

August 21, 2020

Delta Conveyance Design and Construction Authority  
Stakeholder Engagement Committee Members

Subject: ***Materials for the August 26, 2020 Regular Committee Meeting***

Members of the Stakeholder Engagement Committee:

The eleventh regular meeting of the Delta Conveyance Design and Construction Authority (DCA) Stakeholder Engagement Committee is scheduled for a remote video conference on **Wednesday, August 26, 2020 at 3:00 p.m.**

Please join our meeting from your smartphone, computer or tablet.

<https://meetings.ringcentral.com/j/1494672175>

***SEC Members are asked to join the meeting at 2:45pm to ensure priority entry by the meeting hosts and to resolve any technical issues prior to the start of the meeting.***

Enclosed are the materials for the committee meeting in a PDF file, which has been bookmarked for your convenience.

- **Meeting Agenda**
- **Meeting Minutes**- July 22, 2020 Regular SEC Meeting

All files presented during the meeting will also be available at [dcdca.org](http://dcdca.org) by the Monday following the meeting.

Regards,



Sarah Palmer, DCA Board Member  
Stakeholder Engagement Committee Chair



Barbara Keegan, DCA Board Member  
Stakeholder Engagement Committee Co-Chair



**DELTA CONVEYANCE DESIGN AND CONSTRUCTION AUTHORITY STAKEHOLDER ENGAGEMENT COMMITTEE**  
**REGULAR MEETING AGENDA**

Wednesday, August 26, 2020, 3:00 p.m.

Remote – Conference Access Information:

**Phone Number:** 1 (916) 262-7278 **Access Code:** 149 467 2175

Electronic Meeting Link:

Please join our meeting from your smartphone, computer or tablet.

<https://meetings.ringcentral.com/j/1494672175>

The purpose of the Stakeholder Engagement Committee is to create a forum for Delta stakeholders to provide input and feedback on technical/engineering issues related to the DCA's current activities. Please note, this meeting is **not** part of the Department of Water Resources' California Environmental Quality Act public outreach process related to a potential Delta Conveyance project and therefore comments made in this meeting will not be recorded or tracked for those purposes. All items are information only.

In compliance with state and county health orders, the meeting will be held electronically only through the listed meeting link and telephone number. Assistance will be provided to those requiring accommodations for disabilities in compliance with the Americans with Disabilities Act of 1990; requests for accommodations can be made by contacting staff at (916) 347-0486 or info@dcdca.org. Members of the public may speak regarding items on the agenda when recognized by the Chair. Speakers are limited to three minutes each; however, the Chair may limit this time at her discretion. Please note that Item 4 is a single discussion item; subparts are listed for clarity. **Persons wishing to provide public comments remotely on Agenda Items must complete the online public comment form at <https://tinyurl.com/dcapubliccomment-SEC> by 4:00 pm.** The public may also provide written public comment by email to publiccomment@dcdca.org. All written comments received prior to the conclusion of the meeting will be included in the written record for the meeting but will not be read during the meeting. Additional information will be provided at the commencement of the meeting.

- 1. WELCOME/CALL TO ORDER**
- 2. ROLL CALL/HOUSEKEEPING**
- 3. MINUTES REVIEW: July 22, 2020 Regular SEC Meeting**
- 4. STAFF PRESENTATION & COMMITTEE DISCUSSION**
  - 4a. SEC Open Forum – Reflection on Status
  - 4b. DWR Updates
  - 4c. Intakes Design Refinements
  - 4d. Traffic Reductions
  - 4e. Briefing on Bethany Alternative
  - 4f. Public Comment on Item 4
- 5. FUTURE AGENDA ITEMS**
  - 5a. SEC Tours Update
  - 5b. September 23<sup>rd</sup> SEC Meeting Topics
  - 5c. September 17<sup>th</sup> SEC Report to DCA Board
- 6. NON-AGENDIZED SEC QUESTIONS OR COMMENTS**



**DELTA CONVEYANCE DESIGN AND CONSTRUCTION AUTHORITY STAKEHOLDER ENGAGEMENT COMMITTEE**

August 26, 2020 REGULAR MEETING AGENDA, CONTINUED

**7. PUBLIC COMMENT ON NON-AGENDIZED ITEMS**

*This is the time and place for members of the public to address the Committee on matters that are within the Committee’s jurisdiction but that are not on the agenda. Speakers are limited to three minutes each; however, the Chair may limit this time when reasonable based on the circumstances. Persons wishing to speak are requested to email [claudiarodriguez@dcdca.org](mailto:claudiarodriguez@dcdca.org) by 4:00pm with their name, phone number or other identifier. As these items have not been agendized, the Committee is not legally able to discuss these items at this meeting unless a recognized exception applies.*

**8. NEXT MEETING**

**9. ADJOURNMENT**

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***Next scheduled meeting: September 23, 2020 Regular Stakeholder Engagement Committee Meeting at 3:00p.m.***



## Memo

**Contact:** Valerie Martinez, SEC Facilitator

**Date:** August 26, 2020 SEC Meeting

**Item No. 3**

**Subject:** Meeting Minutes

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The meeting minutes from SEC Meeting 10 (July 22, 2020) are attached for your review. Please send any edits to [hannahflanagan@dcdca.org](mailto:hannahflanagan@dcdca.org) by **noon Tuesday, August 25, 2020**. Since the SEC is not a voting group, this process will facilitate the review process and allow us to efficiently address the minutes at the meeting.

## STAKEHOLDER ENGAGEMENT COMMITTEE

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# MINUTES

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REGULAR MEETING

Wednesday, July 22, 2020

3:00 PM

(Paragraph numbers coincide with agenda item numbers)

[Editor's Comment: Minutes are provided to ensure an accurate summary of the Stakeholder Engagement Committee's meetings. The inclusion of factual comments and assertions does not imply acceptance by the Delta Conveyance Design and Construction Authority.]

## 1. WELCOME/CALL TO ORDER

The regular meeting of the Delta Conveyance Design and Construction Authority (DCA) Stakeholder Engagement Committee (SEC) was called to order via RingCentral video conference at 3:01 pm.

Director Palmer welcomed the SEC and meeting guests and thanked all for their participation. The meeting is being held via phone and video conference pursuant to Governor Newsom's Executive Order N-29-20 in response to the COVID-19 State of Emergency.

The purpose of the SEC is to create a forum for Delta stakeholders to provide input and feedback on technical and engineering issues related to the DCA's current activities. The SEC is a formal advisory body to the DCA Board of Directors. As such, and like the DCA itself, the SEC is subject to public transparency laws applicable to local public agencies like the Brown Act and the Public Records Act. It is important to note that the SEC and its meetings are not part of the Department of Water Resources' (DWR's) California Environmental Quality Act (CEQA) public outreach process related to any potential Delta Conveyance project and therefore comments made at this meeting will not be tracked or recorded for those purposes. SEC member comments at this meeting will be recorded and tracked, but only for the purposes of the DCA.

## 2. ROLL CALL/HOUSEKEEPING

Committee members in attendance were Anna Swenson, Cecille Giacomini, David Gloski, Douglas Hsia, Isabella Gonzalez-Potter, James Cox, Jim Wallace, Karen Mann, Lindsey Liebig, Malissa Tayaba, Dr. Mel Lytle, Peter Robertson and Sean Wirth. Ex-officio members Gilbert Cosio and Michael Moran were also in attendance. Committee members not in attendance included Philip Merlo and tribal representative alternate Jesus Tarango.

Members Barbara Barrigan-Parrilla and Mike Hardesty were not in attendance

DCA Board Members in attendance were Director Sarah Palmer (Chair) and Barbara Keegan (Vice Chair) In addition, DCA and DWR staff members in attendance were Kathryn Mallon, Valerie Martinez, Joshua Nelson, Steve Minassian, Graham Bradner, Nazli Parvizi, Claudia Rodriguez, Jasmine Runquist and Carrie Buckman.

Ms. Palmer reviewed meeting guidelines and norms. All meetings are subject to the Brown Act. The chairperson presides over meetings and the vice-chairperson presides over the meeting in her absence. Discussion will be guided by the meeting facilitator, Valerie Martinez. Staff will provide technical information to support the committee's work. Each meeting will be goal-oriented and purpose driven. The information provided is for purposes of discussion only and is subject to change. The committee holds no formal voting authority. We will seek consensus. All views will be listened to, recorded and reported. Participation in the SEC does not imply support for any proposed conveyance project.

Ms. Palmer reviewed housekeeping items. Members of the public can request to speak during the public comment period by emailing [claudiarodriguez@dcdca.org](mailto:claudiarodriguez@dcdca.org). Written comments will be added to the record but not read during the meeting. Patience is appreciated, as this is the first teleconference for the SEC. DCA will work to ensure everyone is heard and receives the information needed.

The meeting is being recorded and will be posted on the website following the meeting. Please be mindful of your background, and please mute your microphone and/or stop your video if you need to step away during the meeting. In order to provide organized comments and allow SEC members to speak without talking over one another, SEC members are asked to use the "Raise Hand" feature in order to be recognized to speak during the meeting by Meeting Facilitator Valerie Martinez.

### **3. MINUTES REVIEW: June 24<sup>th</sup>, 2020 Regular SEC Meeting**

### **4. STAFF PRESENTATION & COMMITTEE DISCUSSION**

#### **a. DWR General Updates and Alternatives Formulation**

Ms. Buckman began the presentation with CEQA updates for the Delta Conveyance Project. The Scoping Summary Report has been published and is on the DWR website. It includes a description of the scoping process and a summary of comments received. The summary report also includes attachments with the full comment letters and meeting transcripts for the eight public meetings held. In terms of the National Environmental Policy Act, the United States Army Corps of Engineers (USACE) informed DWR that they will prepare an Environmental Impact Statement (EIS). A Notice of Intent to formally start the NEPA process is expected later this summer, which will initiate scoping for the preparation of the EIS. The USACE is looking to conduct a separate EIS, rather than having a combined EIS/EIR. The goal is to align the EIR schedule with USACE's EIS schedule so that it can all be reviewed at one time.

An initial study/Mitigated Negative Declaration was done for future soil investigations. This document was formally adopted on July 9<sup>th</sup> and a Notice of Determination was released. Some sites for the future soil investigations require additional permitting efforts; nothing will happen on these sites until additional permitting is complete. Work on publicly owned sites will begin this fall. With WaterFix, there were some sites that were the subject of court processes; investigations on these sites are starting now. Some work is taking place next week to complete the geotechnical evaluations.

As part of Ms. Buckman’s update on the environmental review process, she mentioned that DWR is now working on planning other outreach (line 1 on the graphic). The team is now heading into the Project Definition section of the process (line 2 on the graphic) by starting to formulate alternatives.

The presentation will provide information about CEQA requirements related to alternatives and an overview of the alternatives screening purpose and process (specific to CEQA). It will also provide a preview of preliminary screening results related to physical alternatives, with no discussion of operations yet, and an opportunity to discuss and better understand the process and preliminary findings. DWR is not asking for suggestions on new alternatives beyond what was already submitted during scoping. Although the SEC purpose is not to provide input on CEQA related topics, DWR wanted to keep the SEC informed on the alternatives process and the DCA wants the SEC to understand the current alternatives being considered by DWR in order for the SEC to provide feedback on the design components of the alternatives consistent with previous DCA related design presentations, which means they need to know what those alternatives are.

CEQA prohibits public agencies from approving projects as proposed if there are feasible alternatives or mitigations that would meet project objectives but also substantially lessen significant environmental effects. As part of CEQA’s decision-making process, agencies are required to consider alternatives to the proposed project.

CEQA says that an EIR shall describe a reasonable range of alternatives to the project, including alternative locations of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasibly alternatives that will foster informed decision making and public participation. Alternatives formulation is guided by the “rule of reason.” An EIR is not required to consider alternatives which are infeasible.

Two screening filters are being used for the potential alternatives that are based on the CEQA requirements. Filter One considers if an alternative meets most of the basic project objectives. If it does, Filter Two evaluates if an alternative avoids or substantially lessens an expected significant environmental effect of the proposed project.

The first step with Filter One is to determine whether or not the alternative addresses the fundamental project purpose, which is to restore and protect the reliability of SWP water deliveries in a cost-effective manner consistent with the State’s Water Resilience Portfolio. Then it’s determined whether or not it meets most of the project objectives, which are climate resiliency, seismic resiliency, water supply reliability, and operational resiliency. If it meets most of them, then those alternatives can pass to Filter Two.

If an alternative passes through Filter One, it moves on to Filter Two where it is determined if the alternative could avoid or substantially lessen any of the expected significant environmental effects of, or potentially address one or more significant issues related to, the proposed project, without creating additional potentially significant environmental effects.

There are three categories of alternatives. Dual conveyance includes new SWP points of diversion in the Delta and facilities to move water from those new points of diversion to the existing SWP pumping facilities in the south Delta. It is called “dual conveyance” because it would also continue use of existing SWP diversions (intakes) in the south Delta—two ways of conveying water. Isolated conveyance would include new SWP points of diversion in the Delta but would not continue the use of existing SWP diversions in the south Delta. Through-Delta conveyance would have no new SWP intakes in the Delta but could include new infrastructure in the Delta to ensure continued/improved SWP conveyance capacity through existing Delta waterways.

The list of alternatives being considered are just physical alternatives as operational alternatives are not being discussed at this meeting. Some similar suggestions have been grouped together. A handout was sent to SEC members and posted on the DCA website that lists out all the alternatives with short descriptions.

Under dual conveyance, the Central Tunnel and the East Tunnel are options under the proposed project. Dual conveyance alternatives also include the East and West Canals and the West Tunnel. There are a series of different intake locations, including the Sacramento Weir, the Fremont Weir, and the Decker Island. This also includes Bethany Reservoir and alternative points of diversion.

Isolated conveyance has some similar options to dual conveyance, but they would operate alone, not in conjunction with the Southern Delta facility. These include New Fremont Weir and Decker Island intakes, Sacramento River intakes, and San Joaquin River intakes.

Through-Delta conveyance alternatives include no tunnel, no diversion facility, and levee improvements and reduced reliance on exports.

The list of “Other” is made up of alternatives that don’t easily fall into specific categories. These include A Water Plan for All of California (suggested by Congressman Garamendi), the Western Delta Intake Concept (also known as the Pyke proposal), SolAgra Water Solution, Portfolio-based Conceptual Alternative, Enclosure of existing California Aqueduct, novel technologies, and alternate water supplies.

Mr. Wallace asked if the Through-Delta alternative is the same as the No-Project alternative under CEQA? It was said in the presentation that CEQA is a methodology to inform decision making but DWR is the project proponent, the lead agency, and the decision maker. Will the decisions being made be fair and not heavily politicized?

Ms. Buckman said the Through-Delta conveyance includes some specific levee improvements. The second part of the presentation will go more in depth. The goal of EIR development is to thoroughly study environmental impacts and document that information to help decision-makers evaluate how to move forward. The decision maker for purposes of CEQA compliance is Karla Nemeth, as the Director of DWR, as informed by the governor.

Mr. Cosio said a comment was made to move intakes to Sherman Island and it's not shown on the presentation with dual conveyances or isolated conveyance. Was it put somewhere else?



Ms. Buckman said it is grouped with the alternative points of diversion concept because a new intake at Sherman Island would be a different point of diversion. However, it is also similar to the Western Delta Intake Concept that will be discussed later in the meeting.

Ms. Barrigan-Parrilla asked if the isolated conveyance alternatives include a dismantling of the existing pumps and their infrastructure?

Ms. Buckman said the alternatives comprising of isolated conveyance facilities would not dismantle Banks Pumping Plant. These alternatives may continue pumping at Banks Pumping Plant, but it would only receive water from the new conveyance facility and not continue to receive water from Clifton Court.

Dr. Lytle said the SEC's interaction with DWR has been limited to design and construction issues, with no discussion of CEQA. Now, the SEC is being presented a preview of CEQA alternatives and being asked for our comments. How will these comments be handled? Are they actual CEQA document comments that will be reported based on feedback from the SEC? It would be helpful to understand the flavor of this discussion.

Ms. Buckman explained that DWR will be asking the DCA to contribute design information to the alternatives, and the DCA will be working with the SEC on these alternatives (similar to the work so far on the proposed project). It would be difficult to discuss design of the alternatives with the SEC without explaining why certain alternatives were chosen and others were not. It's also an opportunity for dialogue and for DWR to provide transparency in the process. As has always been the case, this is not a CEQA meeting and any comments provided today are not a part of the official CEQA process.

Dr. Lytle added that discussing CEQA now, in a way disqualifies earlier discussion where individuals wanted to discuss CEQA components but were forbidden to. It seems unfair that the SEC has been asked to stay within certain parameters for discussion, then that suddenly changes based on what you want for discussion going forward. It seems irregular if you want genuine input from the SEC that this is sprung on us.

Ms. Martinez explained that this was the main focus of the preparation for this meeting. In creating this relationship with the stakeholders, there needs to be an opportunity for trust and partnership. Although it is true that DCA does not handle CEQA, they are handling alternatives that continue to move forward. In order to avoid a void of information, this creates an opportunity for clarification.

Ms. Mallon added that from listening to the people of the Delta, the goal here is transparency. This conversation is contextualizing the work of the DCA. It's an opportunity for the SEC to understand the work being done at a greater depth.

Mr. Wirth asked if since the Central Tunnel and the Eastern Tunnel are being so highly considered, will alternatives be considered for the various components of the infrastructure? Will the SEC be considering alternatives for intakes and various shaft sites?

Ms. Buckman said the SEC has been working on this already by considering ways to move facilities and optimize to avoid impacts to communities to the extent possible. As we go

through the environmental evaluation, if potential environmental effects could be avoided by additional changes to facilities, it will be a collaborative effort to move those around.

Ms. Mallon mentioned that this is pre-optimization. Ms. Buckman's team will find things that need to be addressed by moving or changing some design elements, so there will be back and forth.

Mr. Wirth added that this doesn't necessarily work for the intakes. There is no input for the intake siting.

Ms. Buckman said there are alternatives suggested for intake siting.

Ms. Mann said this would've been great information to have sooner. From where did these lists of alternatives derive?

Ms. Buckman this wasn't done sooner because feedback from scoping was used to develop the list. The main source was suggestions during scoping, then alternatives were added from past projects that were still relevant. Suggestions from the technical experts working on the project were also added in.

Ms. Buckman continued the presentation with the alternative screening results. All alternatives suggested through the scoping process went through the screening filters. The alternative formulation process and results will be documented in the Draft EIR. Only a few alternatives will be discussed today and these were of high interest during scoping. The presentation will describe example filtering process results for the Congressman Garamendi proposal, the Pyke proposal, the No-Tunnel and Through-Delta proposals, and the Bethany Alternative.

A Water Plan for All of California, often referred to as the Congressman Garamendi plan, is a dual conveyance alternative featuring a new 3,000 cfs north of the Delta diversion structure on the Sacramento River near West Sacramento (including a fish screen and low-head pump station). The Sacramento Deep Water Ship Channel (DWSC) would be used to convey water approximately 25 miles to a new intake near the southern end of the channel. There would be a new boat lock near the southern end of the Deep Water Ship Channel to prevent water diverted from the Sacramento River from flowing into the Delta near Rio Vista. There would also be a new 12-mile pipeline to convey water through the western Delta and underneath the Sacramento and San Joaquin Rivers to the existing SWP and CVP pumping plants in the south Delta.

The screening process began with determining if the alternative met basic project objectives. The reliance on channels, canals, and levees provides limited seismic resilience. Modifications to those facilities would be necessary to be resilient for climate change. The lower flow provides less operational flexibility between the existing and new facilities for the protection of species and capture of excess flows.

The screening process did move forward to Filter Two because some of the project objectives were generally met. Filter Two considers the alternative's ability to lessen potential significant environmental impacts. Substantial reconstruction would be needed for the Deep Water Ship Channel in order to use it as the current levees are not resilient enough to handle 200 year

floods. Significant construction impacts are associated with working in West Sacramento to build a fish screen and low head pump station. Construction on the west bank of the Sacramento River would result in noise, transportation, visual, air quality, and other impacts related to construction activities through highly populated areas of West Sacramento. Construction traffic would drive past six schools to reach the construction facilities. Also, in order to make the fish screen long enough in the Sacramento River, it would protrude into the river, which would be disruptive. The lower reach of the DWSC is core spawning and rearing habitat for Delta smelt and unique habitat within the Cache Slough Complex supports some of the highest occurrence of native fish species in the Delta. A lock and water intake at the southern end of the DWSC would likely not be able to be permitted, which would require the lock and water intake to be moved about 10-14 miles north along the DWSC to avoid habitat disturbance. If moved north, the intake would be nearly lateral to the location of the proposed intakes in the proposed project, which minimizes the difference in tunnel length between alternatives.

The next alternative is the Western Delta Intake Concept, also referred to as the Pyke Proposal. This is also a dual conveyance alternative with use of Sherman Island as an intake forebay, facilitated by removal of the peat soils and modification of the levees to allow for water to infiltrate up to 15,000 cfs into the island forebay (water inflow into Sherman Island would occur when water elevation in Sherman Island is lower than the water elevation in the surrounding rivers and sloughs). A pumping plant and one or more tunnels would be needed to convey water from Sherman Island to a new reservoir near Clifton Court Forebay (Brushy Creek Reservoir) with connections to existing south Delta pumping plants and an enlarged Los Vaqueros Reservoir. There would be continued use of the existing south Delta intakes with new fish screens and a boat lock at the Delta Cross Channel to prevent salmon from entering.

This concept did not pass Filter One. The Delta water quality may limit the use of the Sherman Island reservoir, which would only worsen with sea level rise. Due to the water quality at Sherman Island, this alternative would not improve SWP water supply reliability or operational resiliency. Water quantities could be limited due to SWRCB water quality and water rights decisions, and other regulatory limitations imposed by USFWS and NMFS. Due to its location in the Delta, it did not meet project objectives and was therefore not passed into Filter Two.

Ms. Giacomini said a yellow pipeline going across Sherman Island was shown for the Garamendi alternative, does that go under or over the island?

Ms. Buckman said the yellow and orange lines are supposed to be pipelines not tunnels. It would be laid and covered back up, then most likely tunneling under the waterways.

Ms. Giacomini added that it's concerning because it looks like the yellow alternative will go right under the largest community on Sherman Island. Will it impact the surface?

Ms. Buckman said there could be potential effects to the communities at the ground surface.

Mr. Cosio asked if removing Sherman because of water quality impacts due to sea level rise, means that it is assumed that state and federal water projects will not be responsible for maintaining water quality in the Delta in the future, as they are now?

Ms. Buckman said that is not being assumed. The assumption is that there will continue to be regulatory requirements about operations and how they would affect water quality in the Delta. As sea level rises further, there will be times of the year that the CVP and SWP will not be able to change water quality. Sherman Island might not be the best location to be resilient in response to potential changes in the Delta in the future.

Ms. Barrigan-Parrilla asked what data is being used for seismic resiliency? This has been a hard issue for the people in the Delta. It feels like the data being used is not recent and does not deal with proximity of earthquakes or past tests results of active fault lines. Can you discuss all the parameters for determining seismic resilience? Has the DCA considered or updated those standards so that it's using criteria that's more comprehensive?

Ms. Buckman said at this point, this is being looked at more conceptually. More detailed evaluation and data will be needed as part of the EIR. At this point, it's determining whether an alternative, at a conceptual level, has the potential to improve seismic resiliency. In other words, if there is an earthquake in the Delta that causes a water quality problem, does this project help keep the SWP online or get them back online as soon as possible?

Ms. Barrigan-Parrilla asked in regards to the statement about DWR being the operator of the State Water Project, how does this match up with the DWR's mission including being the provider and steward of water resources for all of California? That also includes people that do not draw water from the State Water Project.

Ms. Buckman said DWR's mission certainly covers many areas and incorporates topics beyond operations of the State Water Project. This project, however, is focused on the goal is to keep the State Water Project functional in the future in the face of many challenges. The State and DWR are planning many projects to fully accomplish its objectives and mission; Delta Conveyance is only one project.

Mr. Hsia asked could the Garamendi alternative reduce the impact on farmers' use of water on the Sacramento River?

Ms. Buckman said that water rights in the Sacramento River are a constraint. If there is a project that moves forward, the next step would be to petition for a change in point of diversion from the State Water Resources Control Board. As part of this process, DWR would need to document that the project is not unreasonably affecting water supplies for any legal user of water. It will be studied in the EIR but also goes through an extensive State Board process.

Another set of alternatives mentioned during scoping were the No Tunnel and Through-Delta alternatives. The ideas proposed include some combination of an increase in water recycling and conservation efforts, desalination, and continued through-Delta conveyance (using existing facilities) with improvement to Delta levees (Mokelumne, San Joaquin, and Middle rivers; along Snodgrass, Deadhorse Island, Beaver, Hog, Sycamore, Little Potato, White, Little Connection, Latham, and Trapper sloughs; Columbia and Empire cuts; Victoria Canal).

The Through-Delta alternative did not meet basic project objectives. Improving levees and through-Delta conveyance would not address the water quality component of the project

objectives of climate change and sea level rise for the SWP. Continued use of the existing system (even with upgrades) as a long-term plan does not address seismic resiliency and the associated water supply reliability concerns. There would also be no operational resiliency.

The No Tunnel alternative also did not meet basic project objectives. Alternatives that rely on water agencies to implement additional projects (such as water recycling, conservation, or desalination) provide alternate supplies instead of SWP supplies. Alternate supplies do not meet the fundamental project purpose of enabling the SWP to continue to function through challenges such as climate change, sea level rise, and earthquake risk.

Agencies may choose to do things like water conservation, recycling, and desalination under the No Project Alternative. Some alternatives proposed in scoping comments do not meet the project objectives but may be considered in the No Project Alternative. This alternative (required under CEQA) describes likely conditions if the project is not implemented, including potential actions that may be taken absent a project. Alternate water supply options may be incorporated to address water shortages. A full environmental analysis including impacts would still be performed.

Ms. Barrigan-Parrilla said based on this evaluation, it's been decided that these alternatives don't address the water quality criteria for the SWP but there is no description about how water quality challenges are going to be addressed in the Delta. Impacts from operations haven't been addressed yet. Completing an analysis for the SWP is disallowing for the consideration from the non-SWP users that have equal duty to be protected. Confused that impacts on water quality aren't a part of the analysis.

Ms. Buckman said water quality impacts of the proposed project will be studied during the environmental evaluation. Water quality changes will be discussed, and mitigation will be incorporated if significant impacts are identified. Improving baseline water quality conditions in the Delta, however, is not a part of the project objectives.

Mr. Wallace said the No Tunnel alternative doesn't meet climate or seismic resiliency. It seems that the project will only take water when it's available. If these alternatives don't meet the project objectives, does that mean that SWP water will be taken out of the intakes in the north Delta to ensure mitigation of water quality issues? It seems contradictory.

Ms. Buckman said the team does not envision a point where all water would be diverted in the north Delta. It is one of the objectives to provide an alternate point of diversion so that in the future, if the southern Delta becomes further constrained, there is another way to take that water. This will be studied with the modeling of the EIR to try to better characterize what that will look like in the future. The team is not envisioning abandoning the south Delta, the north Delta would just be used more to retrieve water of high quality. More will be known after modeling.

Mr. Wallace clarified that this is going to become an operational issue that has yet to be answered.

Ms. Buckman said that while the amount of diversion in each location is still to be determined, both facilities would continue to operate.

Ms. Mann said it seems that that the concern is more for the people in the south, rather than for the residents and the people who moved here intentionally because this water provides life. The scope of the decision making includes water quality. The SEC needs to know the definition. The presentation mentioned that this would only be used occasionally. It's concerning that this would be an expensive project to only use it on occasion.

Ms. Buckman said water quality is very important and is a focus of multiple ongoing state efforts, but it is not an objective for this project. In terms of using a new diversion facility only on occasion, this is specifically related to operations. There will be operational constraints that will be developed with the fishery agencies. Diversions will be limited based on conditions in the Sacramento River to protect fisheries. The new intakes will not be able to be used all of the time, but operational criteria are still under development.

Ms. Mallon added that the resiliency term is important. Making something resilient to withstand a future of potential seismic activity, climate change, or sea level rise is what water infrastructure needs to consider so that there is 24/7 water available.

Mr. Gloski said it's concerning that this alternative was just eliminated from the start from future analysis. It seems like the focus of this project is to maintain SWP water supplies, rather than environmental purposes. There is the ability to affect algae problem, with less water flowing through that will be more of a problem. It seems like the desire to not keep the current conveyance and just jump into the next. It's all confusing.

Ms. Giacoma said with the existing message of removing water from the Delta and sending it south, the water quality is already degraded around Sherman Island due to excessive removal of water. How will it be ensured that this doesn't worsen? How will the people there and their water be protected?

Ms. Buckman said the EIR will analyze water quality impact of the proposed project and alternatives. The EIR will include an extensive modeling effort throughout the Delta to study water quality. It will be studied how any alternative could affect locations throughout the Delta, including Sherman Island. If there are potential significant adverse effects, the team will look at how to avoid or reduce the effects through mitigation measures.

Ms. Buckman continued the presentation with the Bethany Reservoir Alternative. This alternative, instead of taking water to a Southern Forebay, would convey water further south to Bethany Reservoir. Currently the SWP diverts water from Clifton Court Forebay into Banks Pumping Plant, which pumps it into the California Aqueduct. Bethany Reservoir is along the California Aqueduct just downstream of Banks Pumping Plant. The idea is that instead of having a new forebay, a new pumping plant would move water from the tunnel directly into Bethany Reservoir. This alternative meets all the requirements for climate resiliency, seismic resiliency, water supply reliability, and operational resiliency. It has the potential to avoid or lessen environmental effects. The expectation is that the Bethany Alternative would have fewer surface impacts because there would be no construction of a new terminal forebay. Also, no south Delta conveyance facilities would be needed to connect the southern forebay to the Banks Pumping Plant. This alternative will be studied with more detail and DCA has been asked to continue with the design of the Bethany Alternative in addition to the Eastern and Central

alignments. DWR may also ask for help with design-related information for the No Project alternative to look at different types of facilities and how they would connect into the distribution systems.

The alternative screening process has also provided insight into the intakes in the proposed project. Intake 2 has been removed from further consideration for the proposed project but will still be considered for alternatives with a capacity greater than 6,000 cfs. The preliminary screening indicates the greatest potential for cultural and historic resources (based on known resources). The preliminary screening also found increased potential for construction-related effects to sensitive receptors in Clarksburg. The distance to Twin Cities requires an additional maintenance shaft, which would increase construction-related effects. Lastly, the shallower river depth results in a longer fish screen and increased fish exposure.

Mr. Moran asked if specific to the Bethany alternative, is the size going to increase? Does the function or purpose then change?

Ms. Buckman responded that the alternative does not include an expansion of Bethany Reservoir. There would need to be a pretty substantial pump station at that location. It is a much higher elevation change than the pump station in the proposed project and it is in a rock formation. The pump station would be larger and more expansive. Not as much is known yet about this alternative and the design process may identify additional issues. But at this point, it seems to have the potential to reduce environmental effects.

Mr. Moran asked if more capacity is offered for this particular project, might that mean that water has to be diverted in a more consistent fashion? Water would not be able to be stored as much at Bethany than it would at a Forebay, therefore the tunnel has to be operating more often?

Ms. Buckman said that based on preliminary information, the Bethany Alternative would not require that type of different operation. The southern forebay's primary purpose is regulating water for the Banks Pumping Plant, but the Bethany Alternative would not be connected to Banks Pumping Plant.

Ms. Swenson asked why are the sensitive receptors in Hood, Courtland, or other areas less valuable or less considered than those in Clarksburg? It seems like these alternatives were stacked up with rationale as to why they couldn't be considered. How does any of this lessen the dependence on the Delta? There are no eliminations of alternatives or intakes, so how can the dependence on the Delta be rationalized?

Ms. Buckman said Courtland is further from intake 5, so there the potential construction-related impacts would be less than those in Clarksburg associated with intake 2. Hood is unfortunately already going to be affected by noise from intake 3, so the goal there is to minimize noise and construction impacts to the maximum extent possible. The issue of reduced reliance will certainly be addressed as part of compliance with the Delta Reform Act and consistency determination with the Delta Plan. We expect information related to this will also be presented in the EIR. The team will need to look at how water agencies are reducing their reliance.

Ms. Barrigan-Parrilla said the No-Project alternative is still going to be analyzed because it is a requirement under CEQA. The main complaint in the past was that the analysis for the No Tunnel alternative dropped ideas and dismissed them as to why they would not work. If there is still a No Tunnel alternative, will it include things that the public believes should be included? Or will everything be analyzed with the status quo? This will end up in the same fight from four years ago. The No Tunnel included new fish screens and levee repairs. If the analysis is done because it is a requirement, but the public's requests are dismissed, will it end up back to square one?

Ms. Buckman said this is what the team is trying to do differently. The goal of the no project alternative is to evaluate different types of actions that may be implemented if the proposed project does not move forward. Some things like levee improvements are part of the baseline because they would be implemented regardless of whether the Delta Conveyance Project goes forward. The no project alternative would include efforts that would be implemented in response to not constructing the Delta Conveyance Project. DWR's objective is to develop a rigorous no project alternative.

#### **b. DCA Response to SEC Comments**

Ms. Mallon opened up the presentation with five discussion items that the team has been working on based on the feedback from the committee. These items are maximizing restoration of agricultural land, reducing shaft diameter and shaft pad size (reducing truck traffic), minimizing site footprints and optimizing siting, minimizing construction activity in and around Stone Lakes Refuge, and tunnel boring machine soil conditioners.

Mr. Bradner began his portion of the presentation on land reclamation. The first step to the approach is up-front commitment to site rehabilitation. In some cases, it's several hundred acres of land that makes up the difference between the construction boundary and the actual post-construction site. The initial assessment being done is to understand the current conditions, consider the potential construction impacts—primary impact will be from RTM storage, and include the effort in the Environmental Document. As far as the site reclamation itself, a comprehensive approach is being taken that includes pre-, during, and post-construction actions, and incorporates elements into construction documents.

All the sites have material/equipment laydown and staging, materials stockpiles, topsoil/peat stockpiles, retention ponds/desilting basins, access roads, construction trailers and parking. Some facilities like the intakes and the Southern Complex have slurry mixing plants. At the launch shafts, there are big concrete slabs for segment storage, there is RTM processing and storage, and some have railroad spurs to help move large quantities of material to and from sites.

The size of the sites range from less than 10 acres for maintenance/reception shafts to about 450 acres for tunnel launch sites with materials depots. The Southern Complex, for example, is a massive facility, but some of this land would actually be a part of the permanent facility and not return to agricultural uses. Existing agricultural uses range from irrigated pasture to vineyards and orchards. Ground conditions vary from soft peat/organics to older consolidated deposits. Preliminary estimates of settlements up to four feet depending on the ground



conditions, loading, and duration. Some sites or elements require ground improvement to support loads, for example, for concrete slabs.

It will be very important to strip the topsoil and save it. Pre-construction actions include soil sampling and analysis, saving the topsoil, surface treatments, and water infrastructure. During construction actions include soil handling, reducing compaction with stockpiles, spills containment, and water infrastructure maintenance. Post-construction actions include removing all of the construction material from the site. This is where on-site soil sampling and analysis will be especially important to determine what the state of the soil is after construction. Then the site rehabilitation strategy will be refined, but will likely include actions, such as tillage, application of topsoil, adding amendments, and leveling/grading/discing.

Post-construction treatments could include compacting native soil base, RTM base used to restore topography, and stabilize RTM stockpiles for future use. The long-term uses could be agriculture, natural/habitat, or RTM stockpile (not considered land reclamation but does involve similar steps).

The process for native soil base and RTM base are nearly identical and would include conducting soil testing and analysis, rip up to 3-foot depth, adding amendments to address compaction (e.g., gypsum), incorporating amendments by cross-ripping, respreading the topsoil, cross-disc, grade/level, and wind/water erosion cover (unless the future land user is ready to plant). The only difference is that for RTM base, amendments would be added when respreading the topsoil to address soil fertility. This could be with compost, peat, etc.

The process for RTM stockpile would include respreading the topsoil on the stockpile, cross-discing, wind/water erosion cover (likely hydroseed with grasses), establish an access road to the stockpile, and implement SWPPP around the site with berm to ensure that the site is self-contained and stable. A stabilized exit would also be added to avoid tracking soil onto the street.

Long-term use would follow post-construction activities and would dictate the final site preparations. For an agricultural site, the grower would prepare the field based on crop type. This could include laser-leveling the fields, re-establishing the water supply and drainage, adding additional amendments, or planting cover crops to build soil fertility. There is recognition that the site may initially have sub-optimal yields but would be reflected in the reduced land cost. For natural areas, the site would be prepared based on habitat use, which could include natural contouring or a mixture of plant materials like bushes and shrubs.

Initial coordination has been done with the agricultural community, specifically with Ms. Liebig and the team at SCFB. Preliminary feedback was given on the restoration approach, much of which has been already integrated into the approach. Compaction is the major concern for growers and farmers and the shallow groundwater exacerbates the issue. Accounting for existing drainage and irrigation at the site. Considering deep stripping, if needed, to collect sufficient local, organic material for on-site restoration activities. Considering adjacent land use when evaluating the potential end use of reclaimed areas. Grass for grazing is possible in many proposed locations but permanent crops will be more difficult. Other comments involved traffic concerns that could affect agricultural business operations and the effects of RTM processing and drying on surrounding land and groundwater conditions.

Ms. Swenson said she is concerned about the compaction and how it will affect the domestic wells. Abandoned water infrastructure was mentioned, but there is no such thing in the Delta, so whose water infrastructure will be used? Who decides what is lost and kept? Where will the tunnel muck be stored? How do you know that taking a layer of tunnel muck and putting the topsoil back will lead to productive farmland? Can it be clarified whether the land being discussed is land that the project already owns?

Mr. Bradner said the presentation did not mention anything about anyone not being able to return to the land or once again farming this land.

Ms. Swenson said major water infrastructure is being put on top of farmland, they cannot live there, fields will be taken, and soil will be ruined. What happens to the year of non-productive farming? What will happen to the people there during this time? It is not a year or two, it is a long period of time.

Ms. Mallon said the point of the presentation was to discuss what the team is proposing to do on the sites that would be purchased for construction to return land no longer needed back to its agricultural use.

Ms. Swenson said the Twin Cities borrow area is not purchased land, but the plan is to make it a borrow pit.

Ms. Mallon said Mr. Bradner is talking about how to restore land that has been purchased as part of the project. Not now, because there is not a project yet. It is part of the proposed project.

Mr. Bradner said the project is still in the CEQA phase, no land has been purchased. This is talking about the environmental document effort to ensure the land is returned for agricultural purposes. It's not being ignored; it is being accounted for in the environmental effort. The team is putting forward a plan. These are not parcels that DCA already owns. None of that is true. It's just an approach to try to return land to a productive use. Regarding the water infrastructure, this is water infrastructure that would be used on several different sites so the team would evaluate which should be abandoned properly, and which should be maintained so they can operate in the future. The approach for post-construction land reclamation is not intended limit future operation and strives to ensure continued operation of surrounding water infrastructure. In terms of viability of RTM, lack of nutrients is not a critique of material. It's not bad material, it just doesn't have the naturally occurring organic matter than exists near the surface. This effort for implementation of this approach will all be in the environmental document. Our goal is to be complete and comprehensive.

Ms. Swenson asked for clarification if land is already owned by the DCA.

Mr. Bradner said no land is already owned. There is no current land; there is no project.

Mr. Wirth asked would this reclamation be considered avoidance minimization or mitigation in CEQA? Who would own the reclaimed land? It would make sense for large portions of the north Delta to be restored to an agricultural cover type that these impacted species can utilize. If it's

private land, this would require row crops. Both habitat and agriculture can be accomplished for a lot of the project's footprint.

Ms. Buckman said the idea is not to include land reclamation to avoid minimization measures, but it would be part of the project. The goal is to move through the entire project to figure out how to return the construction areas to some useful purpose. It will be part of the base project that will be evaluated for mitigation needs.

Mr. Wirth asked for clarification that if you have 100 acres, then you reclaim that 100 acres, have 100 acres of mitigation already been provided as part of the project? Then 100 acres of reclamation is added additionally?

Ms. Buckman said it depends on what is underlying the site and how we want to mitigate. The EIR will analyze the impacts at each parcel and propose mitigation measures if significant impacts are identified. Restoring the land at the end will be part of the analysis.

Mr. Wirth asked who would own the land?

Ms. Buckman said the owner of the land is unclear at this point in the project planning. The state would have to purchase land for construction and is considering selling it at the end of the construction period.

Ms. Martinez reminded that this is just an initial plan and initial coordination. Some questions may not have answers yet.

Ms. Giacoma asked what is the timeline of this restoration and is there intent to use adaptive management?

Mr. Bradner said in the assessment, the team has assumed the work would be done in one construction season at the end of the work. Getting it done in the dryer portion of the year. That assumption was set to figure out equipment and operations required. It would all occur within the year immediately following construction. Regarding the model, it is still a work in progress.

Ms. Giacoma the graphic shown earlier in the presentation that showed a large yellow to red area, is there a key to understand the different colors?

Mr. Bradner said that the graphic shows contouring of peat thickness below the surface. The team can send it to you. It's work from DWR and several other agencies, based on existing borings.

Ms. Liebig said a lot of people in the agricultural community don't believe this tunnel muck will be reusable as proper agricultural land after it's restored. Compaction is a major concern with using that land. A lot of prime farmland is being taken out of production and turning it back into a low-value crop is going to have a disproportionate effect on the ag economy. Only taking 12 inches of topsoil is not enough, the amount won't make a difference post construction. The adjacent land use, especially for intakes, in one of the graphics, for example, there was a large square of land with a u-shape around it. Yes, that can be restored but is it farmable? Something

like having an ag base plus having environmental access for terrestrial species would be great. The community is hopeful that this land can be turned back into productive agricultural land, but still see a lot of concerns to see how this is going to affect the productivity of the agricultural community. These approaches still need to be discussed and talked about with farmer engagement.

Ms. Mallon said it has been discussed to do a sort of proof of concept with a demonstration to validate that this works and allow us to reiterate to ensure that what the team is proposing works.

Ms. Liebig mentioned that she saw some of their comments and feedback implemented into today's presentation.

Mr. Moran said the consulting with the Farm Bureau is very encouraging. Ms. Mallon's comment about proof of concept is also very encouraging. With the unprecedented scale of this project, there is an unprecedented amount of study and funding for it for this to be done through mitigation. If this is going to be used as a project base, the same approach should be taken for studying it.

Dr. Lytle said engaging with the agricultural community is very important, as well as offices in that area and maybe local universities. This would allow for pilot studies and adaptive management to get a better understanding of RTM. How many acres of land is estimated to be reclaimed? Mine land reclamation principles could be beneficial for reclaiming lands that have been impacted by changes in soil. The team needs to be more sophisticated with impacts on the overlaying soils, how nutrients move, and developing lists of crops that can live in this type of soil. The artificial soil should be tested by actually planting crops in it. These studies need to be conducted. In regard to the earlier statement about not owning any land and there being no project, there is some land already owned by state water contractors.

Mr. Bradner said the point being made is that there is no project. It's unknown if Bouldin Island will be used or where the alignment will go.

Dr. Lytle said even so, there is a unique opportunity that there is already land owned to use them for pilots for reclaimed lands.

Mr. Bradner added that the team did bring in a restoration ecologist and agricultural engineer that were very involved in the effort. It's correct that there is still a lot of work and opportunity to be done, but this was just an initial preview.

Dr. Lytle said these steps the team is taking are encouraging.

Mr. Cox asked how much topsoil on top of the muck is being considered?

Mr. Bradner said in terms of quantity estimates, looking at one foot of stripping, then that material will be stockpiled on site to preserve. Everything is to be sorted out in the future. The only reason it could end up being more or less, is if we strip a large amount and return it to a smaller area. How much stripped depends on the analysis, is it being returned to a large area or small area?

Mr. Cox suggested studying Foster City, it was built from reclaimed bay water with a topsoil and bay muck underneath. There's about 40 years of growth there that can be studied.

Mr. Hsia asked who would restore the land? The SCFB or the end user?

Mr. Bradner said the team consulted with SCFB to get input. It would be the responsibility of the DCA to construct the initial rehabilitation efforts. If someone is not positioned to take over the site as the end user, the site would be stabilized with grasses. If someone is ready to take over, they would and do final steps. Some effort will be associated with that. The land would come at some sort of reduced cost.

Mr. Hsia added that today there was talk about using the RTM to recover the ground, but there was discussion at the last meeting that there would not be enough RTM to do so.

Mr. Bradner said there are only a few examples where less RTM is generated. There are really small tunnel options and the Southern Forebay doesn't get smaller, so there is a large demand for fill. The smallest alternatives of the project don't generate enough RTM to fully meet the needs of the Southern Forebay. Additional fill would need to be brought in for those few options. The borrow pits may or may not be used for RTM, it depends on the sequence and when material is available. Land would eventually be restored.

Mr. Bradner continued the presentation with reducing shaft diameter and shaft pad size. He presented an example of Mandeville Island Maintenance Shaft. In past versions of the soil balance, traffic models, and mapping, the shaft wall went up to the elevation at 31.4 ft. The internal diameter shafts were 82 ft. Now with the updated geometry, it has been shrunk down to a 70 ft diameter with a final pad elevation of 13 ft. The top of the shaft will remain at 31.4 ft. At the June meeting, it was presented that the volume needed for Mandeville was 211,000 CCY with 80-120 truck trips per day on the hauling schedule. With the edits, this has been reduced to 94,000 CCY coming from Twin Cities and about 40-55 truck trips per day. These reductions have been done project-wide. Excess material here will now be saved onsite for stockpile rather than hauling it back out.

Mr. Bradner presented a chart showing the summary of site acreages that laid out the previous and current numbers in the construction footprint, as well as the reduction. A few sites did increase due to RTM.

The Twin Cities Launch Shaft site (formerly Glanville Tract) was able to be reduced in size largely due to RTM processing requirements. Changes here have emphasis on mechanical drying and a more robust assessment of soil borrow, backfill, and storage logistics needs.

Staten Island Maintenance Shaft was one of many that were tweaked and optimized. Previous plans were to strip out a lot of the peat under the earth pads and stockpile it onsite. That plan has been changed, there will now just be improvements to ground under the pads to avoid excavation. By shrinking the pads, the sites have been able to be reduced in size as well. It has been reduced from 15 acres to 12 acres.

Bouldin Island Launch Shaft has seen several changes, including the removal of the barge landing. Some space has been added for RTM management and processing. The footprint for levee repairs has been increased to allow for more flexibility in the ultimate solution, resulting in the increase of acreage here.

Mandeville Island Maintenance Shaft has seen a reduction from 16 acres to 14 acres. Moving the location across the access road has allowed for a higher elevation, which is important in terms of quantities and truck trips required.

Bacon Island Reception Shaft now has reduced peat excavation and stockpile. Repositioning for optimization has allowed for a reduction to 11 acres from the original 16 acres.

Canal Ranch Maintenance Shaft Site (formerly Brack Tract Shaft) moved to avoid Woodbridge Preserve Units and improve access. No difference in acreage but the move did allow for much more optimization of space.

Lower Roberts Island Launch Shaft is similar to Bouldin Island. There are the same sort of levee improvements and adding more flexibility for the eventual solution, so this results in a slight increase in the footprint. The actual shaft location was also able to be shrunk. There is the ability for increased RTM storage area and avoiding wetland areas.

Upper Jones Island Maintenance Shaft (formerly Lower Jones Island Shaft) decreased pad dimensions and adjusted the layout to be able to decrease footprint by three acres.

Mr. Ryan presented minimizations to construction activity in and around Stone Lakes Refuge. The updated plan is to prioritize Option A of Intakes 3 and 5 for less than 6,000 cfs and eliminate Option B of Intakes 2 and 3. The many benefits include shorter logistics travel route from I-5 to the intake sites, increases separation of construction activities to sensitive receptors in Courtland and Clarksburg, shorter tunnel length, eliminates the need for Lambert Shaft. Intake 2 also had the shallowest river depth and thus the longest intake structure. The elimination of the Lambert shaft eliminates the construction site adjacent to Stone Lakes National Wildlife Refuge and reduces truck traffic, noise, and obstructions.

Ms. Mallon introduced Steve Minassian, Chief Engineer of the DCA, a tunnel design and construction expert with 30+ years of experience.

Mr. Minassian presented about TBM conditioners, why they are needed, what they are used for, and their environmental characteristics. The machines that will be used for the project are Earth Pressure Balance TBM (EPB). They are used for soft ground tunneling, in this case, clay and soils. The conditioners allow the TBM to excavate material more consistently and efficiently. Some of the conditioner will go through the cutterhead to get the material into the machine, the majority of the conditioner will go through nozzles inside the excavation chamber of the TBM and gets mixed, and another small portion will go through the screw conveyor to come out of the back.

The conditioners are important because they improve the workability of the soil to help balance the pressure against the face. This technology has been used in big cities around the nation for the past 5-10 years. It reduces the clumping and abrasiveness of the soil to reduce

energy, reduce maintenance, and improve speed. It also makes it easier to transport soil through the face and convey out of the tunnel. It allows for better control of groundwater inflow by reducing permeability and increasing sealing of the face. The conditioners also improve safety of personnel during maintenance of the cutterhead.

At a foam injection rate (FIR) of 0% and water content 25%, the soil is very clumpy (images in the presentation). Water and foam added together work really well. With FIR at 30% and water content at 40%, the material is more like toothpaste and very workable.

Conditioner is added at the point of “cut” to achieve maximum benefit. Conditioning agent is injected into the mixing chamber and along the screw conveyor during the tunnel excavation. Foam addition rate is adjusted based on soil conditions to achieve optimal effect.

Conditioners have improved over the years migrating toward more eco-friendly constitutions. The latest conditioners available are rapidly biodegradable and nonhazardous formulations. During biodegradation, the conditioner is converted into water, CO<sub>2</sub>, and biomass through the action of existing, naturally occurring microbes. Natural or vegetable polymers are used; no glycols, alcohols, or other low biodegradable solvents used. Some manufacturers include CONDAT (USA), NORMET (Finland), BASF (Germany), and MAPEI (Italy). In selecting a conditioner, the DCA contract specifications will require the use of a conditioner that is highly biodegradable with minimum toxicity and persistence, natural-based polymers only, and no glycols or other low biodegradable solvents. Conditioner will be submitted for testing and approval prior to use. DCA will conduct studies prior to finalizing specifications to validate requirements.

All conditioners will have a Material Safety Data Sheet (MSDS) to identify potential hazards, composition (note: excludes trade secrets), toxicology information, disposal considerations, transport information, and any other information. These sheets usually come from independent testing that will also be used.

Ms. Swenson asked on the Twin Cities slide, what happened to the immediate forebay that was supposed to be near that site? Is it no longer a part of the consideration? Is that then balanced and accounted for in terms of not being able to restore the land?

Mr. Bradner said that is the intermediate forebay which is out of the project at this point. That is based on the hydraulic analysis. It was thought that this forebay would be needed for hydraulic operations of the tunnel, but new modeling was done and proved it was not needed.

Ms. Giacomini reminded that rich farmland, that soil is a living organism so when you scrape it up and store it, it dies. There is no returning fertile land to agricultural use, you need to rebuild that.

Mr. Bradner said more work needs to be done, but the intention is to reintroduce nutrients to have productive use post-construction. The team intends to do much more work.

Mr. Moran asked is it correct that most of the conditioners are applied inside the machine?

Mr. Minassian said for every unit volume, a gallon, of conditioner used, 10% is injected through nozzles in front of the cutter head, typically in the very center. It does not get a chance to get into the edges. 80% is injected inside the excavation chamber. 10% is in the screw conveyor for the final mixing. The ground outside the tunnel does not see conditioner.

Mr. Moran asked if the CO<sub>2</sub> that it is converted to when it comes to the surface, is an amount of concern?

Mr. Minassian said it's a very small amount of CO<sub>2</sub>, not of concern.

Ms. Mallon said it's the by-product of biodegradation, so it is naturally producing.

Mr. Moran clarified that even if it's not toxic, it's not adding nutrients to the muck, correct?

Mr. Minassian said no, not intended to add nutrients, but we can test for that.

Mr. Robertson said for Mandeville Island, the diameter is reduced from 82 ft to 70 ft. Is there an anticipated figure for how long it will take to do the project on Mandeville Island?

Ms. Mallon said there was a schedule for each site in an earlier presentation; it was at about 18 months of construction on this site. There will probably only be a few weeks where the TBM is coming into the shaft, the maintenance occurs and then it moves on. It's a small time period on the island and with the smaller shaft and less material, that schedule only shrinks. When an update is done based on all these changes, schedules can be included. It can only get shorter with these improvements.

#### **c. SEC Questions or Comments on June 24<sup>th</sup> Presentation**

Ms. Palmer opened up discussion for questions or comments on the June 24<sup>th</sup> soils presentation.

Ms. Giacoma informed she received input from Delta stakeholders stating that the DCA should discontinue the evaluation of the 3000 cfs intakes previously proposed because they cannot reasonably protect fish and other aquatic species. They have significant impacts on Delta legacy communities. A smaller design should be worked on to allow salmon to be exposed to the intakes for no more than 15 minutes. A smaller intake would also allow for more flexibility on where to put them.

#### **d. Public Comment on Item 4**

Deirdre des Jardins commented on the consideration of alternatives, with respect to the proposed design and intakes. We feel the DWR and the DCA have not demonstrated good faith after we were directed to submit alternatives in scoping. There were email server issues. There was confirmation sent on April 17th but DWR refused to include those comments in the scoping report and are now refusing to accept requests in this process. This is a failure to act in good faith and consider alternatives in this process. It's concerning that climate resilience has not been defined. It was asked a year ago to evaluate high sea level at intakes, which hasn't been done. If there are two meters of sea level rise, there would likely be issues with salinity



intrusion. Seismic resiliency hasn't been defined nor have you released seismic evaluation of the tunnel lining. Class B and C soils were assumed, which are very stiff to rock. Soil columns in the Delta are not all very stiff to rock. There needs to be a process for consideration of alternatives that is open and scientifically honest. Submitted a formal request that alternatives be considered, in addition that sea level rise is disclosed to the SEC members.

Ms. Martinez reminded that the public comments cannot be replied to by staff.

Osha Meserve said it's helpful to receive a report on where the DWR is with respect to the alternatives. The three alternatives that have had the most support over the past many years, many people believe could meet project objectives are dismissed. The list of criteria is subjective. Many people could have a discussion with the DCA or DWR about the alternatives that could meet all the resiliency standards. With respect to the first three alternatives discussed today, the next step to getting to a real analysis would be to develop a conceptual engineering report. If they are objected initially prior to that, that is a missed opportunity to look at other alternatives. What's the point of a new analysis if there is not anything new to consider especially if our choices were rejected in the beginning? With regards to water quality, it's important because water quality is not good enough, yet the term "good enough" has not been defined, therefore it's lacking credibility. This dispute will continue otherwise.

Gia Moreno said in looking at the slides from earlier about the prioritizing intakes 3 and 5, she didn't see a whole lot about the impact on Hood itself. This is a community that consists of older Chicano, Latino, and Native American communities and residents. The entire town is being surrounded. Intake 3 is to the north and intake 5 is to the south. To the east is supposed to be a cement making facility. There's going to be a lot of traffic and there is nothing discussing anything on impacts to town of Hood, only the surrounding areas. A town of 300 people with several farms and houses outside of Hood. It looks like Hood will be wiped out when this happens. There will be lots of traffic going through in every direction. What if there is an emergency and an ambulance needs to get through? All of the access roads will be filled up with traffic. Construction could be 20 hours a day, when would people sleep? The entire town is being affected and nothing about how you will mitigate this is being discussed. The new haul roads will take out homes and wipe out where the electricity comes from. These are serious issues that have been looked over. It's unclear who Hood's DCA representatives are and they're not communicating with us or our town council.

## 5. FUTURE AGENDA ITEMS

### a. SEC Tour Updates

Ms. Parvizi provided a tour update and explained that will all the changes to the sites, the tour has had to change with them as well. The map books that went out to the SEC have all the latest graphics and the tour should be good to go in two weeks. The T-screen tours are set for Friday, August 7<sup>th</sup>. If the number of people interested increases too much, it might have to be capped. The owner of the plant will be shutting down operations for the day to accommodate for those who have RSVPed to tour.

Ms. Parvizi also informed that she has reached out to the head of the Hood Council, Mario Moreno, to coordinate some meetings and ensure they are better informed and involved.

**b. August 24<sup>th</sup> SEC Meeting Topics**

Ms. Mallon discussed meeting topics for the August 26<sup>th</sup> meeting. Mr. Hubbard will present the updated traffic histograms, as the team has made a lot of changes to them. Mr. Ryan will present an update on intakes design. There will also be a quick briefing on the new Bethany Alternative.

**c. August 20<sup>th</sup> SEC Report to DCA Board**

Ms. Martinez welcomed Mr. Hsia and Mr. Gloski to summarize their report to the DCA Board.

Mr. Hsia said he noted the significance of the Chinese history and the relationship to the Delta to signify the importance of Chinese American heritage. It may be the place to talk about the Chinese heritage and history. He urged the DCA to keep the integrity of the Delta so they can enjoy their Chinese heritage.

Mr. Gloski said he provided background on himself and his main message was to raise visibility on how other things are going to benefit the Delta, like parks. How can DCA identify benefits to the project outside of it moving water in a different way? This needs to be in agendas and budgets to talk about those things realistically.

Ms. Martinez asked for 2-3 representatives to present to the Board for their next meeting.

Ms. Parvizi said she will go through the list of who has and has not spoken and will ask to get some volunteers.

**6. NON-AGENDIZED SEC QUESTIONS OR COMMENTS**

Ms. Liebig said that the Farm Bureau has started a newsletter that includes all of these presentations to go out to the residents of the Delta. The email list is very targeted and letters were sent out to update email lists. She has been working with a local FFA chapter and they chose their agricultural issue to be on the Delta tunnel. That program really looks at all facets of the issue. They simulated a scoping meeting and Ms. Mallon talked with the group for over an hour.

Ms. Swenson thanked the DCA staff for the continued support for the members. We still have a Broadband issue in the Delta which will cause trouble for the kids doing remote learning this Fall. Hood is made up of about 40% Native Americans so it's important that we connect with that town and that they are heard. Ms. Parvizi mentioned rollbacks, what is a rollback?

Mr. Hsia asked that if anyone of DCA staffers wants to provide briefings for local stakeholders, they can join our Zoom meetings. Some of the constituents are farmers in Walnut Grove, DCA is going to do soil testing on some of their properties, so they are wondering when they're going to be contacted.

Mr. Gloski said that in the meeting email that came out before the meeting, there was an attachment with 23 different alternatives, but only four were discussed. One is being discussed

again, the new one with the new storage location. It looks like a couple alternatives were dismissed. Expecting more tables, numbers, and discussion as to why some alternatives were easily dismissed. It'd be great to see current numbers and why different alternatives have different uses. Constituents are encouraged to send in their comments to aid in the CEQA process, but if the responses are at the level of response seen today, it'd be disappointing.

Ms. Giacomo said she also thinks that representing Hood is very important and since the representative of Hood didn't attend today and Ms. Moreno is sincerely involved, perhaps she can be an alternate so that one person from Hood is always attending, insuring they get the information.

Mr. Moran stated to second Mr. Gloski, if the SEC could get a synopsis of what the DCA or the DWR thinks of things, even just a paragraph, to address concerns and include some reference points on the various alternatives that would be helpful. How did the DWR come to their conclusions? It would be very useful for residents of the Delta. The goal is to disseminate information instead of dismiss ideas.

Mr. Wirth said the environmental community has a lot of interest in the mitigation of this project and some are in the stakeholder process. Want to maintain and gain in the original mitigation processes as well as some of the other regional processes.

## **7. PUBLIC COMMENT ON NON-AGENDIZED ITEMS**

Ms. Des Jardin said that California Water Research worked with a tunnel expert to do an evaluation on a previous project including the information that is being presented. She will be sending letters to SEC members. There is no procedure in the meeting to send comments ahead of time, the Power Point slides aren't provided ahead of time. I object to taking people with no engineering background and not providing them a way to evaluate this and give recommendations. She recommended that such a process is created.

Ms. Meserve wanted a clarification from past meetings regarding the 2017 drilling sites. DWR is planning to complete the six drilling sites this month. Ms. Meserve heard DWR say that the legal challenges to the drilling has been resolved, which isn't correct. Everyone involved shouldn't say that because there is current litigation in both Sacramento and San Joaquin County because the drilling is affecting groundwater by drilling through the aquifer. Those cases are still pending in Sacramento and San Joaquin counties.

## **8. NEXT MEETING**

The next SEC meeting will take place August 26<sup>th</sup> via video conference call.

## **9. ADJOURNMENT**

Ms. Keegan adjourned at 6:35 PM.