October 23, 2017

NOTICE OF MEETING – REQUEST FOR RSVPS

Members of the Joint Water Resources Committee (City of Gilroy, City of Morgan Hill, and SCVWD)

Santa Clara Valley Water District (SCVWD):

Hon. Richard P. Santos, Director-District 3, 2017 Board Vice Chair and Committee Chair
Hon. John L. Varela, Director-District 1 and 2017 Board Chair

City of Gilroy:

Hon. Dion Bracco, Mayor Pro Tempore and SCRWA Board Vice Chairman
Hon. Paul Kloecker, Council Member

City of Morgan Hill:

Hon. Larry Carr, Mayor Pro Tem, SCRWA Board Chairman and Committee Vice Chair
Hon. Rene Spring, Council Member and SCRWA Board Member

SCRWA = South County Regional Wastewater Authority

A meeting of the Joint Water Resources Committee (City of Gilroy, City of Morgan Hill, and SCVWD) will take place at 8:35 a.m. on Wednesday, November 1, 2017, at the South County Regional Wastewater Authority Conference Room, 1500 Southside Drive, Gilroy, CA 95020.

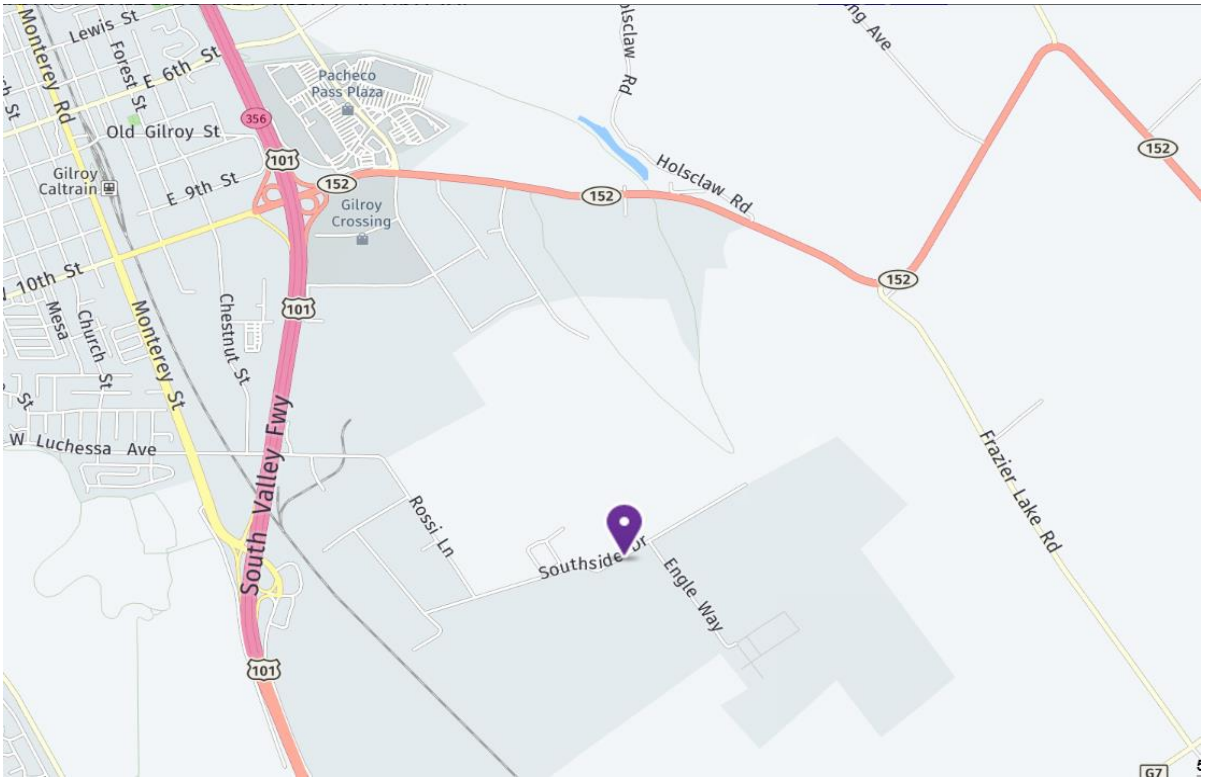
Enclosed for your convenience is a copy of the agenda and corresponding materials. Please bring these materials to the meeting with you.

Please RSVP at your earliest convenience by calling Glenna Brambill at 1-408-630-2408, or by email to gbrambill@valleywater.org

Santa Clara Valley Water District
Office of the Clerk of the Board

Enclosures

SOUTH COUNTY REGIONAL WASTEWATER AUTHORITY MAP
1500 SOUTHSIDE DRIVE
GILROY CA 95020
(408) 848-0480



From District:
Go North on Almaden Expressway
Turn right onto Hwy 85 South
To Hwy 101 South to Gilroy
Take exit 356 toward CA 152 East/10th St.
Turn right onto East 10th St.
Turn left onto Chestnut St.
Turn left onto East Luchessa Ave
Continue on --name changes to Rossi Ln
Turn left onto Southside Dr.
SCRWA is on the right side (1500)
{cross street Engle Way}

JOINT WATER RESOURCES COMMITTEE

Hon. Dion Bracco, Mayor Pro Tempore, City of Gilroy and SCRWA Board Vice Chairman
Hon. Paul Kloecker, Council Member, City of Gilroy
Hon. Larry Carr, Council Member, City of Morgan Hill, SCRWA Chairman and Committee Vice Chair
Hon. Rene Spring, Council Member, City of Morgan Hill and SCRWA Board Member
Hon. Richard P. Santos, 2017 Board Vice Chair, Santa Clara Valley Water District (SCVWD) and Committee Chair
Hon. John L. Varela, 2017 Board Chair, Santa Clara Valley Water District (SCVWD)

SCRWA = South County Regional Wastewater Authority

AGENDA

WEDNESDAY, NOVEMBER 1, 2017
8:35 AM

JOINT WATER RESOURCES COMMITTEE
(CITY OF GILROY, CITY OF MORGAN HILL, AND SCVWD)
South County Regional Wastewater Authority Conference Room
1500 Southside Drive, Gilroy CA 95020

Time Certain:
8:35 a.m.

1. **Call to Order/Roll Call.**

2. **Time Open for Public Comment on Any Item Not on the Agenda.**
   Comments should be limited to two minutes. If the Committee wishes to discuss a subject raised by the speaker, it can request placement on a future agenda.

3. **Approval of Minutes**
   3.1 Approval of Minutes – August 2, 2017, meeting.

4. **Action Items:**
   4.1 Llagas Subbasin Groundwater Management and Future Water Supply Reliability (Vanessa De La Piedra)
   Recommendation: This is an information only item and no action is required. However, the Committee may provide comments for Board consideration.

   4.2 Update on District's Dam Projects (Hemang Desai)
   Recommendation: This is an information only item and no action is required. However, the Committee may provide comments for Board consideration.

   4.3 Review of 2017 Joint Water Resources Work Plan and any Outcomes of Board Action or Committee Requests and discuss the Committee's next meeting agenda (Committee Chair)
   Recommendation: Review the Committee work plan to guide the Committee's discussions regarding policy alternatives and implications for Board deliberation and discuss the next meeting's agenda.

5. **Clerk Review and Clarification of Committee Actions**
   This is a review of the Committee's Actions (from Item 4).

6. **Adjourn:** Adjourn to next regularly scheduled meeting at 8:35 a.m., **February 7, 2018**, South County Regional Wastewater Authority Conference Room, 1500 Southside Drive, Gilroy CA 95020

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

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

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

City of Gilroy
City Clerk
735 Rosanna Street
Gilroy, CA 95020

City of Morgan Hill
City Clerk
17575 Peak Avenue
Morgan Hill, CA 95037

Joint Water Resources Committee Purpose: Advance common South County water interests an receive input from stakeholders and interested parties when undertaking the following: 1. Reviewing current practices and future needs for groundwater management in the Llagas groundwater sub-basin, 2. Facilitating policy discussion and sharing of technical information on water supply planning for South County, 3.Identifying the current and future demand for recycled water as well as jointly identifying funding sources for implementation of the South County Recycled Water Master Plan, 4.Facilitating policy discussion and sharing of technical information on furthering development and use of recycled water in South County, 5.Facilitating policy discussion and sharing of socio-economic homelessness in South County

JOINT WATER RESOURCES COMMITTEE (CITY OF GILROY, CITY OF MORGAN HILL AND SCVWD)

DRAFT MINUTES

WEDNESDAY, AUGUST 2, 2017
9:15 AM

(Paragraph numbers coincide with agenda item numbers)

A meeting of the Joint Water Resources Committee (City of Gilroy, City of Morgan Hill and SCVWD) (Committee) was held on August 2, 2017, at the South County Regional Wastewater Authority Conference Room, 1500 Southside Dr., Gilroy, California.

1. CALL TO ORDER/ROLL CALL

A meeting of the Joint Recycled Water Committee (City of Gilroy, City of Morgan Hill and SCVWD) was called to order by SCVWD's 2017 Board Chair Director John L. Varela at 9:15 a.m.

Committee Members in attendance were: City of Gilroy Council Members: Hon. Dion Bracco and Hon. Paul Kloecker; City of Morgan Hill Council Members: Hon. Larry Carr and Hon. Rene Spring; SCVWD Directors: Hon. Richard P. Santos, District 3, and Hon. John L. Varela, District 1.

SCVWD Staff members in attendance were: Hossein Ashktorab, Glenna Brambill, Norma Camacho, Jerry De La Piedra, Garth Hall, Tracy Hemmeter, Katrina Jessop, Paul Randhawa, and Vicki Rolls-Elam.

City of Gilroy Staff Members in attendance were: Gabriel Gonzalez and Saeid Vaziry, City of Morgan Hill Staff Members in attendance were: Karl Bjarke, Anthony Eulo, and Steve Rymer.

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

There was no one present who wished to speak.

3. ELECTION OF CHAIR AND VICE CHAIR

It was moved by Hon. Larry Carr, seconded by Hon. Rene Spring, and unanimously carried, to approve Hon. Richard P Santos as the Committee Chair.
It was moved by Hon. Richard P Santos, seconded by Hon. Rene Spring, and unanimously carried, to approve Hon. Larry Carr as the Committee Vice Chair.

4. APPROVAL OF MINUTES

4.1 Approval of Minutes

It was moved by Hon. Rene Spring, seconded by Hon. John L. Varela, and unanimously carried, to approve the minutes of the May 24, 2017, Joint Water Resources Committee (City of Gilroy, City of Morgan Hill and SCVWD) meeting, as presented.

5. ACTION ITEMS

5.1 REVIEW AND DISCUSS COMMITTEE FORMATION, PURPOSE, ROLES AND RESPONSIBILITIES

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

Hon. Dion Bracco, Hon. John L. Varela, Hon. Richard P. Santos and Hon. Larry Carr and Hon. Rene Spring spoke about the purpose and discussion topics and roles of the Committee.

Mr. Doug Muirhead a member of the public from Morgan Hill spoke on Groundwater and Recycled water areas of interest to him. He'd like to have a discussed on the South County Plan that expands the breadth of the full South County.

No action was taken.

5.2 DEVELOP COMMITTEE WORK PLAN

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

The topics discussed during Agenda Item 5.1 were captured for future work plan items:
Recycled Water Master Plan, Preservation of Agricultural and/or impacts, Homelessness-preserving the creeks, Update on Dam Projects (Anderson, Pacheco, etc.). potential South County Treatment Plant JPA agreements, South County Master Plan, Current Practices and Future Needs for Groundwater Management in the Llagas Groundwater Subbasin (cover the entire South County).

No action was taken.

5.3 UPDATE ON DISTRICT'S WATER SUPPLY MASTER PLAN

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

Hon. Larry Carr asked that information be simplified so all can understand. Hon. Rene Spring, Hon. Larry Carr and Hon. John L. Varela spoke on the portfolios, costs and separating out the South County information of the Water Supply Master Plan.

No action was taken.

5.4 UPDATE ON CALIFORNIA WATERFIX

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

Hon. Rene Spring, Hon. Larry Carr, Chair Richard P. Santos, Ms. Norma Camacho and Mr. Anthony Eulo spoke on some of the aspects of the Waterfix.

No action was taken.

5.5 UPDATE ON PROGRESS OF PACHECO RESERVOIR EXPANSION AND PREPARATION FOR PROPOSITION 1 APPLICATION

Mr. Garth Hall reviewed the materials as outlined in the agenda item. Mr. Hall also thanked the city of Morgan Hill for their support letter. City of Gilroy has an agenda item scheduled to support the District.

No action taken.

5.6 UPDATE ON RECYCLED AND PURIFIED WATER PROJECTS

Mr. Hossein Ashktorab reviewed the materials as outlined in the agenda item.

Chair Richard P. Santos, Hon. Rene Spring and Hon. Larry Carr spoke on the recycled and purified water projects.

Ms. Katrina Jessop and Mr. Saeid Vaziry were available to answer questions.

6. CLERK REVIEW AND CLARIFICATION OF COMMITTEE ACTIONS

Ms. Glenna Brambill noted items for the work plan, the meetings are set to be quarterly immediately following the SCRWA meetings and she will contact everyone with the dates shortly.

7. ADJOURN

Chair Director Richard P. Santos adjourned at 10:50 a.m. to the next meeting held quarterly.

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

Approved:

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Committee:	Joint Water Resources
Meeting Date:	11/01/17
Agenda Item No.:	4.1
Unclassified Manager:	Garth Hall
Email:	ghall@valleywater.org
Est. Staff Time:	10 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Llagas Subbasin Groundwater Management and Future Water Supply Reliability

RECOMMENDED ACTION:

This is an information only item and no action is required. However, the Committee may provide comments for Board consideration.

SUMMARY:

The Cities of Morgan Hill and Gilroy rely on the Llagas Subbasin to meet nearly all water demands, as do many thousands of private well owners in San Martin and other unincorporated areas. Groundwater levels are maintained by natural groundwater recharge and the District's managed groundwater recharge activities, as well as through in-lieu recharge with recycled water and water conservation programs. These activities, along with proactive future planning and investments, ensure long-term sustainability within the subbasin.

Groundwater quality in the Llagas Subbasin is generally good and supports beneficial uses. The exception is nitrate, which remains the primary groundwater protection challenge due to historic and ongoing sources. While the median nitrate level in groundwater is below the drinking water standard, many individual domestic wells have elevated nitrate. The District continues to offer basic testing and nitrate treatment systems for eligible domestic well users. Perchlorate contamination from a former safety flare plant has been substantially reduced due to ongoing managed recharge and remediation. The District continues to advocate for expedited and thorough cleanup of the contamination.

This item provides information on the Llagas Subbasin, current groundwater conditions, and activities to ensure long-term water supply reliability.

BACKGROUND:

The Llagas Subbasin covers a surface area of about 74 square miles, extending from Cochrane Road in Morgan Hill to the Pajaro River, with east and west boundaries generally along the edge of the valley floor. The subbasin is a large natural reservoir filled with sand, silt and other sediments eroded from adjacent mountain ranges and deposited in the valley. The aquifer depth increases from about 500 feet in the north to over 1,000 feet beneath the Pajaro River. Groundwater movement generally follows surface water patterns, draining south toward the Pajaro River. Locally, groundwater also moves toward areas of heavy pumping.

Groundwater Pumping and Recharge

Groundwater serves over 90% of all beneficial uses in the Llagas Subbasin and is the sole source for drinking water. A small, but growing, portion of water use is served by recycled water, and some raw surface water is also used. Groundwater pumping averages about 44,000 acre-feet per year (AFY), or about 39 million gallons

per day (MGD). Groundwater use is nearly evenly split between agricultural uses (50%) and municipal and industrial uses (45%), with about 5% used for domestic purposes. Pumping by the Cities of Morgan Hill and Gilroy typically accounts for about 35% of Llagas Subbasin pumping.

Recharge sources include District managed recharge and natural recharge from rainfall, return flows, and natural seepage through creeks. Because natural recharge is insufficient to balance pumping, the District replenishes the Llagas Subbasin with about 24,000 AF of water per year (21 MGD). District managed recharge facilities in the Llagas Subbasin include the Main Avenue Ponds, San Pedro Ponds, Church Ponds, Madrone Channel, Llagas Creek, and Uvas Creek. This direct replenishment, along with programs to recycle and conserve water, help maintain long-term sustainable groundwater levels and storage in the Llagas Subbasin.

During the recent drought, groundwater levels declined by 50 to 60 feet in many areas due to reduced managed and natural recharge. However, above-normal recharge in 2016 and impressive water use reduction by the community has resulted in recovered groundwater levels and storage. The District continues to coordinate with the Cities of Morgan Hill and Gilroy on future water demand projections and related investments to ensure continued groundwater sustainability in the Llagas Subbasin.

Groundwater Quality

In addition to planning for adequate supplies, groundwater sustainability also requires protecting water quality. The Llagas Subbasin generally produces good quality water that does not need treatment beyond disinfection at public water supply wells. However, nitrate is an ongoing groundwater protection challenge, particularly in domestic wells. Nitrate is detected over a wide area due to historic and ongoing fertilizer use and septic systems and some wells (primarily domestic) contain nitrate above the drinking water standard. However, the long-term trend in most wells shows stable or declining nitrate levels, indicating improving conditions. The District works with land use agencies, regulatory agencies, and basin stakeholders to reduce nitrate in groundwater through planning, monitoring, and coordination. To reduce well owner exposure to elevated nitrate, the District offers free basic testing and rebates for nitrate treatment systems for eligible well users.

The occurrence of perchlorate from a former highway safety flare plant has been substantially reduced due to ongoing managed recharge and remediation. The perchlorate plume, which once extended about 10 miles from Morgan Hill to Gilroy, now extends about 3 miles to the San Martin Airport. Fewer than 10 domestic wells now require treatment systems or replacement water.

Future Water Supply Reliability

Groundwater demands in the Llagas Subbasin are projected to increase to 56,000 AFY by 2040. The District is coordinating with water retailers and other interested stakeholders during development of the Water Supply Master Plan, which will recommend actions and investments needed to address projected future shortfalls during multi-year droughts. Because South County is largely reliant on groundwater, the question of whether a drinking water treatment plant is needed has been explored on several occasions.

A South County drinking water treatment plant would be needed if: 1) managed recharge, demand management programs, or other in-lieu recharge programs such as recycled water were insufficient to maintain groundwater levels, or 2) groundwater quality conditions no longer supported beneficial uses. Neither of these conditions is currently met and joint agency water management activities should ensure continued sustainability into the future.

Water supply planning analyses dating back to 1975 concluded that existing and planned investments in managed recharge, recycled water, and water conservation are sufficient to maintain groundwater levels in the Llagas Subbasin. As part of the 2017 Water Supply Master Plan update, staff identified additional cost-effective investments in these areas that will be sufficient to maintain groundwater levels despite the expected increase in water use out to 2040.

Current groundwater quality conditions support continued use of the Llagas Subbasin for water supply. Groundwater quality in subbasin is good, except for nitrate, which is primarily an issue in domestic wells. Domestic well users with nitrate above the drinking water standard are eligible for nitrate treatment system rebates from the District, and many agencies are working to reduce nitrate in groundwater over the long-term. Groundwater cleanup of perchlorate is ongoing and the responsible party provides treatment or alternative water for affected private well users. The District and cities continue to promote land use and water management practices that protect groundwater quality.

A South County drinking water treatment plant does not appear to be needed in the 20-year planning horizon. More cost-effective potential projects have been identified, including additional managed recharge in the Butterfield Channel or stormwater recharge, expanded recycled water use, and additional water conservation. The District will continue to monitor groundwater conditions in the Llagas Subbasin as part the groundwater management program and overall water supply and demand trends as part of tracking Water Supply Master Plan implementation. Significant changes that would warrant re-evaluating the need for a South County drinking water treatment plant or additional investments would be discussed by the District Board and this Committee should they occur.

ATTACHMENT(S):

Attachment 1: PowerPoint Presentation

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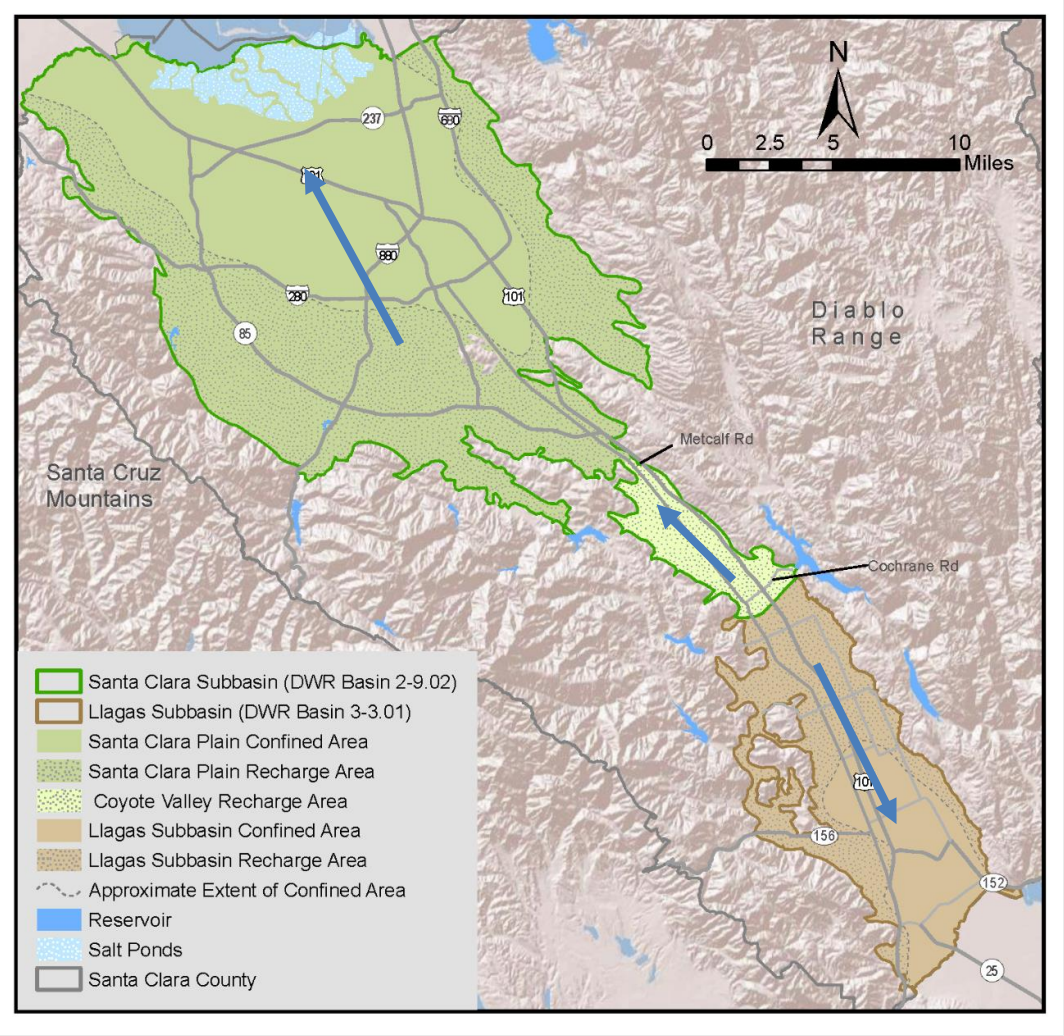
Llagas Subbasin Groundwater Management and Future Water Supply Reliability

November 1, 2017

Santa Clara Valley Water District

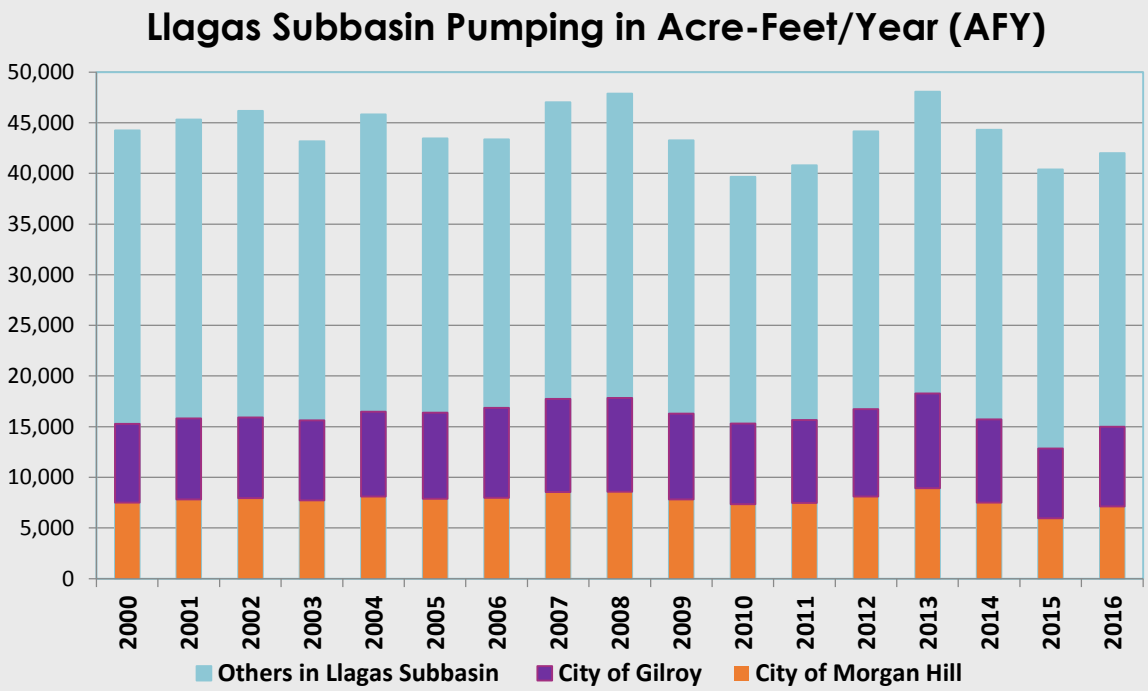
Llagas Subbasin

- Extends from Morgan Hill to the Pajaro River
- 74 square miles, with aquifer depths of 500 to1000 feet
- Groundwater flow is generally southeast

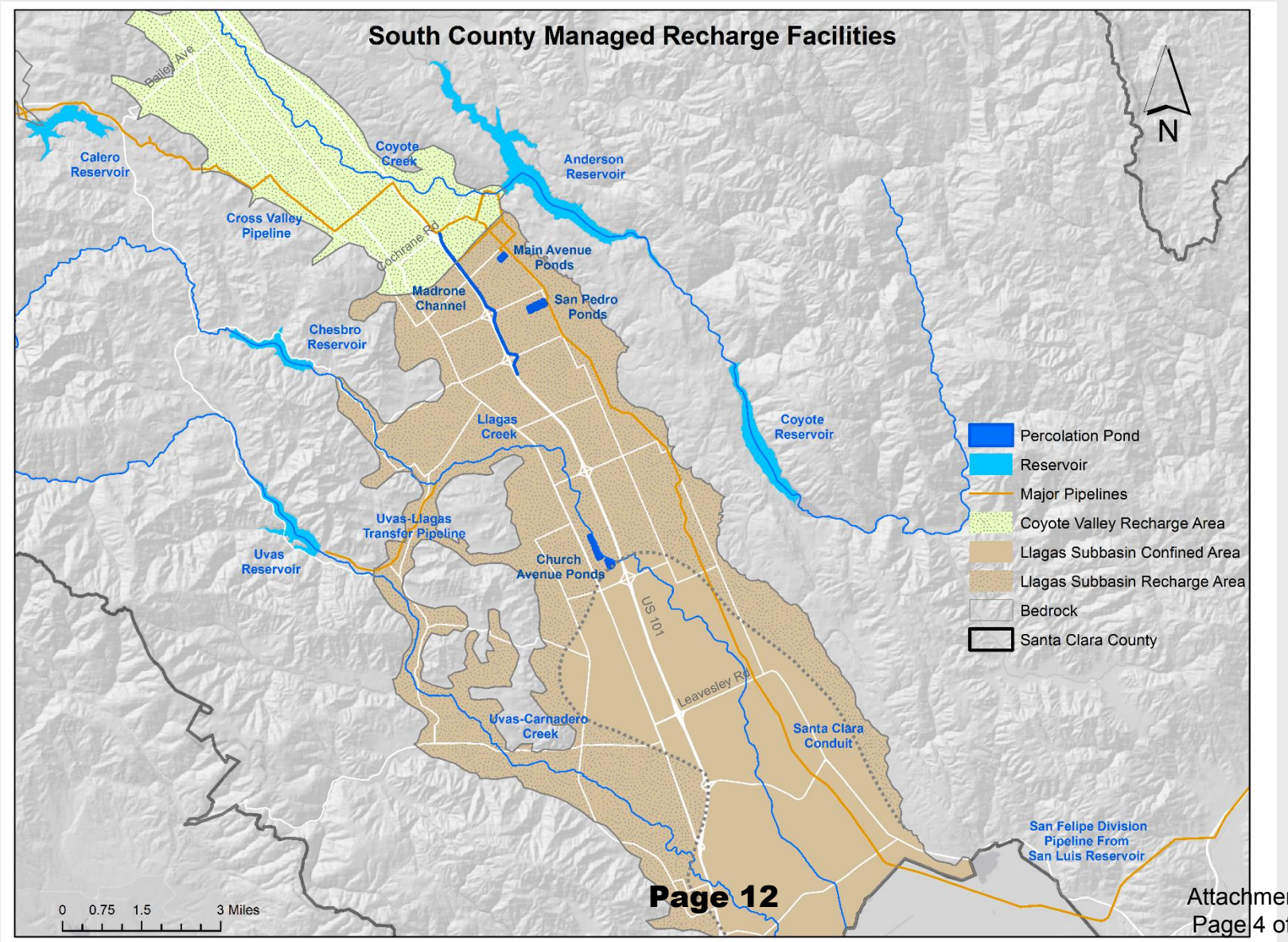


Llagas Subbasin pumping

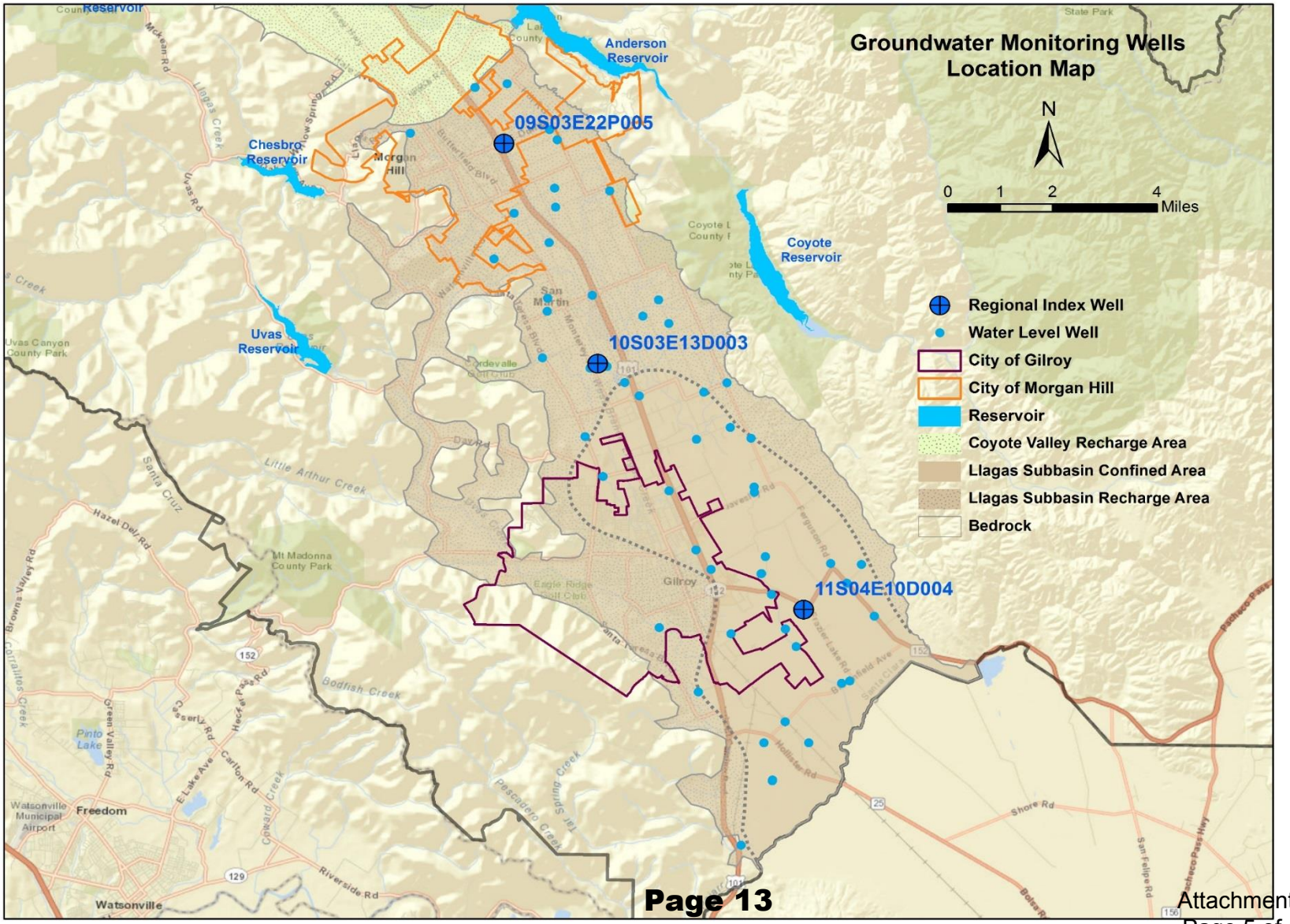
- Average pumping of 44,000 AFY (~39 MGD)
  - 50% Ag
  - 45% M&I
  - 5% Domestic
- Morgan Hill: 7,800 AFY (6.9 MGD)
- Gilroy: 8,300 AFY (7.4 MGD)



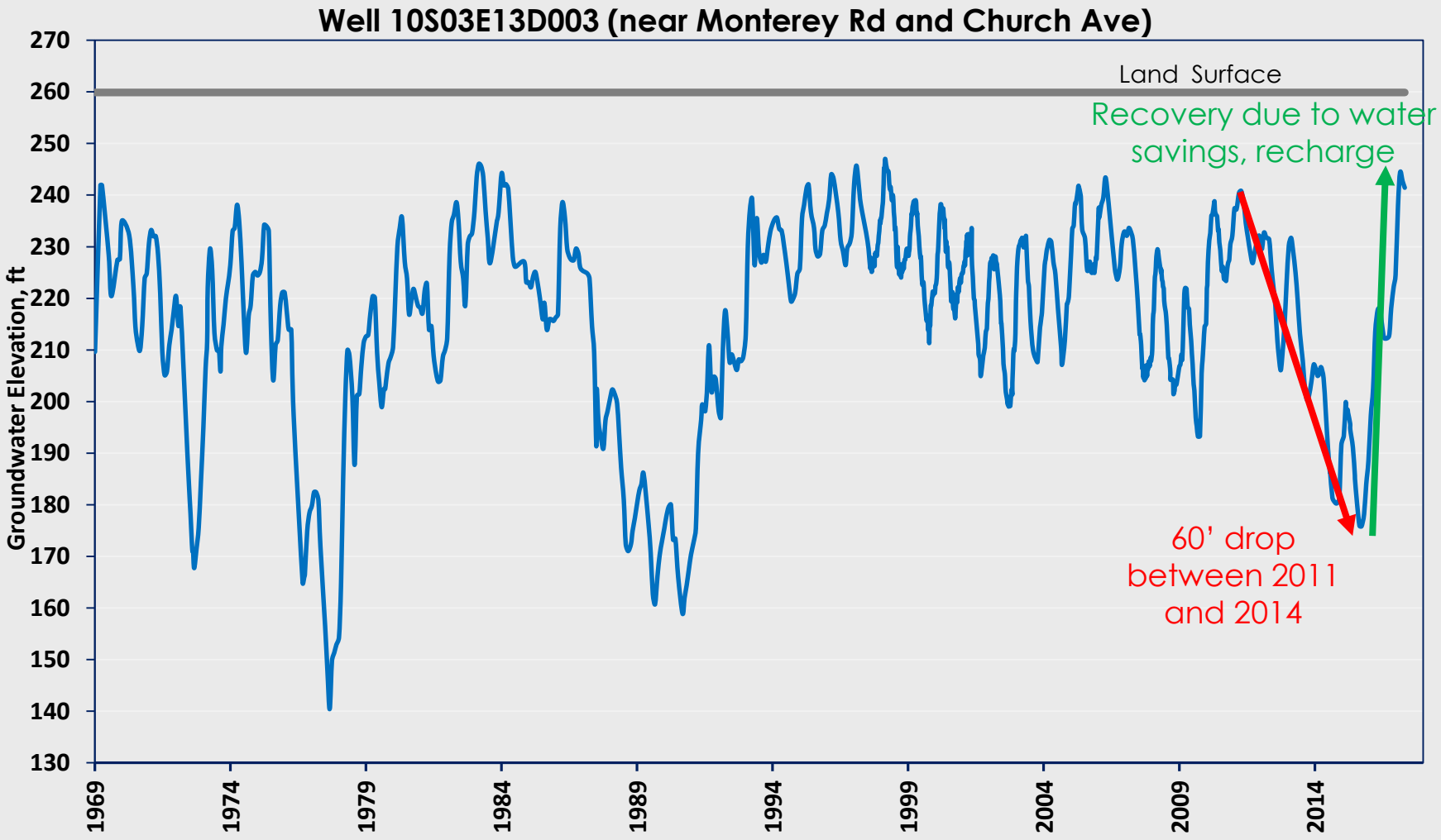
Managed recharge helps balance pumping



Frequent monitoring tracks changes

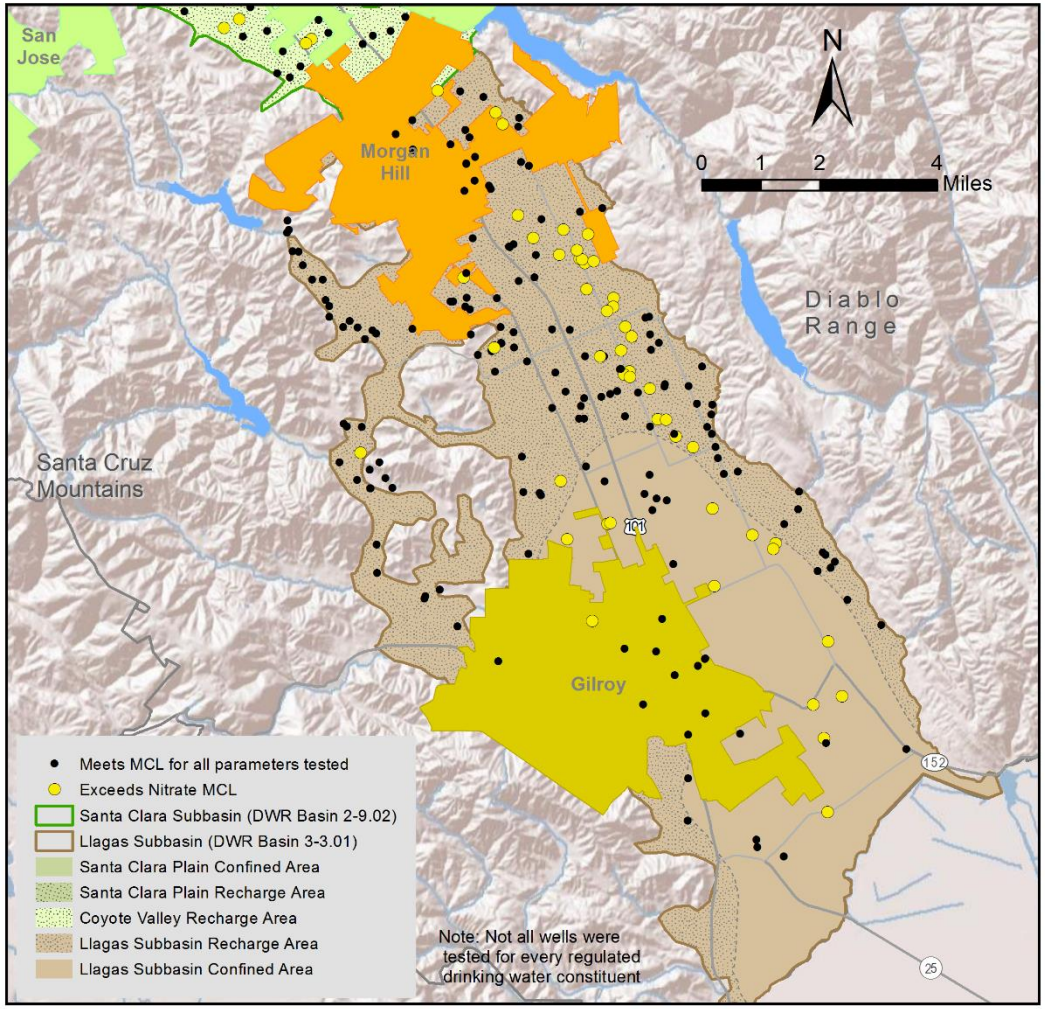


Groundwater level recovery from drought



Protecting groundwater quality

- Groundwater quality is generally good
- Nitrate is an ongoing challenge
  - Well testing
  - Treatment rebates
- Perchlorate plume significantly reduced



Groundwater subbasin is in balance

Water Budget Component	Acre-Feet per Year
Inflow	
Managed Recharge	24,000
Natural Recharge	22,000
Subsurface Inflow	1,000
Total Inflow	47,000
Outflow	
Groundwater Pumping	44,000
Subsurface Outflow	3,000
Total Outflow	47,000
Change in Storage (2003-2012)	0

New projects can meet future needs

- Butterfield Channel recharge
- San Pedro Pond sewering
- Additional recycled water
- Stormwater recharge
- Additional water conservation

Drinking water treatment plant not needed at this time

- Current and future needs can be met with recharge (direct and in-lieu) and conservation
- Water quality conditions stable or improving
- Monitoring continues to be important

Long-term sustainability

Continued sustainability expected due to:

- Comprehensive water supply management
- Collaboration on future reliability and investments
- Regular monitoring and reporting

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Committee:	Joint Water Resources
Meeting Date:	11/01/17
Agenda Item No.:	4.2
Unclassified Manager:	Katherine Oven
Email:	koven@valleywater.org
Est. Staff Time:	10 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Update on District's Dam Projects

RECOMMENDED ACTION:

This is an information only item and no action is required. However, the Committee may provide comments for Board consideration.

SUMMARY:

The District owns and operates fourteen dams and ten reservoirs in Santa Clara County. The District dams and reservoirs were funded and constructed for water conservation, but also provide incidental flood management, recreation, and environmental benefits. Dam safety regulatory requirements, Board policies, and obligations due to dam ownership set direction for the Anderson, Calero, and Guadalupe dam seismic retrofit projects.

Drivers for these capital projects include the following Boards Ends Policies, Strategies and CEO Directions:

- E-1 – The mission of the District is a healthy, safe, and enhanced quality of living in Santa Clara County.
- S-2.1.2.2 – Manage, operate and maintain dams and reservoir assets to maximize reliability, to minimize life cycle costs and to minimize impacts to the environment.
- S-2.1.2.3 – Aggressively implement dam remediation projects.

This memorandum updates the Board on status of Anderson, Calero and Guadalupe seismic retrofit projects.

BACKGROUND:

As part of their seismic re-evaluation program in the early 2000's, the Division of Safety of Dams (DSOD) performed independent, preliminary seismic stability evaluations of Calero, Almaden, Guadalupe, Lenihan, Stevens Creek, Chesbro and Uvas Dams. Additionally, in 2003, with the concurrence of DSOD, the Federal Energy Regulatory Commission (FERC) required that a seismic stability evaluation of Anderson Dam be performed. Based on the preliminary stability evaluations, DSOD directed the District to update the seismic stability analyses for all the dams referenced above.

The District has completed the seismic stability evaluations of Anderson, Almaden, Calero, Guadalupe, Stevens Creek and Lenihan Dams, as directed by DSOD. The seismic evaluations of Chesbro and Uvas are on-going. The completed studies concluded that the embankments for the Anderson, Calero and Guadalupe Dams require remediation. As a result, seismic retrofit projects were initiated for these dams in 2012.

Stevens Creek and Lenihan dams do not require any retrofitting. Although, the seismic evaluation of Almaden embankment indicated that no seismic retrofit was required, the existing intake structure at Alamden reservoir will require to be replaced due to seismic deficiencies. Water level operating restrictions have been imposed on these reservoirs by DSOD, as interim risk reduction measures until the seismic retrofit projects can be completed. A summary of the status, conclusion of seismic stability evaluations, and the current reservoir restrictions for each dam are as follows:

Dam	Evaluation	Planning	Design	Construction	Reservoir Capacity (AF)	Restricted Capacity (AF)
Anderson	Completed in 2011	Completed in 2013	On-going, planned completion in 2020	Planned completion in 2025	90,373	52,553
Almaden	Completed in 2012- Only intake retrofit required	Completed in 2017	Planned completion in 2022	Planned completion in 2024	1,586	1,472
Calero	Completed in 2012	Completed in 2015	On-going, planned completion in 2020	Planned completion in 2023	9,934	7,945
Guadalupe	Completed in 2012	Completion in 2015	On-going, planned completion in 2018	Planned completion in 2021	3,415	2,218

AF = acre-feet

Capital projects are on-going to design and construct the required dam retrofit projects. The following costs have been included in the FY2018-2022 Capital Improvement Program for these projects:

Project	Project No.	FY 2018-22 CIP (current $)
Anderson Dam Seismic Retrofit Project	91864005	$ 406,959,000
Calero-Guadalupe Seismic Retrofit Project	91084020	$ 9,707,000
Calero Seismic Retrofit Project	91874004	$ 78,149,000
Guadalupe Seismic Retrofit Project	91894002	$ 63,156,000
Almaden Dam Intake Project	91854001	$ 53,021,000
	Total	$ 610,992,000

A detailed status of the Anderson, Calero and Guadalupe dam seismic retrofit projects is included as Attachment 1.

ATTACHMENT(S):

Attachment 1: Detailed Status of Seismic Retrofit Projects
Attachment 2: Dam Seismic Retrofit Projects Update

DETAILED STATUS OF SEISMIC RETROFIT PROJECTS

As part of their seismic evaluation program in the early 2000's, the Division of Safety of Dams (DSOD) performed independent, preliminary seismic stability evaluations of Calero, Almaden, Guadalupe, Lenihan, Stevens Creek, Chesbro and Uvas Dams. Based on the results of their evaluations, DSOD directed the District to update the seismic stability analyses for these dams. Additionally, in 2003, based on a review of a required safety inspection report for Anderson Dam (GEI, 2001), the Federal Energy Regulatory Commission (FERC) also concluded that a seismic stability evaluation of Anderson dam was required. FERC's conclusion requiring a seismic evaluation of Anderson dam, was also supported by DSOD.

The District has completed the seismic stability evaluations of Anderson, Almaden, Calero, Guadalupe, Stevens Creek and Lenihan Dams. The evaluations conclude that the embankments for Anderson, Calero and Guadalupe Dams require remediation, and seismic retrofit projects have been initiated for these dams. Although, the seismic evaluation of Almaden embankment indicated that no seismic retrofit was required, the existing intake structure at Alamden reservoir will require to be replaced to addresses seismic deficiencies. The Almaden Dam Intake Project (ADIP) was initiated to address the seismic deficiency of existing intake structure at Almaden reservoir in 2013.

During the planning phases of Anderson Dam Seismic Retrofit Project (ADSRP), Calero Dam Seismic Retrofit Project (CDSRP), Guadalupe Dam Seismic Retrofit Project (GDSRP) and Almaden Intake Project (ADIP), it was concluded that spillways at these reservoirs do not meet the current Probable Maximum Flood (PMF) standards. Additionally, in May 2017, DSOD directed the District to perform comprehensive evaluations of spillways at these reservoirs. Based on the findings of these evaluations, the spillways at Anderson, Calero, Guadalupe and Almaden reservoirs will need to be replaced or substantially modified to meet current safety standards. These required spillway modifications are being addressed in the design phases of the respective projects.

As part of the seismic retrofit projects, the existing outlets at Anderson, Calero, Guadalupe and Almaden dams were also evaluated. Based on these evaluations, the outlets and/or intake structures at these reservoirs will need to be replaced (the intake structures at the Alamden dam will be replaced, whereas the outlet works, including the outlet pipes will be replaced for Anderson, Calero and Guadalupe dams). The required outlet and intake modifications are included within the scope for the design phase of these projects.

As an interim risk reduction measure, DSOD has imposed water level operating restrictions on these reservoirs while the projects are designed and constructed. Detailed status of Anderson, Calero and Guadalupe dam seismic retrofit projects is provided as follows:

i. Anderson Dam Seismic Retrofit Project

Background: AMEC Geomatrix, Inc. performed the Anderson Dam Seismic Stability Evaluation. The results of the evaluation indicated that material at the base and foundation of the dam embankment would weaken due to liquefaction in a large earthquake. Such an event could significantly deform the dam embankment, increasing the risk of an uncontrolled release from Anderson

Reservoir. Geologic/geotechnical investigations during the design phase of the project in June 2017, indicated that movement of potentially active faults located under the dam could adversely impact the embankment. It was also concluded that the existing transition zones within the dam were inadequate to handle any fault offset, and the upstream shell of the dam embankment was also susceptible to liquification. The reservoir is being operated under a restricted reservoir level imposed by FERC and DSOD to ensure public safety (Table 1). In response to these findings, staff initiated the seismic stability retrofit project in Fiscal Year 2011-2012. The planning phase of the project was completed in 2013. The retrofit concept developed during the planning phase was revised in December 2017 to address the new findings in June 2017. The scope of this project includes seismic retrofit of the dam embankment and replacing the outlet works. The spillway structure will also be substantially modified or replaced based on the 2011 FERC Five Year Safety Inspection and Report, reevaluation of the Anderson Dam Probable Maximum Flood, and the recent 2017 spillway evaluation directed by DSOD. The retrofit project has been incorporated in the Fiscal Year 2018-2022 Capital Improvement Plan and the Fiscal Year 2017 and Fiscal Year FY 2018 budgets. A budget of $406,959,000 is allocated to this project in the Fiscal Year 2018-2022 Capital Improvement Plan.

Current status: The project is currently in the design phase and the environmental documentation process has been initiated. The design phase is scheduled for completion by November 2019. The construction phase is scheduled to begin in 2020. The project schedule is presented on Master Schedule for Active Projects, Attachment 2. A public scoping meeting for environmental documentation process is planned for November 2107.

ii. Calero Dam Seismic Retrofit Project

Background: In 2011, URS Corporation performed seismic stability evaluations for Calero dam. The evaluation concluded that Calero Main Dam had inadequate seismic stability and would require retrofitting. The Calero Auxiliary Dam was found to have adequate seismic stability and no retrofit is required. Calero reservoir is currently being operated at a restricted reservoir level as directed by DSOD (Table 1). Staff initiated a seismic retrofit project for Calero dam in July 2012. The goal of this project is to remediate seismic deficiencies identified in the seismic stability evaluation. The planning phase of the project was completed in 2015. Based on the evaluations of the existing outlet and spillway conducted during the planning phase, both the spillway and the outlet will need to be replaced to meet current safety standards. The retrofit project has been incorporated in the Fiscal Year 2018-2022 Capital Improvement Plan and the Fiscal Year 2017 and Fiscal Year 2018 budgets. A total of $78,149,000 is allocated to this project in the Fiscal Year 2018-2022 Capital Improvement Plan.

Current status: The project is in the design phase which is scheduled for completion by 2020. This will be followed by the construction phase which is scheduled for completion by 2022. The project schedule is presented on Master Schedule for Active Projects, Attachment 2.

iii. Guadalupe Dam Seismic Retrofit Project

Background: In 2011, URS Corporation performed seismic stability evaluations for Guadalupe dam. The evaluation concluded that Guadalupe Dam had inadequate seismic stability and would require to be retrofitting. Guadalupe reservoir is currently being operated at a restricted reservoir level as directed by DSOD (Table 1). Staff initiated a seismic retrofit project for Guadalupe dam in July 2012. The goal of this project is to remediate seismic deficiencies identified in the seismic stability evaluation. The planning phase of the project was completed in 2015. Based on the evaluations of the existing outlet and spillway conducted during the planning phase, the outlet will need to be replaced and the spillway will be substantially modified to meet current safety standards. The retrofit project has been incorporated in the Fiscal Year 2018-2022 Capital Improvement Plan and the Fiscal Year 2017 and Fiscal Year 2018 budgets. A total of $63,156,000 is allocated to this project in the Fiscal Year 2018-2022 Capital Improvement Plan.

Current status: The project is in the design phase which is scheduled for completion by 2018. This will be followed by the construction phase which is scheduled for completion by 2021. The project schedule is presented on Master Schedule for Active Projects, Attachment 2.

iv. Almaden Intake Retrofit Project

In October 2000, a capital project was initiated to address seismic deficiencies related to the Almaden Dam outlet works. The planning level work was suspended in September 2005, pending completion of the seismic stability evaluation of Almaden Dam. This seismic stability evaluation was completed in 2011 and it was determined that remediation of the dam embankment is not required; therefore, the Almaden Intake Retrofit Project was reinitiated in 2012. The project will include seismic retrofit or replacement of the existing outlet works, and substantial modification of the existing spillway to meet the latest safety standards. The planning study for the project was completed in 2015. The project has been incorporated in the Fiscal Year 2018-2022 Capital Improvement Plan and the Fiscal Year 2017 and Fiscal Year 2018 budgets. A total of $53,021,000 is allocated to this project in the Fiscal Year 2018-2022 Capital Improvement Plan.

Current status: The design phase is on-going and is scheduled for completion in 2022. The construction phase is scheduled for completion in 2024. The project schedule is presented on Master Schedule for Active Projects, Attachment 2.

Table 1 – Reservoir Sizes and Capacities

Reservoir	Year Built	Dam Height (feet)	Use	Surface Area (Acres)	Reservoir Capacity (Acre-ft.)	Restricted Capacity (Acre-ft.)	March 2015 Stored Volume (Acre-ft.)	Reason for Restriction
Almaden	1935	105	Recharge & treated water	59	1,586	1,472	1,704	Seismic stability concerns
Anderson	1950	240	Recharge & treated water	1,245	90,373	61,810	40,884	Seismic stability concerns
Calero	1935	98	Recharge & treated water	347	9,934	4,585	3,920	Seismic stability concerns
Guadalupe	1935	129	Recharge	79	3,415	2,218	2,005	Seismic stability concerns

Dam Seismic Retrofit Projects Update

Joint Water Resource Meeting

November 1, 2017

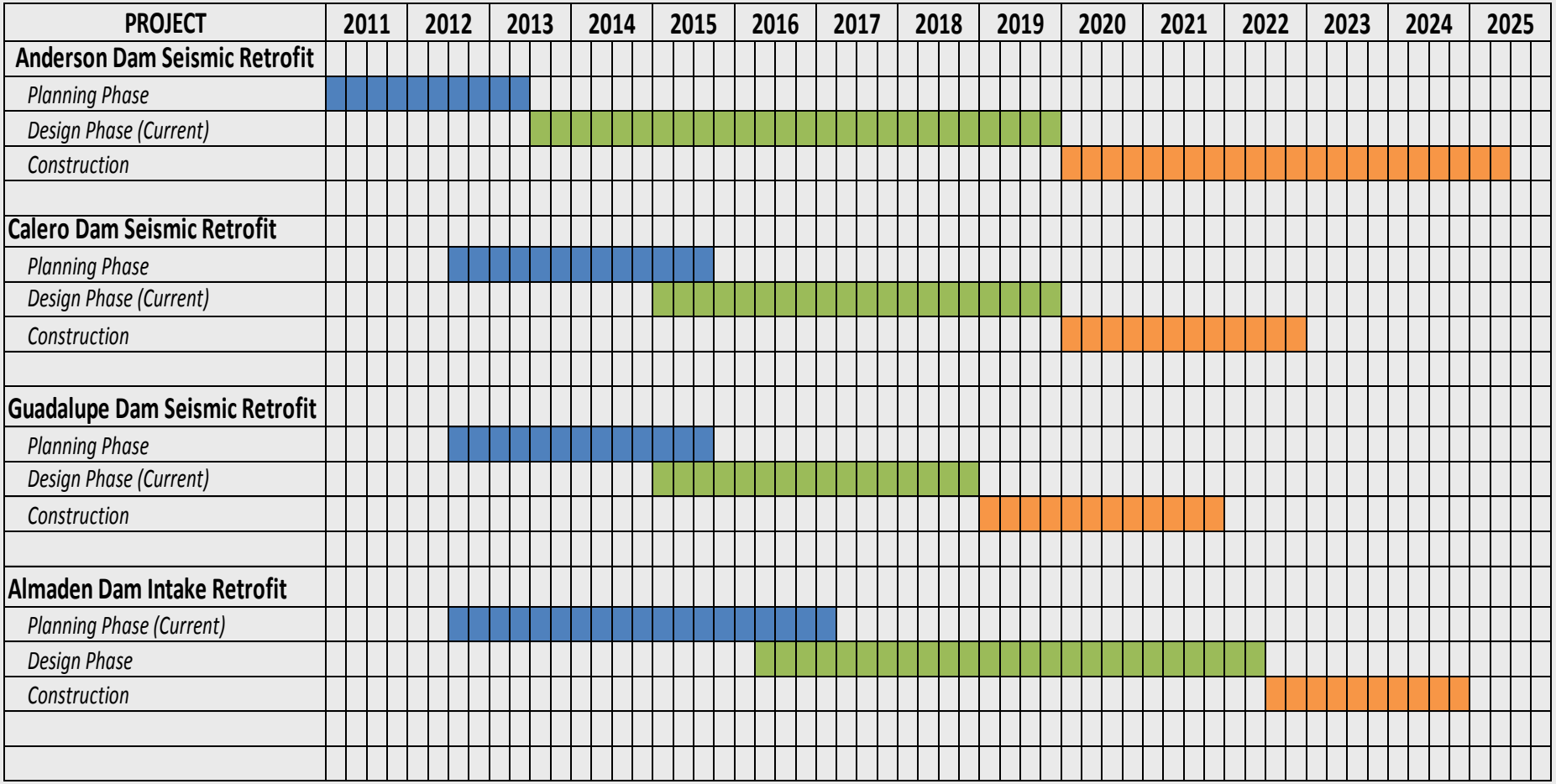
Santa Clara Valley Water District

Major District reservoirs and dams

Reservoir sizes and capacities

Reservoir	Year Built	Dam Height (feet)	Use	Surface Area (Acres)	Reservoir Capacity (Acre-ft.)	Restricted Capacity (Acre-ft.)	March 2015 Stored Volume (Acre-ft.)	Reason for Restriction
Almaden	1935	105	Recharge & treated water	59	1,586	1,472	1,704	Seismic stability concerns
Anderson	1950	240	Recharge & treated water	1,245	90,373	61,810	40,884	Seismic stability concerns
Calero	1935	98	Recharge & treated water	347	9,934	4,585	3,920	Seismic stability concerns
Guadalupe	1935	129	Recharge	79	3,415	2,218	2,005	Seismic stability concerns

Master Schedule for Active Projects



Committee:	Joint Water Resources
Meeting Date:	11/01/17
Agenda Item No.:	4.3
Unclassified Manager:	Michele King
Email:	mking@valleywater.org
Est. Staff Time:	5 minutes

COMMITTEE AGENDA MEMO

SUBJECT: Review Joint Water Resources Committee Work Plan and discuss the Committee's Next Meeting Agenda.

RECOMMENDED ACTION:

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

SUMMARY:

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

BACKGROUND:

Governance Process Policy-8:

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

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

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

ATTACHMENT(S):

Attachment 1: Joint Water Resources Committee 2017 Work Plan
Attachment 2: Joint Water Resources Committee February 2018 Draft Agenda

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2017 Work Plan: Joint Water Resources (City of Gilroy, City of Morgan Hill, SCVWD

Update: September 2017

ITEM #	WORK PLAN ITEM	MEETING	ACTION/DISCUSSION OR INFORMATION ONLY	ACCOMPLISHED OUTCOMES
1	**Election of Chair and Vice Chair**	5-24-17 8-2-17	Elect the Chair and Vice Chair	**Accomplished 5/24/17:** Due to lack of quorum, this agenda item was tabled to the next meeting. **Accomplished 8/2/17:** The Committee elected the Chair and Vice Chair, Director Richard P. Santos and Hon. Larry Carr respectively.
2	**Review and Discuss Committee Formation, Purpose, Roles and Responsibilities**	5-24-17 8-2-17		**Accomplished 5/24/17:** Due to lack of quorum, this agenda item was tabled to the next meeting. **Accomplished 8/2/17:** The Committee reviewed and discussed the Committee formation, purpose, roles and responsibilities and made sure there were alternates in case of absent committee members.
3	**Develop Committee Work Plan**	5-24-17 8-2-17		**Accomplished 5/24/17:** Due to lack of quorum, this agenda item was tabled to the next meeting. **Accomplished 8/2/17:** The Committee discussed the development of the Committee's Work Plan with the subjects discussed and areas of concern added to the plan as well. The Committee will also meet quarterly at the SCRWA location.
4	**Update on Llagas Subbasin Groundwater Levels and Use**	5-24-17		**Accomplished 5/24/17:** Due to lack of quorum, this agenda item was presented by staff with no action taken.

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

2017 Work Plan: Joint Water Resources (City of Gilroy, City of Morgan Hill, SCVWD

Update: September 2017

ITEM #	WORK PLAN ITEM	MEETING	ACTION/DISCUSSION OR INFORMATION ONLY	ACCOMPLISHED OUTCOMES
5	**Update on South County Recycled Water System**	5-24-17		**Accomplished 5/24/17:** Due to lack of quorum, this agenda item was presented by staff with no action taken.
6	**Update on District's Water Supply Master Plan**	8-2-17		**Accomplished 8/2/17:** The Committee received an update on the District's Water Supply Master Plan and took no action.
7	**Update on California Waterfix**	8-2-17		**Accomplished 8/2/17:** The Committee received an update on the California Waterfix and took no action.
8	**Update on Progress of Pacheco Reservoir Expansion and Preparation for Proposition 1 Application**	8-2-17		**Accomplished 8/2/17:** The Committee received an update on the progress of Pacheco Reservoir Expansion project and preparation for Proposition 1 Application projects and took no action.
9	**Update on Recycled and Purified Water Projects (Identifying the Current and Future Demand for Recycled Water as well as Jointly Identifying Funding Sources for Implementation of the South County Recycled Water Master Plan)**	8-2-17		**Accomplished 8/2/17:** The Committee received an update on recycled and purified water projects, current and future demands, as well as joint funding sources and took no action.
10	**Review of 2017 Joint Water Resources Work Plan and the Outcomes of Board Action of Committee Requests**	11-1-17	Discussion/Action Item	
11	**Llagas Subbasin Groundwater Management and Future Water Supply Reliability**	11-1-17	Discussion/Action Item	
12	**Update on Dam Projects**	11-1-17	Discussion/Action Item	

Yellow = Update Since Last Meeting

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2017 Work Plan: Joint Water Resources (City of Gilroy, City of Morgan Hill, SCVWD

Update: September 2017

ITEM #	WORK PLAN ITEM	MEETING	ACTION/DISCUSSION OR INFORMATION ONLY	ACCOMPLISHED OUTCOMES
13	**One Water Plan**	2-7-18	Discussion/Action Item	
14	**Policy Discussion and Sharing of Technical Information on Furthering Development, Use of Recycled Water and Water Supply Planning In South County**	2-7-18	Discussion/Action Item	
15	**Policy Discussion and Sharing of Socio-Economic Information on Homelessness in South County**	TBD	Discussion/Action Item	
16	**Homelessness – preserving the creeks**	TBD	Discussion/Action Item	

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

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JOINT WATER RESOURCES COMMITTEE

Hon. Dion Bracco, Mayor Pro Tempore, City of Gilroy and SCRWA Board Vice Chairman
Hon. Paul Kloecker, Council Member, City of Gilroy
Hon. Larry Carr, Council Member, City of Morgan Hill, SCRWA Chairman and Committee Vice Chair
Hon. Rene Spring, Council Member, City of Morgan Hill and SCRWA Board Member
Hon. Richard P. Santos, 2017 Board Vice Chair, Santa Clara Valley Water District (SCVWD) and Committee Chair
Hon. John L. Varela, 2017 Board Chair, Santa Clara Valley Water District (SCVWD)

SCRWA = South County Regional Wastewater Authority

AGENDA

WEDNESDAY, FEBRUARY 7, 2018
8:35 AM

JOINT WATER RESOURCES COMMITTEE
(CITY OF GILROY, CITY OF MORGAN HILL, AND SCVWD)
South County Regional Wastewater Authority Conference Room
1500 Southside Drive, Gilroy CA 95020

Time Certain:
8:35 a.m.

1. **Call to Order/Roll Call.**

2. **Time Open for Public Comment on Any Item Not on the Agenda.**
   Comments should be limited to two minutes. If the Committee wishes to discuss a subject raised by the speaker, it can request placement on a future agenda.

3. **Approval of Minutes**
   3.1 Approval of Minutes – November 1, 2017, meeting.

4. **Election of Chair and Vice Chair**

5. **Action Items:**
   5.1 One Water Plan (Brian Mendenhall)
   Recommendation: This is an information only item and no action is required. However, the Committee may provide comments for Board consideration.

   5.2 Policy Discussion and Sharing of Technical Information on Furthering Development, Use of Recycled Water and Water Supply Planning in South County (Hossein Ashktorab/Garth Hall/Jerry De La Piedra)
   Recommendation: This is a discussion item and no action is required. However, the Committee may provide comments for Board consideration.

   5.3 Review of 2018 Joint Water Resources Work Plan and any Outcomes of Board Action or Committee Requests and the Committee's next meeting agenda (Committee Chair)
   Recommendation: Review the Committee work plan to guide the Committee's discussions regarding policy alternatives and implications for Board deliberation.

6. **Clerk Review and Clarification of Committee Actions**
   This is a review of the Committee's Actions (from Item 5).

7. **Adjourn:** Adjourn to next regularly scheduled meeting at 8:35 a.m., **May 2, 2018**, South County Regional Wastewater Authority Conference Room, 1500 Southside Drive, Gilroy CA 95020

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

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

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

City of Gilroy
City Clerk
735 Rosanna Street
Gilroy, CA 95020

City of Morgan Hill
City Clerk
17575 Peak Avenue
Morgan Hill, CA 95037

Joint Water Resources Committee Purpose: Advance common South County water interests an receive input from stakeholders and interested parties when undertaking the following: 1. Reviewing current practices and future needs for groundwater management in the Llagas groundwater sub-basin, 2. Facilitating policy discussion and sharing of technical information on water supply planning for South County, 3.Identifying the current and future demand for recycled water as well as jointly identifying funding sources for implementation of the South County Recycled Water Master Plan, 4.Facilitating policy discussion and sharing of technical information on furthering development and use of recycled water in South County, 5.Facilitating policy discussion and sharing of socio-economic homelessness in South County