



December 4, 2020

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

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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 November 20 - December 3, 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.

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1. City of Manteca Financial Accounting Issues

Valley Water has become aware via news article that the City of Manteca is facing extensive financial accounting issues that go back several years. Roughly \$67 million in cash deficits have been identified. The Interim Finance Director for the City of Manteca believes that it may take several years before all issues are cleared up and addressed.

Of importance to Valley Water is that Maze and Associates - Valley Water's current financial auditor - has been the financial auditor for the City of Manteca for the past several years. Valley Water will be monitoring the situation in Manteca especially as it relates to the role that Maze and Associates may have played with regard to the accounting crisis, and for lessons learned that can be applied to Valley Water. Valley Water understands that Maze and Associates has been voicing deficit spending concerns to City of Manteca management for years, and that a key reason that the City has not produced a Fiscal Year 2019 Comprehensive Annual Financial Report is due to questions raised by Maze and Associates.

The article can be found at the following URL: <u>https://www.mantecabulletin.com/news/local-news/67m-manteca-cash-deficits/</u>

For further information, please contact Darin Taylor at (408) 630-3068.

2. Completion of the Great Sign Hunt 2020 Scavenger Hunt (Partnership with Silicon Valley Bicycle Coalition)

Valley Water's Great Sign Hunt 2020 concluded on October 29, 2020 after running for 3.5 months. The outdoor scavenger hunt was hosted in partnership with the Silicon Valley Bicycle Coalition (SVBC) to inventory the location and condition of Valley Water signs. Santa Clara County residents were invited to participate in the scavenger hunt, and if eligible, were able to win monthly and grand prizes (see prize information below). The contest began on July 16, 2020 and through a convenient mobile app, participants could take photos of Valley Water signs, note their condition, and submit the photos for inventory.

The event was advertised on Valley Water and SVBC's social media channels via paid social media boosts, eblasts to stakeholders, newspaper ads, Nextdoor and via targeted multilingual outreach. Through the initial pilot in 2019 and this subsequent campaign, we engaged 433 community members. There were 130 active participants that submitted 10,557 entries for inventory. Of the entries submitted, 4,718 were identified as unique Valley Water signs. A "unique" sign is any Valley Water sign that is located at a different GIS coordinate than another sign, even if it has the same message.

A total of \$2,100 in gift cards were awarded to active participants, including the following winners:

- August monthly winners of \$50 gift cards: Michael G., Helen D., Cindy L. and Chee L.
- September monthly winners of \$50 gift cards: Janet P., David M., Rob T. and Elizabeth M.
- October monthly winners of \$50 gift cards: Melissa C., Leonardo M., Yoko K. and Joanna S.
- Overall grand prize winners (top 3 sign collectors) of \$500 gift cards: Roy D., Michelle Y. and Thomas H.

The scavenger hunt proved to be an effective opportunity to engage community members, allowing them to learn about Valley Water infrastructure and creeks, while inventorying and gathering signage data throughout the County. Despite the challenges of the COVID-19 pandemic, the heatwave and wildfires, the Santa Clara County community remained engaged throughout the campaign, participating in more than 1,700 bike rides. The Survey123 app will temporarily remain open for internal staff to continue submitting signs for inventory.

A post-event survey has been sent to participants. Some initial feedback from participants include:

"Today's adventure was the Valley Water District #GreatSignHunt2020 sign survey. We submitted more than 120 sign photos." - Paul M.

- "Thanks to SVBC and Valley Water for teaming up for this fun distraction. With commuting gone, this has given my rides a purpose and has led me to explore some great new spots."
 Michael G.
- "Just joined the @valleywater and @bikesv #GreatSignHunt2020 biking and collecting geo-referenced images of water district signs in Santa Clara Valley. Great way to put #linguisticlandscape and exercise together, with a touch of #CitizenScience" David M.
- "We enjoyed our late night, sign scavenging times." Melissa C.
- "I had a blast riding around finding the water signs. I easily went over 400 miles of riding. From Palo Alto to Gilroy I went deep into the creek trails and bike paths. I got to see the beauty of our creek trails, but I also saw the plight of the homeless and how they need some kind of help. Thanks for the fun times." – Roy D.

The signage data will be reviewed by Valley Water's Signage Steering Committee, which consists of staff from Business Support Services, Facilities, Civic Engagement and Communications. The steering committee will prioritize sign replacement as well as ongoing monitoring and maintenance. Communications is also in the process of developing signage guidelines.

Resources:

- Event website: https://bikesiliconvalley.org/valley-water-great-sign-hunt-2020/
- Map of signs collected: <u>https://valleywater.maps.arcgis.com/apps/webappviewer/index.html?id=1041bb83ae734ed</u> <u>591f36ec2677b17fd</u>

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

3. Fish Monitoring

In October 2020, Valley Water fisheries biologists began this year's monitoring for steelhead and Chinook salmon in Guadalupe, Coyote, and Stevens Creek watershed. The monitoring program includes collecting data on water temperature, adult migration, juvenile steelhead rearing, and juvenile steelhead outmigration. The data will provide a more complete understanding of habitat conditions and associated steelhead and Chinook salmon trends over time, allowing Valley Water to assess the effectiveness of reservoir operations, determine impacts of future projects, and measure success of in-stream habitat restoration efforts.

Over thirty data loggers were distributed throughout the creeks, which will allow Valley Water to collect and analyze fine-scale, continuous temperature data, which is one of the primary drivers of habitat suitability for these species. In addition, state-of-the-art fish counting devices were installed at two locations, with a third slated for installation the first week of December 2020. Known as Vaki Riverwatchers, these devices automatically scan a silhouette and record a short video when a fish swims through them, allowing Valley Water biologists to identify the fish species, seasonality, and general abundance of adult salmon and steelhead as they migrate upstream. Juvenile steelhead densities are measured by capturing and counting fish by electrofishing at standardized reaches, which are revisited each year so numbers of fish can be compared over time. Prior to releasing captured fish, Passive Integrated Transponder (PIT) tags are inserted to track the movement, survival, and growth of juvenile steelhead. PIT antenna systems are installed in the creek that work like a "FastTrac" for fish, providing biologists with the date and time each tagged fish passes a fixed location.

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

4. New Cal/OSHA Emergency COVID-19 Prevention Standards Adopted

On November 19, 2020, the California Occupational Safety and Health Standards Board unanimously adopted emergency temporary standards on COVID-19 prevention in the workplace. For much of the pandemic, California's Division of Occupational Safety and Health (Cal/OSHA) has advised employers to follow its general and industry-specific guidance on various measures to minimize the risk of employees' exposure to COVID-19. However, the new emergency standards will be binding and enforceable against nearly all California employers. The emergency standards may become effective as early as November 30, 2020 if approved as expected by the Office of Administrative Law after the required 10-day review period. Thus, employers must act quickly to ensure they are in compliance with the new standards and the requirement to prepare and implement a written COVID-19 Prevention Program. The standard is very detailed with numerous, onerous requirements. Thus, while Valley Water has already implemented a COVID-19 response plan, some requirements will change or expand from what was implemented previously. Valley Water is working diligently to ensure that all elements of the new standard are implemented by the effective date. Specifically, Valley Water will be required to implement certain protocols if there is an outbreak, as defined, in the workplace, including the following:

- Providing testing (immediately and 1 week later) to all employees in the exposed workplace during the outbreak period;
- Excluding all COVID-19 cases and employees with a COVID-19 exposure;
- Investigating the exposure, reviewing the employer's policies and controls in place and taking corrective action as necessary;
- Documenting the investigation, review, and corrective action(s) taken; and
- Notifying the local health department within 48 hours after knowledge of the outbreak.

Valley Water must implement additional protocols if there is an outbreak of 20 or more COVID-19 cases within a 30-day period until there are no new cases for a 14-day period, including conducting twice a week COVID-19 testing, or more frequently if recommended by the local health department, to all employees present at the exposed workplace during the relevant 30-day period(s) and who remain at the workplace. COVID-19 testing shall be provided at no cost to employees during employees' working hours.

For further information, please contact Tina Yoke at (408) 630-2385.

5. Penitencia Water Treatment Plant Shutdown

Due to the California Department of Water Resources' planned pipeline rehabilitation and joint sealing work (Weko-Seal installation) on the South Bay Aqueduct, the Penitencia Water Treatment Plant (PWTP) is scheduled to be shut down for maintenance from December 11, 2020 through January 20, 2021.

While PWTP is offline, the Santa Teresa Water Treatment Plant will ramp up production to supply treated water to retailers typically served by PWTP, namely, the City of Milpitas, City of San Jose, and San Jose Water Company. Customers are expected to experience little to no change in water characteristics from this plant shutdown. The above-stated shutdown schedule has been communicated to all East Pipeline retailers.

For further information, please contact Bhavani Yerrapotu at (408) 630-2735.

6. Planned Maintenance Shutdown for South Bay Aqueduct

From December 12, 2020, through January 20, 2021, the Department of Water Resources (DWR) has planned maintenance on the South Bay Aqueduct (SBA) pipeline, which will impact the supply of water to Valley Water-operated groundwater recharge facilities in the Upper Penitencia Creek area. The impacted area includes the pond series of Dr. Robert W. Gross Ponds, Piedmont Ponds, and the City Park Pond. The SBA pipeline delivers water to the SBA Terminal Tank that is located near the Penitencia Water Treatment Plant and supplies the groundwater recharge ponds. There will be no access to the SBA as a water source during this maintenance shutdown period. The ponds will gradually begin to dry out once the SBA water supply is shut off, and Valley Water estimates the ponds may be dry by around the end of December 2020 depending on percolation rates, weather, rainfall, air temperature, cloud cover, and solar radiation.

The DWR planned maintenance on the SBA pipeline is located away from the ponds and will not directly impact the ponds, road traffic, or nearby trails. DWR's work is critically important to strengthening the SBA's reliability during the 10-year construction on the Anderson Dam when Anderson Reservoir will be unavailable as a source of untreated water to the Rinconada, Santa Teresa, and Penitencia water treatment plants.

Additionally, the Central Pipeline will be isolated and taken out of service for inspection and rehabilitation for approximately three months from January 4, 2021, until April 2, 2021, as part of the 10-year Pipeline Rehabilitation Project. During the shutdown period, the Central Pipeline will not be available to fill the Upper Penitencia ponds. Water deliveries to the aforementioned groundwater recharge ponds will resume once DWR completes the SBA maintenance work. It will take a few days to fill the ponds back to their operating level.

Valley Water has been working with retailers and have kept them informed of the reduced redundancy in water supply during the shutdown of both the SBA and Central Pipeline. Valley Water has prepared an outreach plan to the surrounding community (via Nextdoor, mailing list, blog post, etc.) to provide notice of impact to the ponds.

For further information, please contact Greg Williams at (408) 630-2867.

7. Progress on Two Delta Habitat Restoration Projects

Two habitat restoration projects in the Sacramento Delta — Lookout Slough and Lower Yolo Ranch — took big steps forward last month.

Recently, the final Environmental Impact Report (EIR) for Lookout Slough was released and certified, allowing the project to progress to the completion of the California Environmental Quality Act (CEQA) process and to seek approval for construction permits. Lookout Slough is the Delta's largest tidal habitat restoration project to date and aims to restore 3,000 acres in the Cache Slough region in order to benefit native species and improve fishes' access to food. The project also includes a new setback levee that will provide greater flood protection. The habitat restoration aspects of this approximately \$119 million project are funded by the State Water Project (SWP) and the flood improvements are funded through Proposition 1. Valley Water's SWP rates are used, in part, to fund this project. The project is expected to be completed in 2023.

Lookout Slough is part of a larger contiguous tidal wetland restoration effort that will span 16,000 acres and provide landscape scale benefits for listed native species. One of these restoration efforts, Lower Yolo Ranch, was just completed. On November 19, 2020, Westlands Water District

and the California Department of Water Resources (DWR) announced their completion of approximately 1,700 acres of tidal marsh restoration in Lower Yolo Ranch. The land was previously used for cattle grazing and will now serve as a flood plain to provide a place for food production for delta smelt and rearing habitat for young Chinook salmon. Valley Water played a role in early development through the State and Federal Contractors Water Agency including engineering, design work, and development of the EIR.

These projects will go towards DWR's obligation to restore 8,000 acres of tidal wetland as required in the U.S. Fish and Wildlife Service Delta Smelt Biological Opinion and may contribute to the 17,000 acres of enhanced floodplain habitat required in the National Marine Fisheries Service Biological Opinion.

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

8. Resuming Recharge Program at Groundwater Percolation Ponds

Beginning November 2020, Valley Water has resumed recharge operations at some of its groundwater percolation ponds that had been dry since late 2018. The recharge facilities that were brought back online are located in the Los Gatos Creek Recharge System at the Page, Sunnyoaks, and Budd ponds and the Guadalupe River Recharge System at the Kooser Ponds. The ponds identified for resumption of service were determined based on imported water availability as the water source at this time.

Following the drought, Valley Water implemented an aggressive groundwater replenishment program at most of its nearly 100 ponds and the managed recharge resulted in healthy groundwater levels. Due to the success of the program and to mitigate nuisance artesian conditions that occur from high groundwater levels, Valley Water reduced the recharge operations at many of its percolation ponds effective September 2018. Even though the supply to many ponds in the North County was halted, other ponds continued to have water in them to maintain minimal recharge and provide incidental recreation and environmental benefits or due to their proximity to creeks. Recent assessment of groundwater levels in Valley Water's vast network of monitoring wells and the output of numeric groundwater models have shown the need to resume recharge operations due to increased groundwater pumping.

Minimal pond cleanup work, such as vegetation or debris removal at the periphery, is needed as Valley Water starts water releases to the identified recharge facilities. The Kooser Ponds startup occurred on November 17, 2020, and supply to the Page Ponds started on November 19, 2020.

For further information, please contact Greg Williams at (408) 630-2867.

9. Silicon Valley Advanced Water Purification Center Shutdown

The Silicon Valley Advanced Water Purification Center (SVAWPC) is shut down for annual maintenance from December 1, 2020 through December 14, 2020. With SVAWPC being offline, the water quality of recycled water is anticipated to change slightly due to higher total dissolved solids, and no blending from our product water. Valley Water has coordinated with South Bay Water Recycling (SBWR) and the San Jose-Santa Clara-Regional Wastewater Facility. SBWR will inform their recycled water customers about potential water quality changes that result from our shutdown.

For further information, please contact Bhavani Yerrapotu at (408) 630-2735.

10. Water Management Agreements executed in November 2020

Pursuant to EL-5.1.6 and EL-5.3.3, the CEO is required to inform the Valley Water Board of Directors on a timely basis when imported water management agreements are executed. The imported water management executed the following agreement in November 2020:

November 10, 2020 - The State Water Project Contractor Participation Agreement Amendment No. 6 (Agreement #A3173Wf) between the Department of Water Resources and Valley Water: Establishes revised pricing for the purchase of available water pursuant to the 2007 Yuba Water Purchase Agreement.

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

11. <u>Varela</u>

Director Varela requested that staff provide him with a copy of the 03/20/20 DCA presentation on the Delta Conveyance Project, which includes an analysis of Congressman Garamendi's "Little sip, Big gulp" proposal." I-20-0017

Director Varela's request for a copy of the 03/20/20 DCA presentation on the Delta Conveyance Project, which included an analysis of Congressman Garamendi's "Little sip, Big gulp" proposal" was submitted as part of the December 4, 2020 Non-Agenda packet.

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

BOARD MEMBER REQUESTS and Informational Items

Request	Request Date	Director	BAO/Chief	Staff	Description	20 Days Due Date	Expected Completion Date	Disposition
I-20-0014	08/20/20	Kremen	Yoke	Gordon	Director Kremen requested staff to	09/10/20		
		Santos			take a look at the potential of			
					hiring private fire fighting			
					organization to protect the			
					Penitenia WTP. In addition,			
					Director Santos requested			
					information on whether any			
					consideration has been given to			
					installing fire suppression			
					sprinklers on the perimeter or			
					other effective location on WTPs.			
					Copies of both email requests are			
					attached below.			



MEMORANDUM

FC 14 (08-21-19)

TO :	Rick C	allender	FROM:	Jessica Collins
SUBJE	CT:	FY20 Safe, Clean Water and Natural Flood Protection Annual Report – Year 7	DATE:	11/30/2020

The Fiscal Year 2019-2020 Safe, Clean Water and Natural Flood Protection Program Annual Report – Year 7 has been finalized with updated financials and text adjustments approved by the Board on Sept. 22, 2020. The report is available on the Safe, Clean Water Program webpage (https://www.valleywater.org/sites/default/files/SCW_FY20%20Annual%20Report_web.pdf) and was distributed electronically on November 20, 2020, to the Independent Monitoring Committee (IMC) and the Board of Directors. IMC members were also mailed hard copies of the report. For the Board members, hard copies of the report are also available in the Office of the Clerk of the Board. Electronic copies have been provided to Program staff and the report will also be released to the public electronically through Valley Water's eNewsletter. Hard copies are available to the public upon request.

While the report incorporates the final financial data, the final audit opinion is still pending and is expected to be received in early December. If the audited financial data differs from the final numbers included in the report, we will provide the new information to the Board and the IMC and print an updated report with audited financial data.

In addition to reflecting the Upper Llagas Creek Flood Protection Project modification approved by the Board during January 14, 2020, public hearing, the report incorporates the Board-approved text adjustment to the description of Project B4 Encampment Cleanup description. It also addresses the IMC recommendations, including the following:

- Additional data in individual project financial tables to reflect the "Adopted Budget" and the "Budget Adjustments" for the year.
- Two new tables--Appendix A-3.1 detailing "Other Revenue Sources" and A-3.2 detailing "Transfer and Refunding Proceeds."

The IMC is scheduled to reconvene on December 2, 2020. The agenda includes receiving presentations from staff as recommended in the IMC's Report reviewing the FY19 Safe, Clean Water Annual Report. Additionally, the IMC will be setting the schedule and process for its review of the FY20 Safe, Clean Water Annual Report.

DocuSigned by: Juniter Martin

Jennifer Martin acting for: Jessica Collins Unit Manager Business Planning & Analysis Unit

Cc: M. Richardson Board of Directors Safe, Clean Water IMC

MG Safe, Clean Water and Natural Flood Protection – Year 7





FC 14 (08-21-19)

TO :	Board	of Directors	FROM:	Aaron Baker
SUBJE	ECT:	Response to Informal Board Member Request I-20-0017 Regarding DCA PowerPoint Which Analyzes Congressman Garamendi's "Little Sip, Big Gulp" Proposal	DATE:	11/30/2020

On November 20, 2020 Director Varela requested a copy of the March 30, 2020 Delta Conveyance Design and Construction Authority (DCA) presentation on the Delta Conveyance Project: Summary of the Preliminary Assessment of a Western Corridor (Attachment 1). The attached presentation includes an analysis on Congressman Garamendi's "Little Sip, Big Gulp" proposal.

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Aaron Baker, P.E. Chief Operating Officer Water Utility Enterprise

Attachment 1: DCA Delta Conveyance Project Presentation



Delta Conveyance Project: Summary of the Preliminary Assessment of a Western Corridor

March 30, 2020

Agenda

- Introductions
- CEQA Process Overview and Current Status
- Objectives of Delta Conveyance Project
- Review of Representative Garamendi "Little Sip, Big Gulp Plan"
- Issues of Plan as Proposed
- Comparison of Plan Against NOP Project Objectives
- Q&A





CEQA Alternative Formulation

- 1. Identify project objectives
- 2. Develop concepts for alternatives
- 3. Identify proposed project based on ability to meet project objectives and minimize environmental effects
- 4. Obtain ideas for additional alternatives during public scoping
- 5. Screen proposed alternatives for ability to meet project objectives and reduce environmental effects
- 6. Select range of reasonable alternatives





CEQA Alternative Formulation

- 1. Identify project objectives
- 2. Develop concepts for alternatives
- 3. Identify proposed project based on ability to meet project objectives and minimize environmental effects

These are the three steps that we have completed so far. This presentation focuses on the reasons that the western corridor was not selected to be part of the proposed project. It will be considered during the process to select alternatives for the EIR, but the issues raised in this presentation will still be applicable.





Delta Conveyance Purpose and Objectives

<u>Fundamental Purpose</u>: Develop new diversion and conveyance facilities in the Delta necessary to restore and protect the reliability of water deliveries in a cost-effective manner, consistent with the State's Water Resilience Portfolio.

Project Objectives:

- » Address sea level rise and climate change
- » Minimize water supply disruption due to seismic risk
- » Protect water supply reliability
- » Provide operational flexibility to improve aquatic conditions





Design Considerations Inform Alternatives

- 200 year return period flood level + sea level rise
- Proposed Capacity = 6,000 cfs
- NOP identified potential capacity alternatives, but decisions have not yet been made on alternatives that will move forward for more detailed analysis in the EIR
 - » Potential Capacity Alternatives = 3,000, 4,500, and 7,500 cfs





"Little Sip, Big Gulp Plan"

Little Sip Facility:

- Proposed maximum capacity of 3,000 cfs
- Fish screen and low head pump at existing opening on Sacramento River (Port of West Sacramento intake)
- Convey water 25 miles from Port of West Sacramento to intakes and shipping lock at south end of Sacramento Deep Water Ship Channel (DWSC)
- Pumps at shipping lock intakes deliver water into dual 10-foot diameter pressurized pipes that convey water 12 miles to Old River channel leading to pumps near Tracy (alternate route could deliver water from pressurized pipe to aqueduct at Brentwood and then on to Tracy)

Big Gulp:

• Drawing approximately 2.5 million acre feet using the existing south Delta facilities at Tracy Pumps

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Intake Fish Screens

Proposal:

» Construct fish screen at entrance to DWSC in Sacramento

<u>lssues</u>:

- » Option 1: On-bank vertical plate screen structure
 - Achieving adequate length would require screen to be in main channel of River which is far more disruptive construction than "in bank" design in current proposed project.
 - River protrusion would affect flood levels in area
- » Option 2: In-channel (chevron configuration) vertical plate screen structure
 - Requires fish capture and handling not a preferred protection measure for endangered aquatic species
 - Regulatory approval limited to locations with no other alternatives – not the case here.



Approximate length of 3,000 cfs flat plate fish screen at confluence of Ship Channel and Sacramento River using actual river bathymetry data.





Intake and Pump Station

Proposal:

- » Fish screen at entrance to DWSC in Sacramento River
- » Low head Pump station over flood barrier

Issues:

- » DCA and DWR staff met with West Sacramento City Manager and Port of West Sacramento to solicit feedback on plan.
- » City Manager identified major conflicts with adopted West Sacramento General Plan development adjacent to DWSC near confluence with Sacramento River
- » Construction vehicle traffic to access site and construction related noise and air emissions concentrated in populated urban area with significant number of schools (6) and other sensitive receptors along routes and near construction sites.

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West Sacramento General Plan – Proposed Development along Sacramento River and Ship Channel Area









Ship Channel Diversion

Proposal

» Use existing ship channel to divert water to southern end of and construct shipping lock on end to allow cargo transport.

<u>Issues</u>

- » Levees along DWSC would need to be raised from proposed shipping Lock to proposed USACE project levees to meet Delta Conveyance design criteria of 200 year flood level + Sea Level Rise.
- » Levee modifications on west side of ship channel would require regulatory permission to transport construction equipment and perform construction activities in the Yolo Bypass Wildlife Area
- » USACE has determined sediment in DWSC is contaminated would require dredging or capping to protect water supply
- » USACE proposes mitigations along the Federal project system but does not address seismic design requirements for Delta Conveyance or non-Federal levee south of West Sacramento.
 Major additional upgrades would be required.23

Post Scielly Lower Prip Chann Scott Love East Lewis Corps dEngineers currently proposing a project(s) to enclose West Sacramento with 200-year flood protection

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Ship Lock and Delta Smelt Habitat

Proposal

» Construct shipping lock at southern end of Ship Channel to maximize reuse of existing Channel conveyance and allow continued cargo transport to West Sacramento.

<u>Issues</u>

- The lower reach of the DWSC is core spawning and rearing habitat for Delta Smelt and unique habitat within the Cache Slough Complex which supports some of the highest occurrence of native fish species in the Delta. A new lock at the southern end of the channel would block access to this unique feature for spawning and rearing Delta Smelt. It is doubtful that regulatory permits could be secured for a lock or tunnel inlet in this location.
- » The lock and tunnel inlet shaft would need to be relocated about 10 to 14 miles further north along the ship Channel to avoid habitat disturbance.
- » The new tunnel inlet shaft location is nearly lateral to the location of the proposed intakes in the Delta Conveyance



NOP. This negates any substantive reduction in total tunnel length between these two proposals.



Delta Conveyance Project: Summary of the Preliminary Assessment of a Western Corridor March 30, 2020 | Subject to Change



Dual Pipelines

Proposal

» Construct two parallel 10-ft diameter pipelines from south end of ship channel to a new channel along the east side of the Old River channel leading to the Tracy Pumps

<u>Issues</u>

- » Two 10 ft diameter pipes would be woefully inadequate to transport 3,000 cfs; a single 26-ft diameter tunnel would be more cost effective.
- » Height of proposed channel levees to meet Delta Conveyance Design criteria of 200 yr flood protection and Sea Level rise would be in the range of approximately 28 ft in the South Delta Area – well above any existing levees in the area.
- » Tunneling, although more expensive than channel construction, is far more resilient and obviously has far less impact than constructing a several miles long channel to the Tracy Pumps.
- Channel construction along Old River would require significant import of borrow material and is along areas of poor ground conditions requiring significant ground improvement.







Construction Logistics

Limited access to most of the alignment:

- » New bridge required in West Sacramento with new road extending south to reach east side channel levees
- » Access required in Yolo Bypass to raise west side channel levees
- » Poor access to east side of ship channel. Heavy construction traffic forced on Hwy 84 to access area. This Hwy cannot handle the capacity and loads.
- » Poor access to most islands along the alignment for heavy construction. Major logistics improvements would be required.

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Delta Conveyance Project: Summary of the Preliminary Assessment of a Western Corridor March 30, 2020 | Subject to Change

Other Impacts

- Freeport Regional Water Authority Intake
 - » FRWA does not divert flows during certain reverse flow (tidal flows) conditions. Upstream diversion of 3,000 cfs would increase frequency of reverse flows that affect FRWA thus reducing their withdrawal quantity.
- SRCSD Impacts:
 - » Upstream withdrawal reduces dilution volume available for Sacramento Regional County Sanitation District (SRCSD) outfall – will reduce their discharge capacity







Additional Physical Features of Proposed Garamendi Plan Compared to Project in NOP

- 3,000 cfs low lift pump station in West Sacramento
- New Ship Lock at South End of Ship Channel
- Assuming USACE completes their project, residual DCA work would include 5 miles of cutoff wall, 4 to 10 miles of crown raise, and minimum 7.5 to 12 miles of seismic remediation to meet Delta Conveyance Design Criteria for flood protection, sea level rise, and seismic resiliency.
- Dredge or cap existing ship channel to remove or contain contaminated sediment and protect water quality
- Significant logistics investment to access remote sites including along ship channel and the proposed pipe route.





Recent Addition to Garamendi Plan (2.7.20 Letter)

Proposal

» Divert flows in a pressurized pipeline from south lock on the Ship Channel to three new reservoirs on Bacon Island, Holland Tract, and Webb Tract.

<u>Issues</u>

- » The islands in the inner Delta have a deep layer of peat soil at the surface that would severely contaminate the water supply with organic material. This organic material creates a wide range of carcinogenic compounds when treated with disinfectants. This is a completely unacceptable proposition from a public health perspective.
- » The levees on these islands would require significant upgrades to meet the design earthquake loads, 200-year flood levels and sea level rise.
- » This alternate proposal would add another 3,000 cfs pump station and flow control structures (1 per island) to divert flows to the existing SPW facilities. Each pump station requires approximately 50 acres of land (mostly zoned agricultural in these areas).
- The amount of storage available on these islands may meet daily operational needs and eliminate the need for the Southern Forebay but is insufficient in size to provide any meaningful type of seasonal storage.



Delta Conveyance Project: Summary of the Preliminary Assessment of a Western Corridor March 30, 2020 | Subject to Change



Comparison of Plan to Program Objectives

Program Objectives	Garamendi Plan			
Water Supply Reliability	Limited to 3,000 cfs			
	 Lower flow provides less redundancy resilience in the overall system 			
	 Relies more heavily on upgrades of existing aging infrastructure with documented 			
	deficiencies rather than new structures designed to very stringent seismic, flood, and sea			
	level criteria and a 100-year design life.			
Seismic Resilience	• Relies more heavily on channels, canals, and levees for conveyance. These conveyance			
	structures provide less seismic resilience than a concrete lined tunnel.			
Sea Level Rise and Climate Change	• The channels, canals, and levees in this alternative are far more difficult to modify for sea			
Resilience	level rise than underground tunnel facilities.			
Operational Flexibility to Improve	• Lower flow provides less operational flexibility between the existing and new facilities for			
Aquatic Conditions	the protection of species and the capture of excess flows.			
	 Requires major construction in a delicate habitat area for Delta smelt. 			

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Questions?