The BAOs shall inform and support the Board in its work.
Chief Executive Officer Bulletin
Week of June 28 – July 4, 2019

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.

<table>
<thead>
<tr>
<th>Item</th>
<th>IN THIS ISSUE</th>
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<td>Water Supply Master Plan Stakeholder Outreach</td>
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| 2    | Varela
      | Response to Gavilan College Water Resources Management I-19-0010 |
| 3    | Varela
      | Please Provide a 20-Year Projection of the Discretionary Portion of the Open Space Credit, Which Will Need to be Replaced by a New Alternative Revenue Source Beginning in Fiscal Year 2021-2022 I-19-0012 |

Water Supply Master Plan Stakeholder Outreach

Valley Water is in the process of updating its Water Supply Master Plan (Master Plan), which is Valley Water’s strategy for providing a reliable and sustainable water supply in a cost-effective manner consistent with Board Policy E-2 – “There is a reliable, clean water supply for current and future generations”.

Valley Water has completed a draft Master Plan and is currently scheduled to present the draft to the following stakeholder groups:

- Agriculture Water Advisory Committee – July 1, 2019
- Public Stakeholder Meeting – July 8, 2019
- Environmental and Water Resources Committee – July 15, 2019
- Retailer, City, and County Stakeholder Meeting – July 16, 2019
- Quarterly Water Retailers Meeting – July 17, 2019
- Santa Clara Valley Water Commission – July 24, 2019

Additionally, the draft Master Plan has been uploaded to Valley Water’s website.

A final Master Plan will be presented to the Board in September 2019, at a Board of Directors meeting.
For further information, please contact Jerry De La Piedra at (408) 630-2257.

Varela
Response to Gavilan College Water Resources Management
I-19-0010

In June 2019, Director Varela initiated an Informal Board Member Request (IBMR 1-19-0010) requesting that Valley Water investigate providing continued support to Gavilan College’s Water Resource Management Program, through scholarships, lecturer support, use of Valley Water equipment, etc., and following up with Director Varela and Dean of Career Education, Sherrean Carr.

Valley Water met with Director Varela on June 20, 2019, to discuss Gavilan College’s Water Resource Management Program. It has been confirmed that Valley Water cannot provide scholarships, but discussed opportunities under Valley Water’s Grants Program. Valley Water is continuing to research use of equipment and interest in lecturing support before contacting Ms. Carr.

For further information, please contact Anna Noriega at (408) 630-3089.

Varela
Please Provide a 20-Year Projection of the Discretionary Portion of the Open Space Credit, Which Will Need to be Replaced by a New Alternative Revenue Source Beginning in Fiscal Year 2021-2022
I-19-0012

Valley Water submitted a memorandum to the Board of Directors in the July 5, 2019, Non-Agenda Packet that shows the 20-year projection of Open Space Credit savings for each year beginning in Fiscal Year (FY) 2021-2022 based on setting the agricultural groundwater charge at the maximum of 25% of the South County Municipal and Industrial (M&I) groundwater charge. The Open Space Credits savings in this scenario represents the amount of revenue that would need to be replaced by a new alternative revenue source in order to continue setting the agricultural groundwater charge at 6% of the South County M&I charge in FY 2021-2022 and beyond. The annual Open Space Credit savings ranges from $2.8 million in FY 2021-2022 to $8.1 million by FY 2041-2042.

For further information, please contact Darin Taylor at (408) 630-3068.
Outlook as of July 1, 2019

We began calendar year 2019 with groundwater storage well within Stage 1 (Normal) of Valley Water's Water Shortage Contingency Plan despite below-normal local rainfall and statewide snowpack in calendar year 2018. As of July 1, the statewide average snowpack water equivalent is well above normal and valley floor precipitation is also above normal. Countywide, groundwater storage remains healthy due to the wet winter and continued water use reduction by the community. In northern Santa Clara County, groundwater levels in many monitoring wells reached historic highs this spring and the basin is essentially full.

Weather

Rainfall in San Jose:
- Month of June, City of San Jose = 0.0 inches
- Rainfall year total = 15.67 inches or 110% of average [rainfall year is July 1 to June 30]
- Normal rainfall for the full year = 14.31 inches

Local Reservoirs

- Total July 1 storage = 100,322 acre-feet
  - 100% of 20-year average for that date
  - 60% of total capacity
  - 90% of restricted capacity (166,808 acre-feet total storage capacity limited by seismic restrictions to 111,963 acre-feet)
- Approximately 800 acre-feet of imported water delivered into local reservoirs during June 2019
- Total estimated releases to streams (local and imported water) during June was 6,460 acre-feet (based on preliminary hydrologic data)

Treated Water

- Above average demands of 11,154 acre-feet delivered in June
- This total is 105% of the five-year average for the month of June
- Year-to-date deliveries = 41,899 acre-feet or 96% of the five-year average

Groundwater

- Groundwater conditions are very healthy, with total storage at the end of 2019 predicted to fall well within Stage 1 (Normal) of Valley Water's Water Shortage Contingency Plan.

<table>
<thead>
<tr>
<th></th>
<th>Santa Clara Subbasin</th>
<th>Llagas Subbasin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Santa Clara Plain</td>
<td>Coyote Valley</td>
</tr>
<tr>
<td>June managed recharge estimate [AF]</td>
<td>4,800</td>
<td>1,400</td>
</tr>
<tr>
<td>January to June managed recharge estimate [AF]</td>
<td>21,200</td>
<td>6,600</td>
</tr>
<tr>
<td>January to June managed recharge, % of 5-year average</td>
<td>84%</td>
<td>142%</td>
</tr>
<tr>
<td>May pumping estimate [AF]</td>
<td>3,700</td>
<td>1,100</td>
</tr>
<tr>
<td>January to May pumping estimate [AF]</td>
<td>16,400</td>
<td>3,900</td>
</tr>
<tr>
<td>January to May pumping, % of 5-year average</td>
<td>60%</td>
<td>98%</td>
</tr>
<tr>
<td>GW index well level compared to last June</td>
<td>Same</td>
<td>Increase</td>
</tr>
</tbody>
</table>

AF = acre-feet

continued on back
Imported Water

- As of July 1, 2019, the Statewide average snowpack water equivalent is 79% of the historic average for this date.
- 2019 State Water Project (SWP) and Central Valley Project (CVP) allocations:
  » 2019 SWP allocation of 75%, which provides 75,000 acre-feet to Valley Water
  » 2019 South-of-Delta CVP allocations are 100% for M&I and 75% for Agriculture, which provides 122,325 acre-feet to Valley Water
- Statewide reservoir storage information, as of June 30, 2019:
  » Shasta Reservoir at 96% of capacity (119% of average for this date)
  » Oroville Reservoir at 98% of capacity (120% of average for this date)
  » San Luis Reservoir at 73% of capacity (115% of average for this date)
- Valley Water’s Semitropic groundwater bank reserves are at 87% of capacity, or 304,367 acre-feet, as of May 31, 2019
- Estimated SFPUC deliveries to Santa Clara County:
  » Month of May = 3,758 acre-feet
  » 2019 Total to Date = 14,340 acre-feet
  » Five-year annual average is 48,700 acre-feet
- Board Governance Policy No. EL-5.3.3 includes keeping the Board informed of imported water management activities on an ongoing basis. In calendar year 2019, two imported water management agreements were executed as of July 1, 2019

Conserved Water

- Saved 75,687 acre-feet in FY18 from long-term program (baseline year is 1992)
- Long-term program goal is to save nearly 100,000 acre-feet by 2030
- The Board continues its call for 20% reduction and a limit of three days per week for irrigation of ornamental landscape with potable water
- Through May, achieved a 26% reduction in water use in calendar year 2019, compared to 2013

Recycled Water

- Estimated June 2019 production = 1,700 acre-feet
- Estimated Year-to-Date through June = 6,800 acre-feet or 82% of the five-year average
- Silicon Valley Advanced Water Purification Center produced an estimated 1.3 billion gallons (4,100 acre-feet) of purified water in 2018. Since the beginning of 2019, about 1,800 acre-feet of purified water has been produced. The purified water is blended with existing tertiary recycled water for South Bay Water Recycling Program’s customers
BOARD MEMBER REQUESTS & INFORMATIONAL ITEMS
<table>
<thead>
<tr>
<th>Request</th>
<th>Request Date</th>
<th>Director</th>
<th>BAO/Chief</th>
<th>Staff</th>
<th>Description</th>
<th>20 Days Due Date</th>
<th>Expected Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-19-0010</td>
<td>06/11/19</td>
<td>Varela</td>
<td>Camacho</td>
<td>Noriega</td>
<td>Staff to investigate providing continued support to the Gavilan College's Water Resource Management program, through scholarships, lecturer support, use of District equipment, etc., and following up with Director Varela and Sherrean Carr, Dean of Career Education</td>
<td>07/01/19</td>
<td></td>
</tr>
<tr>
<td>I-19-0012</td>
<td>07/02/19</td>
<td>Varela</td>
<td>Camacho</td>
<td>Taylor</td>
<td>Please provide a 20 year projection of the discretionary portion of the Open Space Credit, which will need to be replaced by a new alternative revenue source beginning in Fiscal Year 2021-22.</td>
<td>07/22/19</td>
<td></td>
</tr>
</tbody>
</table>
MEMORANDUM

TO: Board of Directors

SUBJECT: 20-Year Projection of the Discretionary Portion of the Open Space Credit (IBMR 19-0012 Response)

FROM: Darin Taylor

DATE: July 2, 2019

The purpose of this memo is to respond to IBMR 19-0012. On June 27, 2019 Director Varela requested a 20-year projection of the discretionary portion of the open space credit, which is the portion that will need to be replaced by a new alternative revenue source beginning in Fiscal Year (FY) 2021-22 per Board direction.

The following chart shows the amount of Open Space Credit savings projected for each year beginning in FY 2021-22 by setting the Agricultural groundwater charge at the maximum of 25% of the South County Municipal and Industrial (M&I) groundwater charge, and therefore represents the amount of revenue that would need to be replaced by a new alternative revenue source in order to continue setting the agricultural groundwater charge at 6% of the South County M&I charge in FY 2021-22 and beyond.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>OSC Savings</th>
</tr>
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<tbody>
<tr>
<td>2022</td>
<td>$2.8 M</td>
</tr>
<tr>
<td>2023</td>
<td>$3.0 M</td>
</tr>
<tr>
<td>2024</td>
<td>$3.2 M</td>
</tr>
<tr>
<td>2025</td>
<td>$3.4 M</td>
</tr>
<tr>
<td>2026</td>
<td>$3.7 M</td>
</tr>
<tr>
<td>2027</td>
<td>$3.9 M</td>
</tr>
<tr>
<td>2028</td>
<td>$4.2 M</td>
</tr>
<tr>
<td>2029</td>
<td>$4.5 M</td>
</tr>
<tr>
<td>2030</td>
<td>$4.7 M</td>
</tr>
<tr>
<td>2031</td>
<td>$5.0 M</td>
</tr>
<tr>
<td>2032</td>
<td>$5.2 M</td>
</tr>
<tr>
<td>2033</td>
<td>$5.4 M</td>
</tr>
<tr>
<td>2034</td>
<td>$5.6 M</td>
</tr>
<tr>
<td>2035</td>
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<td>$6.7 M</td>
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<tr>
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<td>$7.0 M</td>
</tr>
<tr>
<td>2040</td>
<td>$7.3 M</td>
</tr>
<tr>
<td>2041</td>
<td>$7.7 M</td>
</tr>
<tr>
<td>2042</td>
<td>$8.1 M</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$109.8 M</strong></td>
</tr>
</tbody>
</table>
If you have any questions, please call me at 408 630-3088.

Darin Taylor
Chief Financial Officer

CC: N. Camacho, N. Hawk, A. Mendiola, J. Abadilla, J. Atmore
TO: Board of Directors

FROM: David Cahen
Risk Manager

SUBJECT: Risk Management Communication

DATE: July 3, 2019

The purpose of this memorandum is to provide you a copy of recent Risk Management staff's communication with individuals that have filed a claim against the District.

Please find the following attachments:

1) June 24, 2019 subrogation letter to Dr. Rahul Singh and Ms. Tania Biswas (District 7)
2) June 28, 2019 claim confirmation letter to Ms. Alondra Uribe-Jimenez (District 4)
3) June 28, 2019 settlement letter to Ms. Farimah Haghighi-Massourni (District 5)
4) July 2, 2019 claim confirmation letter to Ms. Lori Brody (District 7)
5) July 2, 2019 settlement letter to Mr. Richard Lonergan and Dr. Manning (District 7)
6) July 2, 2019 settlement letter to Mr. Anders Bjorkman (District 7)
7) July 2, 2019 settlement letter to Mr. Joshua Elman and Ms. Clover Huang (District 7)
8) July 2, 2019 settlement letter to Dr. Robin Press (District 7)

For additional information, please contact me at 408-630-2213.

David Cahen
Risk Manager
June 24, 2019

Dr. Rahul Singh  
Tania Biswas  
923 Mountain View Ave.  
Mountain View, CA 94040

Dear Dr. Singh and Ms. Biswas,

The District has reviewed your claim. The Santa Clara Valley Water District’s general contractor, Robert A. Bothman Construction (“Bothman”), is performing the Permanente Creek Flood Protection Project in your neighborhood and is the proper party to handle this matter. Bothman is obligated by contract to receive and handle any claims arising from this Project. Accordingly, we have tendered this claim to Bothman for further handling.

The name and address of the contact person for Bothman is:

Michael Mingrone  
General Counsel  
Robert A. Bothman Construction  
2890 Scott Blvd.  
Santa Clara, CA 95050

A representative from Bothman should contact you soon. If you receive no contact within the next 30 days, please contact my office and we will follow up on the status of your claim.

In the meantime, if you have any questions, please contact me at (408) 630-2213.

Sincerely,

David Cahen  
Risk Manager

WARNING

You have two years from the accrual of the cause of action to file a court action on this claim. See Government Code Section 945.6. You may seek the advice of an attorney of your choice in connection with this matter. If you desire to consult an attorney, you should do so immediately.

cc: Board of Directors (7), S. Yamamoto
June 28, 2019

Alondra Uribe Jimenez
1441 Hillsdale Ave.
San Jose, CA 95118

Regarding: Receipt of Claim – L1890030

Dear Ms. Jimenez,

We received your claim regarding the damages to your personal vehicle due to the June 18, 2019 accident involving one of our Valley Water employees.

We will investigate the claim and notify you of our findings.

If you have any questions, please don’t hesitate to contact Risk Manager, David Cahen at (408) 630-2213.

Sincerely,

Lilian Dennis
Management Analyst II
ldennis@valleywater.org
June 28, 2019

Farimah Haghghi-Massoumi
14215 Squirrel Hollow Lane
Saratoga, CA  95070

Regarding:  Claim L1680027

Dear Ms. Haghghi-Massoumi,

Enclosed is the final settlement check regarding the above-mentioned claim. The total amount of the settlement is $200.00.

On behalf of the Santa Clara Water District, I apologize for any inconvenience this incident may have caused and thank you for your cooperation.

Sincerely,

David Cahen
Risk Manager

Enc:  Check #276272
July 2, 2019

Lori Brody
969 Valencia Ave.
Mountain View, CA 94040

Regarding: Receipt of Claim – L1890031

Dear Ms. Brody,

We received your claim regarding the exterior house cleaning services as a result of the Permanente Creek project.

We will investigate the claim and notify you of our findings.

If you have any questions, please don’t hesitate to contact Risk Manager, David Cahen at (408) 630-2213.

Sincerely,

Lilian Dennis
Management Analyst II
ldennis@valleywater.org
July 2, 2019

Richard Lonergan  
Marilyn Manning  
945 Mountain View Ave.  
Mountain View, CA  94040

Regarding:  Claim L1780009

Dear Mr. Lonergan and Dr. Manning,

Enclosed is the final settlement check regarding the above-mentioned claim. The total amount of the settlement is $6,000.00.

On behalf of the Santa Clara Water District, I apologize for any inconvenience this incident caused and thank you for your cooperation.

Sincerely,

[Signature]

David Cahen  
Risk Manager

enc: Check #276294
July 2, 2019

Anders Bjorkman  
957 Mountain View Ave.  
Mountain View, CA 94040

Regarding: Claim L1780035

Dear Mr. Bjorkman,

Enclosed is the final settlement check regarding the above-mentioned claim. The total amount of the settlement is $4,000.00.

On behalf of the Santa Clara Water District, I apologize for any inconvenience this incident caused and thank you for your cooperation.

Sincerely,

David Cahen  
Risk Manager

enc: Check #276224
July 2, 2019

Joshua Elman  
Clover Huang  
947 Mountain View Ave  
Mountain View, CA 94040

Regarding: Claim L1780026

Dear Mr. Elman and Ms. Huang,

Enclosed is the final settlement check regarding the above-mentioned claim. The total amount of the settlement is $4,000.00.

On behalf of the Santa Clara Water District, I apologize for any inconvenience this incident caused and thank you for your cooperation.

Sincerely,

[Signature]

David Cahen  
Risk Manager

enc: Check #276256
July 2, 2019

Dr. Robin Press
959 Mountain View Ave
Mountain View, CA 94040

Regarding: Claim L1780036

Dear Dr. Press,

Enclosed is the final settlement check regarding the above-mentioned claim. The total amount of the settlement is $4,000.00.

On behalf of the Santa Clara Water District, I apologize for any inconvenience this incident caused and thank you for your cooperation.

Sincerely,

[Signature]

David Cohen
Risk Manager

enc: Check #276324
On July 1, 2019, the Secretaries of the California Environmental Protection Agency and the California Natural Resources Agency, Jared Blumenfeld and Wade Crowfoot, released a memo summarizing progress on the Voluntary Agreement process they have been leading (Attachment 1).

The memo describes the progress made since the March 1, 2019 submittal to the State Water Resources Control Board (State Board). Work efforts have been divided into four separate work groups that all report to a Plenary group, which is composed of all the entities participating in the effort, including state and federal agencies, water agencies and non-governmental conservation organizations. The work groups are as follows:

1. Assets and Outcomes: work group is defining and analyzing the potential benefits of the proposed water flow and habitat projects as well as developing biological and environmental targets.
2. Governance, Science and Adaptive Management: work group is establishing a governance structure and science program to inform implementation, and track and report outcomes of the flow and habitat projects.
3. Policy: work group is addressing critical path legal and policy questions.
4. State Team: composed of representatives from the California Natural Resources Agency, California Environmental Protection Agency, State Board, Department of Water Resources, and Department of Fish and Wildlife, the State Team is evaluating the proposed Voluntary Agreements to determine whether they can provide reasonable protection for beneficial uses of Bay-Delta waters as required by law.

Santa Clara Valley Water District (Valley Water) staff have been actively participating in the first two work groups and tracking progress of the third and fourth.

The memo also outlines the following schedule moving forward:

October 2019: modeling and scientific analysis "nearing completion" and the governance and science program in "close to final form." If the legal and policy questions are sufficiently resolved by October 15, 2019, the State Team should be able to determine whether the Voluntary Agreements provide reasonable protection of native fish and wildlife while also balancing the needs of the other beneficial uses identified in the Bay-Delta Water Quality Control Plan as required by law.
Spring 2020: On the current timeline, if the State Team decides to recommend that the State Board consider the Voluntary Agreements as an alternative to the unimpaired flow approach they adopted in December 2018 for the San Joaquin River and its major salmon bearing tributaries, then a scientific basis report will be complete by Spring 2020.

Summer 2020: On the current timeline, the State Board would release a draft California Environmental Quality Act (CEQA) document for public comment in the summer of 2020 and finalize it the following year. Implementation could begin immediately after the CEQA environmental review is complete.

The Secretaries’ memo and additional information on the Voluntary Agreement effort can be found at the following website:

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

Also related to the Voluntary Agreements, on June 27, 2019 Governor Newsom approved the 2019-2020 State Budget which appropriates $70 million, from the available $200 million, in Chapter 8 of Proposition 68 to fund implementation of the Voluntary Agreements. The Governor’s budget seeks to expend the funds, “for projects and actions that develop and improve habitat, river flows, water quality, and contribute to conditions that support the viability of native fish species.”

Per direction of Valley Water’s Board of Directors, Valley Water staff have been very engaged in the discussions leading up to this most recent transmittal and will remain engaged as the parties work to resolve the remaining issues and execute a final agreement.

Nina Hawk
Chief Operating Officer
Water Utility Enterprise

Attachment 1: Memorandum from Secretaries Blumenfeld and Crowfoot, dated July 1, 2019
MEMORANDUM

To: VA Plenary Participants
From: Secretaries Jared Blumenfeld and Wade Crowfoot
Re: Voluntary Agreements Progress Report
Date: July 1, 2019

This memo provides a status report on our agencies' development of voluntary agreements (VAs) with water users, non-governmental conservation organizations and federal agencies. The VAs intend to implement updated water quality objectives for the Sacramento and San Joaquin Rivers and their tributaries, as well as the Sacramento-San Joaquin Bay-Delta, through a broad set of tools. The memo outlines progress to date and describes work in the coming months to complete and evaluate these agreements. This memo is intended to be shared with any and all stakeholders who are interested in following the development of the VAs.

State agencies and VAs participants have yet to decide whether this effort will culminate in a single proposed voluntary agreement or multiple agreements. In this document we refer to this proposal in the plural as voluntary agreements (VAs) for consistency; this is not intended to suggest a predetermination as to the final format.

Overview

Since Governor Newsom took office in January, we have helped to lead an effort to advance and evaluate the initial VAs framework presented to the State Water Resources Control Board (State Water Board) in December 2018. The VAs are being developed as an alternative mechanism to provide reasonable protection of native fish, wildlife and other beneficial uses as required by law and identified in the State Water Board’s update to the Bay-Delta Water Quality Control Plan (Bay-Delta Plan).

The VAs seek to improve conditions for native fish and wildlife through targeted river flows and a suite of habitat-enhancing projects including floodplain inundation and physical improvement of spawning and rearing areas. The VAs aim to achieve these improvements while also balancing the needs of other beneficial uses identified in the Bay-Delta Plan, including municipal, domestic and agricultural water supplies, recreation, and navigation.

The VAs reflect a collaborative approach to water resources management and native fish and wildlife protection. Over the past six months, support for this effort has been reflected in extensive collaboration over hundreds of hours among the State Team,
Bureau of Reclamation and an array of stakeholders, including dozens of public water agencies and environmental conservation groups.

Our collective effort has involved clarifying the details of complex, interconnected 15-year agreements among dozens of parties to manage flows and restore habitat in the Sacramento and San Joaquin river systems, their tributaries and the Bay-Delta. The proposed VAs are currently being evaluated by the California Natural Resources Agency (CNRA), the California Environmental Protection Agency (CalEPA), the State Water Board, the Department of Water Resources (DWR) and the Department of Fish and Wildlife (DFW) (known collectively as the "State Team") to determine whether they can provide reasonable protection for beneficial uses of Bay-Delta waters as required by law.

It is important to note that many environmental conservation groups participating in the process have raised concerns regarding the adequacy of the VAs flow and non-flow assets to achieve required outcomes. At the same time, many water users have expressed concerns about the prospect of being asked to contribute more assets beyond what was outlined in VAs presented to the State Water Board in December 2018.

On March 1, the Directors of DWR and DFW submitted two documents to the State Water Board:

1. An updated Project Description for the VAs that provided more detailed information about the assets being offered in the agreements, including water flows, funding, accelerated implementation of habitat improvements, and a science-based decision-making process to manage flows.

2. A Planning Agreement to guide further work needed to complete the VA proposals. The Planning Agreement set a target date of June 30, 2019, to resolve several outstanding legal and policy questions regarding the proposed VAs and to further refine certain elements of the project description.

Status of the Voluntary Agreements

We are pleased to report substantial progress since March 1 to further develop and evaluate the VAs. Work has advanced through three primary work groups, each composed of representatives from the State Team, the Bureau of Reclamation, water agencies and environmental groups:

1. The **Assets to Outcomes Work Group** is identifying how the water flows, habitat and funding provided through the VAs—known as "assets"—could result in measurable, achievable outcomes that will reasonably protect native fish species and other beneficial uses. The goal of this work group is to provide the State Water Board with information necessary to determine whether the VAs’ assets will result in providing reasonable protection of the beneficial uses as required by law.
2. The **Governance, Science and Adaptive Management Work Group** is structuring a decision-making process that would govern implementation of the VAs to adaptively manage the water flows and habitat provided by the VAs. This group is designing a science program to track and report outcomes of the various assets and provide scientific information to support effective adaptive management. This collaborative decision-making approach utilizing real-time scientific monitoring could significantly improve our state's environmental management of these river systems.

3. The **Policy Work Group** is addressing critical path legal and policy questions, such as enforceability of the VAs' terms and appropriate amendments or updates to the Bay-Delta Plan that remain to be resolved. This work group has received extensive support from a Legal Work Group that drafted the Planning Agreement submitted March 1.

The work of each of these three groups is guided by a Plenary meeting of all groups participating in the VAs, which takes place every three weeks and is led by the Secretaries. Detailed below is the specific progress made in each work group, as well as outstanding work yet to be completed.

**Assets to Outcomes Work Group**

Since March 1, this work group has completed an enormous amount of work. First, it has clarified the complicated details regarding the water flows and habitat projects proposed by participating water agencies in each tributary; this clarification is essential for the State Team to analyze the VAs.

The work group has also discussed the methodology that will be used to analyze these assets and the outcomes they can be anticipated to produce, as well as an approach to comparing the outcomes generated by the VAs assets to the outcomes generated by the unimpaired flows proposed by the State Water Board staff.

Extensive discussion has taken place about how to analyze the water flow assets in the state's current analytical models, including CalSIM, SacWAM, and WSE.\(^1\) The State Water Board released a preliminary baseline run for SacWAM and held a webinar to review the latest version of the model. DWR and the State Water Board have been working together to assure an understanding of potential differences between CalSIM and SacWAM representation of flow assets, and towards a comparison of baseline runs. These baseline runs are nearly completed, and substantial progress has been made on modeling the VAs assets and unimpaired flows.\(^2\) Once completed, this work will make it possible to analyze and compare the modeled results of the flow assets in each of the

\(^1\) CalSIM, which is a DWR model, and SacWAM and WSE, which are State Water Board models, all assess the effects of hydrologic changes in the Sacramento and San Joaquin River systems.

\(^2\) These models are based on a monthly time step; other tools that can complement them by evaluating items like water temperature on a daily time step may be considered and integrated into the analysis as well.
tributaries and in the Delta, and will allow individual river systems to perform important analysis and understand parameters such as water temperature.

This work group has also clarified details of habitat enhancements proposed in the VAs so these assets can be analyzed for anticipated outcomes. Two different analytical tools will be used to evaluate the habitat assets— one in the tributaries and the other in the Delta. The first tool will assess the relationship between water flows and habitat improvement and expansion in each tributary and produce information to evaluate whether the combination of flow and non-flow measures meets specific suitability requirements and can support healthier native fish populations. The other Delta-focused tool utilizes a hydrodynamic model to evaluate the impacts of different variations of flow and habitat assets on various fisheries habitat indicators such as water depth, velocity, salinity, etc. Ultimately, the CalSIM and SacWAM hydrological analyses must be paired with these two habitat appraisal tools to produce an overall assessment of the VAs’ combined flow and habitat approach and its ability to contribute to the Boy- Delta Plan’s objectives.

The Assets to Outcomes workgroup is also developing biological and environmental targets (BETs) for the VAs to guide both finalization of the agreements and scientific monitoring and decision-making during the 15-year term of the agreements. Same BETs will establish compliance targets, which will define the intended contribution of the VAs towards meeting the legal and policy requirements of the Bay-Delta Plan. Other BETs will serve as benchmarks to track the success of the VAs by evaluating their effectiveness in improving the success of native fish and wildlife at different life stages and in different locations; understanding the response of native fish and wildlife; and improving scientific understanding throughout the watersheds. This work group will need to finalize BETs and integrate them into the governance, science and adaptive management program so they can inform the deployment of available assets to provide the greatest biological benefits. These activities will be completed in coordination with the Governance, Science and Adaptive Management Work Group.

In a separate but related process, the State Water Board is developing a set of biological goals as required by the current Bay-Delta Plan. These biological goals are broader and concern all implementation actions in the Bay-Delta watershed, including actions that are required for water rights holders who are not parties to a VA. The BETs developed through the VAs process will be integrated with the State Water Board’s broader biological goals.

In the coming months, the work group will work closely with the State Team to explore further revisions to flow modeling and to discuss the results of analysis of flow and non-flow assets. This discussion is expected to yield a preliminary quantitative and qualitative assessment of the outcomes of the VAs and a description of how VAs outcomes compare with the outcomes expected from the State Water Board’s unimpaired flow approach. This group will also need to finalize a set of biological and environmental targets, describe how these targets will be incorporated into the VAs, and inform the
drafting of a report to examine and articulate the scientific basis for the VAs approach to attaining required outcomes.

**Governance, Science and Adaptive Management Work Group**

This work group has made significant progress since March 1 developing recommendations for the governance and science program of the VAs. The description of the proposed VAs governance now includes:

1. Principles to guide how parties to the VAs will work together to implement the agreements;
2. A collaborative governance structure intended to balance regional capabilities and constraints in the tributaries and the Delta with a systemwide approach;
3. A consensus-oriented strategic planning and decision-making approach for the deployment of VAs assets that is intended to be science-based and transparent; and
4. A process for reviewing progress toward desired environmental and biological outcomes and recommending adjustments to the deployment of assets to achieve improved outcomes.

These recommendations have been informed by successful collaborative governance structures for shared water management in other areas of the country, which have been highlighted by consultants from Compass—a nationally recognized expert on water governance retained by this work group.

The updated VAs science program description includes functions and products that are intended to: track and report on the deployment of VAs assets and associated progress toward VAs targets; help reduce management-relevant uncertainties; and recommend adaptive management adjustments to the deployment of VAs assets (to the extent that the deployment of VAs assets is flexible).

Several important aspects of the VAs governance system are unresolved and require additional detail on the VAs assets and resolution of several key policy questions. These policy questions include, but are not limited to: 1) the State Water Board's role in VAs implementation; 2) how funding for habitat projects and science activities will be collected and allocated, and how state funding will be used; 3) whether there should be a single, master agreement for all parties or individual agreements, and who the signatories should be; and 4) what will happen if desired or required environmental outcomes (as defined by BETs) fail to materialize, despite compliance with deployment requirements for VAs assets. The Policy Work Group is the designated forum for discussion of issues and will be addressing them in coming weeks. While these questions are being discussed and resolved, this work group will further develop proposed governance structures and processes for specific tributaries and the Delta.
Policy Work Group

In February, a Legal Work Group was organized to draft the Planning Agreement submitted to the State Water Board on March 1. This Planning Agreement identified several critical path legal and policy issues that must be resolved to complete the proposed VAs. Accordingly, consensus on these issues is critical to successful VAs. In April, a Policy Work Group was formed that includes representatives of each tributary participating in the VAs and environmental conservation organizations to discuss and recommend to the Plenary aligned approaches on these important critical path issues.

The Policy Work Group has focused on five principal issues:

1. Whether the Bay-Delta Plan should be amended to include a new or modified water quality objective related to the viability of native fishes;
2. What assurances the State Water Board should provide that it will not require additional contributions of flows or funds from the parties during the term of the VAs;
3. How should the State Water Board enforce the commitments contained in the VAs;
4. How the VAs relate to non-settling parties; and
5. What happens at the end of the VAs’ 15-year term.

Working closely with the State Team, the Policy Work Group met regularly in May and June to develop a document that identifies key options for resolving critical path issues and provides a brief policy rationale for each option. The Policy Group continues to meet weekly to discuss these options with the intent of coalescing around agreed-upon approaches.

Looking ahead, the stakeholders, through a regular plenary group meeting, will consider the Policy Work Group’s options for resolving these issues. After resolution, the Legal Work Group will undertake drafting legally operative text for incorporation of these policy and legal issues into the VAs.

Schedule Moving Forward

Over the next three months, the three work groups will continue to discuss, develop and ultimately finalize needed components of the proposed VAs. The State Team will need to review the VAs in a comprehensive form, with each of these components inserted, to come to a collective conclusion as to whether the VAs can provide the reasonable protection of beneficial uses required by law.

By October of this year, the State Team expects to have the modeling and scientific analysis nearing completion and the governance and adaptive management structure in close to final form. Assuming the critical path policy and legal questions are also either resolved or close to resolution, the State Team should have enough information
on each of the component parts to determine the adequacy of the VAs by October 15.

If the State Team decides to recommend that the State Water Board consider the VAs in their current form, the State Water Board will proceed to complete the remaining analyses required by law. First, the scientific basis report being developed by the State Team with input from the Assets to Outcomes working group will be submitted for independent scientific peer review. On the current timeline, that process will be complete by the spring of 2020. During this time, the VAs parties will continue to make refinements to the biological and environmental targets.

Second, as contemplated by the Planning Agreement, the State Water Board will also need to complete environmental review of the VAs and the updated Water Quality Control Plan pursuant to the California Environmental Quality Act (CEQA). While this process will be time consuming, it will be a priority of the State Water Board to complete. On the current timeline, a draft CEQA document would be released for public comment in the summer of 2020, with a finalized document complete by the following year. With successful VAs in place, implementation of the updated Bay-Delta Plan could begin immediately thereafter.