mobile phone are encouraged to fill out emergency contact cards to receive their kit.

The District website serves as a one-stop shop for flood-related information, including emergency updates, flood safety tips and information on sandbag sites, stream and reservoir gauges in the county, as well as links to the National Weather Service, County Office of Emergency Services; and FEMA'S preparedness site, Ready.gov. Social media and online publications through our news website, valleywaternews.org, will continue to be utilized to provide registered recipients with timely and immediate flood-hazard messages.

In the wake of the February 2017 flooding, the District is committed to continually improving strategies for effective flood safety messaging.

5. Prepare and Respond Effectively to Flood Emergencies (3.2.3)

Despite all the proactive efforts to remove parcels from flood hazard zones, maintain channel conveyance capacities and floodplain function, and engage the public with flood awareness and safety messages, floods still can and do occur - usually with little warning and sometimes with potentially devastating effects.

Flood emergency preparedness entails the combined efforts of many units of the District, notably Emergency and Security Services, Field Operations, Water Supply Operations and Planning, Hydrology and Hydraulics, Communications and other units that contribute staff that are trained to participate in roles assigned in the field, Departmental Operation Centers (DOC), and within the Emergency Operations Center (EOC).

To ensure that the District is in the best possible state of readiness to address flooding when it does occur, the District maintains tools, processes, trained staff and interagency relationships that enable coordinated field response and public information.

Emergency Action Planning

Emergency Action Plans (EAPs) are documents that identify potential emergency conditions at facilities, such as creeks, and specifies actions to be followed to minimize loss of life and property damage. These documents include:

- Actions taken to moderate or alleviate a problem
- Actions, in coordination with emergency management authorities, to respond to incidents or emergencies
- Procedures to follow and warning and notification messages for responsible downstream emergency management authorities
- o Inundation maps to help emergency management authorities identify critical infrastructure and population-at-risk sites that may require protective measures, warning, and evacuation planning
- Delineation of the responsibilities of all those involved in managing an incident or emergency and how the responsibilities should be coordinated

The EAPs are created following the guidance from the Federal Emergency Management Agency federal guidelines for emergency action planning for dams (FEMA Publication No. P-64). As well, EAPs also incorporate the guidance of the Federal Energy Regulatory Commission's Chapter 6 Emergency Action Plans of the Engineering Guidelines for the Evaluation of Hydropower Projects.

The most recent of these plans is the joint Coyote EAP developed in coordination with the City of San José, following the February 2017 flooding along sections of Coyote Creek. The joint EAP was adopted by the San José City Council and the District Board in November 2017.

Monitoring and Flood Forecasting

The District forecasts incoming weather systems based on weather reports received from multiple sources including the National Weather Service (NWS) and media sources such as Fox Weather. In addition, the District augments standard weather reports with detailed quantitative precipitation forecasts (QPFs) from several sources, leveraging knowledge from private meteorologists, academia, and the NWS, to get a picture of a storm event. These QPFs include details such as the amount, duration, location, and timing of storm patterns.

For real-time monitoring, as the rain and flood events unfold, the District operates more than a 100 precipitation, reservoir level, and stream gauges, including 85 stream flow gauges, 10 reservoir gauges and 47 precipitation stations. All the District stream and rain gauges are regularly maintained and calibrated. This year, the District installed an "X-band" radar unit on top of the rooftop of the Penitencia Water Treatment Plant. The unit is part of the Bay area AQPI (Advanced Quantitative Precipitation Information) system. The short range and lower elevation radar supplements our existing rainfall gauge system and provides more precise rainfall data in real time.

In addition, under the District's Safe, Clean Water Program Priority C Project, Emergency Response Upgrades Project, the District is running an experimental flood forecast and warning system, using automated hydrologic and hydraulic models to determine creek runoff and expected reservoir levels. The models ingest data from both the QPFs and monitoring sensors mentioned earlier. As the back-end modeling system and front-end user interface are perfected, additional forecast points and features can be added to provide intelligence to decision makers, emergency responders, and the general public.

Reservoir Management

The District operates 10 surface water reservoirs throughout the county. The District reservoirs are operated primarily as water supply facilities that provide incidental flood protection, environmental and recreational benefits. Many reservoirs are operated to flood risk reduction rule curves. The volume of water above the flood management rule curve may be released if it is safe to do so, to create additional storage in the reservoir and reduce flood potential. The curves maximize water supply benefit and minimize flood risk with a high probability

of the water being recovered by the end of the season. For the 2017/2018 winter season, because of the improved water supply resulting from last winter's above-average precipitation, the Board has directed staff to operate Anderson and Coyote Reservoirs at a lower combined level this year than in past years, which will further reduce the risk of flooding downstream.

The following is a checklist of activities performed by Raw Water Operations/Field Operations staff before a reservoir flood release is initiated:

- Check weather forecast (estimate rainfall runoff)
- Check stream flow
- Check for National Weather Service Advisories/Watches/Warnings
- Coordinate with Watershed Operations (identify any existing blockages or restrictions downstream)
- o Notify residents and agencies on creek contacts list

Real-time Information, Alerts and Warnings

The District provides precipitation and stream gauge data to the public via its website and this year the District launched a new flood watch website that utilizes a user-friendly interactive map to allow residents to monitor levels in their own neighborhoods.

The District website also provides access to weather forecasts, reservoir levels, precipitation, and flood-safety measures through its Weather/Hydrologic Assessment and Strategic Update Plan (WHASUP) that, beginning in November, is issued twice per week or more frequently as needed throughout the winter. The public can sign up to receive automatic emails when WHASUP information is updated. The District also promotes the County's emergency alert system AlertSCC as well the ReadySCC.

District, Countywide and Regional Emergency Management Systems

The District maintains facilities, equipment, procedures, trained staff and inter-agency relationships that enable it to respond to floods and other emergencies. District emergency management facilities include its Districtwide Emergency Operations Center (EOC) and Water Utility and Watersheds Departmental Operations Centers (DOCs). The District maintains a dedicated, primary EOC that is equipped with both high and low-tech communication and information storage and display technologies to allow the enable EOC functions to perform under all hazard scenarios. EOC equipment is regularly inventoried, maintained and tested to ensure readiness. District DOCs facilities are equipped for emergencies that can be handled within departmental resources and capabilities. The District maintains its Emergency Operations Plan and EOC Activation Guides within the District's Quality and Environmental Management System (QEMS). Position-specific checklists are available within the EOC to help guide EOC staff in the performance of their Standardized Emergency Management System (SEMS) response functions.

Over the last year, select District EOC response staff have participated in internal and multi-agency exercises. Exercises are designed to develop, learn, and test response capabilities under various hazard scenarios.

12/07/16	San Francisquito Creek Workshop and Tabletop Exercise (TTX)
02/07/17	San Francisquito Creek Levee Activation
02/09/17	San Francisquito Creek HWY 101 Activation
02/20/17	Coyote Creek Flood Event Activation
03/01/17	Llagas-Chual Spur Potential Landslide Activation
April 2017-Present	Development of a Joint Covote Creek FAP

April 2017–Present Development of a Joint Coyote Creek EAP 09/14/17-09/15/17 SCC Operational Area-Wide Exercise

09/21/17 Joint Coyote Creek EAP TTX

These exercises enabled staff to practice and identify areas of improvement for the operational coordination, operational communication, situational awareness, public information and warning, and infrastructure system core capabilities as defined by the National Response Framework.

Each fall, the District Emergency and Security Unit hosts a multi-jurisdictional Winter Emergency Operations and Preparedness Workshop. This year's event was held on Oct. 26, 2017. Attendees included emergency managers and public works representatives from all 15 cities within the county, the County, and other local and state agencies. District staff reviewed the following topics during the workshop:

- Flood priority inspection locations (flooding hot spots)
- o Real-time online resources for stream/reservoir/precipitation data
- o Dam operations during the winter (flood rule curves, seismic stability operating restrictions)
- Coordination of District flood fighting resources (levee repair, debris blockages, and sand bagging)

The following made presentations on resource support:

- California Department of Water Resources (DWR)
- California Conservation Corps (CCC)
- o CAL FIRE
- NWS
- Santa Clara County Office of Emergency Services (SCC OES)
- City of San José (CSJ OEM)

In addition to the Winter Preparedness Workshop, District emergency management staff, senior executives and elected officials foster strong interagency emergency preparedness relationships by participating in several important groups including the Santa Clara County Emergency Managers Association, the Santa Clara County Operational Area Signatories, and the Santa Clara County Emergency Operational Area Council.

District Field Response Actions and Capabilities

During a flood event the District can mobilize a field response that includes:

- o maintaining a watersheds 24/7 hotline;
- o deploying Field Information Teams (FIT); and
- maintaining a list of known flooding hotspots to expedite on-site arrival of resources and crews that are able to remove blockages, deploy sandbags and perform other functions to maximize flood conveyance capacity during a storm.

The District provides filled sandbags to 5 sites throughout Santa Clara County. Typically for winter seasons with average rainfall forecasts, the District stocks 20,000 filled sandbags to these locations by the end of October, restocking those sites with up to 40,000 filled bags as needed. When all the filled sandbags have been used, the District will then supply empty bags and sand at those locations.

Additionally, the District provides empty sandbags to municipal and county public works departments to stock an additional 19 sites around the County. Empty sandbags are offered to county public works agencies beginning October 1.

Maps of sandbag locations have been prepared in conjunction with other entities. The site locations are provided through the following link: http://valleywater.org/services/sandbagsites.aspx>.

The Morgan Hill and Palo Alto sites have webcams installed to allow residents to check on sandbag availability via the District webpage. These webcams provide the District a cost-effective way to remotely monitor the sites to replenish and provide more timely services to the residents and the county.

The District currently has 407,000 empty sandbags and 278 cubic yards of sand in storage.

The District is Certified Storm Ready

As a result of the District's efforts to protect parcels from flooding, preserve flood conveyance capacity, engage the public to reduce flood risks, and maintain capabilities to respond to storm and flood events, the District continues to be recognized by the NWS as Storm Ready. The District received the recertification in October 2017 and it is valid through October 2020.

ATTACHMENT(S):

None