



### September 11, 2020

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

SANTA CLARA VALLEY WATER DISTRICT

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| 3    | Weeks of August 28 – September 10, 2020  |  |  |  |
|      | BOARD MEMBER REQUESTS & INFORMATIONAL ITEMS  |  |  |  |
| 8    | BMR/IBMR Weekly Reports: 09/10/20  |  |  |  |
| 10   | Memo from Garth Hall, COO, Water Utilities, to the Board of Directors, dated 9/4/20, regarding Delta Conveyance Project Updates.   |  |  |  |
| 27   | Memo from Rechelle Blank, DOO, Watersheds, to Rick Callender, CEO,<br>dated 9/8/20, regarding Completion of Planning Phase for Palo Alto Flood<br>Basin Tide Gate Structure Replacement Project. |  |  |  |
|      | INCOMING BOARD CORRESPONDENCE  |  |  |  |
| 29   | Board Correspondence Weekly Report: 09/10/20   |  |  |  |
| 30   | Email from Ernest Chavez, to the Board of Directors, dated 9/2/20, regarding homeless in San Tomas Creek (C-20-0150).  |  |  |  |
| 31   | Email from Darrell Erb, to the Board of Directors, dated 9/4/20, regarding Diversion Basin at Ranch San Antonio Open Space (C-20-0151).  |  |  |  |
| 32   | Email from Richard Hinnenkamp, to Director Varela, dated 9/8/20, regarding Anderson Park Closure (C-20-0152).  |  |  |  |
| 33   | Email from Ted Smith, to the Board of Directors, dated 9/9/20, regarding Elementary School Students Raising Money to Support Classmates and Community hit by Flooding (C-20-0153).               |  |  |  |
|      | OUTGOING BOARD CORRESPONDENCE  |  |  |  |
| 35   | Thank you letter from Chair Hsueh, to the Honorable Rick Lanman, dated 9/2/20, regarding August 28, 2020 meeting to discuss ways to collaborate.   |  |  |  |
| 36   | Thank you letter from Director Kremen, to Mayor Margaret Abe-Koga, dated 9/2/20, regarding meeting to discuss Valley Water key legislative policy priorities and other water related issues.     |  |  |  |
| 37   | Email from Director Keegan, to Don Lieberman, dated 9/3/20, regarding the Safe, Clean Water and Natural Flood Protection Program (C-20-0148).  |  |  |  |
| 39   | Email from Director Keegan, to Vickie Hoy, dated 9/9/20, regarding Homeless Activity along Saratoga Creek (C-20-0149).   |  |  |  |

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.

# **CEO BULLETIN**

# **CEO BULLETIN**



## To:Board of DirectorsFrom:Rick L. Callender, CEO

#### Weeks of August 28 - September 10, 2020

#### 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.

| ltem     | IN THIS ISSUE   |
|----------|---|
| <u>1</u> | Cannabis Plants and the Santa Clara County Sheriff's Office   |
| <u>2</u> | Completion of Planning Phase for Palo Alto Flood Basin Tide Gate Structure<br>Replacement Project   |
| <u>3</u> | State Grant Funding Opportunities for the Calabazas and San Tomas Aquino<br>Creek Realignment Project, a part of Salt Ponds A5-11 Restoration (Project<br>Number 20444001)  |
| <u>4</u> | Valley Water hosting CivicSpark Fellows this year   |
| <u>5</u> | Water Management Agreements executed in August 2020   |
| <u>6</u> | Youth Commission Quarterly Meeting  |
| <u>7</u> | Kremen<br>At the 9/8/20 Board meeting, Director Kremen requested that staff investigate<br>whether the proposed Pacheco Pumping Plant fire suppression system will<br>function if there is a power outage.<br>R-20-0010 |

#### 1. Cannabis Plants and the Santa Clara County Sheriff's Office

In recent weeks, Valley Water encountered cannabis plants growing in parts of the Guadalupe River and contacted local law enforcement to provide support for situations like this where safety may become an issue. While municipal police departments do not have services to deal with this type of encounter, Valley Water has coordinated with the Santa Clara County Sheriff's Office that operates a marijuana eradication team funded by the Drug Enforcement Administration (DEA). On September 4, 2020, an eradication operation was performed in the Guadalupe River by the County Sheriff's Office in coordination with Valley Water. Valley Water appreciates the support from the County Sheriff's Office for making these services available and will continue to work with our local law enforcement agencies moving forward as situations arise.

For further information, please contact Alex Gordon at (408) 630-2637.

### 2. Completion of Planning Phase for Palo Alto Flood Basin Tide Gate Structure Replacement Project

The Planning Phase for the Palo Alto Flood Basin Tide Gate Structure Replacement Project (Project) is complete and the Project is moving forward into the Design Phase. The existing 1957 tide gate structure provides 100-year flood protection for Matadero, Barron, and Adobe Creeks, and protects residential and commercial parcels and Highway 101 from coastal flooding. An emergency repair was performed to control seepage underneath the tide gate structure in 2012. Pursuant to the emergency work, another repair to the tide gate structure was attempted in 2017 which was unsuccessful. Following the attempted repair, a structural assessment was made by a consultant which resulted in a recommendation to fully replace the tide gate structure.

The replacement tide gate structure will provide continued flood protection, takes into consideration future sea level rise in alignment with the South San Francisco Bay Shoreline Phase II Feasibility Study effort, and maintains existing basin habitat and trail recreation. A Project Definition Report and Planning Study Report (PSR) have been completed. The PSR was completed on August 10, 2020 and is posted at the project website <u>https://www.valleywater.org/pafbtidegates</u>. A project update was presented to the Valley Water Board on February 11, 2020. Valley Water also hosted a virtual public meeting on June 24, 2020 to present the project background, objectives, design concepts, and target project schedule. The current estimated total project cost is \$33 million and is being funded by Valley Water's Watershed Stream Stewardship Fund 12.

The Draft CEQA (California Environmental Quality Act) Mitigated Negative Declaration (MND) has been prepared and is anticipated to be posted for public review in September 2020 on the project website. Current project schedule anticipates the MND will be final in November 2020 (contingent on the number of comments received). Environmental permit application submissions are planned for October 2020, seeking authorization by September 2021. Extensive pre-application coordination with regulatory agencies has been conducted and is ongoing. Construction on the replacement Structure is anticipated to start in Fall 2022 and be completed by Fall 2025, pending acquisition of all necessary environmental permits.

For further information, please contact Rechelle Blank at (408) 630-2615

### 3. State Grant Funding Opportunities for the Calabazas and San Tomas Aquino Creek Realignment Project, a part of Salt Ponds A5-11 Restoration (Project Number 20444001)

As part of Safe Clean Water Project B1 (Impaired Water Bodies Improvement), Valley Water operates oxygenation systems in four reservoirs to address contaminants, including mercury, by extracting pure oxygen from the air and delivering it to the bottom of the reservoirs. The systems are typically deployed and operated continuously from April to September and require regular mechanical maintenance. The oxygenation systems were operating continuously the last three summer seasons but are susceptible to malfunction. This year, the Almaden and Calero reservoir oxygenation equipment failed in June and early-July respectively. Repair of the units has been complicated by COVID-19 work stoppages and other factors. The Almaden unit can be brought online with minimal repair work and parts should be available late-August 2020. The Calero unit will require more extensive repairs and may not be brought online this season. An emergency Purchase Order for evaluation and repair is currently being processed. Valley Water is evaluating options for reducing future downtime, including the purchase of a backup unit, replacement of major aging components, and more frequent service. The Stevens Creek and Guadalupe oxygenation systems are functioning normally.

For further information, please contact Lisa Bankosh at (409) 630-2618.



#### 4. Valley Water hosting CivicSpark Fellows this year

This year, Valley Water is hosting two CivicSpark Fellows who began their service year on September 1, 2020. The Local Government Commission (LGC), a nonprofit organization, is administering the CivicSpark program, as part of the federal AmeriCorps program. The CivicSpark Program provides capacity building services to local governments in California through project implementation activities performed by LGC teams; LGC staff and CivicSpark Fellows. Through project service, Fellows gain hands-on experience tackling the most pressing environmental and social equity problems facing communities today. CivicSpark Fellows have provided over 518,000 hours of service to California's communities and succeeded in a wide range local sustainability and resilience actions. Valley Water previously hosted a CivicSpark Fellow to assist in the early development of the Climate Change Action Plan.

Maggie O'Shea will support the Environmental Planning Unit in completing the Climate Change Action Plan for Board approval, conduct any needed outreach, and assist with development of an implementation program to further define specific actions and metrics. Desiree Sausele will support the Water Supply Planning and Conservation Unit with collecting and reviewing important data and literature on water temperature, as well as developing temperature models for both reservoirs and river reaches.

For further information, please contact Lisa Bankosh at (408) 630-2618 or Vincent Gin at (408) 630-2633.

#### 5. Water Management Agreements executed in August 2020

Pursuant to Executive Limitations (EL) EL-5.1.6 and EL-5.3.3, the Valley Water Chief Executive Officer is required to inform the Valley Water Board on a timely basis when imported water management agreements are executed. Imported water management agreements executed in August 2020 are summarized below.

Agreement between the Department of Water Resources and Santa Clara Valley Water District Approving Operations Under the 2020 Consolidated Place of Use Petition (#A4385X), August 3, 2020: allows for water exchange of up to 75,000 acre-feet between the State Water Project and Central Valley Project (CVP) to facilitate the delivery of Valley Water's CVP supplies through the South Bay Aqueduct; provides flexibility needed for effective management of Valley Water's imported water deliveries in 2020 and 2021.

For further information, please contact Vincent Gin at (408) 630-2633

#### 6. Youth Commission Quarterly Meeting

On August 26, 2020, the Valley Water Youth Commission hosted their first quarterly virtual meeting. Sixteen (16) youth commissioners attended the meeting and were applauded for their leadership and service. The meeting included the swearing-in of new youth commissioners, election of the Youth Commission Chair and Vice Chair, updates from various working groups, and future commission agenda items.

Nine (9) new youth commissioners were sworn-in and the new Chair, Michael Zhao, and Vice Chair, Ishita Verma, were elected. Updates were also provided from the following working groups: The Creek Stewardship Program, Career Shadowing & Mentorship, Youth Citizen Science Network, and Adopt-A-Bench Project. A date is also being confirmed for an upcoming virtual annual Youth Commission retreat,

There is currently one vacancy on the Valley Water Youth Commission in District 7. The application deadline for the vacant seat is September 14, 2020.

The next virtual Valley Water Youth Commission meeting will be on November 18, 2020.

For further information, please contact Marta Lugo at (408) 630-2237.

#### 7. Kremen

At the 9/8/20 Board meeting, Director Kremen requested that staff investigate whether the proposed Pacheco Pumping Plant fire suppression system will function if there is a power outage. R-20-0010

The fire suppression system improvements to be constructed via contract awarded by the Valley Water Board of Directors on September 8, 2020 include installation of a 24-hour battery backup system in the event external power is lost at the site.

Pacheco Pumping Plant's main electrical system also has an existing standby generator for life safety support.

For further information, please contact Heath McMahon at (408) 630-3126.

# **BOARD MEMBER REQUESTS** and Informational Items

| Request   | Request<br>Date | Director         | BAO/Chief | Staff   | Description   | 20 Days Due<br>Date | Expected<br>Completion<br>Date | Disposition |
|-----------|-----------------|------------------|-----------|---------|---|---------------------|--------------------------------|-------------|
| I-20-0014 | 08/20/20        | Kremen<br>Santos | Yoke      | Gordon  | Director Kremen requested staff to<br>take a look at the potential of<br>hiring private fire fighting<br>organization to protect the<br>Penitenia WTP. In addition,<br>Director Santos requested<br>information on whether any<br>consideration has been given to<br>installing fire suppression<br>sprinklers on the perimeter or<br>other effective location on WTPs.<br>Copies of both email requests are<br>attached below. | 09/10/20            |                                |             |
| R-20-0008 | 08/25/20        | Hsueh            | Tippets   | Infante | Chair Hsueh requested that staff<br>prepare a communication to send<br>to all constituents who have<br>contacted the Board outlining the<br>actions taken to date on the<br>President's Day flood on Coyote<br>Creek. Copy of email attached<br>below.  | 09/14/20            |                                |             |
| R-20-0009 | 09/08/20        | Kremen<br>Santos | Hall      | Mcmahon | At the 9/8/20 Board meeting, Dirs.<br>Kremen and Santos requested<br>staff to look at fire suppression<br>and protection across a broad<br>view of Valley Water infrastructure<br>and facilities and whether systems<br>or practices are in place to allow<br>for suppression and protection in<br>both power outage and external<br>(wildfire) events.   | 09/28/20            |                                |             |
| R-20-0010 | 09/08/20        | Kremen           | Hall      | Mcmahon | At the 9/8/20 Board meeting, Dir.<br>Kremen requested that staff  | 09/28/20            |                                |             |

#### Report Name: Board Member Requests

| Request | Request<br>Date | Director | BAO/Chief | Staff | Description                        | 20 Days Due<br>Date | Expected<br>Completion<br>Date | Disposition |
|---------|-----------------|----------|-----------|-------|------------------------------------|---------------------|--------------------------------|-------------|
|         |                 |          |           |       | investigate whether the Pacheco    |                     |                                |             |
|         |                 |          |           |       | Pumping Plant fire suppression     |                     |                                |             |
|         |                 |          |           |       | system will function if there is a |                     |                                |             |
|         |                 |          |           |       | power outage. Copy of COB          |                     |                                |             |
|         |                 |          |           |       | email requesting this BMR is       |                     |                                |             |
|         |                 |          |           |       | included below.                    |                     |                                |             |



| <b>TO</b> : | TO: Board of Directors |                                  | FROM: | Garth Hall        |
|-------------|------------------------|----------------------------------|-------|-------------------|
| SUBJE       | CT:                    | Delta Conveyance Project Updates | DATE: | September 4, 2020 |

During the August 20, 2020 Delta Conveyance Design and Construction Authority (DCA) Board meeting, the DCA Executive Director shared a preliminary cost assessment of \$15.9 billion for the Delta Conveyance Project (Project). Her presentation is provided as Attachment 1. This preliminary cost estimate is designed to give Valley Water and other State Water Project contractors a general ballpark of Project costs to inform potential Board decisions in the fall of 2020 on additional funding for planning and environmental review. This Project cost estimate will continue to be refined as more precise design and engineering information becomes available.

Valley Water is working with other State Water Project contractors on evaluating this cost information as well as preliminary water supply benefit estimates and is planning to present both along with a potential funding agreement for future planning costs at a Valley Water Board meeting this fall.

Also on August 20, 2020, the U.S. Army Corps of Engineers (USACE) issued a Notice of Intent to prepare an Environmental Impact Statement for the Project. Public comments are due by October 20, 2020. Additional information on the USACE notice can be found at the following website: <u>https://www.spk.usace.army.mil/Missions/Regulatory/Delta-Conveyance/</u> Valley Water previously submitted comments on the Department of Water Resources' Notice of Preparation of an Environmental Impact Report and does not intend to provide additional scoping comments on the Project.

The Department of Water Resources (DWR) recently released a revised Project schedule (Attachment 2). According to this schedule, DWR anticipates releasing draft environmental review documents for public review in mid-2022 and completing key permit and review processes by mid-2024.

Garth Hall Interim Chief Operating Officer Water Utility Enterprise

Attachment 1: Preliminary Cost Assessment Presentation Attachment 2: Project Schedule



#### **Board Memo**

Contact: Kathryn Mallon, Executive Director

Date: August 20, 2020 Board Meeting

Subject: Presentation on Delta Conveyance Preliminary Cost Assessment

#### Detailed Report:

The DCA Executive Director, Kathryn Mallon, will present a preliminary cost assessment for the proposed Delta Conveyance Project. While development of the program is in very early stages, this information is intended to aid the public water agencies who are ultimately responsible for funding the environmental review, planning, permitting and, if approved, design and construction of a proposed Delta Conveyance facility.

Cost information developed at this early stage provides a preliminary starting point to understand possible costs that will necessarily be refined over time as planning and environmental review proceeds and more precise design and engineering are available to increase confidence and probability levels of potential costs based on industry standard methodology. Additionally, items not included in the estimate at this time will need to be developed to create a more comprehensive assessment of total program costs.

It should be noted that the preparation of this cost information related to the proposed project is not an indication of any type of project approved by DWR. DWR has made no decisions as to the selection of a specific alternative. A final decision regarding whether to approve the proposed Delta Conveyance Project or an alternative, including the no project, will not occur until after completion of environmental review under CEQA, and other environmental permitting processes.

#### **Recommended Action:**

Information only.

Item No. 7c



# Delta Conveyance Program Cost Assessment Update

### PRESENTATION TO THE BOARD

August 2020

Item 7.c

WWW.DCDCA.ORG | WWW.WATER.CA.GOV/DELTACONVEYANCE

Attachment **1**,**2**<sup>P</sup>age 2 of 15

# **Topics Covered**

- Program Scope What was estimated?
- DCA Estimating Process
- Cost Assessment of Program
- Confidence Level
- Design Advancements
- Future Steps to Finalize Baseline Program Budget

## Notes on the Cost Assessment

### THIS ESTIMATE <u>IS</u>...

- A snapshot based on the status of the program today – we are still very early in the planning process
- A tool for the State Water Contractors to use when requesting Board Approval for Delta Conveyance Funding
- Undiscounted, similar to past estimates to allow agencies to compare with historical values

### THIS ESTIMATE IS **NOT**...

- *Reflective of the final conceptual design* will come as the Planning Phase completes
- *Reflective of the final mitigation costs* will be identified during the CEQA process
- Inclusive of all items such as community benefits, DWR planning, or financing costs – will be added as we get closer to preparing a final Baseline Program Budget
- *Reflective of the time-value* of money over the estimated 20-year delivery period will be added as part of our final Baseline Program Budget

#### COST ASSESSMENT UPDATE

# Project Scope – What did we estimate?

- Total capacity 6,000 cfs
- Two intakes at 3,000 cfs each
- 42 miles of tunnels and associated shafts
- Southern Complex Facilities
  - Pump Station
  - Forebay
  - Connections to existing CA Aqueduct

\* There is a 0.5-mile section of parallel 40ft tunnels extending between the forebay and the connection to the existing Aqueduct CENTRAL ALIGNMENT SITES

New Hope Tract Maintenance Shaft

Staten Island Maintenance Shaft

Bouldin Island Launch Shaft

Mandeville Island Maintenance Shaft

Bacon Island Reception Shaft

> S O U T H E R N C O M P L E X

Southern Forebay Facilities South Delta Outlet & Control Structure

South Delta Pumping Plant Southern Forebay Southern Forebay Outlet Structure and Tunnel Launch Shafts South Delta Outlet and Control Structure and Tunnel Shafts

Intake 3

Intake 5

EASTERN ALIGNMENT SITES

NORTHERN SITES

**Twin Cities Launch Shaft** 

New Hope Tract Maintenance Shaft

**Canal Ranch Tract Maintenance Shaft** 

**Terminus Tract Reception Shaft** 

King Island Maintenance Shaft

Lower Roberts Island Launch/ Reception Shaft

Upper Jones Tract Maintenance Shaft

Attachment **1**, **5** age 5 of 15

# **DCA Estimating Process**

#### COST BREAKDOWN

| Construction (Per Element) |   |  |  |
|----------------------------|---|--|--|
|                            | Detailed Line Items   |  |  |
|                            | Allowances  |  |  |
|                            | Risk Mitigations  |  |  |
|                            | Contractor Field Mgt, OH&P  |  |  |
|                            | Contingency   |  |  |
| Soft Costs                 |   |  |  |
|                            | • DWR Oversite  |  |  |
|                            | • DCA PMO, Engineering, CM  |  |  |
|                            | Land Acquisition  |  |  |
| Environmental Mitigation   |   |  |  |
|                            | <ul> <li>Mitigation Design, Construction,<br/>Monitoring</li> </ul> |  |  |

**TOTAL (Construction, Soft Costs, Mitigation)** 

- Followed AACE1 **industry standard guidelines** for estimate preparation
- Detailed estimates including materials, labor and equipment were developed for known information from drawings, sketches, and other documents. (All rates based on current, Year 2020 values).
- Allowances were used for known yet undefinable items
- The **program risk team** identified accepted risk mitigations
- Industry standard Field Management, Overhead, and Profit percentages were applied to construction costs
- **Contingency levels** were established for individual elements
- **Soft Costs** were established based on industry standard factors for Capital Program Delivery
- An **Environmental Mitigation** "placeholder" was carried over from the previous Cal Waterfix project estimate.

Attachment **1**, **6** age 6 of 15

# **Some Key Points on Contingency**

- Contingency is part of the construction cost. It represents a best guess of the unknown items where experience indicates, will likely result in additional cost.
- Contingency levels were identified for each feature to reflect the uncertainty in the status of the information at the time of the estimate development.
- Contingency levels were established in partnership between the estimating and engineering teams and reflects our assessment of:
  - Design status
  - Identified risks
  - Professional judgment
- Contingency levels will decrease as the engineering work advances and the unknown elements of the work are revealed or resolved.

Contingency Levels for Each Major Feature CONTINGENCY AS A % OF TOTAL DIRECT COST

| Intakes                      | 35%      |
|------------------------------|----------|
| Tunnels and Shafts           | 40%      |
| Forebay and Levee            | 35%      |
| Pumping Plant                | 30%      |
| South Delta Facilities       | 35%      |
| Utilities/Early Works/Logist | tics 50% |
| COMPOSITE CONTINGENCY        | 38%      |

6

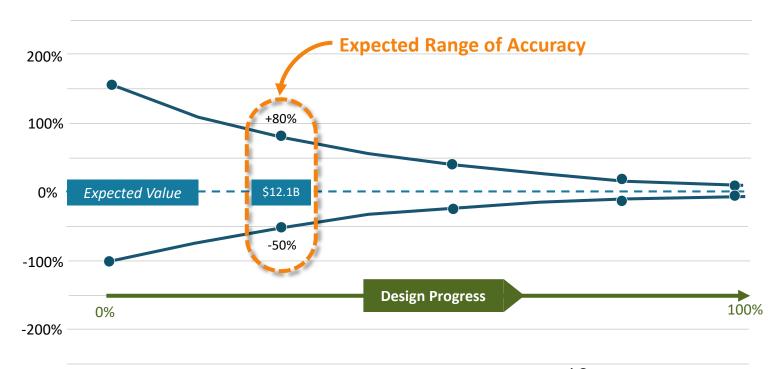
# **Construction Cost Summary**

| ELEMENT  | BASE COST <sup>1</sup> | CONTINGENCY      | TOTAL             |
|--|------------------------|------------------|-------------------|
| Intakes  | \$ 1,448,000,000       | \$ 507,000,000   | \$ 1,955,000,000  |
| Tunnels and Shafts   | \$ 4,473,000,000       | \$ 1,789,000,000 | \$ 6,262,000,000  |
| Pumping Plant  | \$ 805,000,000         | \$ 242,000,000   | \$ 1,047,000,000  |
| Southern Facilities Complex<br>(Forebay, Hydraulic Structures) | \$ 1,521,000,000       | \$ 532,000,000   | \$ 2,053,000,000  |
| Early Works, Utilities, Logistics                              | \$ 522,000,000         | \$ 261,000,000   | \$ 783,000,000    |
| Total  | \$ 8,769,000,000       | \$ 3,331,000,000 | \$ 12,100,000,000 |

1. Base cost includes all defined items derived from the available engineering information including materials, labor, equipment, allowances, risk mitigations, construction field management and contactor overhead and profit. The unit costs and rates used to develop the estimate are based on Year 2020 values.

# AACE uses <u>historical data</u> to develop confidence ranges for estimating classes

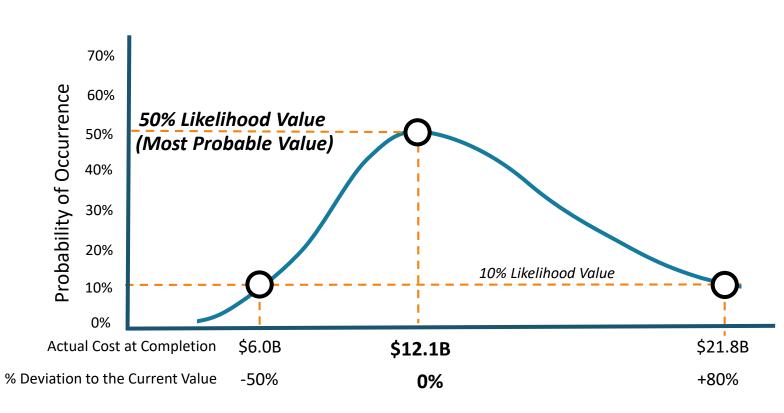
### **80% Confidence Interval Accuracy Range**



- The boundaries of the curve represent the expected range of accuracy of the estimate to the final actual construction cost at the 80% confidence level.
- In the early stages, there is a much wider range of potential outcomes due to the uncertainty in the level of information.
- As the design advances, the confidence range of the estimate narrows.

# What does the 80% confidence interval mean for the Delta Conveyance value?

### **80% Confidence Interval Accuracy Range**



Attachment **20** age 10 of 15

- The most probable construction cost is \$12.1Bil. This is the DCA's opinion of cost at the 50% probability level.
- Based on historical data, there is an 80% likelihood that the final cost will range between -50% to +80% of the most probable number of \$12.1Bil.
- The wide range is based on historical outcomes and reflects the lack of certainty in the program definition at this time.
- The far ends of the range have a much lower probability of occurrence than the most probable value.

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#### COST ASSESSMENT UPDATE

# Soft costs added to reflect DCA delivery and DWR oversite costs

### **Categories of Soft Costs**

### **DCO OVERSIGHT**

- Engineering Standards Compliance
- Program Controls Monitoring (Schedule and Budget)

### **PROGRAM MANAGEMENT OFFICE**

- Executive Office
- Executive Support (HR, Legal, Audits, Treasury)

### **1.5% OF CONSTRUCTION**

- Invoice Processing and Payment
- Start-up and Commissioning Support
- Environmental Monitoring

### **3.5% OF CONSTRUCTION**

- Program Controls (Inc. Procurement)
- Shared Professional Services (Safety, Permitting, Real Estate, Quality, Sustainability, Outreach)

### ENGINEERING MGT, DESIGN, AND CONSTRUCTION MGT 20% OF CONSTRUCTION

- Project Management
- Design Services thru Construction Closeout
- Field Investigations and Temporary Easements
- Independent Technical Reviews

PERMITTING AND AGENCY COORDINATION

- Construction Project Management
- Construction Oversite Services
- Off-site/ Factory Inspections and Validations
- Commissioning and Start-up

### 0.5% OF CONSTRUCTION

Agency fees

### LAND ACQUISITION:

• Permit fees

• Easements Attachment 2 Page 11 of 15

### 2.5% OF CONSTRUCTION

Land purchase

# **Cost Summary**

| ITEM   | VALUE                      |
|--|----------------------------|
|  | \$ 12,100,000,000          |
| Two Intakes  | \$ 1,448,000,000           |
| Southern Complex Facilities (Forebay, Hydraulic Structures)                                      | \$ 1,521,000,000           |
| Pumping Plant  | \$ 805,000,000             |
| Tunnel and Shafts  | \$ 4,473,000,000           |
| Utilities, Power and Logistics   | \$ 522,000,000             |
| Construction Sub-Total   | \$ 8,769,000,000           |
| Contingency (38%)  | \$ 3,331,000,000           |
| SOFT COSTS   | \$ 3,400,000,000           |
| DWR Oversite   | \$ 180,000,000             |
| DCA Program Management Office  | \$ 420,000,000             |
| DCA Engineering (Design and CM Services)   | \$ 2,420,000,000           |
| DCA Permits and Agency Coordination  | \$ 60,000,000              |
| Land Acquisition   | \$ 320,000,000             |
| ENVIRONMENTAL MITIGATION   | \$ 400,000,000             |
| Mitigation Program   | \$ 400,000,000             |
| TOTAL  | \$15,900,000,000           |
| <sup>1</sup> All material, labor and equipment rates used to develop the construction costs were | based on Year 2020 values. |

# **Design progression**

| FEATURE                               | A D V A N C E M E N T S   |  |
|---------------------------------------|---|--|
| Intakes                               | <ul> <li>Enhanced ground improvements</li> <li>Enhanced foundation design</li> </ul>                                |  |
| Tunnel and Shafts                     | <ul> <li>Smaller diameter tunnel</li> <li>Fewer shafts</li> <li>Enhanced tunnel liner design</li> </ul>             |  |
| Intermediate Forebay                  | • Eliminated  |  |
| Pump Station                          | • New independent structure   | As the engineering work advances, we will continue                                       |
| Forebay                               | <ul> <li>Enhanced foundation design</li> <li>Enhanced seismic stability design</li> </ul>                           | to experience change. This is<br>a natural progression in the<br>design process. We will |
| Interconnection to Existing<br>System | <ul> <li>More robust flow control structures</li> <li>Canals replaced with tunnels to connect structures</li> </ul> | inevitably identify better<br>ways to achieve objectives or<br>need to adjust for new    |
| Logistics                             | <ul> <li>Road and rail improvements</li> </ul>  | information.   |
|                                       | Attachment <b>2B</b> age 13 of 15   | 0/20/2020 12   |

# **Future Steps**

Create a Baseline Program Capital Plan that represents the time-value of money over the 20-year delivery period.

Include the estimated value of all contracts in the year the contracts are scheduled to be procured.

### Continue developing soft costs, e.g.

- Community Benefit Fund
- DWR Environmental Planning Work



- Concept design confirmed
- Final environmental mitigations identified

### Update Board periodically as new information is developed that affects cost, e.g.

- Geotechnical exploration data
- Major scope changes

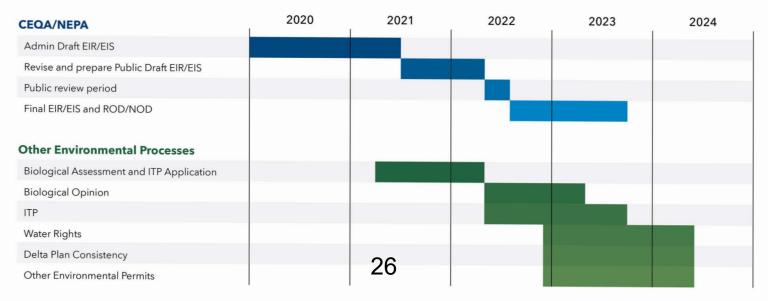
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# Thank You. Questions?

#### Delta Conveyance Project Schedule

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FC 14 (08-21-19)

| TO:   | Rick L. | Callender, Esq.  | FROM: | Rechelle Blank |
|-------|---------|--|-------|----------------|
| SUBJI | ECT:    | Completion of Planning Phase for Palo Alto<br>Flood Basin Tide Gate Structure<br>Replacement Project | DATE: | 9/8/2020       |

In accordance with QEMS, this Non-Agenda Memorandum informs that the Planning Phase for the Palo Alto Flood Basin Tide Gate Structure Replacement Project (Project) is complete and the Project is moving forward into the Design Phase. The existing 1957 tide gate structure provides 100-year flood protection for Matadero, Barron, and Adobe Creeks, and protects residential and commercial parcels and Highway 101 from coastal flooding. An emergency repair was performed to control seepage underneath the tide gate structure in 2012. Pursuant to the emergency work, another repair to the tide gate structure was attempted in 2017 which was unsuccessful. Following the attempted repair, a structural assessment was made by a consultant which resulted in a recommendation to fully replace the tide gate structure.

The replacement tide gate structure will provide continued flood protection, takes into consideration future sea level rise in alignment with the South San Francisco Bay Shoreline Phase II Feasibility Study effort and maintains the existing basin habitat and trail recreation. A Project Definition Report and Planning Study Report (PSR) have been completed. The PSR was completed on August 10, 2020 and is posted at the project website <a href="https://www.valleywater.org/pafbtidegates">https://www.valleywater.org/pafbtidegates</a> that is accessible to the public. The project team provided a project update to the Board on February 11, 2020. Valley Water hosted a virtual public meeting on June 24, 2020 to present the project background, objectives, design concepts, and target project schedule. The current estimated total project cost is \$33 million and is being funded by the Watershed Stream Stewardship Fund 12.

The Draft CEQA Mitigated Negative Declaration (MND) has been prepared and is anticipated to be posted for public review in September 2020 and will be accessible from the project website. Current project schedule anticipates the MND will be final in November 2020 (contingent on the number of comments received on the MND). Environmental permit applications are planned to be submitted in October 2020 and seek authorization by September 2021. Extensive pre-application coordination with regulatory agencies has been conducted and is ongoing. Construction work for the replacement Structure is anticipated to start in Fall 2022 and be completed by Fall 2025, pending acquisition of all necessary environmental permits.

—DocuSigned by: Recluelle Blank

Deputy Operating Officer Watersheds Design and Construction Division

(CC: Melanie Richardson, Sue Tippets, Roger Narsim)