Board Policy: EL-7 Communication and Support to the Board
The BAOs shall inform and support the Board in its work.

CEO BULLETIN / NEWSLETTERS

CEO Bulletin: 04/06/18 – 04/12/18

Water Tracker: 04/01/18

BOARD MEMBER REQUESTS & INFORMATIONAL ITEMS

BMR/IBMR Weekly Reports: 04/12/18

Memo from Nina Hawk, COO/WUE, to the Board, dated 04/03/18, regarding an update on the California WaterFix.

Memo from Nina Hawk, COO/WUE, to the Board, dated 04/09/18, regarding the Groundwater Benefit Zone Study Update.

Memo from Nina Hawk, COO/WUE, to the Board, dated 04/09/18, regarding the potential use of brackish groundwater at the Silicon Valley Advanced Water Purification Center (BMR I-18-0004).

Memo from Norma Camacho, CEO, to the Board, dated 04/10/18, regarding a letter of support from Dave Cortese for the Conservation Corp’s proposed Coyote Creek Invasive Plant Removal and Revegetation and Disadvantaged Youth Career Path Project.

Memo from Nina Hawk, COO/WUE, to the Board, dated 04/11/18, regarding an update on Division of Safety of Dams action at the existing North Fork Pacheco Creek Dam.

Memo from Michele King, COB, to the Board, dated 04/13/18, regarding a handout and reports from Jerry Smith, Emeritus Professor, SJSU at the 04/10/18 Board Meeting.

INCOMING BOARD CORRESPONDENCE

Board Correspondence Weekly Report: 04/13/18

Email from Tony Del Bene to the Board, dated 04/05/18, regarding the potential for housing homeless on District property (C-18-0058).

Email from Judy Munley to the Board, dated 04/05/18, regarding public outreach on potential storm (C-18-0059).

Letter from Trish Mulvey, Watershed Management Initiative, to the Board, dated 04/09/18, regarding Giant Reed (Arundo donax) eradication (C-18-0060).

Email from Deirdre Des Jardins to the Board, dated 04/08/18, regarding seismic risks associated with the Delta tunnels (C-18-0061).
Email from Mary Robertson to Director Kremen, dated 04/11/18, regarding costs associated with the Delta tunnels (C-18-0062).

Email from Dhruv Khanna to the Board, dated 04/10/18, regarding status of revisions to the District Act (C-18-0063).

Email from Jim Stallman to Director Hsueh, dated 04/11/18, regarding support of using Proposition 1 money for water storage (C-18-0064).

Email from Dhruv Khanna to the Board, dated 04/13/18, regarding the email he received from Darin Taylor, CFO (C-18-0065).

Email from Dhruv Khanna to the Board, dated 04/13/18, regarding off-setting property tax reductions (C-18-0066).

OUTGOING BOARD CORRESPONDENCE

Letter from Chair Santos to Mayor Roland Velasco, City of Gilroy and Mayor Steve Tate, City of Morgan Hill, dated 04/05/18, inviting them to a joint meeting between the District and their respective cities.

Board correspondence has been removed from the online posting of the Non-Agenda to protect personal contact information. Lengthy reports/attachments may also be removed due to file size limitations. Copies of board correspondence and/or reports/attachments are available by submitting a public records request to publicrecords@valleywater.org.
To: Board of Directors  
From: Norma J. Camacho, CEO

Chief Executive Officer Bulletin  
Week of April 6 - 12, 2018

Board Executive Limitation Policy EL-7:  
The Board Appointed Officers shall inform and support the Board in its work. Further, a BAO shall 1) inform the Board of relevant trends, anticipated adverse media coverage, or material external and internal changes, particularly changes in the assumptions upon which any Board policy has previously been established and 2) report in a timely manner an actual or anticipated noncompliance with any policy of the Board.

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<td>1</td>
<td>Ngoc Nguyen, named Deputy Operating Officer of Watersheds Design &amp; Construction Division</td>
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<tr>
<td>2</td>
<td>Letter of Support from the District Three County of Santa Clara District Supervisor, Dave Cortese, for Coyote Creek Invasive Plant Removal and Revegetation and Disadvantages Youth Career Path Project</td>
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</table>

Ngoc Nguyen, named Deputy Operating Officer of Watersheds Design & Construction Division

Since August 2016, Ngoc Nguyen has been serving as Interim Deputy Operating Officer (DOO), managing the daily operations of the Watersheds Design and Construction Division. Ngoc has been instrumental in managing a $59.6 million budget with critical district projects such as the San Francisquito Creek Flood Protection Project, Permanente Creek Flood Protection Project, Upper Berryessa Flood Protection Project, Ogier Ponds Feasibility Study and the Safe, Clean Water Implementation Team.

With over 28 years of experience at the district, Ngoc has demonstrated the requisite expertise, professional judgment, strong leadership, and effective communication and interpersonal skills required to succeed in this position.

In his permanent role as DOO of Watersheds Design and Construction, Ngoc will continue to manage and lead six units, with a total of 58 staff members, including four design and construction units, land surveying and mapping, and real estate services as well as a section that plans and designs watershed enhancement projects.

Ngoc began his permanent role on April 9, 2018.

For further information, please contact Melanie Richardson at (408) 630-2035.
Letter of Support from the District Three County of Santa Clara District Supervisor, Dave Cortese, for the Coyote Creek Invasive Plant Removal and Revegetation and Disadvantages Youth Career Path Project

On March 22, 2018, the District Three County of Santa Clara District Supervisor, Dave Cortese, submitted a letter to the district expressing gratitude and support for the Conservation Corps’ proposed Coyote Creek Invasive Plant Removal and Revegetation and Disadvantages Youth Career Path Project. The letter was provided in the April 13, 2018, Non-Agenda packet.

For further information, please contact Norma Camacho at (408) 630-2084.

---------------------------------------------------------------------------------------------------
Outlook as of April 1, 2018

We began calendar year 2018 with groundwater storage well within Stage 1 (Normal) of the District’s Water Shortage Contingency Plan. This year’s precipitation is below 60% of average to-date at the San Jose Index Station and below average for the Santa Cruz Mountains, South County, and the Diablo Range. The snow water equivalent for the Northern Sierra is less than 45% of normal for this date.

Despite below normal local rainfall and below normal statewide snow pack, end of year groundwater storage for 2018 is projected to be well within Stage 1 (Normal) due to carryover supplies from a wet 2017.

Weather

- Rainfall in San Jose
  - Month of March, City of San Jose = 2.56 inches
  - Rainfall year total = 7.36 inches or 58% of average to date (rainfall year is July 1 to June 30)
  - April 2 Northern Sierra snowpack was 43% of normal for this date

Local Reservoirs

- Total April 1 storage = 67,627 acre-feet
  - 61% of 20-year average for that date
  - 40% of total capacity
  - 60% of restricted capacity (169,009 acre-feet total storage capacity limited by seismic restrictions to 113,667 acre-feet)
- Approximately 6,500 acre-feet of imported water was delivered into local reservoirs during March 2018
- Total estimated releases to streams (local and imported water) during March was 5,800 acre-feet

Groundwater

- Groundwater (GW) Storage: Total storage at the end of 2018 is predicted to fall within Stage 1 (Normal) of the District’s Water Shortage Contingency Plan.

<table>
<thead>
<tr>
<th></th>
<th>Santa Clara Subbasin</th>
<th>Llagas Subbasin</th>
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<tbody>
<tr>
<td></td>
<td>Santa Clara Plain</td>
<td>Coyote Valley</td>
</tr>
<tr>
<td>March managed recharge estimate (AF)</td>
<td>5,600</td>
<td>900</td>
</tr>
<tr>
<td>January to March managed recharge estimate (AF)</td>
<td>17,000</td>
<td>2,600</td>
</tr>
<tr>
<td>January to March managed recharge, % of 5-year average</td>
<td>208%</td>
<td>117%</td>
</tr>
<tr>
<td>February pumping estimate (AF)</td>
<td>5,100</td>
<td>800</td>
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<tr>
<td>January to February pumping estimate (AF)</td>
<td>9,500</td>
<td>1,600</td>
</tr>
<tr>
<td>January to February pumping, % of 5-year average</td>
<td>99%</td>
<td>124%</td>
</tr>
<tr>
<td>GW index well level compared to last March</td>
<td>Increase</td>
<td>Decrease</td>
</tr>
</tbody>
</table>

AF = acre-feet
Imported Water

- As of March 29, 2018, the Statewide Average snowpack water content is 57% of the historic average for this date
- 2018 State Water Project (SWP) and Central Valley Project (CVP) allocations:
  » The initial 2018 SWP allocation of 20%, providing 20,000 AF to the District
  » The initial 2018 South-of-Delta CVP allocations:
    - The M&I allocation is currently 70% and the Agricultural allocation is 20%, which provides 97,620 AF to the District
- State-wide reservoir storage information, as of March 29, 2018:
  » Shasta Reservoir at 84% of capacity (105% of average for this date)
  » Oroville Reservoir at 58% of capacity (77% of average for this date)
  » San Luis Reservoir at 86% of capacity (95% of average for this date)
- District’s Semitropic groundwater bank reserves are 256,725 acre-feet as of February 28, 2018
- Estimated SFPUC deliveries to Santa Clara County:
  » Projected month of February = 2,793 acre-feet
  » 2018 Total to Date = 5,950 acre-feet
  » Five-year annual average is 48,700 acre-feet

Treated Water

- Below average demands of 5,349 acre-feet delivered in March
- This total is 86% of the five-year average for the month of March
- Year-to-date deliveries = 16,796 acre-feet or 96% of the five-year average

Conserved Water

- Saved 72,000 acre-feet in FY17 from long-term program (baseline year is 1992)
- Long-term program goal is to save nearly 75,000 acre-feet in FY18
- The Board has called for a 20% reduction and a limit of three days per week for irrigation of ornamental landscape with potable water
- Achieved a 9% reduction in water use through the first two months of 2018, compared to 2013

Recycled Water

- Estimated March 2018 production = 600 acre-feet
- Estimated Year-to-Date through March = 1,900 acre-feet or 60% of the five-year average
- Silicon Valley Advanced Water Purification Center produced an estimated 1.3 billion gallons (4,000 acre-feet) of purified water in 2017. Since the beginning of 2018, about 700 acre-feet of purified water has been blended with existing tertiary recycled water for South Bay Water Recycling Program’s customers

CONTACT US

For more information, contact Customer Relations at (408) 630-2880, or visit our website at valleywater.org and use our Access Valley Water customer request and information system. With three easy steps, you can use this service to find out the latest information on district projects or to submit questions, complaints or compliments directly to a district staff person.

Follow us on:
BOARD MEMBER REQUESTS & INFORMATIONAL ITEMS
<table>
<thead>
<tr>
<th>Request</th>
<th>Completed Date</th>
<th>Meeting Date</th>
<th>Director</th>
<th>GM / AGM</th>
<th>Description</th>
<th>20 Days Due Date</th>
<th>Expected Completion Date</th>
<th>Disposition</th>
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<tbody>
<tr>
<td>R-18-0005</td>
<td>Pending</td>
<td>02/27/18</td>
<td>Varela</td>
<td>Hawk</td>
<td>Place an item on the Board's April 24, 2018 Agenda on the cost analysis study to use the Uvas/Llagas Pipeline Extension to capture stormwater and place back into the water basin.</td>
<td>03/19/18</td>
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<tr>
<td>R-18-0006</td>
<td>Pending</td>
<td>03/13/18</td>
<td>Varela</td>
<td>Callender</td>
<td>Director Varela requested staff to agendize for discussion SB623 and AB2050.</td>
<td>04/10/18</td>
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<tr>
<td>Request</td>
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<tr>
<td>I-18-0004</td>
<td>Pending</td>
<td>03/27/18</td>
<td>Santos</td>
<td>Hawk</td>
<td>Staff is to provide information on whether brackish groundwater can supplement waste water supplies at the SVAWPC.</td>
<td>04/29/18</td>
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</table>
On March 27, 2018, staff provided an update on the California WaterFix (WaterFix). (see Attachment 1)

Subsequently, on March 27, 2018, Metropolitan Water District (MWD) held a Board workshop focused on the WaterFix. At that workshop, MWD staff described a potential 9,000 cfs project, with 67% to be funded by the State Water Project (SWP) and 33% anticipated for Central Valley Project (CVP) contractors. MWD staff estimated costs and benefits if MWD chose to finance the 33% CVP share and enter into agreements with CVP contractors to be reimbursed where beneficiary pays. MWD staff recognized that the District is actively exploring ways to secure capacity for its CVP supplies separate from such an arrangement, as are a small segment of CVP contractors. MWD staff also discussed long term transfers as a mechanism for some contractors to off-load WaterFix costs and identified the District could be a potential buyer.

On April 2, 2018, MWD’s Chairman of the Board and General Manager sent a joint letter to the MWD Board regarding a meeting with SWP and CVP contractors, and officials from the State and United States Bureau of Reclamation (Reclamation) (see Attachment 2). According to the letter, the majority of CVP contractors and Reclamation officials said that there were a number of internal institutional issues to be resolved among the CVP contractors before they could make a commitment to participate in the full 9,000 cfs WaterFix project. Based on this information, it was decided that the SWP contractors would proceed with a staged approach to initially build a single tunnel with a capacity of 6,000 cfs.
Directors: this is a brief update on the California WaterFix, since discussions among various potential participants and with the Department of Water Resources and others are occurring daily.

Recap
On October 10, 2017, the Board of Metropolitan Water District of Southern California (MWD) expressed support for the California WaterFix (WaterFix) and authorized its general manager to execute certain agreements that would create governance and financing structures for moving forward with the project. On October 17, 2017, the District Board passed a resolution providing conditional support of the California WaterFix project subject to seven guiding principles. These approvals followed a September 19, 2017 vote by Westlands Water District to not participate in the project as it was presented at that time. Since these decisions were made, the following activities have transpired:

- Since October 2017, District staff have been working with the State, MWD, Kern County Water Agency, and other public water agencies to define a participation approach for the District that is consistent with the Board’s guiding principles.

- Department of Water Resources (DWR) and the State Water Project (SWP) contractors resumed the public process to negotiate proposed amendments to the SWP water supply contracts between DWR and the SWP contractors for enhanced water management provisions, including confirmation of long-term transfers that can assist in managing WaterFix reliability and benefits among SWP contractors. Public negotiations sessions have taken place on February 13, February 27, and March 7 of 2018.

- On February 7, the State of California announced that it will evaluate the option of constructing the WaterFix in stages, with a 6,000 cubic foot per second (cfs) stage proceeding first.

- On Feb 14, 2018, MWD’s Water Stewardship and Planning Committee requested that MWD staff explore the possibility of leading the financing for construction of the entire 9,000 cfs project at the outset and on February 27, MWD’s Special Committee on Bay-Delta confirmed the direction to staff to continue exploring that approach.

- On February 22, the State Water Resources Control Board (SWRCB) resumed Part 2 of the WaterFix hearings for a change in point of diversion.
Update
Very recent developments are summarized as follows:

- In February and March, a quicker pace of negotiations ensued among public water agencies, the State of California, and the federal agency representatives, reflecting renewed interest in the project by Central Valley Project (CVP) contractors.

- One element of District potential participation in the project has remained relatively constant in concept, that is participation in the project as part of the SWP, with the same percentage level (approximately 2½ percent) of the District's share of the SWP today.

- In addition, District staff are in discussions with other public water agencies to explore additional opportunities for participation – to receive CVP benefits from the project, consistent with the Board’s principles.

- One of the areas our District Board members should be aware of is MWD's consideration of financing approaches for the currently unsubscribed share of the 9,000 cfs project. District staff continue to evaluate financing approaches for the District's SWP and CVP share, which may include various participation arrangements that may be available through DWR and/or other public participating agencies.

- Other discussions extend to alternatives whereby the District could receive additional benefits from the SWP share of the project, in addition to the 2½ percent mentioned above, including possible receipt of a long-term transfer from SWP contractors who do not wish to receive automatic cost responsibility and benefits from the WaterFix.

- On the agenda of MWD's Special Committee on Bay-Delta scheduled for tomorrow, March 27, is a report back on WaterFix project implementation options.

Nina Hawk
Chief Operating Officer
Water Utility Enterprise
Date: April 2, 2018

To: Board of Directors  
Member Agency Managers

From: Randy A. Record, Chairman of the Board  
Jeffrey Kightlinger, General Manager

Subject: California WaterFix

On March 30, Chairman Record, General Manager Kightlinger and Assistant General Manager Patterson met with directors and staff from other State Water Project (SWP) and Central Valley Project (CVP) contractors along with officials from the State of California and the United States Bureau of Reclamation (USBR) to discuss California WaterFix (CWF).

The CVP representatives and USBR officials expressed great appreciation for the concepts that Metropolitan advanced to explore alternative financing mechanisms to construct the full 9,000 cfs WaterFix preferred alternative. Everyone concurred that the best approach for all of California’s water interests and the environment would be to build the full project in one stage as originally proposed.

However, the majority of CVP contractors and USBR officials informed everyone that there still remained a number of internal institutional issues that first needed to be resolved among the CVP contractors before they could make a commitment to participate in the full 9,000 cfs project.

Based on that information, it was decided that the SWP contractors would proceed as proposed by the Brown Administration with a staged approach to build two intake facilities and a single tunnel with the capacity of 6,000 cfs. A third intake and second tunnel would follow in a later stage to eventually bring the project to its full capacity. The SWP contractors and the California Department of Water Resources would continue to work with the CVP contractors and the USBR to resolve issues and explore alternative financing mechanisms to expedite construction of the second stage. There was interest from two smaller CVP contractors to participate in the first stage, and they will be included. The SWP contractors and participating CVP contractors will finance the entire first stage, however the door will remain open for other CVP contractors to participate on a larger scale in the first stage if there is interest.

Accordingly, the action that staff will be bringing to the Metropolitan Board on April 10 will be for Metropolitan to fund its share of the first stage of CWF: the two intakes, single tunnel, 6,000 cfs stage of the project. Metropolitan staff will continue to engage in discussions with CVP contractors and USBR on their issues and alternative financing options for the second stage that honor the “beneficiaries pay” principle which the first stage is using, and we will keep the Board apprised of progress.
TO:    Board of Directors
FROM:  Nina Hawk
       Chief Operating Officer for
       Water Utility Enterprise

SUBJECT:  Groundwater Benefit Zone Study Update
DATE:    April 9, 2018

This memo provides an update on the Groundwater Benefit Zone Study, which is being conducted to provide the District with a scientific, transparent basis for proposing changes to the zones. As described below, staff is conducting significant outreach on the preliminary study results before bringing related information and stakeholder input to the Board for consideration.

The preliminary technical report has been completed by Hydrometrics Water Resources Inc., a consulting firm specializing in developing, protecting, and managing groundwater and surface water resources. The technical analysis used measured data, groundwater modeling, and geological mapping to demonstrate areas benefitting from District activities to protect and augment groundwater. The preliminary study report was reviewed by an independent expert review panel, who found it to be thorough and reasonable.

Because this study has the potential to impact many well users in the county, staff is conducting significant stakeholder outreach on the preliminary technical findings and recommendations. Staff has presented related information to water retailers and the Board's Agricultural Water Advisory Committee, and will present to the Water Commission on April 11th. Upcoming outreach will focus on individual well users potentially impacted by the study through direct mailings, public meetings, and other opportunities for input. Following stakeholder input, the technical consultant will consider any revisions needed to the preliminary study report.

The preliminary technical report is extensive and detailed, so staff wants to ensure interested stakeholders have adequate time to review the study findings and provide input. Staff expects to receive detailed technical comments from some water retailers, including Stanford University, who recently requested certain information and data used in the study (Attachment 1).

After receiving stakeholder input, staff will present the preliminary technical study to the Board, along with recommendations for any changes to the zones. If the Board approves changes to the zones, new legal survey descriptions will be prepared for Board consideration per District Act requirements. If new or modified zones are established, the groundwater charge to be applied within each zone would then need to be evaluated in accordance with the District Act and other applicable laws.

Nina Hawk
Chief Operating Officer for Water Utility Enterprise

N. Camacho, R. Callender, R. Gibson, G. Hall, D. Taylor, L. Hoang, V. De La Piedra, G. Cook

Attachment 1: Stanford University Letter dated March 23, 2018
Vanessa De La Piedra, P.E.  
via email to vdelapiedra@valleywater.org  
Unit Manager, Groundwater Monitoring and Analysis Unit  
SANTA CLARA VALLEY WATER DISTRICT  
5750 Almaden Expressway  
San Jose, CA  95118

March 23, 2018

Subject: Zones of Benefit Study

Dear Ms. De La Piedra:

Thank you for the opportunity to review the subject draft Zones of Benefit Study report. Stanford is reviewing the report, and is intending to prepare comments on it. Given the reliance of the study on a groundwater flow model in finding that benefits of SCVWD activities extend to the northern boundary of the Santa Clara Valley Basin, we would appreciate an opportunity to review additional information on the model used to determine Zones of Benefits, including:

1. Documentation of the original CH2MHill groundwater flow model (1991/2), and modifications thereto that were made in preparing the current findings and report;
2. Groundwater model files, along with descriptions of:
   a. The boundary conditions along San Francisquito Creek (the San Mateo – Santa Clara County line), and;
   b. Aquifer parameters.
3. Baseline and scenario assumptions, such as distinctions in the quantity of natural versus managed recharge in stream channels, that were assumed in deriving scenarios related to benefits; and
4. Thresholds of significance that were used in applying model results to Zones of Benefit findings.

Please let me know how we can receive or access this information, in order to complete our review and comments.

Sincerely,

[Signature]

Tom W. Zigterman, P.E., D.DRE  
Director, Water Resources & Civil Infrastructure

c: Rob Donlan, Ellison, Schneider, Harris and Donlan  
Tom Elson, Luhdorff & Scalmannini  
Peter Leffler, Luhdorff & Scalmannini
MEMORANDUM
FC 14 (01-02-07)

TO: Board of Directors
FROM: Nina Hawk
Chief Operating Officer for Water Utility Enterprise

SUBJECT: Potential Use of Brackish Groundwater at the Silicon Valley Advanced Water Purification Center (I-18-0004)
DATE: April 9, 2018

Attached for your information is the staff memorandum prepared in response to Chair Santos' inquiry about whether brackish groundwater could supplement wastewater as a source to the SVAWPC (I-18-0004).

Please contact me at (408) 630-2736 with any related questions.

Nina Hawk
Chief Operating Officer for Water Utility Enterprise

N. Camacho, G. Hall

Attachment: Staff memorandum dated March 26, 2018
TO: Garth Hall, Deputy Operating Officer, Water Supply Division

FROM: Vanessa De La Piedra, Groundwater Management Unit Manager

SUBJECT: Potential Use of Brackish Groundwater for Expanded Silicon Valley Advanced Water Purification Center

DATE: March 26, 2018

This memo provides conceptual information on the potential to use brackish groundwater\(^1\) as a source for an expanded Silicon Valley Advanced Water Purification Center (SAWPC). In Santa Clara County, brackish groundwater is limited in extent, encountered primarily in shallow aquifers near San Francisco Bay (Figure 1). Due to limited availability, brackish groundwater is not expected to provide significant yield to the SAWPC. Further, the potential to cause undesirable results (e.g., impacts to groundwater quality and/or surface water) is of significant concern and requires thorough evaluation as described further below. While there are currently other alternatives that better meet the District’s long-term reliability goals, staff will continue to consider brackish groundwater as a potential water supply source in future planning.

Previous Studies
The use of brackish groundwater has been explored through the District’s Water Supply Master Plan and other efforts summarized below. However, it has not been recommended for implementation due to limited availability, uncertain long-term yield, high treatment costs, and other challenges.

The Bay Area Regional Desalination Project Feasibility Study\(^2\) included preliminary evaluation of three potential sites in the county where brackish groundwater could be used as feedwater; none was determined to be a top-ranked site. The report estimated the production capacity at each site to be less than 5 million gallons per day, and noted “very limited capacity for a regional supply.”

The District’s Feasibility Study for the Recovery and Beneficial Use of Shallow Groundwater\(^3\) also looked at the potential to use brackish groundwater. The study estimated a sustainable pumping rate of only 1 to 10 gallons per minute (gpm) per well or a total system pumping rate of 40 to 65 gpm.\(^4\) The report also notes high treatment costs and widespread contamination in the shallow aquifer.

Most recently, the potential treatment of brackish groundwater did not pass the screening analysis in the District’s Water Supply Master Plan due to limited availability and project size, resulting in high costs per acre-foot. However, the concept will be reviewed in future updates to the plan.

Current Analysis (Conceptual)
Based on recent inquiries about potential brackish groundwater use, Groundwater Management Unit staff conducted a brief conceptual analysis as summarized below.

Brackish groundwater primarily occurs within shallow, unconfined or semi-confined aquifers near San Francisco Bay (Figure 1). Shallow aquifer zones near the Bay are predominantly comprised of silts and

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\(^1\) While there is no single definition, brackish groundwater is often considered to have Total Dissolved Solids (TDS) between 1,000 and 10,000 milligrams per liter (mg/L) per the U.S. Geological Survey. For this memo, it is defined as areas with TDS above 1,000 mg/L.

\(^2\) Prepared for Contra Costa Water District, EBMUD, SFPUC, and Santa Clara Valley Water District by URS, 2007

\(^3\) Prepared by URS, 2009

\(^4\) Based on data from remediation systems and NPDES discharges
clays; water-bearing sediments, such as sands or gravels, are generally thin (less than 20 feet in thickness) or may not be present at all. Limited pumping occurs within shallow aquifers due to often-unreliable yield and because it is generally of poorer quality than principal aquifers. Contaminant release sites from leaking underground fuel tanks and industrial spills are widespread throughout shallow aquifers as shown on Figure 1.

As noted in previous studies and restated here, it may be difficult to locate sites with reasonable long-term well yield. Even if sites with adequate yield could be identified, the following issues would require thorough evaluation:

- Potential pumping near contaminant release sites could capture or spread existing contaminant plumes. While subsequent treatment at an expanded SVAWPC would likely address these contaminants in produced water, the disturbance or expansion of existing plumes should be avoided.

- Significant pumping near the Bay has the potential to reverse the hydraulic gradient (currently toward the Bay), possibly causing inland intrusion of saline water and creating new water quality issues.

- Because shallow groundwater is often connected to surface water such as creeks, brackish groundwater pumping may reduce creek flow and has the potential to cause significant and unreasonable impacts to surface water.

Each of these issues has the potential to cause an undesirable result as defined by the Sustainable Groundwater Management Act. As the Groundwater Sustainability Agency for the county, the District has an obligation to avoid undesirable results; as such, these issues must be analyzed if the concept of using brackish groundwater is to be further explored. For the reasons outlined above, brackish groundwater does not appear to be a good option for meeting the District's long-term reliability goals at this time. However, as water supply needs and/or treatment technologies change, it may become a more feasible alternative. Staff will continue to consider brackish groundwater as a potential water supply source in future planning.

Vanessa De La Piedra, P.E.

cc: G. Cook, J. De La Piedra, T. Hemmeter

vj

Attachment: Figure 1. Location of Brackish Groundwater and Contaminant Release Sites
Figure 1. Location of Brackish Groundwater and Contaminant Release Sites
TO: Board of Directors

FROM: Norma J. Camacho
CEO

DATE: April 10, 2018

SUBJECT: Letter of Support from the District Three County of Santa Clara District Supervisor, Dave Cortese, for Coyote Creek Invasive Plant Removal and Revegetation and Disadvantages Youth Career Path Project

On March 22, 2018, the District Three County of Santa Clara District Supervisor, Dave Cortese, submitted a letter to the district expressing gratitude and support for the Conservation Corps’ proposed Coyote Creek Invasive Plant Removal and Revegetation and Disadvantages Youth Career Path Project.

Norma J. Camacho
CEO

Attachment 1: March 22, 2018, letter from Dave Cortese, County of Santa Clara District Supervisor, District Three
March 22, 2018

Norma Camacho, CEO
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118

Dear Ms. Camacho,

I am writing in support of the Conservation Corps’ proposed “Coyote Creek invasive Plant Removal and Revegetation and Disadvantaged Youth Career Path Project” to be implemented north of Berryessa Road in San Jose.

Two years ago, I wrote a letter of support for the planning effort for this project. It is gratifying to see that all the hard work of the partners in that effort has created a project that is ready for implementation.

This project represents a unique combination of actions to address both the environmental needs of our creeks and the needs of formerly homeless disadvantaged youth associated with the Conservation Corps.

By giving these young people an opportunity for on-the-job training to acquire practical skills and experience in vegetation management, and by connecting them with landscape management firms who have committed to interviewing them for potential hire, they will be positioned for entry into a career path for self-sufficiency.

Thank you for your consideration.

Sincerely,

[Signature]

Dave Cortese
Santa Clara County Supervisor, Third District
TO: Board of Directors

SUBJECT: Update on Division of Safety of Dams action at the existing North Fork Pacheco Creek Dam

FROM: Nina Hawk

DATE: April 11, 2018

This summary provides the latest update on the Division of Safety of Dams (DSOD) of the Department of Water Resources (DWR) action on the existing North Fork Pacheco Creek Dam.

The Santa Clara Valley Water District (District) and its partner, San Benito County Water District, are paying close attention to the state of the North Fork Dam since their proposed Pacheco Creek Expansion Project is located on the same creek. PPWD is also anticipated to be a partner in the Expansion Project.

In a letter dated April 6, 2018 directed to the Pacheco Pass Water District (PPWD), DSOD ordered the PPWD to:

- maintain the upstream and downstream outlet controls in the fully open position in order to maximize releases and maintain the lowest possible water surface elevation, and
- complete short-term interim repairs to the left spillway wall by October 1, 2018, and long-term permanent repairs by October 1, 2020.

Short-term interim repairs required by the DSOD include the following:

- Removal of all woody vegetation from the downstream face and from within five feet of the downstream groins and toe of the dam.
- Removal of all woody vegetation from the joints of the concrete-lined upstream face, and from the joints of the spillway walls and invert.
- Seal/repair of all cracks, joints, and damaged concrete in the spillway, and grind down any raised downstream panel edges.

A copy of DSOD’s April 6 letter is attached.

DSOD noted that if the PPWD fails to comply with the orders stated in the letter and continues to make unsatisfactory progress toward addressing the spillway deficiency at North Fork Dam, the Certificate of Approval to store water will be revoked in accordance with Section 6357.1 of the CA Water Code.

BACKGROUND:

DSOD sent a letter to the PPWD on April 5, 2017 regarding the necessary repairs to the failed left spillway wall panels at the North Fork Dam. DSOD indicated on its April 6, 2018 letter that the Area Engineer inspected the dam on November 6, 2017 and noted that no progress has been made toward the required spillway repairs.

DSOD states that a fully functional spillway is essential to the safety of the dam. They note that the Dam is used nearly every year, and failure to repair the left wall in a timely manner has created an unsafe condition at the dam. DSOD suggested that, in its current condition, additional wall panels
adjacent to the failed section could progressively fail and block the channel, render the spillway inoperable, and cause the dam to overtop. With its orders, DSOD also requested daily inspections when the spillway is used.

On August 14, 2017, the District submitted an application to the California Water Commission (CWC) for the Pacheco Reservoir Expansion Project, located on the same creek, a short distance north of the existing North Fork Dam. The District requested funding for public benefits at fifty percent of the cost to construct the Project. At the September 14, 2017, Pacheco Reservoir Exploratory Ad Hoc Committee meeting, staff discussed the application submitted to the CWC on August 14, 2017 requesting $484.5 million, half of the capital cost of a project to expand Pacheco Reservoir. The CWC's proceedings continue, with a final decision on funding awards anticipated in July or August 2018.

Nina Hawk
Chief Operating Officer
Water Utility Enterprise

Attachment 1: Division of Safety of Dams letter to Pacheco Pass Water District
SECOND NOTICE REGARDING NECESSARY REPAIRS

Mr. Frank O'Connell, President
Pacheco Pass Water District
Post Office Box 1382
Hollister, California 95023

North Fork Dam, No. 77
Santa Clara County

Dear Mr. O'Connell:

This is a follow-up to our letter dated April 5, 2017, regarding the necessary repairs to the failed left spillway wall panels at North Fork Dam. On November 6, 2017, Area Engineer Austin Roundtree inspected the dam, and noted that no progress has been made toward the required spillway repairs. Additionally, none of the required maintenance work noted in past inspection reports and letters has been completed, which is unacceptable. For your reference, Mr. Roundtree's latest inspection report is attached, which documents his observations, conclusions, and recommendations regarding the safety of the dam.

A fully functional spillway is essential to the safety of the dam. The spillway at North Fork Dam is used nearly every year, and failure to repair the left wall in a timely manner has created an unsafe condition at the dam. In its current condition, additional wall panels adjacent to the failed section could progressively fail and block the channel, render the spillway inoperable, and cause the dam to overtop. Therefore, we are further restricting the reservoir below the current restricted level of two feet below the spillway crest.

In accordance with Division 3, Part 1, Chapter 4, Section 6081 of the California Water Code, THE DISTRICT IS HEREBY ORDERED to maintain the upstream and downstream outlet controls in the fully open position in order to maximize releases and maintain the lowest possible water surface elevation. The District must perform daily inspections when the spillway is in use, and any change in conditions needs to be reported immediately. This restriction shall remain in effect until permanent repairs to the left spillway wall are completed.

In addition, THE DISTRICT IS HEREBY ORDERED to complete short-term interim repairs to the left spillway wall by October 1, 2018, and long-term permanent repairs by October 1, 2020. A work plan for the interim repairs was not submitted as requested in our April 5, 2017 letter, which is unacceptable. Please submit this plan no later than July 1, 2018. No repair work may be done without our prior approval.

A new repair application will be required for the long-term spillway repair, and a comprehensive condition assessment of the entire spillway must be completed. The District will need to submit for our review and approval a detailed work plan identifying all tasks needed to carry out the comprehensive condition assessment of the spillway, including any necessary investigation and exploration programs. The results of the assessment must be documented in a detailed report and all deficiencies identified as part of the assessment must be addressed and included in the repair work. The repair application, updated plans and specifications, and appropriate filing fee must be submitted by January 2, 2019, to ensure all construction work is completed by October 1, 2020. The application work must be designed and constructed under the direction of a civil engineer registered in the State of California.

Attachment 1, Page 1 of 3
If the District fails to comply with the orders stated in this letter and continues to make unsatisfactory progress toward addressing the spillway deficiency at North Fork Dam, the Certificate of Approval to store water will be revoked in accordance with Section 6357.1 of the CA Water Code.

During Mr. Roundtree's inspection, he noted no progress has been made toward addressing the maintenance items requested in previous inspection reports and in our January 15, 2014, and March 15, 2016 letters, and that additional work is now required. Therefore, THE DISTRICT IS HEREBY FURTHER ORDERED to complete the following items by October 1, 2018:

1. Remove all woody vegetation from the downstream face and from within five feet of the downstream groins and toe of the dam.

2. Remove all woody vegetation from the joints of the concrete-lined upstream face, and from the joints of the spillway walls and invert.

3. Seal/repair all cracks, joints, and damaged concrete in the spillway, and grind down any raised downstream panel edges.

If you have any questions or require additional information, contact Mr. Roundtree at (916) 227-4625 or Regional Engineer Melissa Collord at (916) 227-4631.

Sincerely,

[Signature]
Sharon K. Tapia, Chief
Division of Safety of Dams

Enclosure
Certified Mail

cc: (See attached list.)
cc:  Ms. Robin Brewer, Assistant Chief Counsel  
Office of the Chief Counsel  
Department of Water Resources  
1416 Ninth Street, Room 1118  
Sacramento, California  95814

Ms. Lori Newquist, Coordinator  
California Office of Emergency Services  
Hazard Mitigation  
3650 Schriever Avenue  
Mather, California  95655

Mr. Jeff Cattaneo, District Manager  
San Benito County Water District  
Post Office Box 889  
Hollister, California  95024

Ms. Katherine Oven, Deputy Operating Officer  
Water Utility Capital Division  
Santa Clara Valley Water District  
5750 Almaden Expressway  
San Jose, California  95118-3686
TO: Board of Directors
SUBJECT: Handout from 04/10/18 Board Meeting

FROM: Michele L. King, Clerk
DATE: 04/13/18

The following handout was submitted by Jerry Smith, Emeritus Professor, San Jose State University, during the 04/10/18 Board Meeting, regarding steelhead trout. His two reports will be included in a separate file due to length.
Precarious Steelhead Populations in Northern Santa Clara County

Jerry J. Smith, Ph. D.
Emeritus, Dept. Biology, San Jose State University
frogs and fish@yahoo.com

Since my name, and a report based upon my fish sampling in Coyote Creek in 2014-2017, have been referenced in a MercuryNews article, and in a letter to editor in the News, especially in relation to an NGO water rights complaint, I would like to clarify the fish situation.

The apparent local extinction of federally threatened steelhead trout in Coyote Creek, is based upon the lack of steelhead reproduction (spawning) and young-of-year rearing in 2015-2017. No steelhead upstream migration by adults or downstream migration by smolts heading to San Francisco Bay was possible from mid-February 2014 through March 2016.

The impacts were caused by a combination of factors:
- a) the drought and reduced SCVWD imported water, reservoir releases, pipeline releases, and stream flows in 2014-2016;
- b) fish passage problems at the Singleton Road Crossing (City of San Jose);
- c) predation and warm temperature impacts of the on-channel Ogier Pond complex (Santa Clara County Park); and
- d) most prominently, by the lack of an adequate set of guidelines, regulations, and collaborations to protect and maintain threatened steelhead in Coyote Creek and other north county streams.

The Stevens Creek steelhead population also lacked apparent steelhead spawning in 2014-2016 due to similar effects, but fortunately some successful spawning occurred in 2017.

For more than 15 years, discussions have been conducted to establish an agreement (the Fish and Aquatic Habitat Collaborative Agreement) for permanent rules and actions to improve and maintain conditions for steelhead in the Coyote Creek, Stevens Creek, and Guadalupe River watersheds. An inadequate, unsigned interim agreement, and lack of enforceable guidelines, has failed to protect steelhead during that period and was completely inadequate to protect the fish during the recent drought.

Migratory steelhead require three conditions to complete their life cycle:
- a) sufficient flow during the January to early April period, and the lack of physical barriers to upstream migration, in order to reach spawning and rearing habitat;
- b) suitable year-round habitat for rearing, with water temperatures, fast-water feeding habitat, and food sufficient to grow for one to two years; and (often overlooked)
- c) adequate stream flow to the Bay in March-May to allow the smolts to migrate downstream.
During the past five years, steelhead rearing habitat was available due to percolation operations in the local streams, but adult access for spawning and outmigration of smolts was inadequate or absent. All three life cycle phases need to be addressed with a flexible and enforceable agreement among the regulatory agencies and the SCVWD and others.

Incidentally, an updated Memorandum of Agreement between the SCVWD, the California Department of Fish and Wildlife, and NOAA Fisheries for Uvas Creek in south Santa Clara County was developed in 2005-2010, and adopted in 2012, that established a set of rules to improve adult steelhead access, expand the extent and quality of steelhead rearing habitat, and provide for reservoir releases to allow smolts to migrate downstream in spring. The framework adjusts for differences among rainfall years and includes scheduled collaboration between the SCVWD and the regulatory agencies to adjust the allocations of releases to reflect variations within and between years. A similar approach is needed in north Santa Clara County.