Santa Clara Valley Water District

January 14, 2019

MEETING NOTICE & REQUEST FOR RSVP

TO: SANTA CLARA VALLEY WATER COMMISSION

Municipality

City of Campbell City of Cupertino City of Gilroy City of Los Altos Town of Los Altos Hills Town of Los Gatos City of Milpitas City of Monte Sereno City of Morgan Hill City of Mountain View City of Palo Alto City of San Jose City of Santa Clara City of Saratoga City of Sunnyvale Santa Clara County Boar Supervisors Midpeninsula Regional C District Santa Clara County Open Space Hon. Mike Flaugher Authority

Representative

	Hon. Susan M. Landry	Hon. Anne Bybee
	Hon. Darcy Paul	Hon. Steven Scharf
	Hon. Peter Leroe-Muñoz	Hon. Fred Tovar
	Hon. Anita Enander	Hon. Lynette Lee Eng
	Hon. Courtenay Corrigan	
	Hon. Steve Leonardis	Hon. Marcia Jensen
		Tony Ndah
	Hon. Evert Wolsheimer	Hon. Curtis Rogers
	Hon. Rich Constantine	Hon. Larry Carr
	Hon. Lucas Ramirez	Hon. Allison Hicks
	Hon. Adrian Fine	Hon. Tom DuBois
	Hon. Lan Diep	Kerrie Romanow
	Hon. Debi Davis	Hon. Kathy Watanabe
	Hon. Rishi Kumar	Hon. Yan Zhao
	Hon. Nancy Smith	Hon. Larry Klein
rd of	Hon. Mike Wasserman	Hon. Cindy Chavez
Open Space	Hon. Yoriko Kishimoto	Hon. Jed Cyr
n Space	Hon. Mike Flaugher	Hon. Kalvin Gill

Alternate

The regular meeting of the Santa Clara Valley Water Commission is scheduled to be held on Wednesday, January 23, 2019, at 12:00 p.m., in the Headquarters Building Boardroom, located at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California. Lunch will be provided.

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 https://www.valleywater.org/how-we-operate/committees/board-advisory-committees.

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Members with two or more consecutive unexcused absences will be subject to rescinded membership.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 Friday, January 18, 2019; noon** by contacting Glenna Brambill at 1-408-630-2408, or <u>gbrambill@valleywater.org</u>.

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

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Santa Clara Valley Water District Santa Clara Valley Water Commission Meeting

HQ Boardroom 5700 Almaden Expressway San Jose CA 95118

REGULAR MEETING AGENDA

Wednesday, January 23, 2019 12:00 PM

District Mission: Provide Silicon Valley safe, clean water for a healthy life, environment and economy.

All public records relating to an 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. Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to attend Board of Directors' meeting. Please advise the Clerk of the Board Office of any special needs by calling (408) 265-2600.

Note: The finalized Board Agenda, exception items and supplemental items will be posted prior to the meeting in accordance with the Brown Act.

Santa Clara Valley Water District Santa Clara Valley Water Commission

REGULAR MEETING AGENDA

Wednesday, January 23, 201912:00 PMHQ Boardroom5700 Almaden Expressway

1. CALL TO ORDER:

1.1. Roll Call.

2. Time Open for Public Comment on any Item not on the Agenda.

Notice to the public: This item is reserved for persons desiring to address the Commission on any matter not on this agenda. Members of the public who wish to address the Commission on any item not listed on the agenda should complete a Speaker Form and present it to the Commission Clerk. The Commission Chair will call individuals in turn. Speakers comments should be limited to two minutes or as set by the Chair. The law does not permit Commission action on, or extended discussion of, any item not on the agenda except under special circumstances. If Commission action is requested, the matter may be placed on a future agenda. All comments that require a response will be referred to staff for a reply in writing. The Commission may take action on any item of business appearing on the posted agenda.

3. APPROVAL OF MINUTES:

3.1.	Approval of Minutes.			
	Recommendation:	Approve the October 24, 2018, Meeting Minutes.		
	Manager:	Michele King, 408-630-2711		
	Attachments:	Attachment 1: 102418 Water Commission Draft Mins		
	Est. Staff Time:	5 Minutes		

4. ELECT CHAIR AND VICE CHAIR

4.1. Election of Chair and Vice Chair.

Recommendation:Elect 2019 Chair and Vice ChairManager:Michele King, 408-630-2711Est. Staff Time:5 Minutes

5. ACTION ITEMS:

18-1104

San Jose CA 95118

5.1.Review and Approve 2018 Annual Accomplishments Report for18-1106Presentation to the Board (Commission Chair).

Recommendation:	1. Approve	the	2018	Ac	complishment	s Repo	ort for
	presentation	to the Boa	ard.				
	2. Provide with the Boar pertaining to	comment rd as part o the purp	ts to of the bose, s	the Acco struct	Commission omplishments F ure, and function	Chair to Report pre on of the	o share esentation
	Commission						

Manager:	Michele King, 408-630-2711			
Attachments:	Attachment 1: Water Comm 2018 Acomplishments Report			
Est. Staff Time:	5 Minutes			

5.2. Water Supply Master Plan.

Recommendation:	This is a discussion item and the Commission may provide comments, if applicable. However, no action is required.
Manager:	Jerry De La Piedra, 408-630-2257
Attachments:	Attachment 1: WSMP PowerPoint
Est. Staff Time:	10 Minutes

5.3. Review and Comment to the Board on the Fiscal Year 2019-20 Preliminary Groundwater Production Charges.

Recommendation: Discuss and consider the attached preliminary groundwater production charge analysis and provide comment to the Board on policy implementation, as necessary.

Manager:	Darin Taylor, 408-630-3068
Est. Staff Time:	15 Minutes

5.4. Open Space Credit.

Recommendation:	This is an information item and no action is required.
Manager:	Darin Taylor, 408-630-3068
Attachments:	Attachment 1: PowerPoint
Est. Staff Time:	15 Minutes

19-0056

<u>19-0022</u>

19-0047

5.5. Update on the State Water Resources Control Board's Amendments to the Bay-Delta Water Quality Control Plan and Agency-Proposed Voluntary Agreements.

Recommendation:	Receive an update on the State Water Resources Control		
	Board's Amendments to the Bay-Delta Water Quality Control		
	Plan and agency-proposed Voluntary Agreements.		
Manager:	Garth Hall, 408-630-2750		
Attachments:	Attachment 1 072718 District Comment Letter		

Est. Staff Time: 10 Minutes

5.6. Review Santa Clara Valley Water Commission Work Plan, the Outcomes <u>19-0021</u> of Board Action of Commission Requests; and the Commission's Next Meeting Agenda.
Recommendation: Review the Commission work plan to guide the commission's discussions regarding policy alternatives and implications for Board deliberation.
Manager: Michele King, 408-630-2711
Attachments: <u>Attachment 1: Water Comm 2019 Work Plan</u> <u>Attachment 2: 041019 WC Draft Agenda</u>
Est. Staff Time: 10 Minutes

6. Clerk Review and Clarification of Committee 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 the meeting.

7. REPORTS:

Directors, Managers, and Commission 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.

- 7.1. Director's Report
- 7.2. Manager's Report
- 7.3. Commission Member Report

8. ADJOURN:

8.1. Adjourn to Regular Meeting at 12:00 p.m., on April 10, 2019, in the Santa Clara Valley Water District HQ Boardroom, 5700 Almaden Expressway, San Jose, California.

19-0053



File No.: 18-1102

Agenda Date: 1/23/2019 Item No.: 3.1.

COMMITTEE AGENDA MEMORANDUM

Santa Clara Valley Water Commission

SUBJECT:

Approval of Minutes.

RECOMMENDATION:

Approve the October 24, 2018, Meeting Minutes.

SUMMARY:

A summary of Committee discussions, and details of all actions taken by the Committee, during all open and public Committee meetings, is transcribed and submitted for review and approval.

Upon Committee approval, minutes transcripts are finalized and entered into the District's historical records archives and serve as historical records of the Committee's meetings.

ATTACHMENTS:

Attachment 1: 102418 WC Draft Mins.

UNCLASSIFIED MANAGER:

Michele King, 408-630-2711

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SANTA CLARA VALLEY WATER COMMISSION MEETING

DRAFT MINUTES

WEDNESDAY, OCTOBER 24, 2018 12:00 PM

(Paragraph numbers coincide with agenda item numbers)

A regular meeting of the Santa Clara Valley Water Commission (Commission) was held on October 24, 2018, in the Headquarters Building Boardroom, located at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California.

1. CALL TO ORDER/ROLL CALL

Hon. Chair Yoriko Kishimoto called the meeting to order at 12:03 p.m.

Members in attendance were:

<u>Municipality</u>	<u>Representative</u>	<u>Alternate</u>
City of Campbell	Hon. Susan M. Landry	
City of Cupertino		Timm Borden
City of Gilroy	Hon. Peter Leroe-Muñoz*	
City of Los Altos	Hon. Lynette Lee Eng	
Town of Los Altos Hills	Hon. Courtenay Corrigan	
Town of Los Gatos	Hon. Barbara Spector	
City of Milpitas		Tony Ndah*
City of Mountain View	Hon. Lisa Matichak	
City of Palo Alto	Hon. Adrian Fine	
City of San José	Hon. Lan Diep*	
City of Santa Clara		Hon. Kathy Watanabe
City of Saratoga	Hon. Rishi Kumar*	
City of Sunnyvale	Hon. Nancy Smith	
Midpeninsula Regional Open Space	Hon. Yoriko Kishimoto	
District		

Members not in attendance were:

<u>Municipality</u>	<u>Representative</u>	Alternate
City of Cupertino	Hon, Darcy Paul	Hon. Steven Scharf
City of Gilrov		Hon. Roland Velasco
City of Los Altos		Hon. Mary Prochnow
Town of Los Gatos		Hon. Steve Leonardis
City of Milpitas	Hon. Garry Barbadillo	
Town of Monte Sereno	Hon. Evert Wolsheimer	Hon. Curtis Rogers
City of Morgan Hill	Hon. Rich Constantine	Hon. Larry Carr
City of Mountain View		Hon. Pat Showalter
City of Palo Alto		Hon. Tom DuBois
City of San José		Kerrie Romanow
City of Santa Clara	Hon. Debi Davis	
City of Saratoga		Hon. Howard Miller
City of Sunnyvale		Hon. Larry Klein
County of Santa Clara	Hon. Mike Wasserman	Hon. Cindy Chavez
Santa Clara Open Space Authority	Hon. Mike Flaugher	Hon. Kalvin Gill
Midpeninsula Regional Open Space District		Hon. Jed Cyr

Board member in attendance was: Director Linda J. LeZotte, Board Representative.

Staff members in attendance were: Kurt Arends, Glenna Brambill, Jerry De La Piedra, Vincent Gin, Garth Hall, Nina Hawk, Clayton Leal, Lisa Porcella, Afshin Rouhani, James Webb and Stan Yamamoto.

Special Guests were: Professor Craig Criddle, Meg Giberson, Richard McMurtry, Doug Muirhead, Dave Poeschel, Jeff Provenzano, Dr. Jerry Smith and Stan Williams.

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 Hon. Nancy Smith, seconded by Hon. Adrian Fine, and carried by majority vote, to approve the July 25, 2018, Santa Clara Valley Water Commission meeting minutes with the noted corrections. Hon. Debi Davis, Hon. Lynette Lee Eng, Hon. Courtenay Corrigan and Mr. Timm Borden abstained.

4. ACTION ITEMS

4.1 ECONOMICS AND SCIENCE OF RECYCLED WATER: STRATEGIES FOR COMMERICAL VIABILITY

Hon. Yoriko Kishimoto introduced guest speaker Professor Craig Criddle who reviewed the materials as outlined in the agenda item and a handout of his presentation was given to the Commissioners.

*Mr. Tony Ndah arrived at 12:07 p.m. *Hon. Peter Leroe-Muñoz and Hon. Rishi Kumar arrived at 12:11 p.m.

Hon. Yoriko Kishimoto, Hon. Lisa Matichak, Hon. Debi Davis, Hon. Nancy Smith, Hon. Susan Landry, Mr. Doug Muirhead and Hon. Courtenay Corrigan had questions on: the water rates, recycling costs in Singapore/Malaysia, Tool kit, marginal costs, nutrient pollution, timing/sequencing, 3 objectives, discharging into the Bay, end user with software tool kit, will this help integrate the Water District's goals/mission, satellite outputs and density of homes.

*Hon. Lan Diep arrived at 12:29 p.m.

No action was taken.

4.2 SALMONIDS IN THE DISTRICT WATERWAYS

Hon. Yoriko Kishimoto introduced guest speaker Dr. Jerry Smith who reviewed the materials as outlined in the agenda item and a handout of his presentation was given to the Commissioners.

Hon. Lan Diep left at 1:05 p.m. and did not return. Hon. Rishi Kumar left at 1:07 p.m. and did not return.

Ms. Lisa Porcella and Mr. Clayton Leal also reviewed the materials as outlined in the agenda item.

Mr. Vincent Gin, Mr. Kurt Arends and Ms. Nina Hawk were available to answer questions.

Mr. Dave Poeschel of the Sierra Club Loma Prieta Chapter and Mr. Richard McMurtry of Santa Clara County Creeks Coalition spoke on issues regarding this subject.

Hon. Susan Landry, Mr. Timm Borden, Hon. Debi Davis, Hon. Nancy Smith and Hon. Courtenay Corrigan had questions/concerns regarding the following issues: chart on fish size and relating to water per year-improvements to the creek, Stevens Creek Corridor Project, cool reservoir releases and fish passage, inviting outside agencies such as; Department of Fish and Game and NOAA Fisheries to speak to the Water Commission, displacement of native fish, balance resources and multi-jurisdictional issues to provide guidance.

No action was taken.

4.3 REVIEW SANTA CLARA VALLEY WATER COMMISSION WORK PLAN, THE OUTCOMES OF BOARD ACTION OF COMMISSION REQUESTS AND THE COMMISSION'S NEXT MEETING AGENDA

Ms. Glenna Brambill and Chair Kishimoto reviewed the materials as outlined in the agenda item.

No action was taken.

5. CLERK REVIEW AND CLARIFICATION OF COMMISSION REQUESTS TO THE BOARD

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

6. **REPORTS**

6.1 Director's Report

None.

6.2 Manager's Report

Ms. Nina Hawk reported on the following: *Potential future discussion on funding of Water Utility and associated costs.

6.3 Commission Member Reports

Hon. Yoriko Kishimoto reported on: The Commission received the Trails and Waterways Summit 2018 brochure held on June 29, 2018.

7. ADJOURNMENT

Chair Hon. Yoriko Kishimoto adjourned at 2:01 p.m. to the next regular meeting on Wednesday, January 23, 2019, at 12:00 p.m., in the Santa Clara Valley Water District Headquarters Boardroom.

Glenna Brambill Board Committee Liaison Office of the Clerk of the Board

Approved:

File No.: 18-1104

Agenda Date: 1/23/2019 Item No.: 4.1.

COMMITTEE AGENDA MEMORANDUM

Santa Clara Valley Water Commission

SUBJECT:

Election of Chair and Vice Chair.

RECOMMENDATION:

Elect 2019 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.

ATTACHMENTS: None

UNCLASSIFIED MANAGER: Michele King, 408-630-2711 File No.: 18-1106

Agenda Date: 1/23/2019 Item No.: 5.1.

COMMITTEE AGENDA MEMORANDUM

Santa Clara Valley Water Commission

SUBJECT:

Review and Approve 2018 Annual Accomplishments Report for Presentation to the Board (Commission Chair).

RECOMMENDATION:

- 1. Approve the 2018 Accomplishments Report for presentation to the Board.
- 2. Provide comments to the Commission Chair to share with the Board as part of the Accomplishments Report presentation pertaining to the purpose, structure, and function of the Commission.

SUMMARY:

The Accomplishments Report summarizes the committee's discussions and actions to prepare Board policy alternatives and implications for Board deliberation throughout 2018. The Committee Chair, or designee, presents the Accomplishments Report to the Board at a future Board meeting.

The Commission may provide feedback to the Commission 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

File No.: 18-1106

through information sharing to the communities they represent.

ATTACHMENTS:

Attachment 1: Santa Clara Valley Water Comm 2018 Accomplishments Report

UNCLASSIFIED MANAGER:

Michele King, 408-630-2711

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	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
1	Election of Chair and Vice Chair for 2018	January 24	Commission Elects Chair and Vice Chair for 2018. (Action)	Accomplished January 24, 2018: The Commission elected Hon. Yoriko Kishimoto as 2018 Water Commission Chair and Hon. Debi Davis as 2018 Water Commission Vice Chair.
2	Annual Accomplishments Report	January 24	 Review and approve 2017 Accomplishments Report for presentation to the Board. (Action) Submit requests to the Board, as appropriate. 	Accomplished January 24, 2018: The Commission reviewed and approved the 2017 Accomplishments Report for presentation to the Board.
3	Civic Engagement	January 24	 Receive feedback from Commission per Transparency Audit. (Action) Provide comments to the Board, as necessary. 	Accomplished January 24, 2018: The Commission received information on Civic Engagement and took no action.

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

ITEM	WORK PLAN ITEM	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
4	Winter Preparedness Update	January 24 October 24	Receive information on the District's Winter Preparedness. (Information)	Accomplished January 24, 2018: The Commission received information on Winter Preparedness and took no action.
5	Review and Comment to the Board on the Fiscal Year 2019 Preliminary Groundwater Production Charges	January 24	 Review and comment to the Board on the Fiscal Year 2019 Preliminary Groundwater Production Charges. (Action) Submit requests to the Board, as appropriate. 	Accomplished January 24, 2018: The Commission reviewed and had no comments to the Board on the Fiscal Year 2019 Preliminary Groundwater Production Charges.
6	Review of Santa Clara Valley Water Commission Work Plan, the Outcomes of Board Action of Commission Requests and the Commission's Next Meeting Agenda	January 24 April 11 July 25 October 24	 Receive and review the 2018 Board-approved Committee work plan. <i>(Action)</i> Submit requests to the Board, as appropriate. 	Accomplished January 24, 2018: The Commission reviewed the 2018 work plan and took no action.Accomplished April 11, 2018: The Commission reviewed the 2018 work plan and took no action.Accomplished July 25, 2018: The Commission reviewed the 2018 work plan and took no action.Accomplished October 24, 2018: The Commission reviewed the 2018 work plan and took no action.Accomplished October 24, 2018: The Commission reviewed the 2018 work plan and took no action.

ITEM	WORK PLAN ITEM	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
7	Review and Comment to the Board on the Fiscal Year 2019 Proposed Groundwater Production Charges.	April 11	 Review and comment to the Board on the Fiscal Year 2019 Proposed Groundwater Production Charges. (Action) Provide comments to the Board, as necessary. 	 Accomplished April 11, 2018: The Commission reviewed and commented to the Board on the Fiscal Year 2019 Proposed Groundwater Production Charges as follows: Commission's summarized comments 1. How are rates publicized to the community? There needs to be some outreach explaining why the rates are being increased. 2. Need to show a long-term trend of the cumulative effect of rates over 10 to 20 years (reviewing projections of total costs). 3. Suggest having a steady increase as opposed to a dramatic increase in the rates. Keeping the rates low as possible being the ultimate goal. Look at the rationale of returning funds or placing them in a "holding" fund (reserves) for later use if possible so a request for an increase will be unnecessary or minimal. 4. Since construction costs are high does the District consider delaying capital improvement projects until costs are more cost effective? 5. Does the District receive development monies? If not, there needs to be a mechanism in place for the District to collect fees/funds when developers come to the County and cause

ITEM	WORK PLAN ITEM	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
				 impacts to the infrastructure. Suggest the District have discussions with those that could provide the funding needed (City, State and Federal officials). 6. Rates being more sustainable.
8	Climate Change Mitigation – Carbon Neutrality by 2020 Program Update	April 11	 Receive information on climate change mitigation – carbon neutrality by 2020 program update. <i>(Action)</i> Provide comments to the Board, as necessary. 	Accomplished April 11, 2018: The Commission received information on climate change mitigation – carbon neutrality by 2020 program update and took no action.
9	Study of the District's Groundwater Services Areas ("Zones of Benefit")	April 11	 Receive information on the Study of the District's Groundwater Services Areas. (Action) Provide comments to the Board, as necessary. 	Accomplished April 11, 2018: The Commission received information on the Study of the District's Groundwater Services Areas and took no action.
10	Climate Change and Sea Level Rise Adaptation – Water Supply, Flood Protection, Ecosystems Protection	July 25	 Receive information on climate change and sea level rise adaptation – water supply, flood protection, ecosystems protection. (Action) 	Accomplished July 25, 2018: The Commission received information on Climate Change and Sea Level Rise Adaptation – Water Supply, Flood Protection, Ecosystems Protection and took no action.

ITEM	WORK PLAN ITEM	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
			Provide comments to the Board, as necessary.	
11	Economics and science of recycled water: strategies for commercial viability	October 24	Presentation from Professor Craig Criddle on Economics and science of recycled water: strategies for commercial viability (Information)	Accomplished October 24, 2018: The Commission received a special presentation on Economics and science of recycled water: strategies for commercial viability with a handout.
12	Salmonid in the District's waterways Dr. Jerry Smith-invited guest	October 24	 Receive information on Salmonid in the District's waterways. <i>(Action)</i> Provide comments to the Board, as necessary. 	Accomplished October 24, 2018: The Commission received a special presentation on Salmonid in the District's waterways with a handout.
13	Climate Change Action Plan - Climate Change Impacts, Vulnerabilities and Stakeholder Needs	January 2019	 Receive information on Climate Change Action Plan - Climate Change Impacts, Vulnerabilities and Stakeholder Needs. (Action) Provide comments to the Board, as necessary 	

ITEM	WORK PLAN ITEM	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
14	Discussion on the Riparian Corridor Ordinance, Encroachment Process	TBD	 Discuss the Riparian Corridor Ordinance, Encroachment Process. (Action) 	
			Provide comments to the Board, as necessary.	



File No.: 19-0056

Agenda Date: 1/23/2019 Item No.: 5.2.

COMMITTEE AGENDA MEMORANDUM

Santa Clara Valley Water Commission

SUBJECT:

Water Supply Master Plan.

RECOMMENDATION:

This is a discussion item and the Commission may provide comments, if applicable. However, no action is required.

SUMMARY:

The Water Supply Master Plan (Master Plan) is the District's plan for providing a reliable and sustainable water supply in a cost-effective manner. It informs investment decisions by describing the type and level of water supply investments the District is planning to make through 2040, the anticipated schedule, the associated costs and benefits, and how Master Plan implementation will be monitored and adjusted. This memorandum summarizes prior analyses and outreach, describes the "Ensure Sustainability" strategy, discusses the water supply reliability level of service goal, and describes how the Master Plan will be monitored and adapted to changing conditions.

Summary of Prior Analyses

Staff has analyzed anticipated water supply and demand conditions for 2040, without any new projects. The supply conditions assume existing infrastructure and local supplies are maintained, but that imported water supplies decline over time due to additional regulatory restrictions and climate change. The demands are based on 2020 water use targets in retailers' Urban Water Management Plans, extended through 2040 to account for updated regional growth projections and expected water conservation program savings. The analysis continues to indicate that extended droughts are our greatest challenge and the county could experience shortages of up to about 150,000 acre-feet (AF) in the most critical year. An acre-foot of water is equivalent to one foot of water depth spread across an acre of land. To put a 150,000 acre-feet shortage in perspective, it is roughly half of the total County's water demand in a normal year.

A number of projects and combinations of projects have been evaluated for addressing these projected shortages. The analyses considered:

- Water supply yields under different scenarios,
- Other benefits such water quality or environmental benefits,
- Costs,

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- Risks,
- Performance with different demand assumptions,
- Performance with different imported water supply assumptions,
- Performance under late century climate change,
- Input from the Expert Panel, and
- Stakeholder and Board interests.

A number of different approaches or strategies will meet the District's water supply reliability goal, but there are tradeoffs. Some projects perform better during droughts and a changed climate, but are expensive. Other projects may be relatively inexpensive, but do not contribute to drought reliability or are high risk. Some projects have significant benefits for the environment or other interests, but relatively little water supply benefit. Some projects types are preferred more than others by the community. Stakeholders all agree that 1) water supply reliability is important, 2) we should maximize water conservation, water reuse, and stormwater capture, and 3) we need to keep water rates affordable. Based on stakeholder input, technical analyses, and the climate of uncertainty, staff's recommendations are intended to provide a framework for balancing multiple needs and interests while making effective and efficient investment decisions.

Recommended Water Supply Strategy

The Board adopted the "Ensure Sustainability" strategy in 2012 as part of the Water Supply and Infrastructure Master Plan. The "Ensure Sustainability" strategy is comprised of three elements:

- 1) Secure existing supplies and infrastructure,
- 2) Expand the water conservation and reuse, and
- 3) Optimize the use of existing supplies and infrastructure.

Together these elements protect and build on past investments in water supply reliability, leverage those investments, and develop alternative supplies and demand management measures to manage risk and meet future needs, especially during extended droughts in a changing climate. Staff recommends that the Board consider continuing with the "Ensure Sustainability" strategy, combined with the District's Asset Management and Infrastructure Reliability programs, as it provides a pathway to a sustainable water supply system. The following discussion describes the three elements of the recommended strategy and the projects that support them.

1. Secure Existing Supplies and Infrastructure

Securing existing supplies and facilities for future generations is important because they are, and will continue to be, the foundation of the county's water supply system. These baseline supplies are conveyed, treated, and stored in a complex and integrated system of water supply infrastructure.

Key ongoing projects and programs that support this strategic element include the Fisheries and Aquatic Habitat Collaborative Effort (FAHCE), dam retrofits, pipeline maintenance and other asset management activities, and the Rinconada Water Treatment Plant Reliability Project. These and similar projects support securing our local supplies and infrastructure and are considered baseline projects.

The District Board decided to participate in California WaterFix on May 8, 2018, which would secure up to about 170,000 acre-feet per year of imported Central Valley Project and State Water Project water supplies.

2. Increase Water Conservation and Reuse

Master Plan analyses show that demand management, stormwater capture, and water reuse are critical elements of the water supply strategy. They perform well under current climate conditions and late century climate change. Water recycling and reuse provide local supplies that are not hydrologically dependent, so they are resilient to extended droughts when the District most needs additional supplies. They make efficient use of existing supplies, so they are sustainable and consistent with a "One Water" approach. In addition, these activities are broadly supported by stakeholders.

A more diverse portfolio of supplies will also be more resilient to risks and uncertainties, including climate change, than a portfolio with increased reliance on imported water supplies. Imported supplies are particularly vulnerable to climate change and regulatory actions like the Bay Delta Water Quality Control Plan.

Staff plans to include a "No Regrets" package of water conservation and stormwater projects in the Master Plan. The projects will increase the District's water conservation target from 99,000 acre-feet per year of savings by 2030 to 109,000 acre-feet per year of savings by 2040.

Staff recommends that the Master Plan include at least 24,000 acre-feet per year of additional reuse by 2040. This could be potable reuse and/or non-potable recycled water (purple pipe). Staff believes that additional reuse, along with the "No Regrets" package, is vital to the long-term sustainability of water supply reliability in the county. As described above, water reuse and conservation are local drought resistant supplies that are resilient to climate change.

3. Optimize the Use of Existing Supplies and Infrastructure

This element of the strategy includes projects that increase the District's ability to use existing supplies and infrastructure. The District's existing supplies are more than sufficient to meet current and future needs in wet and above normal years. In some years, supplies exceed needs and additional facilities would increase flexibility and the ability to use or store those excess supplies. Additional infrastructure could increase the District's ability to respond to outages and respond to challenges such as droughts and water quality problems.

Staff is planning to recommend a South County recharge project in the Master Plan, because groundwater modeling indicates the need for additional recharge capacity. Pacheco Reservoir is consistent with the Board's priority to actively pursue efforts to increase water storage

opportunities. Both the Transfer-Bethany Pipeline portion of the Los Vaqueros Reservoir Expansion and the Pacheco Reservoir Expansion increase the District's water supply operations flexibility and increase emergency water storage. The State, in approving funding of at least half the Pacheco Reservoir Expansion and Los Vaqueros Reservoir Expansion projects' construction costs (in 2015\$), recognized those projects also provide ecosystem improvements, recreation opportunities, and/or flood protection benefits.

The three projects - South County Recharge, Pacheco, and Transfer-Bethany Pipeline - would provide a combined average annual yield of about 5,000 acre-feet per year, increase system flexibility, and/or emergency supply.

The three elements of the recommended strategy work together to provide a framework for providing a sustainable and reliable water supply. Furthermore, they strike a balance between protecting what we have, investing for the future, and making the most of the water supply system.

Water Supply Reliability Level of Service Goal

The water supply reliability level of service goal is important because it guides long-term water supply planning efforts and informs Board decisions regarding the level of water supply reliability investments. Some of the considerations for the level of service goal are stakeholder input, other agencies' goals, the frequency and magnitude of potential water supply shortages, uncertainty in future supply and demand conditions, and costs.

Modeling indicates that the projects proposed for the Master Plan will meet at least 90 percent of demands during an extended drought. Different subsets of the projects would meet at least 80 percent of demand during an extended drought.

Monitoring and Assessment Plan (MAP) Approach

A primary purpose of the Master Plan is to inform investment decisions. Therefore, a critical piece of the water supply plan is a process to monitor and report to the Board on the demands, supplies, and status of projects and programs in the Master Plan so the Board can use that information in its annual strategic planning sessions, which inform the annual water rate setting, Capital Improvement Program (CIP), and budget processes. Monitoring will identify where adjustments to the Master Plan might be needed to respond to changed conditions. Such adjustments could include accelerating and delaying projects due to changes in the demand trend, changing projects due to implementation challenges, adding projects due to lower than expected supply trends, etc.

Staff will report to the District Board on Master Plan implementation on at least an annual basis, usually during the summer. In addition, the Board will receive reports on specific projects and pertinent policy and regulatory developments as needed. If changes to or decisions about the Master Plan, Master Plan projects, or other projects appear needed, staff will develop recommendations for the Board based on how decisions would affect the level of service, costs and rate impacts, risk management, and relationships between projects. Staff will also describe how projects relate to each other and stakeholder input. The intent is for staff to provide as complete a picture as possible to

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inform the Board's strategic planning and investment decisions and to incorporate the Board's decisions into the CIP, budget, and water rate setting processes.

Next Steps

The next steps for the Master Plan are to prepare a draft Master Plan 2040 based on Board direction. Staff anticipates having a draft Master Plan ready for Board and stakeholder review in March 2019. The intent is to have at least two workshops - one with water retailers and one with other stakeholders. Additional presentations may be made at Board advisory committees. Staff plans to present a final Master Plan to the Board in June 2019.

ATTACHMENTS:

Attachment 1: PowerPoint

UNCLASSIFIED MANAGER: Jerry De La Piedra, 408-630-2257

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Water Supply Master Plan Update January 23, 2019

Droughts are, and will be, our greatest challenge to reliability



Many projects have been evaluated for filling the gap



Stakeholder Input Summary

Input	Phone Survey – Likely Voters	Workshop #1 - Environmental, Civic Non- Profits, Individuals	Workshop #2 - Retailers
Water supply reliability important	Х	Х	Х
Expand conservation, recycling, and reuse	Х	Х	Х
Minimize rate increases	Х	Х	Х

Additional takeaways:

- Voters like additional local and regional storage
- Environmental groups and others request reduced reliance on Delta
- Retailers would like better alignment between plans and actions

Technical Analyses Summary



Imported supplies generally less expensive, but less resilient to climate change and risks



Potable reuse generally more expensive, but more resilient to climate change and risks

Increasing variability and uncertainty associated with climate change



2012 Board-Adopted "Ensure Sustainability" Strategy

infrastructure


"Ensure Sustainability" Strategy

- Protects existing assets
- Leverages past investments
- Meets new demands with droughtresilient supplies
- Supports "One Water" approach
- Develops local and regional supplies to reduce reliance on the Delta
- Increases flexibility
- Increases resiliency to climate change



Incremental Benefits of Increasing Level of Service

Scenario	Without Projects (Basecase)	With Some Projects Approved for Planning	With All Projects Approved for Planning
Minimum Drought Reliability	Meets 50% of demands	Meets 80% of demands	Meets 90% of demands
Present Value Benefits (2017\$)	Not applicable	\$2,480,000,000	\$2,700,000,000
Present Value Cost to District (2017\$)	Not applicable	\$1,600,000,000	\$2,450,000,000
Benefit:Cost Ratio	Not applicable	1.6	1.1







Next Steps

- Prepare Draft Water Supply Master Plan 2040 March 2019
- Solicit input on draft Water Supply Master Plan – March – April 2019
- Present Final Water Supply Master Plan June 2019

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File No.: 19-0022

Agenda Date: 1/23/2019 Item No.: 5.3.

COMMITTEE AGENDA MEMORANDUM

Santa Clara Valley Water Commission

SUBJECT:

Review and Comment to the Board on the Fiscal Year 2019-20 Preliminary Groundwater Production Charges.

RECOMMENDATION:

Discuss and consider the attached preliminary groundwater production charge analysis and provide comment to the Board on policy implementation, as necessary.

SUMMARY:

Summary of Groundwater Production Charge Analysis:

Staff has prepared the preliminary FY 2019-20 groundwater production charge analysis, which includes a current water use projection and several scenarios for Board review. Staff has developed two basic scenarios that align with the 90% and 80% level of service goals according to the January 2019 Water Supply Master Plan update, along with several other scenarios for Board consideration.

The groundwater production charge recommendation will be detailed in the Annual Report on the Protection and Augmentation of Water Supplies that is planned to be filed with the Clerk of the Board on February 22, 2019. The public hearing on groundwater production charges is scheduled to open on April 9, 2019. It is anticipated that the Board would set the FY 2019-20 groundwater production charges by May 14, 2019, that would become effective on July 1, 2019.

The FY 2019-20 groundwater production charge and surface water charge setting process will be conducted consistent with the District Act, and Board resolutions 99-21 and 12-10. (Attachments 3-4).

Water Use Assumptions

District managed water use for FY 2017-18 is estimated to be approximately 226,000 acre-feet (AF), which is roughly 9,000 AF higher than budgeted that year and is roughly a 21% reduction versus calendar year 2013. (District-managed water use excludes Hetch Hetchy, and San Jose Water Company owned water supplies). For the current year, FY 2018-19, staff estimates that water usage will meet the budgeted water use of 226,000 AF, which is again roughly a 21% reduction versus calendar year 2013. For purposes of the preliminary analysis, staff is assuming a water usage of 239,000 AF for FY 2019-20, which is a 5.7% increase relative to the estimated FY 2018-19 water usage, and a 16% reduction versus calendar year 2013.

Staff will carefully monitor monthly water use actuals and work closely with the water retailers during the upcoming rate setting process to modify the water usage forecast as necessary.

Groundwater Production Charge Projections

Staff has prepared several preliminary groundwater production charge projection scenarios for Board review. The increase in the North County Municipal and Industrial (M&I) groundwater production charge ranges from 4.7% to 8.1% for FY 2019-20 depending on the scenario, and from 5.7% to 7.7% in the South County.

The overall impact of the preliminary analysis scenarios for FY 2019-20 to the average household would be an increase ranging from \$2.09 to \$3.60 per month in North County and from \$0.88 to \$1.19 per month in South County.

Staff anticipates no changes to the current contract treated water surcharge and the non-contract treated water surcharge for FY 2019-20.

Other Assumptions

All scenarios assume the continued practice of relying on the State Water Project (SWP) Tax to pay for 100% of the SWP contractual obligations. Pursuant to Water Code Section 11652, the District, whenever necessary, is required to levy on all property in its jurisdiction not exempt from taxation, a tax sufficient to provide for all payments under its SWP contract with the California Department of Water Resources (DWR). All scenarios assume no change in the SWP Tax for FY 2019-20, which would remain at \$18 M. The SWP Tax for the average household in Santa Clara would remain at about \$27 per year. Note that the SWP tax projection for FY 2019-20 under all scenarios does not include any costs for the CWF.

All scenarios also assume the continued practice to set the South County agricultural groundwater production charge at 6% of the M&I charge.

All scenarios assume Water Utility operations cost growth of 5% to \$186.4 M in FY 2019-20 versus the FY 2018-19 adopted budget.

A PowerPoint presentation will be provided at the meeting.

ATTACHMENTS:

None.

UNCLASSIFIED MANAGER:

Darin Taylor, 408-630-3068



File No.: 19-0047

Agenda Date: 1/23/2019 Item No.: 5.4.

COMMITTEE AGENDA MEMORANDUM

Santa Clara Valley Water Commission

SUBJECT:

Open Space Credit.

RECOMMENDATION:

This is an information item and no action is required.

SUMMARY:

The purpose of this item is to obtain Water Commission comments and input on the Board's Open Space Credit Policy, specifically a staff proposal to implement an Agricultural Charge Adjustment for Williamson Act and Conservation Easement Properties.

Background

The District Board has historically recognized that agriculture brings value to Santa Clara County in the form of open space and local produce. In an effort to help preserve this value, the District Act limits the agricultural charge to be no more than 25% of the M&I charge. In 1999, to further its support for agricultural lands, a policy was put into place further limiting the agricultural groundwater production charge to no more than 10% of the M&I charge. The agricultural community currently benefits from low groundwater charges that are 2% of M&I charges in North County and 6% of M&I charges in South County. According to Section 26.1 of the District Act, agricultural water is "water primarily used in the commercial production of agricultural crops or livestock."

The credit to agricultural water users has become known as an "Open Space Credit." It is paid for by fungible, non-rate related revenue. To offset lost revenue that results from the difference between the adopted agricultural groundwater production charge and the agricultural charge that would have resulted at the full cost of service, the District redirects a portion of the 1% ad valorem property taxes generated in the Water Utility, General and Watershed Stream Stewardship Funds. The South County Open Space Credit is currently estimated to be \$8.0 million in FY 2018-19 and projected to continually increase in the years that follow.

Since 2013, the Board has continued the past practice of setting the agricultural charge at 6.0% of the South County M&I charge. On September 18, 2017, in response to the President's Day Flood event, the Board's Capital Improvement Program Committee analyzed scenarios to decrease the Open Space Credit and therefore provide more funding for flood protection projects. Accordingly, alternatives were prepared to reduce the Open Space Credit by increasing the agricultural charge to 10% or 25% of the M&I charge over a multi-year timeframe. For FY 2018-19, staff recommended

increasing the agricultural charge to 6.8% of the M&I charge. On May 8, 2018, the Board chose to continue the past practice of setting the agricultural charge at 6.0% of the South County M&I charge for FY 2018-19.

Background on the Williamson Act and Conservation Easement Classification

The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. Under these voluntary contracts, landowners gain substantially reduced property tax assessments. A land owner whose property is devoted to agricultural use and is within an agricultural preserve may file an application for a Williamson Act contract with the County. Per the Santa Clara County of Ordinances section C13-12, to be eligible for a Williamson Act contract:

- 1. The property proposed for inclusion in the contract is at least ten acres in size in the case of prime agricultural land, and 40 acres in size in the case of nonprime agricultural land;
- 2. All parcels proposed for inclusion in the contract are devoted to agricultural use; and
- 3. There are no existing or permitted uses or development on the land that would significantly displace or interfere with the agricultural use of the land.

Even if all of the criteria are met, the Board of Supervisors may, in its discretion, choose not to approve the application.

Conservation easement is a power invested in a qualified organization or government to constrain, as to a specified land area, the exercise of rights otherwise held by a landowner so as to achieve certain conservation purposes. For example, a land owner whose property constitutes open-space land as defined in Government Code §§ 51075(a) and 65560 may file an application for an agreement with the County.

Per the Santa Clara County of Ordinances section C13-36, to be eligible for an Open Space Easement Agreement with the County:

- 1. The land proposed for inclusion in the agreement is at least 20 acres in size;
- 2. All parcels proposed for inclusion in the agreement are devoted to open-space;
- 3. There are no other existing or permitted uses or development on the land that would significantly impair the open-space value of the land; and
- 4. The Board of Supervisors makes the required findings in Government Code § 51084.

Even if all of the criteria in are met, the Board of Supervisors may, in its discretion, choose not to approve the application.

There are also three open space authorities that have jurisdiction to enter into conservation easements in Santa Clara County.

File No.: 19-0047

There are 174 Williamson Act parcels and 10 conservation easement parcels in the combined Zone W-2 and Zone W-5. The parcels comprise roughly 33% of total agricultural water use on average.

Consideration of an Agricultural Water Charge Adjustment

An agricultural water charge adjustment could be predicated on Williamson Act or conservation easement participation and paid for by the Open Space Credit. Staff recommends implementing an adjustment such that if the District were to increase the agricultural water charge to something greater than 6% of the M&I charge, then an adjustment would be applied to all Williamson Act and conservation easement properties, that would result in a net agricultural charge of 6% of M&I charges for those properties. The Williamson Act or Conservation Easement property classification would be determined by the authorities managing those programs, not the District. There would be no need for an application process, and as such the incremental costs associated with the adjustment would be negligible. The District currently receives from the County the list of Williamson Act properties and would use properties of record in February and August for the upcoming billing cycle. Staff would obtain the conservation easement property information direct from the open space organizations in parallel during the February and August timeframe. Property status changes occurring after staff data collection would be handled on a case-by-case basis for the potential proration of rates, if applicable. Agricultural wells are predominately charged bi-annually in arears in January and June.

If the District were to increase the agricultural charge to 10% of the M&I charge over a 7-year timeframe, and adjust back to 6% of the M&I charge for Williamson Act and conservation easement properties, then staff anticipates a cumulative savings to the Open Space Credit of roughly \$2.1 million over that 7-year timeframe. Savings would be \$1.4M if the transition occurred over a 5-year timeframe, and would be \$3.4M if the transition occurred over a 10-year timeframe. The savings could be reduced if additional eligible properties were to change status to be classified as Williamson Act or Conservation Easement properties. Staff estimates that there are 245 agricultural properties that may qualify, but are not classified as Williamson Act or Conservation Easement properties.

ATTACHMENTS:

Attachment 1: PowerPoint

UNCLASSIFIED MANAGER:

Darin Taylor, 408-630-3068

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Open Space Credit Policy Discussion

January 23, 2019



Attachment 1 Page 1 of 12

What is the Open Space Credit (OSC)?

Formal definition: "The use of non-rate related revenue to offset reduced agricultural revenue as a result of keeping agricultural rates lower than needed to recoup the full cost of service"

Applies to agricultural water users only, not to all open space



Open Space Credit: Preliminary Projection



April 2018 • Board directs staff to:

- 1. Analyze ag water usage trend scenarios and potential impact on Open Space Credit projection
- Research feasibility of a reduced ag charge for Williamson Act participants
 - Seek contributions from local private companies or other governmental agencies to fund Open Space Credit

- Williamson Act provides tax benefits to property owners who do not develop their land
- Conservation Easements permanently extinguish development rights

	Williamson	Conservation	Average % of
	Act	Easement	Total Ag
	Parcels	Parcels	Water Use
North County	3	0	1%
South County	171	10	32%
Total	174	10	33%

- Ag Charge Adjustment Program Alternative for Consideration
 - Predicated on Williamson Act or Conservation Easement participation
 - If: Ag charge increased to >6% of M&I
 - Then: Adjust back to 6% for Williamson Act and Conservation Easement properties
 - Staff could implement with minimal effort

5-Year Transition

Current 6% of M&I

	FY 19	FY 24
South County		
Municipal & Industrial	\$450	\$652
Ag Rate % of M&I Rate	6.0%	6.0%
Agricultural	\$27.02	\$39.15

10% of M&I by FY 24

	FY 19	FY 24
South County		
Municipal & Industrial	\$450	\$652
Ag Rate % of M&I Rate	6.0%	10.0%
Agricultural	\$27.02	\$65.39

Total Anticipated 5-Year Savings to Open Space Credit \$1.4M

25% of M&I by FY 24

	FY 19	FY 24	
South County			
Municipal & Industrial	\$450	\$652	
Ag Rate % of M&I Rate	6.0%	25.0%	
Agricultural	\$27.02	\$163.07	
Total Anticipated E. Veen Covings to Onen Crees Credit #4 ENA			

Total Anticipated 5-Year Savings to Open Space Credit \$6.5M

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7-Year Transition

C

Current 6% of M&I

	FY 19	FY 26
South County		
Municipal & Industrial	\$450	\$757
Ag Rate % of M&I Rate	6.0%	6.0%
Agricultural	\$27.02	\$45.41

10% of M&I by FY 26

	FY 19	FY 26
South County		
Municipal & Industrial	\$450	\$757
Ag Rate % of M&I Rate	6.0%	10.0%
Agricultural	\$27.02	\$75.65

25% of M&I by FY 26

	FY 19	FY 26
South County		
Municipal & Industrial	\$450	\$757
Ag Rate % of M&I Rate	6.0%	25.0%
Agricultural	\$27.02	\$189.08

Total Anticipated 7-Year Savings to Open Space Credit \$9.8M Page 56

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10-Year Transition

Current 6% of M&I

	FY 19	FY 29
South County		
Municipal & Industrial	\$450	\$898
Ag Rate % of M&I Rate	6.0%	6.0%
Agricultural	\$27.02	\$53.87

10% of M&I by FY 29

	FY 19	FY 29	
South County			
Municipal & Industrial	\$450	\$898	
Ag Rate % of M&I Rate	6.0%	10.0%	
Agricultural	\$27.02	\$89.95	
Total Anticipated 10-Vear Savings to Open Space Credit \$3.4M			

25%	of	M&I	by	FY	29

	FY 19	FY 29
South County		
Municipal & Industrial	\$450	\$898
Ag Rate % of M&I Rate	6.0%	25.0%
Agricultural	\$27.02	\$224.72

Total Anticipated 10-Year Savings to Open Space Credit \$16.0M Page 57

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Open Space Credit: 2013 Economic Study Overview

- Study prepared by ERA Economics LLC
- Constructed an economic model of agriculture in Santa Clara County
 - 3 scenarios with 10 year phase-in
 - Baseline (Maintain Ag Charge at 6% of M&I rate)
 - 10 % of M&I rate
 - 25 % of M&I rate
- Economic Evaluation Conclusions:
 - A 10% increase in Ag Rates over 10 years would cause permanent fallow of 0.11% of irrigated acres
 - A 25% increase in Ag Rates over 10 years would cause permanent fallow of 3.5% of irrigated acres

Open Space Credit: 2013 Economic Study Overview

Staff Analysis of Economic Evaluation Conclusions:

Calendar Year	Fruit and Nuts	Field Crops	Onions and Garlic	Vegetables	Processed Tomatoes	Grapes	Dryland Hay	Total
	Acres Harvested							
2011	1,197	1,339	520	9,248	1,060	1,550	3,510	18,424
2017	1,613	1,195	784	13,224	322	1,601	4,044	22,783
Acres Delta	416	(144)	264	3,976	(738)	51	534	4,359
Acres Delta%	35%	-11%	51%	43%	-70%	3%	15%	24%

Potential factors contributing to the 24% increase in harvested acreage:

- Drought
- Central Valley water management
- Transition to higher value crops
- Irrigation efficient technologies
- SCVWD Ag Rates

Staff Recommendation

Increase Agricultural Rates to 10% of M&I over a 7-Year period

Proceed with an adjustment program for Williamson
Act and Conservation Easement participants that
would hold their agricultural water charge to 6%
of M&I

File No.: 19-0053

Agenda Date: 1/23/2019 Item No.: 5.5.

COMMITTEE AGENDA MEMORANDUM

Santa Clara Valley Water Commission

SUBJECT:

Update on the State Water Resources Control Board's Amendments to the Bay-Delta Water Quality Control Plan and Agency-Proposed Voluntary Agreements.

RECOMMENDATION:

Receive an update on the State Water Resources Control Board's Amendments to the Bay-Delta Water Quality Control Plan and agency-proposed Voluntary Agreements.

SUMMARY:

On December 12, 2018, the State Water Resources Control Board (SWRCB) approved Resolution No. 2018-0059, that included adopting its staff's proposed Phase 1 amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta (Bay Delta Plan), which set flow and water quality objectives for the San Joaquin River and its major salmon bearing tributaries, including the Tuolumne, Stanislaus, and Merced Rivers. The Phase 1 amendments also revised the southern Delta salinity objective to protect agricultural supply beneficial use in the Delta.

The Phase 1 amendments could significantly reduce the supply of water to the San Francisco Public Utilities Commission (SFPUC), including deliveries to Hetch Hetchy customers in Santa Clara County, especially during droughts.

The SWRCB has welcomed voluntary agreements that include flow and non-flow measures, recognizing that they could expedite implementation of the water quality objectives and provide more durable solutions. Over the past two years, State departments, including the California Department of Water Resources (DWR) and Department of Fish and Wildlife (DFW), and the U.S. Bureau of Reclamation (USBR) engaged in negotiations with water users and other stakeholders to negotiate voluntary agreements for the anticipated update to the Bay Delta Plan. These efforts reached a significant milestone on December 12, 2018, with presentation by the State to the SWRCB of a framework for voluntary agreements.

Despite the significant progress made by the State on developing voluntary agreements, the SWRCB adopted the more extensive flow criteria recommended by its staff for the lower San Joaquin River tributaries, but directed its staff to support development of the voluntary agreements for future

File No.: 19-0053

consideration.

The SWRCB decision and potential impacts to the District are described below.

SWRCB decision on Phase 1 amendments to the Bay Delta Plan

The Bay-Delta Plan sets water quality objectives for the Sacramento and San Joaquin Rivers, their tributaries, the Delta, and Suisun Bay to ensure the reasonable protection of all beneficial uses. This includes specific salinity levels as well as different flow requirements. The State Water Project (SWP) and Central Valley Project (CVP) are responsible for meeting most of the current objectives.

On December 12, 2018, the SWRCB approved a resolution adopting its staff's proposed Phase 1 amendments to the Bay Delta Plan, which set flow and water quality objectives for the San Joaquin River and its major salmon bearing tributaries, including the Tuolumne, Stanislaus, and Merced Rivers. The Phase 1 amendments also revised the southern Delta salinity objective to protect agricultural supply beneficial use in the Delta. The SWRCB amended the resolution to direct its staff to assist the California Natural Resources Agency in completing a Delta watershed-wide voluntary agreement by March 1, 2019, and to incorporate the agreement as an alternative for a future comprehensive Bay Delta Plan update that the Board would consider soon after December 1, 2019. Should a voluntary agreement be completed by March 1, 2019, the SWRCB believes the 8-month period before it considers that agreement, on or around December 1, 2019, should be sufficient time for completion of any necessary environmental reviews and public input.

Prior to the SWRCB decision, Chuck Bonham, Director of the DFW, and Karla Nemeth, Director of the DWR, presented the current status of the State's voluntary agreements. Their presentation covered the agreement framework as well as proposed term sheets for the Delta and the Sacramento, Feather, Yuba, American, Mokelumne, Tuolumne, and San Joaquin Rivers. Their framework includes a description of flow and non-flow measures, habitat restoration and other stressor reduction measures, adaptive management, and funding sources. Additional information on the proposed voluntary agreements can be found at the following website:

http://resources.ca.gov/voluntary-agreements/

Supporters of the voluntary agreements unsuccessfully requested that the SWRCB delay its decision to adopt SWRCB staff's recommended plan amendments in order to provide additional time to complete the voluntary agreements in 2019. Instead, the SWRCB's decision incorporates Phase 1 amendments that require 30 to 50 percent of unimpaired flow to be maintained in the Tuolumne River, the Merced River, and the Stanislaus River from February to June. This could significantly reduce the supply of water to the San Francisco Public Utilities Commission (SFPUC) and Santa

Clara County, especially during droughts, unless voluntary agreements including negotiated terms for flows on the Tuolumne River are ultimately adopted by the SWRCB. Adoption of voluntary agreements as a Bay Delta Plan update would require additional review, analysis, and public process.

The unimpaired flow requirements adopted by the SWRCB will not be implemented until Phase 2, otherwise known as the Sacramento/Delta Update to the Bay Delta Plan, is completed and a program of implementation is developed. On July 6, 2018, the SWRCB released a framework for the Phase 2 Sacramento/Delta update that describes changes that will likely be proposed in 2019 through a formal proposal and supporting environmental document. The changes include unimpaired flow requirements for the Sacramento River and its salmon-bearing tributaries that range between 45 and 65 percent, with a starting point of 55 percent.

Implementation of the criteria adopted in Phase 1 and Phase 2 of the Bay Delta Plan update would be take place through Phase 3 in which the SWRCB will use its adjudicative authority to assign responsibility to water rights holders for meeting the updated plan requirements. The SWRCB will determine specific implementation procedures on a date yet to be announced.

Potential impacts to the District from adoption of Phase 1 amendments

The District described potential impacts from adoption of the Phase 1 amendments in a letter to the SWRCB dated July 27, 2018, which is included as Attachment 1. If the SWRCB ultimately does not move from its staff unimpaired flow recommendations for the Tuolumne River, SFPUC predicts a doubling of water-short years, with shortages increasing from between 10 and 20 percent to between 40 to 54 percent under a 40 percent unimpaired flow allocation; these shortages could increase under higher unimpaired flow conditions. This in turn could reduce the amount of SFPUC supplies available to cities within Santa Clara County by an additional 21 to 78 percent during a repeat of the 1987 to 1992 drought, depending upon the level of unimpaired flow imposed on the Tuolumne in any given year and depending on how SFPUC and its wholesale customers agree to share the limited yield. Such a reduction in SFPUC supplies could result in greater District supplies called for by these impacted cities to meet demands. Average annual impacts to Santa Clara County could be an increase in the frequency of shortage years of between 5 and 15 percent, with an average shortage magnitude increase of up to 14,000 acre-feet. In addition, recent staff analysis indicates that the reduction in SFPUC supplies may increase the magnitude of water shortage contingency plan actions during a long-term drought by 10 to 20 percent.

ATTACHMENTS:

Attachment 1: 072718 SCVWD Comment Letter to SWRCB

UNCLASSIFIED MANAGER:

Garth Hall, 408-630-2750

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Santa Clara Valley Water District

July 27, 2018

State Water Resources Control Board Attn: Ms. Jeanine Townsend, Clerk of the Board 1001 I Street, 24th Floor Sacramento, CA 95814-0100

Via email: LSJR-SD-Comments@waterboards.ca.gov

Subject: Comment Letter - Revisions to Proposed Bay-Delta Plan Amendments

The Santa Clara Valley Water District (District) appreciates the opportunity to comment on the proposed final amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan). The District is the primary water resource management agency for Santa Clara County providing water supply and flood protection for Silicon Valley and its 1.9 million residents.

The District also has a long-standing commitment to environmental stewardship, both within Santa Clara County as well as within the Delta and its watershed. For many years, we have actively supported and participated in science, research, and habitat restoration in coordination with the Interagency Ecological Program and fishery agencies, and for the past two years have played a leadership role in the Collaborative Science and Adaptive Management Program.

The District remains concerned with the approach the State Water Board continues to take in the proposed plan amendments, and strongly supports the State Water Board's consideration of voluntary agreements to help achieve desired benefits. The District believes that a science-based, voluntary settlement approach that incorporates effective non-flow measures and optimizes the use of limited water supplies is the best path to protecting and improving the Delta ecosystem while balancing other beneficial uses.

The unimpaired flow approach is not an efficient way to use limited resources

Our considerable experience and knowledge in ongoing Delta science efforts have convinced us that a singular focus on flow volumes is not likely to provide meaningful benefits to the Delta ecosystem and detracts from the collective ability to develop a comprehensive, holistic approach to environmental restoration and wise water management. Focus on increasing flows to meet unimpaired flow targets will reduce the flexibility to adapt to changing conditions. It will

Our mission is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.

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also drain financial and water resources that could be used to adaptively address a suite of stressors, focusing first on those that are most harmful to the Delta ecosystem.

The District supports the ultimate goal of improving the Bay-Delta ecosystem; however, we continue to have significant concerns over the State Board's unwillingness to consider more efficient ways to use the State's limited water supplies. On page 34 of the State Water Board's Master Response 1.1, the State Water Board acknowledges that "a more natural flow pattern would be beneficial to [fish and wildlife] beneficial uses." However, the comments do not address the District's March 17, 2017 comments on the draft Substitute Environmental Document (SED) that "unimpaired flows" do not have the same form and function as natural flows in the highly-altered Bay Delta system, and that the best available science should be used to craft approaches that recognize and respond to competing needs. Focusing solely on unimpaired flows will cause higher flows in leveed and rock-lined channels which, merely increases the depth and velocity of the flow. In contrast, a more natural flow pattern is one where storm and spring-melt flows spill out onto the riparian and floodplain landscape and create increased spawning habitat, greater food resources, and shelter from predators that inhabit the major river corridors. Beneficial use of riparian and floodplain landscapes can be accomplished with physical modifications that reduce the stage at which floodplains are inundated, and focuses on the functions of flow, providing benefits to native fish while also sustaining other beneficial uses of that water. Simply shaping flows, as proposed by the State Water Board, will not achieve these desired ecosystem functions without using unreasonable amounts of water in the absence of physical modifications.

The State Water Board continues to propose an inefficient approach in its recently released Framework for the Sacramento/Delta Update to the Bay-Delta Plan. Available science indicates that non-flow measures, such as habitat restoration and food production, predation control, reduction of invasive species, and reduction of contaminant loading into the Bay Delta are critical to restoring the environmental health of the Bay Delta. The Framework seems to imply that in certain circumstances voluntary agreements will only result in the State Water Board imposing the lower end of the unimpaired flow range. However, the District urges the State Water Board to strive towards replacing the unimpaired flow requirement in its entirety with voluntary agreements that holistically address stressors through a combination of functional flows, physical modifications, and other non-flow measures.

<u>The proposed amendments will have a significant impact on SFPUC wholesale</u> <u>customers in Santa Clara County</u>

The District is extremely concerned about the potential impacts to Santa Clara County's water supplies from the combination of Phase 1 and Phase 2 amendments to the Bay-Delta Plan. Santa Clara County relies on water from the Delta watershed for 55 percent of its water supply on average. Forty percent is conveyed through the Delta by the State Water Project (SWP) and Central Valley Project (CVP) and 15 percent, or about 60 thousand acre-feet (TAF) per year, comes from San Francisco's Regional Water System (RWS).

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According to the State Water Board's own analysis, the 40 percent of unimpaired flows scenario could result in an average reduction of up to 137 TAF in supplies to San Francisco's RWS each year during a repeat of the 1987 to 1992 drought. The District's March 2017 comment letter described the significant impacts to Santa Clara County's water supplies that would result from a flow objective requiring 40 percent of unimpaired flow from the Tuolumne River and other tributaries to the San Joaquin River. The State Water Board's response dismissed the District's concerns, claiming that the District inflated the severity of rationing to RWS customers within Santa Clara County by prorating allocations to wholesale customers for shortages in excess of 20 percent based on the allocations prescribed for a 20 percent shortage. To the contrary, SFPUC managers have concurred that the rationing scenario the District modeled is a reasonable potential outcome of the Phase 1 amendments.

To capture the potential range of impacts, the District updated its modeling to include an alternative approach to rationing consistent with assumptions made in the March 2017 report, "Bay Area Socioeconomic Impacts Resulting from Instream Flow Requirements for the Tuolumne River", prepared for SFPUC by Dr. David Sunding. The updated analysis provides a possible range of impacts to RWS deliveries to Santa Clara County during a repeat of the 1987-1992 drought, as shown in the table below. The modeling shows reductions in deliveries of about 18% or 11 TAF during a repeat of the drought even without the unimpaired flow requirements. The table shows the additional shortage that would be attributed to the unimpaired flow requirement. Additional details on the analysis are provided in Attachment 1.

Table 1: Average Annual Incremental Impacts of Phase I Unimpaired Flow Requirements on Santa Clara County's RWS Wholesale Customers During a Repeat of the 1987 to 1992 Drought.

Unimpaired Flow Requirement	Incremental Reduction in RWS Deliveries to Santa Clara County Wholesale Customers (Percent)	Incremental Reduction in RWS Deliveries to Santa Clara County Wholesale Customers (TAF)
30%	21%-32%	12-18
40%	35%-55%	21-32
50%	50%-78%	29-45

The proposed amendments will have a significant impact on Santa Clara County's water supply reliability

When the District integrates these shortages into the entire water supply portfolio for Santa Clara County, including recycled water, local surface water, groundwater, conservation, SWP and CVP supplies, and groundwater banking in the Central Valley, they result in significant impacts to the county's water supply reliability.

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In the base case, without the proposed unimpaired flow requirements, District modeling indicates that county-wide shortages occur in about 32% of years with an average annual magnitude of 69 TAF¹. The proposed flow requirements would increase the frequency of shortages by 4-15 percent and increase the average magnitude of those shortages by 5-19 percent. More details on the analysis and results are included in Attachment 1.

To minimize county-wide shortages caused by the reductions in deliveries to Santa Clara County's RWS wholesale customers, these customers would draw more heavily on local groundwater supplies which are necessary to help get through extended dry periods. Therefore, in addition to increased shortages, the County's overall system reliability would be decreased in response to the unimpaired flow requirements. The reductions to RWS's wholesale customers in Santa Clara County, in particular when considered in the context of the potential Phase 2 amendments, will have a significant impact on the ability of the District to provide reliable water supplies to our communities, businesses, and local streams, and make it more difficult for us to protect our local groundwater basins and prevent land surface subsidence. The reduction in local storage would make Santa Clara County more vulnerable to future dry periods, emergencies, and facility outages. These groundwater depletions will require additional supplies to recharge groundwater levels; such incremental supplies are not identified and their impacts are not analyzed in the Final SED.

Water managers cannot rely on water transfers to compensate for these magnitudes of reductions in supplies

The State Water Board also asserts that SFPUC's water rationing-only approach is not reasonably foreseeable in part because SFPUC would be more likely to secure replacement supplies than to "undertake a course of action that would have potentially devastating effects on the San Francisco Bay Area economy and that would be expected to be widely unacceptable to residents of the Bay Area community" (See SED Master Response 8.5 at 19). However, the State Water Board's transfers-only approach is not reasonably foreseeable. The District previously commented that the District and SFPUC will be hard pressed to find the volume of transfer supplies that the State Water Board envisions. The State Water Board's response does not address our stated concern that in dry years demand exceeds available transfer supplies, and sellers face political and environmental pressures to abstain from transferring water outside of their region. Implementation of the 40 percent unimpaired flow requirements will exacerbate this situation, especially in light of the State Water Board's reference to future, unknown minimum reservoir carryover storage targets (see SED Appendix K at 28) and the recent Framework for the Sacramento/Delta Update to the Bay-Delta Plan, which contemplates an additional two million-acre-foot (MAF) reduction in available water supplies resulting from the proposed 55 percent unimpaired flow requirement.

The State Water Board's response also does not address our concern that in years when transfer supplies are more plentiful, conveyance capacity across the Delta can be severely

¹ Based on modeling using 94-years of hydrologic data (1922 to 2015) and future demands.

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limited. For example, in 2016, there was no conveyance capacity for new transfers of non-SWP/CVP water. Nor does the State Water Board response consider the impact of conveyance losses of up to 35% on the quantity or cost of transfer supplies. Attachment 1 provides additional information supporting the District's concerns with the State Water Board's analysis of water transfer availability and cost.

<u>Concerns regarding Phase 1 amendments are amplified given the recently released</u> <u>Phase 2 Framework for the Sacramento/Delta Update to the Bay-Delta Plan (Phase 2</u> <u>Framework)</u>

The State Water Board's recently released Phase 2 Framework proposes a similar, but even higher unimpaired flow requirement than that proposed in Phase 1 for the San Joaquin River and its tributaries, repeating an approach that promotes the inefficient use of limited water supplies and magnifying the water supply impacts produced by the Phase 1 unimpaired flow requirements. The District's analysis of Phase 1 impacts likely understates water supply impacts, especially in light of the State Water Board's reference to future, unknown minimum reservoir carryover storage targets (see SED Appendix K at 28) and the Phase 2 Framework. While it is still unknown how much of the supply reduction from the Phase 2 Framework will be assigned to the SWP and CVP, it is likely that the District will see additional impacts to its water supplies, either as reductions in SWP and CVP imports which make of 40 percent of the District's water supplies on average, or as reduced availability of supplemental transfer supplies. The District requests that the State Water Board consider other more reasonable options to make the best use of California's precious water supplies, such as utilizing a functional flow approach coupled with physical modifications to optimize biological benefits, and allowing more time for voluntary settlement agreements to develop, instead of perpetuating the unimpaired flow approach in the Phase 2 amendments.

The District has long been committed to both reliable water supplies and environmental stewardship. We continue to encourage the State Water Board to develop solutions that meet both of these objectives.

Sincerely,

Norma J. Camacho Chief Executive Officer

Attachment 1: Technical Comments on Proposed Amendments to Bay-Delta Plan

cc: Santa Clara Valley Water District Board Members

Santa Clara Valley Water District Comment Letter - Revisions to Proposed Bay-Delta Plan Amendments July 27, 2018

Attachment 1 Technical Comments on Proposed Amendments to Bay-Delta Plan

Summary

On March 17, 2017 the Santa Clara Valley Water District (District) submitted comments on the proposed amendments to the Bay-Delta Plan and draft Substitute Environmental Document (SED). This attachment provides information in response to the State Water Board's response to our comments and additional analysis of significant impacts to Santa Clara County, focusing on three areas:

- 1. Additional information in response to State Water Board comments regarding the District's March 17, 2017 comment letter.
- 2. Updated analysis on the potential impacts to Santa Clara County from the State Water Board's proposed adaptive range of 30 to 50 percent unimpaired flows.
- 3. Additional information on the cost and availability of water transfers as potential replacement supplies to minimize impacts of water supply reductions.

Additional information in response to State Water Board comments regarding the District's March 17, 2017 comment letter

The proposed amendments to the Bay-Delta Plan would establish an adaptively managed flow requirement on the Tuolumne River that would range between 30 percent and 50 percent of unimpaired flow with a starting point of 40 percent. The Final SED estimates impacts to San Francisco Public Utilities Commission (SFPUC) water reliability in Appendix L, indicating that San Francisco's Regional Water System (RWS) water supplies could experience an average shortage of 137 TAF during each year of a repeat of the 1987-1992 drought. Such a shortage would impact Santa Clara County's water supply reliability because the County relies on RWS supplies to meet 15 percent of its demand. The District's March 17, 2017 comment letter included an analysis of how this could impact the District's and Santa Clara County's water supply reliability. The State Water Board's response appears to dismiss the District's concerns by implying the District overstated potential impacts. Key issues raised by the State Water Board and the District's response are provided below.

a) The State Water Board claims the District amplified water supply effects by using SFPUC's future demands instead of fiscal year 2012-2013 actual demands or fiscal year 2015-2016 drought demands.

<u>*Response*</u>: In a water supply planning approach, which the State Water Board itself assumes affected entities would use¹, it is standard practice to analyze and plan for

¹ "The SED analysis is based on the reasonable assumption that affected entities such as SFPUC would use a water supply planning approach, to prepare for times when water supplies would be reduced." State Water Board Master Response 8.5 at 5.

future demands. District staff is unaware of any planning analysis that utilizes past demands to assess a future impact, as this typically does not provide for a well-reasoned analysis.

b) The State Water Board claims the District amplified water supply effects by pro-rating SFPUC's wholesale rationing approach for system-wide shortages greater than 20 percent.

<u>Response</u>: The District disagrees with this claim given that SFPUC and their wholesale customers do not have an agreed upon plan to allocate supplies for system-wide shortages greater than 20 percent. Extrapolating from data on existing conditions to predict responses outside of the known range of responses is a common and accepted practice in water supply planning processes. With public health and safety at stake, it is entirely reasonable and appropriate to make conservative assumptions for water supply planning purposes.

However, to evaluate the full range of potential water supply impacts, the District updated its analysis to also include a fixed allocation approach resulting in lower cutbacks to SFPUC wholesale customers and larger cutbacks to SFPUC retailers. This fixed allocation approach is used by the Brattle Group in the report SFPUC attached to its March 17, 2017 comment letter on the Revised SED², as well as a more recent 2018 Brattle Group report that SFPUC submitted to FERC³. The results of this updated analysis are provided below.

c) The State Water Board claims the District amplified water supply effects by assuming the Scenario 2 interpretation of the Fourth Agreement.

<u>Response:</u> The Fourth Agreement between SFPUC and Turlock and Modesto Irrigation Districts allocates responsibility to meet instream flow requirements below New Don Pedro Reservoir that may be imposed on the irrigation districts during the FERC relicensing, among other things. According to SFPUC's March 2017 comment letter to the State Water Board, Article 8 of the Fourth Agreement could result in San Francisco being responsible to provide approximately 51.7 percent of the State Water Board's proposed flow requirement which corresponds to Scenario 2 in the State Water Board's analysis. In contrast, the State Water Board's Scenario 1 assumes SFPUC and the irrigation districts might modify their agreement whereby SFPUC might agree to provide monetary compensation to the irrigation districts in exchange for the irrigation districts agreeing to provide all of the water necessary to meet the new flow requirements. As SFPUC points out in footnote 6 of their March 2017 comment letter, "As a water supply provider to approximately 2.6 million people throughout the Bay

² San Francisco Public Utilities Commission. 2017. *Bay Area Socioeconomic Impacts Resulting from Instream Flow Requirements for the Tuolumne River*. March 2017

³ San Francisco Public Utilities Commission. 2018. Socioeconomic Impacts of Water Shortages within the Hetch-Hetchy Regional Water System Service Area. January 2018

Area, San Francisco must utilize worst-case scenarios for water supply planning purposes."

d) The State Water Board claims the water rationing-only approach used in the District's analysis is not a reasonably foreseeable method for compliance and that its use amplified water supply effects

<u>Response</u>: While the District will make every reasonable effort to compensate for a reduction in available supplies, there is no guarantee that any such efforts will be successful. The District is already planning to invest about \$2 billion over the next ten years in new water supply projects to help fill the gap between future water demands and supplies that is predicted to occur even without the State Water Board's proposed amendments. Under such compromised conditions imposed by the proposed amendments, water rationing may be the only feasible recourse open to the District.

In addition, the State Water Board states that transfers can be secured to offset any water supply reductions caused by the proposed amendments. (see SED Appendix L, at 26). The District does not agree that the State Water Board's approach is reasonably foreseeable. Based on our experience, the District will be hard pressed to find the volume of transfer supplies necessary to compensate for reductions as a result of the proposed amendment. In dry years, demand exceeds available transfer supplies, and sellers face political and environmental pressures to abstain from transferring water outside of their region. Implementation of the proposed Phase 1 reductions in supply will exacerbate this situation, increasing the demand on even more limited water supplies. In years when transfer supplies are more plentiful, conveyance capacity across the Delta can be limited. For example, in 2016 there was no conveyance capacity for new transfers of non-SWP/CVP water. Conveyance losses are also high; as much as 35 percent of purchased water can be lost in transit.

Whether SFPUC and the District choose to address the potential water supply shortage created by the State Water Board's proposed amendments with water rationing, water transfers, or some other method does not change the fact that the State Water Board's own analysis estimates there would be an average shortage in SFPUC water supplies of 137 TAF during each year of a repeat of the 1987-1992 drought. Based on SFPUC's predicted future demand of 297 TAF, this would constitute a 46 percent shortage in supply that SFPUC and its water users, including common customers with the District, would need to find some way, or ways to replace. In relation to SFPUC's fiscal year 2012-2013 demands of 250 TAF, this reduction equates to a shortfall of almost 55 percent of the water supply for approximately 2.6
million people and the 19th largest economy in the world⁴. That is a very large quantity of water to make up by any approach.

The District's analysis likely <u>understates</u> potential water supply impacts, especially in light of the State Water Board's reference to future, unknown minimum reservoir carryover storage targets (see SED Appendix K at 28) and the recent Phase 2 Framework for the Sacramento/Delta Update to the Bay-Delta Plan which contemplates an additional two million-acre-feet reduction in available water supplies resulting from the proposed 55 percent unimpaired flow requirement. While it is still unknown how much of that supply reduction will be assigned to the State Water Project (SWP) and Central Valley Project (CVP), it is probably a safe assumption that the District will see additional impacts to its water supplies, either as reductions in SWP and CVP imports or as reduced availability of supplemental transfer supplies, if the Bay-Delta Plan is updated according to the Framework.

e) The State Water Board states that "the SCVWD analysis does not display modeling results in context of the complete water supply portfolio for SCVWD. The RWS provides approximately 15 percent of SCVWD's water supply portfolio. Any reductions to the SFPUC portion of SCVWD's water supply portfolio are likely to be addressed by the substantial flexibility they currently have in their system (e.g., use of water from the Central Valley Project [CVP] or SWP). (See SED Master Response 8.5 at 50)"

Response: As described in the District's March 17, 2017 comment letter, the District's modeling analysis did indeed include and integrate the entire water supply portfolio for Santa Clara County, including recycled water, local surface water developed by both the District and by other agencies such as San Jose Water company, groundwater, conservation, SWP and CVP supplies, and groundwater banking in the Central Valley. It is through this comprehensive analysis that optimizes the functionality of its various supplies that specific shortage impacts have been determined. The State Water Board's statement that reductions in SFPUC deliveries would be addressed by flexibility in the District's system is unsupported by any analysis and is contrary to the careful work produced by those that understand and operate the District's water supply system. Further, the State Water Board claim that "any reductions to the SFPUC portion of SCVWD's water supply portfolio are likely to be addressed by the substantial flexibility they currently have in their system (e.g., use of water from the Central Valley Project [CVP] or SWP)" does not take into consideration the State Water Board's recent Phase 2 Framework which contemplates an additional 2 million acre-feet reduction in available water supplies resulting from the proposed 55 percent unimpaired flow requirement on the Sacramento River and its tributaries and how that requirement may impact those SWP and CVP supplies.

⁴ Bay Area Council Economic Institute. 2018. *Continuing Growth and Unparalleled Innovation: Bay Area Economic Profile, Tenth in a Series.* July 2018.

Updated analysis on the potential impacts to Santa Clara County from the State Water Board's proposed adaptive range of 30 to 50 percent unimpaired flows

The District's March 17, 2017 comment letter only included analysis of the proposed 40 percent of unimpaired flow requirement. The District has since updated its Water Evaluation and Planning (WEAP) model to better reflect future conditions and operations and to evaluate the full proposed adaptive range of 30 to 50 percent of unimpaired flow. The District also evaluated the range of possible shortage allocation scenarios between SFPUC and its wholesale customers.

Updates to the WEAP model in the updated analysis include reduced demand projections compared to the 2015 Urban Water Management Plan 2040 demand levels to reflect the following:

- Assumption that retailers will meet their 20x2020 water use reduction targets (per Senate Bill X7-7)
- 2) Additional conservation savings based on the District Water Use Efficiency Model and new demand management programs
- 3) Updated growth projections based on studies from retailers and regional agencies

In addition to changes in demand projections, the District removed some potential infrastructure projects from the model that have not yet been approved by the District's Board of Directors or are not under construction since there are significant regulatory and financial uncertainties (e.g., indirect potable reuse). In their place, District Board-approved planning projects related to conservation, demand management, and storm water capture were added to the model.

The District also updated imported water assumptions to better reflect future regulatory assumptions. The original WEAP model used an imported water scenario representing existing regulatory conditions. The District replaced the imported water dataset with the scenario for greater outflows to the San Francisco Bay that is provided in the Department of Water Resources' 2015 Delivery Capability Report.

The District also evaluated an additional shortage allocation approach in which SFPUC and its wholesale customers agree to allocate shortages greater than 20 percent according to the same split specified in the Water Shortage Allocation Plan for a 20 percent shortage. This fixed allocation approach is used by the Brattle Group in the report SFPUC attached to its March 17, 2017 comment letter on the Revised SED⁵, as well as a more recent 2018 Brattle Group report that SFPUC submitted to FERC⁶. The fixed allocation approach allocates at least 62.5 percent of the available RWS supplies to the wholesale customers and results in more water being available to these customers than under the prorated allocation approach the District used for its March 17, 2017 comment letter on the Revised SED. However, SFPUC has provided no guarantee that the fixed allocation approach would be employed during a future shortage of greater than 20 percent, and so it can best be used as an optimistic bookend when considering the range of impacts to Santa Clara County. The modeling shows reductions in deliveries during a repeat of the drought even without the unimpaired flow

⁵ San Francisco Public Utilities Commission. 2017. *Bay Area Socioeconomic Impacts Resulting from Instream Flow Requirements for the Tuolumne River*. March 2017

⁶ San Francisco Public Utilities Commission. 2018. Socioeconomic Impacts of Water Shortages within the Hetch-Hetchy Regional Water System Service Area. January 2018

requirements. The table below shows the additional shortage that would be attributed to the unimpaired flow requirement.

Table 1: Average Annual Incremental Impacts of Phase 1 Unimpaired Flow Requirements on SFPUC's RWS, its Wholesale Customers, and its Wholesale Customers in Santa Clara County During a Repeat of the 1987 to 1992 Drought.

Unimpaired Flow Requirement	SFPU System-wid	C RWS le Shortage ^a	SFPU(Wholesale	C RWS Shortage⁵	SFPUC RWS Wholesale Shortage (Santa Clara County) ^{b,c}		
	Percent	(TAF/yr)	Percent	(TAF/yr)	Percent	(TAF/yr)	
30%	20%	60	18%-27%	37-56	21%-32%	12-18	
40%	34%	101	41%-48%	63-99	35%-55%	21-32	
50%	49%	145	44%-69%	91-141	50%-78%	29-45	

^a Per SFPUC's analysis of a 2040 demand of scenario (297 TAF/yr). Represents the median shortage level over the 1987-1992 period.

^b The Water Shortage Allocation Plan between SFPUC and the wholesale customers only specifies allocations for system-wide shortages of up to 20 percent. For shortages greater than 20 percent the District considered a range of possible outcomes bookended by two different assumptions:

- 1. Fixed allocation approach: Wholesale customers would continue to receive the same percentage share of the water as dictated for a 20 percent shortage under the Water Shortage Allocation Plan (62.5 percent).
- or
 - ^{2.} Prorated allocation approach: Shortages to wholesale customers above 20 percent would be prorated based on the allocations under a 20 percent shortage. For example, since a 20 percent system-wide shortage results in a 28 percent shortage to the wholesale customers, a 40 percent system-wide shortage would result in a 56 percent shortage to the wholesale customers. 40% X (28% / 20%) = 56%.

^c Assumes demand of 59 TAF/yr based on projections in the Urban Water Management Plans for the affected Santa Clara County agencies. Full delivery projections are smaller than total allocated amount.

The District used the updated WEAP model to analyze how the projected shortages to SPFUC RWS wholesale customers in Santa Clara County would affect the entire District service network under the full proposed adaptive range of unimpaired flow requirements and under both water shortage allocation approaches.

The District is already in the process of updating its Water Supply Master Plan to respond to potential future water supply shortages. The Water Supply Master Plan will describe new water supply investments the District is planning to make to provide a reliable and sustainable water supply in a cost-effective manner. Many of these new water supply investments are already included in the District's base case scenario. In the base case, without the proposed unimpaired flow requirements, District modeling indicates that county-wide shortages occur in about 32 percent of years with an

average annual magnitude of 69 TAF⁷. The proposed flow requirements would increase the frequency of shortages by 4 to 15 percent and increase the average magnitude of those shortages by 5-19 percent.

Table 2 Percent of	voars Santa Clara	County could h	o in shortago h	based on MEAE	2 analysis7
	years Santa Claic	a County Could L	je ili slivilaye L	Jaseu un WEAr	- anaiysis .

SFPUC RWS Shortage		Percent of Years in Shortage								
Allocation Approach	No UF Requirement	30 % UF	40% UF	50% UF						
Fixed	32%	36%	37%	43%						
Prorated	32%	38%	43%	47%						

Table 3. Average Magnitude of shortages in Santa Clara County based on WEAP analysis⁷.

SFPUC RWS	A	verage Magnitude	erage Magnitude of Shortage (TAF)							
Allocation Approach	No UF Requirement	30% UF	40% UF	50% UF						
Fixed	69	73	76	76						
Prorated	69	83	82	79 ⁸						

Additional information on the cost and availability of water transfers as potential replacement supplies to minimize impacts of water supply reductions

The State Water Board asserts that the impacts from the predicted supply reductions will not be as great as SFPUC and the District present because the affected water agencies will be able to secure transfer supplies to make up the difference. In its March 17, 2017 letter, the District commented that based on past experience it is not reasonable to assume the Bay Area would be able to secure a sufficient volume of transfer supplies to make up for the reductions anticipated under the 40 percent unimpaired flow requirement. The State Water Board's response does not address our stated concern that in dry years, demand exceeds available transfer supplies, and sellers face political and environmental pressures to abstain from transferring water outside of their region. Implementation of the 40 percent unimpaired flow requirements will exacerbate this situation, especially in light of the

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⁷ Based on modeling using 94-years of hydrologic data (1922 to 2015) and future demands.

⁸ The magnitude of shortage decreases in the 50 percent unimpaired scenario relative to the 30 and 40 percent unimpaired scenarios because there are a greater number of shortages, many of which are smaller shortages that decrease the average size of shortage.

State Water Board's reference to future, unknown minimum reservoir carryover storage targets (see SED Appendix K at 28) and the recent Framework for the Sacramento/Delta Update which contemplates an additional two million acre-feet reduction in available water supplies resulting from the proposed 55 percent unimpaired flow requirement.

As an example, during the recent drought, surface water supplies, including available transfer supplies, were limited throughout California, resulting in the drawdown of local groundwater levels to the point of concern that land subsidence could be triggered in Santa Clara County, and significant land subsidence did indeed occur in the Central Valley. There were few sellers of transfer water and many buyers, and many of the potential sellers were reluctant to sell. With the State Water Board's 30 to 50 percent unimpaired flow requirement on the San Joaquin River and its tributaries, along with the potential 45 to 65 percent unimpaired flow requirement on the Sacramento River and its tributaries, there will be even less water available for transfer and more competition for that limited water during an extended drought.

The State Water Board's response also does not address our concern that in years when transfer supplies are more plentiful, conveyance capacity across the Delta and in SWP and CVP facilities can be limited. For example, in 2016, there was no conveyance capacity for new transfers of non-SWP/CVP water. Even if the District had been able to locate and negotiate additional transfer agreements, it would not have been able to arrange delivery of those supplemental supplies.

Finally, the State Water Board response does not consider the impact of conveyance losses on the quantity or cost of transfer supplies. The Department of Water Resources and U.S. Bureau of Reclamation apply carriage water losses to supplies transferred across the Delta that have ranged from 20 to 35 percent of the purchased water quantity. In drought years, losses have trended towards the higher end of this range. In other words, for every 1,000 acre-feet of water purchased, the buyer may only receive 650 acre-feet. This loss not only decreases the volume of water obtained but also increases the actual cost per acre foot of the water. For example, Table 8.5-6 in SED Master Response 8.5 lists the price at \$665 per acre-foot for several purchases by the San Luis & Delta-Mendota Water Authority in 2015. However, in 2015, the U.S. Bureau of Reclamation applied a 35 percent carriage water loss which means the San Luis & Delta-Mendota Water Authority and its member agencies, including the District, received 35 percent less water than they paid for, and therefore, the cost for water actually received was \$1,023 per acre-foot.

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Agenda Date: 1/23/2019 Item No.: 5.6.

COMMITTEE AGENDA MEMORANDUM

Santa Clara Valley Water Commission

SUBJECT:

Review Santa Clara Valley Water Commission Work Plan, the Outcomes of Board Action of Commission Requests; and the Commission's Next Meeting Agenda.

RECOMMENDATION:

Review the Commission work plan to guide the commission'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.

Special discussion from Director Nai Hsueh from the Board Policy and Planning Committee regarding aligning the Water Commission's work plan to the Board's 2019 Work Plan.

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.

ATTACHMENTS:

Attachment 1: Santa Clara Valley Water Commission 2019 Work Plan Attachment 2: Santa Clara Valley Water Commission April 10, 2019, Draft Agenda

UNCLASSIFIED MANAGER:

Michele King, 408-630-2711

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	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
1	Election of Chair and Vice Chair for 2019	January 23	Commission Elects Chair and Vice Chair for 2019. (Action)	
2	Annual Accomplishments Report	January 23	 Review and approve 2018 Accomplishments Report for presentation to the Board. (Action) Submit requests to the Board, as appropriate. 	
3	Review and Comment to the Board on the Fiscal Year 2019-20 Preliminary Groundwater Production Charges.	January 23	Review and Comment to the Board on the Fiscal Year 2019-20 Preliminary Groundwater Production Charges. <i>(Action)</i>	
4	Open Space Credit	January 23	Receive information on Open Space Credit. (Information)	
5	Update on the State Water Resources Control Board's Amendments to the Bay-Delta Water Quality Control Plan and Agency-Proposed Voluntary Agreements.	January 23	Receive an update on the State Water Resources Control Board's Amendments to the Bay-Delta Water	

Yellow = Update Since Last Meeting Blue = Action taken by the Board of Directors

ITEM	WORK PLAN ITEM	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
			Quality Control Plan and Agency-Proposed Voluntary Agreements. (Information)	
6	Review of Santa Clara Valley Water Commission Work Plan, the Outcomes of Board Action of Commission Requests and the Commission's Next Meeting Agenda	January 23 April 10 July 24 October 23	 Receive and review the 2019 Committee work plan. (Action) Submit requests to the Board, as appropriate. 	
7	Review and Comment to the Board on the Fiscal Year 2020 Proposed Groundwater Production Charges.	April 10	 Review and comment to the Board on the Fiscal Year 2020 Proposed Groundwater Production Charges. (Action) Provide comments to the Board, as necessary. 	
8	Discussion on how the cities propose working together (with the other cities, the county and the District) to develop a summit to address the unhoused population in our communities and creeks. Also, discuss the authority that the cities (police) have on removing the inhabitants and patrolling the creeks.	TBD	 Discuss issues regarding the unhoused population in our communities and creeks and propose how to work with the County to develop a summit to address this issue. Getting additional feedback from cities will be key in planning for this effort in 2019. (Action) 	

ITEM	WORK PLAN ITEM	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
			Submit requests to the Board, as appropriate.	
9	Update Salmonid in the District's waterways	TBD	 Receive information on Salmonid in the District's waterways. <i>(Action)</i> Provide comments to the Board, as necessary. 	
10	Climate Change Action Plan - Climate Change Impacts, Vulnerabilities and Stakeholder Needs	TBD	 Receive information on Climate Change Action Plan - Climate Change Impacts, Vulnerabilities and Stakeholder Needs. (Action) Provide comments to the Board, as necessary 	
11	Discussion on the Riparian Corridor Ordinance, Encroachment Process	TBD	 Discuss the Riparian Corridor Ordinance, Encroachment Process. (Action) Provide comments to the Board, as necessary. 	

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Board Representative



Chair , Vice Chair

DRAFT AGENDA

SANTA CLARA VALLEY WATER COMMISSION

WEDNESDAY, APRIL 10, 2019

12:00 p.m. – 2:00 p.m.

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

Time Certain:

12:00 p.m. 1. Call to Order/Roll Call

2. Time Open for Public Comment on Any Item Not on Agenda

Comments should be limited to two minutes. If the Commission 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 23, 2019, meeting

4. Action Items

5.1 Review and Comment to the Board on the Fiscal Year 2020 Proposed Groundwater Production Charges. (Darin Taylor)

Recommendation: Review and comment to the Board on the Fiscal Year 2020 **Proposed Groundwater Production Charges.**

5.2 Review Santa Clara Valley Water Commission Work Plan, the Outcomes of Board Action of Commission Requests and the Commission's Next Meeting Agenda (Commission Chair)

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

6. Clerk Review and Clarification of Commission Requests to the Board

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

7. <u>Reports</u>

Directors, Managers, and Commission 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.

- 7.1 Director's Report
- 7.2 Manager's Report
- 7.3 Commission Member Reports
- 8. <u>Adjourn</u>: Adjourn to next regularly scheduled meeting at 12:00 p.m., July 24, 2019, 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 Headquarter 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 commission meetings. Please advise the Clerk of the Board office of any special needs by calling 1-408-630-2277.

Santa Clara Valley Water Commission's Purpose and Duties

The Santa Clara Valley Water Commission of the Santa Clara Valley Water District is established to assist the Board of Directors (Board) with policies pertaining to water supply, flood protection and environmental stewardship in the areas of interest to Santa Clara County and the Towns and Cities therein.

The specific duties are:

- Prepare policy alternatives
- Provide comment on activities in the implementation of the District's mission
- Produce and present to the Board an Annual Accomplishments Report that provides a synopsis of the annual discussions and actions.

In carrying out these duties, Commission members bring to the District their respective expertise and the interests of the communities they represent. In addition, Commissioners may help the Board produce the link between the District and the public through information sharing to the communities they represent.

Handouts

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HANDOUT: AGENDA ITEM 5

Santa Clara Valley

Water District



The Water Supply Master Plan 2040 (Master Plan) is the District's strategy for providing a reliable and sustainable water supply in a cost-effective manner. It informs investment decisions by describing the type and level of water supply investments the District is planning to make through 2040, the anticipated schedule, the associated costs and benefits, and how Master Plan implementation will be monitored and adjusted. An integral component in developing the Master Plan is establishing countywide water demand projections.

The Master Plan water demands, known as the Trending Scenario, are based on 2020 water use targets in retailers' 2015 Urban Water Management Plans (UWMP), extended through 2040 to account for updated regional growth projections and water savings from future District conservation programs. The scenario produces 2040 countywide demands of approximately 402,000 acre-feet per year (AFY), compared to the approximately 435,000 AFY developed for the 2015 UWMP (Table 1).

The methodology for developing the Trending Scenario was as follows:

- To establish the 2020 base year water use, the analysis started with the retailers' 2015 UWMP "20x2020" targets. Water use by sector was then applied, using the retailers' 2013 water use billing data. It was assumed the proportional use by sector remained the same between 2013 and 2020.
- A compilation of data from the Association of Bay Area Government (ABAG) Projections 2013 data, the Plan Bay Area 2016 county data, and the 2016 Department of Transportation (DOT) jobs forecast was used to account for future growth (demographic, household, economic, and land use). Household and job growth rates were applied to the appropriate water use sectors (residential, multifamily, industrial, commercial, etc.) under each retailer's service area.
- IWR-MAIN was used to create a model for each retailer's service area demands.
- Lastly, each retailer's demands were reduced proportionately based on planned future water conservation program savings.

The benefits of this methodology are it allows for a good comparison of updated retailers' projections in the 2015 UWMPs (including the effects of the 2012-16 drought) and includes the effect of more recent demographic projections.

As presented at the December 17, 2018 Special Joint Meeting with the City of Sunnyvale, the Master Plan identifies shortages ranging from 36,000 AFY to 152,000 AFY during average and drought water supply conditions (Figure 1). The shortage of 36,000 AF, which represents less than 10% of the overall water demand, is small

enough that it can be made up through additional water conservation, transfers, and/or exchanges. The shortage of 152,000 AF does present a challenge and will be addressed through additional investments identified in the update to the Master Plan. As water demands are one of the key factors that will influence the overall level of investment needed, they will continue to be monitored and tracked as part of our annual Master Plan update to the Board.

Comico Area	2015 UWMP ¹	WSMP 2040
Service Area		Trending Scenario
	2040	2040
Cal Water Area	14,900	14,200
Gilroy	17,900	15,700
Great Oaks	12,500	10,700
Milpitas	23,500	14,600
Morgan Hill	11,000	9,700
Mountain View	13,500	14,100
Palo Alto	11,500	13,800
Purissima Hills	2,100	2,000
San Jose Muni	43,500	29,300
San Jose Water Company	169,400	158,700
Santa Clara	33,900	35,100
Stanford	4,700	4,700
Sunnyvale	28,200	30,900
Ag GW W-2	700	700
Ag GW Coyote	2,300	2,300
Ag GW Llagas	23,000	23,000
Other GW W-2	9,000	9,000
Other GW Coyote	2,200	2,200
Other GW Llagas	6,400	6,400
Raw Water	1,700	1,700
Losses	3,300	3,300
Total Demand (acre-feet) ²	435,000	402,000
¹ Rounded to the nearest hundre	ed.	
	uiu.	

Table 1. 2015 UWMP vs. WSMP 2040 Trending Scenario Water Demand, Year 2040

Water Commission Meeting Page 3 January 23, 2019





Figure 1. Declining Reliability in Year 2040

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HANDOUT: AGENDA ITEM 5.3

Preliminary FY 20 Groundwater Production Charge Analysis

January 23, 2019



Page 1 of 13

Presentation Outline

- 1. Water Use
- 2. Financial Analysis
 - ► FY 20 Analysis Scenario Assumptions
 - Scenarios
 - Other Information
- 3. Schedule

Water Usage (District Managed)



Financial Analysis: Scenario Assumptions HANDOUT: AGENDA ITEM 5.3

1) WSMP 90% Level Of Service

- Baseline Projects
- CWF (State side)
 - Paid for by water charges, not SWP Tax
- CWF (CVP side)
- No Regrets Package
- Potable Reuse Phase 1 to produce 24KAF by FY 28
 - Based on \$690M capital project, District contributes 30% "pay as you go"
 - P3 reserve at \$8M in FY 20 growing to \$20M by FY 28
- Pacheco Reservoir
- Transfer-Bethany Pipeline
- South County Recharge
 - Timing = beyond FY 29

Also Includes:

- \$200M warranty placeholder for dams & RWTP
- Guiding Principle #5

2) WSMP 80% Level Of Service

- Baseline Projects
- CWF (State side)
 - Paid for by water charges, not SWP Tax
- CWF (CVP side)
- No Regrets Package
- Potable Reuse Phase 1 to produce 24KAF by FY 28
 - Based on \$690M capital project, District contributes 30% "pay as you go"
 - P3 reserve at \$8M in FY 20 growing to \$20M by FY 28
- Pacheco Reservoir paid for by special tax
- Transfer-Bethany Pipeline
- South County Recharge
 - Timing = beyond FY 29

Also Includes:

- \$200M warranty placeholder for dams & RWTP
- Guiding Principle #5

3) WSMP 80%, Reduce Potable Reuse

- Baseline Projects
- CWF (State side)
 - Paid for by water charges, not SWP Tax
- CWF (CVP side)
- No Regrets Package
- Potable Reuse Phase 1 to produce 24KAF before FY 40
 - Based on \$345M capital project, District contributes 15% "pay as you go"
 - Delay remaining \$345M to beyond FY 29
 - P3 reserve at \$4M in FY 20 growing to \$10M by FY 28
- Pacheco Reservoir paid for by special tax
- Transfer-Bethany Pipeline
- South County Recharge
 - Timing = beyond FY 29

Also Includes:

- \$200M warranty placeholder for dams & RWTP
- Guiding Principle #5

Financial Analysis: Scenario Assumptions HANDOUT: AGENDA ITEM 5.3

4) WSMP 80%, No CWF, Reduce Potable Reuse

- Baseline Projects
- CWF (State side)
- CWF (CVP side)
- No Regrets Package
- Potable Reuse Phase 1 to produce 24KAF before FY 40
 - Based on \$345M capital project, District contributes 15% "pay as you go"
 - Delay remaining \$345M to beyond FY 29
 - P3 reserve at \$4M in FY 20 growing to \$10M by FY 28
- Pacheco Reservoir paid for by special tax
- Transfer-Bethany Pipeline
- South County Recharge
 - Timing = beyond FY 29

Also Includes:

- \$200M warranty placeholder for dams & RWTP
- Guiding Principle #5

5) WSMP	80%,	Reduce	Potable
Reuse	+ LV	+ Sites	

- Baseline Projects
- CWF (State side)
 - Paid for by water charges, not SWP Tax
- CWF (CVP side)
- No Regrets Package
- Potable Reuse Phase 1 to produce 24KAF before FY 40
 - Based on \$345M capital project, District contributes 15% "pay as you go"
 - Delay remaining \$345M to beyond FY 29
 - P3 reserve at \$4M in FY 20 growing to \$10M by FY 28
- Pacheco Reservoir paid for by special tax
- Transfer-Bethany Pipeline
- South County Recharge
 - Timing = beyond FY 29
- Sites & Los Vaqueros

Also Includes:

- \$200M warranty placeholder for dams & RWTP
- Guiding Principle #5

Board Member Comments on January 8, 2019

HANDOUT: AGENDA ITEM 5.3

- Scenario 4 should be eliminated
 - Does not meet 80% level of service goal
- Separate potential investments in Sites and Los Vaqueros reservoirs
 - include most viable option in scenario
- Little support for reducing investment in potable reuse prior to FY
 29, & delaying remaining investment to beyond FY 29
- Support for Scenario 1, achieves 90% LOS goal
 - General support indicated for scenarios that achieve 80% LOS goal

Financial Analysis: Additional Scenario Assumptions

HANDOUT: AGENDA ITEM 5.3

1) WSMP 90% Level Of Service (LOS)

- Baseline Projects
- CWF (State side)
 - Paid for by water charges, not SWP Tax
- CWF (CVP side)
- No Regrets Package
- Potable Reuse Phase 1 to produce 24KAF by FY 28
 - Based on \$690M capital project, District contributes 30% "pay as you go"
 - P3 reserve at \$8M in FY 20 growing to \$20M by FY 28
- Pacheco Reservoir
- Transfer-Bethany Pipeline
- South County Recharge
 - Timing = beyond FY 29

Also Includes:

- \$200M warranty placeholder for dams & WTP's
- Guiding Principle #5

North 8.1%, South 7.7% avg annual incr.

6) WSMP 90% LOS, Pacheco paid by other sources

- Baseline Projects
- CWF (State side)
 - Paid for by water charges, not SWP Tax
- CWF (CVP side)
- No Regrets Package
- Potable Reuse Phase 1 to produce 24KAF by FY 28
 - Based on \$690M capital project, District contributes 30% "pay as you go"
 - P3 reserve at \$8M in FY 20 growing to \$20M by FY 28
- Pacheco Reservoir paid for by other sources
- Transfer-Bethany Pipeline
- South County Recharge
 - Timing = beyond FY 29

Also Includes:

- \$200M warranty placeholder for dams & WTP's
- Guiding Principle #5

North 6.4%, South 7.2% avg annual incr.

7) WSMP 80% with Transfer-Bethany Pipeline

- Baseline Projects
- CWF (State side)
 - Paid for by water charges, not SWP Tax
- CWF (CVP side)
- No Regrets Package
- Potable Reuse Phase 1 to produce 24KAF by FY 28
 - Based on \$690M capital project, District contributes 30% "pay as you go"
 - P3 reserve at \$8M in FY 20 growing to \$20M by FY 28
- Pacheco Reservoir paid for by other sources
- Transfer-Bethany Pipeline
- South County Recharge
 - Timing = beyond FY 29

Also Includes:

- \$200M warranty placeholder for dams & WTP's
- Guiding Principle #5 Page 7 of 13

North 5.9%, South 6.4% avg annual incr.

Financial Analysis: Additional Scenario Assumptions

HANDOUT: AGENDA ITEM 5.3

- 8) WSMP 80% with Transfer-Bethany Pipeline, + LV
- Baseline Projects
- CWF (State side)
- CWF (CVP side)
- No Regrets Package
- Potable Reuse Phase 1 to produce 24KAF by FY 28
 - Based on \$690M capital project, District contributes 30% "pay as you go"
 - P3 reserve at \$8M in FY 20 growing to \$20M by FY 28
- Pacheco Reservoir paid for by other sources
- Transfer-Bethany Pipeline
- South County Recharge
 - Timing = beyond FY 29
- Los Vaqueros

Also Includes:

- \$200M warranty placeholder for dams & WTP's
- Guiding Principle #5

North 6.0%, South 6.8% avg annual incr.

- 9) WSMP 80%, Pacheco w/ \$250M WIIN, WIFIA Ioan & Partners Pay 20%
- Baseline Projects
- CWF (State side)
- CWF (CVP side)
- No Regrets Package
- Potable Reuse Phase 1 to produce 24KAF by FY 28
 - Based on \$690M capital project, District contributes 30% "pay as you go"
 - P3 reserve at \$8M in FY 20 growing to \$20M by FY 28
- Pacheco Reservoir
 - \$250M WIIN funding + WIFIA loan
 - Partner Agencies pay 20% of project
- Transfer-Bethany Pipeline
- South County Recharge
 - Timing = beyond FY 29
- Los Vaqueros

Also Includes:

- \$200M warranty placeholder for dams & WTP's
- Guiding Principle #5

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North 6.4%, South 6.6% avg annual incr.

Financial Analysis: Preliminary Groundwater Production Charge Projections



Financial Analysis: Preliminary Water Supply Investment Scenarios

No. County M&I Groundwater Charge Y-Y Growth %

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
May 2018	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	8.7%	5.9%	4.7%	
1) WSMP 90% LOS	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%
6) WSMP 90% LOS, Pacheco paid by Other	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%
7) WSMP 80% LOS w/ Xfer Bethany	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.8%	5.8%
8) WSMP 80% LOS w/ Xfer Bethany + LV	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	5.8%	5.8%	5.8%
9) WSMP 80% LOS w/ Xfer Bethany + WIIN	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%

So. County M&I Groundwater Charge Y-Y Growth %

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
May 2018	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	
1) WSMP 90% LOS	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%
6) WSMP 90% LOS, Pacheco paid by Other	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
7) WSMP 80% LOS w/ Xfer Bethany	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%
8) WSMP 80% LOS w/ Xfer Bethany + LV	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%
9) WSMP 80% LOS w/ Xfer Bethany + WIIN	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%

Financial Analysis: Preliminary Water Supply Investment Scenarios

No. County Increase per Month per Avg Household*

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
May 2018	\$4.31	\$4.72	\$5.18	\$5.68	\$6.24	\$6.84	\$6.73	\$4.96	\$4.19	
1) WSMP 90% LOS	\$3.60	\$3.89	\$4.20	\$4.54	\$4.91	\$5.31	\$5.74	\$6.20	\$6.71	\$7.25
6) WSMP 90% LOS, Pacheco paid by Other	\$2.84	\$3.02	\$3.22	\$3.42	\$3.64	\$3.87	\$4.12	\$4.39	\$4.67	\$4.97
7) WSMP 80% LOS w/ Xfer Bethany	\$2.62	\$2.77	\$2.94	\$3.11	\$3.29	\$3.49	\$3.69	\$3.91	\$4.07	\$4.31
8) WSMP 80% LOS w/ Xfer Bethany + LV	\$2.66	\$2.82	\$2.99	\$3.17	\$3.36	\$3.56	\$3.78	\$3.87	\$4.10	\$4.33
9) WSMP 80% LOS w/ Xfer Bethany + WIIN	\$2.84	\$3.02	\$3.22	\$3.42	\$3.64	\$3.87	\$4.12	\$4.39	\$4.67	\$4.97

So. County Increase per Month per Avg Household*

	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29
May 2018	\$1.19	\$1.29	\$1.38	\$1.49	\$1.61	\$1.73	\$1.86	\$2.01	\$2.16	
1) WSMP 90% LOS	\$1.19	\$1.29	\$1.38	\$1.49	\$1.61	\$1.73	\$1.86	\$2.01	\$2.16	\$2.33
6) WSMP 90% LOS, Pacheco paid by Other	\$1.12	\$1.20	\$1.28	\$1.37	\$1.47	\$1.58	\$1.69	\$1.82	\$1.95	\$2.09
7) WSMP 80% LOS w/ Xfer Bethany	\$0.99	\$1.06	\$1.12	\$1.19	\$1.27	\$1.35	\$1.44	\$1.53	\$1.63	\$1.73
8) WSMP 80% LOS w/ Xfer Bethany + LV	\$1.05	\$1.13	\$1.20	\$1.28	\$1.37	\$1.46	\$1.56	\$1.67	\$1.78	\$1.91
9) WSMP 80% LOS w/ Xfer Bethany + WIIN	\$1.02	\$1.09	\$1.16	\$1.24	\$1.32	\$1.41	\$1.50	\$1.60	\$1.71	\$1.82

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* Calculated based on groundwater production charge

FY 2019-2020 Schedule

- Jan 8 Board Meeting: Preliminary Groundwater Charge Analysis
- Jan 16 Water Retailers Meeting: Preliminary Groundwater Charge Analysis
- Jan 23 Water Commission Meeting: Prelim Groundwater Charge Analysis
- Feb 12 Board Meeting: Review draft CIP & Budget development update
- Feb 22 Mail notice of public hearing and file PAWS report

Mar 20 Water Retailers Meeting: FY 20 Groundwater Charge Recommendation

- Mar 26 Board Meeting: Budget development update
- Apr 1 Ag Water Advisory Committee
- Apr 2 Landscape Committee Meeting
- Apr 9 Open Public Hearing
- Apr 10 Water Commission Meeting
- Apr TBD Continue Public Hearing in South County
- Apr 23 Conclude Public Hearing
- Apr 24-26 Board Meeting: Budget work study session
- May 14 Adopt budget & groundwater production and other water charges

Summary of Preliminary Analysis^{HANDOUT: AGENDA ITEM 5.3}

Scenario 1 plus additional scenarios range from 5.9% to 8.1% annual increases in North County M&I groundwater charge, & 6.4% to 7.7% in South County

 Potential FY 20 increase ranges from \$2.62 to \$3.60 per month for the average household in North County, and \$0.99 to \$1.19 per month in South County

 Board direction to be incorporated into Report on Protection and Augmentation of Water Supplies (PAWS) scheduled for release on February 22, 2019 1-22-19

Dear Santa Clara Valley Water Commissioners:

The impacts of a potential reduction in Hetch Hetchy deliveries to Santa Clara County customers due to a newly-modified Delta Plan can be offset by wise development and use of local supplies through wastewater recycling, stormwater capture and conservation.

Local projects and water sources can yield more reliable water and substitute for water previously imported from the Delta. A SCVWD survey even showed that 67% of county voters prefer to pay for local recycled water and stormwater reuse, as opposed to less than half of surveyed voters willing to pay to maintain imported water that comes through the Delta.

• As David Sedlak (UCB professor) noted, San Jose would have enough water for an entire year if it just captured one-half the rainwater that falls within the city boundaries each year.

• Dr. Michael Connor (former General Manager East Bay Dischargers Authority and Chair of Bay Area Clean Water Agencies) noted that greywater reuse can mean 46% less imported water.

The claimed potential reduction in RWS deliveries of up to 45 TAF (SCVWD's July 27, 2018 letter) could easily be replaced by either of these means.

A longer discussion of the issues is included in the attached document "comment lttr re Delta Plan SWRCB" that we sent to the State Water Resources Control Board regarding the Delta Plan.

Thank you for your consideration of available sources that would meet the State Legislature's declaration of state policy "to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency."

Respectfully submitted,

Alan and Meg Giberson

HANDOUT: AGENDA ITEM 5.5

July 26, 2018

Via electronic mail: LSJR-SD-Comments@waterboards.ca.gov

State Water Resources Control Board Attn: Jeanine Townsend, Clerk to the Board Joe Serna Jr. CalEPA Headquarters Building 1001 I Street, Second Floor Sacramento, CA 95814

RE: Comment letter—Lower San Joaquin and Southern Delta, Bay-Delta Plan update

Dear Board Members:

We appreciate the opportunity to comment on the recently-released State Water Resources Control Board (SWRCB) Lower San Joaquin and Southern Delta update, Bay-Delta Plan (BDP, Plan). We welcome the Plan as a step toward restoring needed flows to an estuary in crisis. Please seek to maintain the strongest standards—50 to 60% of unimpaired flow, if possible, as recommended by other state agencies.

Delta waters and its ecosystem are not healthy because of years of over-diversions. This situation led to the Delta Reform Act of 2009, which enunciated the state's policy "to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency".¹

Yet, as the Natural Resources Defense Council and the Pacific Institute have estimated, each year California uses 6 maf more than the state's rivers and aquifers can sustainably provide. DWR planning in 1960 assumed that full demands for water could be met by the State Water Project and the Central Valley Project with the addition of hypothetical surplus water.² But that surplus water did not, in fact, appear. The National Research Council (NRC) has found that in some basins available supply is overallocated by more than 800 percent (measuring supply as average annual runoff).³ The NRC also noted "[w]ater scarcity has long existed in much of California.... The magnitude or intensity of scarcity has grown over time and it continues to grow.⁴ We now know that the wet 20th century will not be repeated in this century, and supplies once thought possible will not materialize.

Farm acreages and previously prohibited permanent crops (those harder to fallow in dry conditions) were allowed to increase during the 20th century—along with heavily subsidized

¹ California Water Code § 85021.

² http://wdl.water.ca.gov/waterdatalibrary/docs/historic/Bulletins/Bulletin 76/Bulletin 76 1960.pdf

³ Sustainable Water and Environmental Management in the California Bay-Delta, National Research Council, 2012, page 33

⁴ *Id*. at page 32
water to serve them—while the quality of those farm communities' lives, health and education levels decreased.⁵ These problems continue today.

Native species have suffered (numbers of native salmon, a keystone species, have plummeted to levels that threaten their survival), pollutants are more concentrated, water temperatures are elevated, dissolved oxygen is low, migratory cues for returning anadromous fish are often lacking, and sizeable sections of the economy have suffered from the lack of sufficient flows to maintain a healthy Delta and estuary.

Clearly, the over-allocation of water from the Sacramento and San Joaquin River basins is unsustainable (five acre-feet of consumptive water rights granted for every acre-foot of unimpaired flow actually available). And on average, less than 50% of the freshwater flow from the Central Valley reaches the Bay; in some years it is less than 35%.

The SWRCB has done foundational work in using peer-reviewed science to establish these new Bay-Delta update standards that will help safeguard the health of the Bay-Delta. The Board's actions are commendable in its diligent pursuit of its mission: to preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations. These new BDP objectives for flows through the Bay-Delta will begin to address the systemic problems that have plagued California's water system for decades, and which, if left unaddressed, will bring ever more severe negative environmental and social consequences.

Water conservation, recycling, reuse to the rescue

It is clear from excellent research done at California's universities, and by environmental groups, that water saved through conservation, reuse and recycling can make up for amounts that previously have been taken from the Delta—flows that should have been allowed to flow through the Delta, but which were instead exported for agriculture and M&I uses in areas to the south.

Indeed, the State Water Resources Control Board established a mandate in 2009 to increase the use of conserved/recycled/reused water in California:

We strongly encourage local and regional water agencies to move toward clean, abundant, local water for California by emphasizing appropriate water recycling, water conservation, and maintenance of supply infrastructure and the use of stormwater (including dry-weather urban runoff) in these plans; these sources of supply are drought-proof, reliable, and minimize our carbon footprint and can be sustained over the long-term.

⁵ N. Hundley, <u>The Great Thirst, Californians and Water: A History</u>, *see especially* chapter 7 and sub-chapter "Subsidized Agriculture and Social Inequity" (2001).

According to the NRDC and the Pacific Institute, agricultural efficiency alone could provide 6.6 mafy of water, important since agriculture uses 80% of California's developed water supply. Urban efficiency could supply potential savings of 5.2 mafy, and water reuse another 1.2-1.8 mafy. Stormwater capture has similar potential for water supply increases. California could save up to 14 maf each year with these strategies, greatly lessening the need for water from the Delta.⁶ The Pacific Institute notes further that urban water conservation and efficiency measures are less expensive than most new water supply options and are thus the most cost-effective way to meet current and future water needs. In fact, many residential and non-residential measures have a "negative cost," which means that they save the customer more money over their lifetime than they cost to implement.

Benefits from these water reuse methods include:

- cleaning up discharges to the Bay from sewage treatment plants (POTWs);
- reducing algal/cyanobacteria blooms caused in part by nutrients in POTW discharges;

• enhancing local water supplies, including dramatically increasing local supplies from enhanced stormwater capture (regarding stormwater harvesting in San Jose, Dr. David Sedlak⁷, has noted that "if San Jose could just capture half of the water that fell within the city, they'd have enough water to get them through an entire year"⁸;

- providing open space and recreation facilities during dry seasons;
- providing local control over our water supply.

Further specific examples and projected benefits from water recycling, capture and reuse that can replace imported water include:

• Landscape conversion can save up to 2 mafy in California, and is one of the lowestcost water supplies (The Cost of Alternative Water Supply and Efficiency Options in California, Pacific Institute, October 2016, page 17, Table 5, "Residential Water Efficiency Measures")

• Agricultural processes: dry farming, deficit irrigation, micro- and drip-irrigation, crop density manipulation—along with better crop choices—can lessen the need for ag water.

- Pajaro Valley, a mostly agricultural area on the Central Coast, receives no imported water; it is dependent on groundwater. Distributed stormwater recharge projects led by UCSC's Dr. Andy Fisher will improve stormwater infiltration. Similar projects could help recharge other areas' aquifers.
- Water-efficient crops and water efficient irrigation practices can replace water-intensive crops and wasteful practices. Prickly pear, dragonfruit, pomegranates, and even grapes and avocados, can be grown with less water. As UC Davis economist Daniel Sumner reportedly said, "markets and weather have always driven what farmers plant. The context is that what we produce

⁶ http://pacinst.org/wp-content/uploads/2014/06/ca-water-future.pdf

⁷ UC Berkeley, Plato Malozemoff Professor, Co-Director of Berkeley Water Center, Deputy Director NSF Engineering Research Center for Reinventing the Nation's Urban Water Infrastructure (ReNUWIt), Director of Institute for Environmental Science and Engineering (IESE)

⁸ https://www.ted.com/talks/david_sedlak_4_ways_we_can_avoid_a_catastrophic_drought

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in California has been changing for two hundred years.... You go back 140 years ago California was the second biggest wheat state in the country. The Central Valley was dry land wheat farming. We were second to Kansas."⁹

• **Recycled/reused water:** As Dr. Michael Connor¹⁰ noted in a January 2015 address ("Short-Term and Long-Term Crises Facing Bay Area Water/Wastewater Managers): recycled wastewater can mean 47% less imported water and 65% less sewer discharge.

- **Agency and voter approvals**: Recycled water has received approvals from numerous groups, including the California Medical Association; Santa Clara County voters (SCVWD/EMC April 2017 voter survey, 67% approval); Bay Area Council 2015 (88 percent of those surveyed favored expanding recycled water programs); NRC/National Academies.

- Various areas and agencies safely process and use large amounts of recycled water:

• OCWD is increasing its recycled water production from 103,000 to 130,000 afy;

• LA County Sanitation Districts plan to recycle up to 168,000 afy wastewater. LADWP reported in May 2010 that its water recycling and replenishment will use "about 50% less energy than it takes to import water from Northern California and the Colorado River and it will lessen the strain on California's Bay Delta."

• Los Angeles has proposed long-term stormwater capture of 179,000 to 258,000 afy by 2099. LA might even capture up to 300,000 afy stormwater according to Dr. Richard Luthy, a Stanford professor of civil and environmental engineering.

• Del Puerto district (Stanislaus County) will receive 30,600 acre-feet of highly-treated recycled wastewater from Modesto that will supply one-third of the needs for Del Puerto farmers and give them a stable water source; ultimately 59,000 afy is anticipated.

Providing sufficient flows to and through the Bay-Delta will allow the system to function as it should: fish can avoid predators, pollution can be diluted, floods and floodplains can perform their necessary roles of pollution flushing, sediment transport and deposition. Bay-dependent economies can begin to recover. Thank you for your work to restore the ecosystems of the San Joaquin River and the whole Bay-Delta.

Respectfully,

Alan and Meg Giberson Los Gatos, CA 95030

⁹ <u>http://www.capradio.org/articles/2015/06/11/california-drought-changes-what-farmers-grow/</u>

¹⁰ former General Manager, East Bay Dischargers Authority and Chair of Bay Area Clean Water Agencies