STAKEHOLDER ENGAGEMENT COMMITTEE

MINUTES

REGULAR MEETING
Wednesday, February 26, 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 at Belle Vie Vineyards, 19900 Sherman Island Cross Rd., Rio Vista, CA 94571 at 3:01pm.

Barbara Keegan acknowledged special guest VJ Chue, Field Representative for California Assemblymember Jim Frazier, District 11. She welcomed SEC members and the public to the meeting, acknowledging the hard work and time given to participation. She thanked the venue hosts and acknowledged the work of staff to prepare for the meeting. This meeting facility accommodates meeting size and allows for live streaming during the meeting.

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 Angelica Whaley, Anna Swenson, Barbara Barrigan-Parrilla, Cecille Giacoma, David Gloski, Douglas Hsia, Isabella Gonzalez-Potter, Jim Wallace, James Cox, Karen Mann, Lindsey Liebig, Malissa Tayaba, Dr. Mel Lytle, Mike Hardesty and Peter Robertson. Ex-officio members Gilbert Cosio and Michael Moran were also in attendance. Tribal representative alternate Jesus Tarango also attended.

Committee members not present included Philip Merlo and Sean Wirth.

DCA Board Member in attendance was Director Barbara Keegan (Vice Chair). In addition, DCA and DWR staff members in attendance were Kathryn Mallon, Valerie Martinez, Joshua Nelson, Phil Ryan, Andrew Finney, Graham Bradner and Carrie Buckman.

Ms. Martinez reviewed housekeeping items. Members should sign in for accurate record-keeping. Members of the public can fill out and submit speaker cards in order to speak during the public comment period. Meeting is being filmed and webcast live and will be posted on the website following the meeting. Members are asked to speak into microphones so their comments can be heard and recorded. Please be mindful of cameras and walk behind them if leaving the meeting. Emergency exits were reviewed.

Ms. Martinez provided an overview of materials provided to SEC members and members of the public. Documents were printed and provided on flash drives for SEC members. These documents included the current meeting agenda, meeting minutes from last meeting, question tracking packet, meeting presentation and replacement pages, siting methodology, copy of an Independent Technical Review report and DCA's response, and two maps provided in response to member requests- one showing schools, hospitals and emergency services, the other showing public boat launches, marinas, wildlife refuges and habitats.

Ms. Martinez reviewed meeting guidelines and norms. 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 as the process moves forward. 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.

The meeting agenda was reviewed. There will be a roundtable discussion to follow-up on the presentation from the February 12th SEC meeting, a presentation about maintenance and retrieval shaft basics and a presentation about siting maintenance and retrieval shafts.

Ms. Mallon noted that in response to Mr. Cosio's comment from last meeting regarding his previous testimony in the WaterFix proceedings, the question tracking log has been updated to reflect that dewatering will be a topic for future discussion. Engineering issues raised in this testimony will be treated as SEC member questions, and a response will be provided. Mr. Cosio said his main concern was a lot of engineering issues were brought up that may or may not have been answered, and it would be nice if the committee got to hear the actual answers. Ms. Mallon agreed and said that is why it was added to the log of questions and comments that are tracked and provided to the committee. Based on discussions at each meeting, items are added to the agendas for future meetings, so the DCA will address key issues regarding dewatering and levee stability.

3. MINUTES REVIEW: February 12, 2020 Regular SEC Meeting

Ms. Keegan asked if there were any comments on the minutes, which were distributed to members, provided as hard copies at the meeting and posted on the website. Changes made after the minutes were posted on Friday, February 7 are not reflected in the printed copies, but

all changes will be implemented and posted to the website when the meeting materials are posted. Any changes can be reported to Jasmine Runquist. No objections or changes were reported.

4. DISCUSSION ITEMS/PRESENTATIONS

a. Follow-up and Roundtable on February 12, 2020 SEC Meeting

Ms. Mallon said she was thinking about the SEC members when putting together the questions for the roundtable discussion. She would like to focus members' attention on the input that would be most helpful to the engineering team as they try to determine where to place facilities on the alignments. DCA is sensitive and empathetic to the difficulty members may encounter in providing input and perhaps feeling that they are trading one neighbor for another, or recreational boaters for truck traffic. No one is looking forward to increased truck traffic in their area or barges on recreational waterways, but hopefully collaboration between the SEC members and the engineering team can help balance all the interests and find the most responsible alignments that can be put together in the NOP corridors. The DCA team is also focused on the quality of life, ecological considerations and recreational uses. The maps provided to the SEC committee members are constantly referenced for these sensitivities.

The facilities have to be located somewhere and there are going to be effects. The hope is work collectively with SEC members to find ways to make this the project as responsible to the Delta as possible. Members are in a challenging position; participation in this process is very much appreciated.

Ms. Martinez opened up the member roundtable to discuss the February 12, 2020 meeting and other general input about outreach conducted or community feedback received. In refining the roundtable process, a questionnaire was provided to members after the last meeting in an effort to elicit more specific feedback. The questionnaire was lengthy and the goal was to set the tone for the type of information DCA needs from members. DCA is involved with design and construction and thus far has provided information about intakes and launch shafts. The input sought from SEC members is regarding siting the launch shafts and preference ranking of the three intake sites deemed most suitable. DCA would like this information in order to move forward with planning and design in a community-focused way.

The questionnaire included a map showing intakes C-E-2, C-E-3 and C-E-5. In regards to these intakes, SEC members were asked to rank them in order of preference from most to least preferred. Members are also encouraged to provide any site-specific information that may be helpful to the engineering team.

Ms. Giacoma said she has attended numerous scoping meeting the question is repeatedly asked if alternatives are being considered. The answer is always that a decision has not yet been made. Where are the alternatives to the intake sites that will be presented to the SEC?

Ms. Buckman clarified that alternatives are developed by the CEQA process. Scoping comments will help inform the development of alternatives. Alternatives will be developed at the close of scoping. Thus far, DWR has only asked DCA to evaluate the proposed project corridors specified in the NOP. Because it is more cost-effective to evaluate different flow capacities at one time,

DCA has been asked to evaluate three different flow capacities as alternatives. However, it is not a commitment that the alternate flow capacities will be alternatives.

Ms. Liebig asked if the alternatives that come out of the CEQA process based off of scoping comments will be given the same consideration as the options being presented to the SEC. It would be a huge disservice to not give as much consideration to the alternatives suggested by local residents as is being given to the plans discussed in SEC meetings. Ms. Buckman said all alternatives suggested during scoping will be analyzed for their ability to meet the project objectives and/or reduce environmental effects, which determines which alternatives will move forward for further analysis in the EIR. An entire suite of alternatives has already been proposed through scoping comments. Those alternatives suggestions will be narrowed down through the analysis process and included in the EIR for analysis at a similar level of detail.

Ms. Mallon added that DCA will go through this same process with SEC members for any alternatives that move forward for inclusion in the EIR.

Ms. Barrigan-Parrilla said the Independent Technical Review (ITR) report that was released in December said the Central Alignment shouldn't be studied any further. The ITR also says the preferred route is adjacent to Stockton. Ms. Buckman clarified that it the ITR report is not developed in consideration of any environmental factors. The ITR is information taken as a point of consideration, but does not represent a conclusion about how to consider the two options in the NOP.

Ms. Barrigan-Parrilla said the ITR may not consider environmental factors, but it did include engineering recommendations. It is problematic that the questionnaire asks information from citizen groups requires deep level, detailed thinking. This is coming from a group that has never written or answered a comment letter off the top of our heads. Contrary to the label of a "bumper sticker campaign," every question answered has been researched. When subject matters beyond our capability were involved, we have consulted with experts because we don't believe people should take on roles in which they have no expertise. In order to respond to the questionnaire in the right way in regards to siting facilities, experts would need to be obtained who are capable of doing a deep level analysis in order to provide an accurate and critical answer. Otherwise, it feels like playing a game of Sims. If members are supposed to look at things at a theoretical level but there is also a suite of alternatives possible, there is concern that there will be a preferred engineering alignment that is adjacent to Stockton that we are not spending the time analyzing.

Ms. Barrigan-Parrilla said it is troubling that recommendations from the ITR were not discussed more in the NOP or presented to committee members. The team is working hard and seem to care, but the SEC members see things one way and DCA sees them another. It's not about people not working with integrity or not working hard. It is getting harder and harder because this process has been separated from CEQA. Working on the questionnaire creates nervousness because of there is not enough time to do an in-depth analysis, it's not possible to provide the best information as a community member. If the Central Corridor really isn't feasible engineering wise, is it really worth this committee's time? It would be better just to get a list of impacts and work with the committee to mitigate them.

Ms. Mallon clarified the ITR was from a group of contractors, and the focus was on drive lengths and the type of Tunnel Boring Machine (TBM). As part of the ITR team's analysis, they took a bus tour around the Delta. As contractors, their perspective is about ease of access to locations, how to get workers and equipment to possible siting locations, as well as rescues in case of emergency. From this standpoint, Stockton looks great. DCA's first reaction to that, however, is that there are environmental justice (EJ) and air quality issues. DCA could have told the ITR team that they went outside their purview in remarking on the corridors, but instead their recommendation was included in the report and made transparent to SEC members. DCA is making the effort to make all information used by the engineering staff available to SEC members as well.

Central Corridor has challenges in terms of access. The DCA staff has struggled internally with some of the islands for example, that have one-lane bridges. The staff is trying to think about the same things as SEC members.
Ms. Buckman said the issues identified with the Central Corridor are considerations that are important to contractors. The considerations in the environmental analysis may be completely different. The recommendations in the ITR are not necessarily determining factors for the overall project, and it is too early in the process to know whether or not those recommendations will be used to make ultimate decisions. The ITR is one piece of information in a large process that will include a lot of other pieces of information. The ITR is useful to help understand the logistical challenges of the Central Corridor and helps bring greater understanding to what would need to be done in order to resolve the logistics issues, but the ITR recommendation is in no way a screening out of the Central Corridor. Information from the ITR was not included in the NOP because the ITR report was completed after the NOP was released.

Ms. Barrigan-Parrilla said it would be good practice to inform the SEC members immediately when there is a technical report coming. Ms. Mallon said the team will be obtaining independent technical reviews of the key technical work that the DCA staff does. All ITR's will be publicly presented at DCA Board meetings with the DCA responses to the ITR recommendations. All ITRs will be available to the public.

Ms. Keegan asked if Ms. Mallon could respond to the comment about not having enough technical expertise to respond to the questionnaire. Ms. Mallon said that the criteria used to screen sites was intended to be in a way that was understandable to a non-technical person. If not, members are welcome to meet with DCA staff to review further. Ms. Barrigan-Parrilla said it is about making decisions on full, accurate information and being able to be accurate in the response. Ms. Mallon said DCA is trying to make all information available to SEC members that is available to engineers. This is why multiple maps were provided to SEC members. Staff will provide multiple means of helping SEC members have the information needed, such as interactive maps, field trips, consultation with independent analysts. DCA encourages members to provide their ideas about how to better facilitate the conversation.

Ms. Keegan added that SEC members opinions and input may evolve or change as more information becomes available. Ms. Mallon said the same is true for the engineering staff. This is a very iterative process. Staff is working to lay out the project in a way that has the fewest shafts and the least amount of effects possible.

Ms. Swenson said she came into the SEC process in good faith and with an open mind. The ITR report that DCA received on December 20th stated that RTM is not recyclable, yet the committee spent six weeks talking about recycled tunnel muck. She feels like DCA has wasted her time and has been hiding the ball. She has had conversations with community members and told them DCA is putting their best foot forward, but the ITR report received in December says tunnel material is not recommended for recycling and that "labor and construction safety costs regardless of improvements are too uncertain to price due to the location and distance of any shafts." The proposed project is irresponsible to tax payers. The report also said there are no active fault crossings in the Delta conveyance alignment and that seismic demands are not extreme compared to other projects, and the DCA indicated it agreed on that statement. Why are we building tunnels if seismic issues are not a concern? [Editor's Comment: The full ITR report & DCA response is available at https://www.dcdca.org/pdf/2020-02-26-IndependentTechnicalReviewResponse.pdf]

Ms. Swenson said she feels like DCA has not been honest with her or the people who came to the scoping meetings because the presentation was not even 1/100th of the information that has been provided to the SEC members. DCA violated trust by not sharing this information to the public. This project was supposed to be new and different. How can this process be done right if the ITR is something members have to dig up off the internet?

Ms. Mallon said it is disingenuous to say that DCA hid the ball on the ITR; it was presented publicly at the last DCA Board meeting. DCA plans to use RTM for the embankments of the proposed Southern Forebay. There has been testing done on the soil that shows it can be used for structural fill, and DCA stands by that testing. There will be another ITR conducted in the future once additional data is available to demonstrate the performance of that material. The ITR team comments regarding the alignments were heavily focused on logistics, which is only one aspect of how an alignment is selected, but a big part of what contractors think about. There is a not a time that comes to mind when the DCA has not been forthcoming about information.

Ms. Swenson said the ITR team used the word "impractical" in the recommendation regarding the Central Corridor. Members should have been informed about the ITR's recommendations before spending so much time looking at and discussing RTM and the Central Corridor with others. Instead of receiving the ITR from the DCA, it was shared by a landowner.

Ms. Mallon said on every ITR, there will be a group of people who come together for about a week to look at information, discuss it and then write a report about their recommendations. DCA will agree with some recommendations and disagree with others. This process happens on every value engineering and every ITR committee process.

Ms. Keegan noted that there may be a misconception that ITR recommendations are definitive decisions. Rather, ITR's are from a group of people that make advisory comments. The challenge of making all of the information available to everyone is that there will be statements made that the general public may find shocking, while the recommendations are just a very preliminary type of report that is only focused on one aspect of the project. There are other aspects that determine how project decisions are made, including the environmental analysis.

Ms. Mallon said that editing the recommendations in the report would have been unethical, but that is not what happened.

Ms. Barrigan-Parrilla said that things will change because we are going through a process. The report was received after release of the NOP. When things come to public awareness that seem out of order, it raises concerns. It seemed that the ITR was contradictory to the NOP. Ms. Buckman clarified that the ITR panel was convened before the NOP was released and some of the there was some awareness of the possible recommendations. However, there were not yet responses from DCA. Having experience on multiple projects, it is usually the case that the ITR has access to less information than does the project team who is working on the project day to day. For that reason, the responses from the project team are just as important as the ITR recommendations themselves in order to understand how to characterize and consider the ITR recommendations. Having the ITR recommendation about tunnel material based on those contractors' prior experience working on different projects was one piece of information, but it was just as important and critical to have the technical experts from the project team who are more familiar with this particular project address why that particular recommendation was not applicable to this project.

Ms. Buckman responded to the comment about scoping meetings not sharing the same level of detailed information as has been shared with SEC members. The presentation provided at scoping meetings is a very brief overview because scoping meetings are about using the time to listen to commenters. Scoping meetings are not a broad sharing of information, but if community members have interest in hearing more, DWR is happy to arrange more in-depth presentations to those groups.

Mr. Cosio said he agrees with Ms. Mallon that the ITR is mostly focused on logistics, but members are being asked to come up with their own logistics on the questionnaire, when that is what the experts have already done in this report. When the SEC members say the traffic is going to be a problem and then the ITR team says there are many one-lane bridges, this means there will be hundreds of cars sitting and waiting as a couple of trucks go through.

A lot of projects say they will fix problems with a lot of money, such as building more roads. Money is one component, but time is more important than money when you build a road in the Delta because of the soils that have to move and heave before a road can be finished. Five years CalTrans wanted to widen Highway 12 through Bouldin Island. It took about five years to build the road because they overloaded it about 4-5 feet. The plan was to scoop off about 800 thousand tons once it settled, but it settled past the starting point and more material had to be brought in to raise the road to where it needed to be.

Ms. Mallon said that the engineering work they are trying to do to resolve the logistics challenges on the Central Corridor have demonstrated that point. This is less of an issue on the Eastern Corridor because of the soil conditions, which was included on one of the maps that has been provided to the SEC. The map shows where the deep layers of peat are located. Further east the peat becomes shallower and less prevalent.

Ms. Keegan thanked Mr. Cosio for sharing past experiences. Member input is important because the construction parameters in the Delta are different than they may be elsewhere.

Mr. Hsia said the questionnaire asked what kind of factors should be added to the evaluation matrix for launch shaft siting. Tribal and historic sites should be added. Regarding the ITR, constituents who are well versed found the report agreeable, especially in regards to the favorability of the Eastern Corridor.

Mr. Wallace suggested that the term "least worst" should be used to categorize the ranking options on siting the project. Regarding the intakes, choosing one over the other is like Sophie's Choice. In looking at the project as if it were his and he had to do it, Mr. Wallace said he would try to shorten up the logistics by eliminating C-E-2 and choosing sites C-E-3 and C-E-5. However, C-E-5 would probably take out the orchard where his daughter was married and the house that is his grandson's heritage. These are the kinds of personal and professional issues that have to be juggled when looking at preferred sites.

Mr. Wallace said he spoke at length with Ms. Martinez about how to respond to the questionnaire. It takes a huge effort in order to provide a comment that is important enough to include, and members need more than anecdotal stories to justify their decisions.

Mr. Wallace indicated that perhaps the process is backwards. Maybe the DCA should first propose a design, and then ask the community what benefits DCA could provide to them. That approach may be a better use of the SEC members' time. Ms. Mallon said once we have SEC input on siting the alignment through both corridors, the next step is to determine how to optimize the sites, create dual benefits and deal with effects in meaningful and creative ways. The process is not over once facilities are sited; the DCA plans to continue consulting with the SEC.

Ms. Keegan asked Ms. Buckman to elaborate on how the community benefits discussion fits into the CEQA process. Ms. Buckman said that the CEQA process will be looking at community benefits of mitigating impacts of the proposed project.

Mr. Wallace said he is talking about the community benefits discussion that goes beyond the CEQA process. Ms. Buckman said it is a process order issue; there needs to be a project to analyze before the community benefits of that project can be considered. It is agreed that community benefits should be given some thought now and not solely at the conclusion of the process.

Ms. Keegan requested that a time frame for the community benefits discussion be provided at the next meeting.

Ms. Mann said the ITR report was fascinating to read and seemed very well thought-out. The questionnaire asks members to give feedback on the intakes without having seen it or having the opportunity to touch the dirt. For members that don't live in the area of the intakes, providing feedback seems like appraising something without being able to see it. Members who do not live in that area of the intakes don't have the same understanding. Could members have a tour of the proposed intake sites in order to better understand where the facilities would be sited?

Ms. Mallon said DCA can add a tour of the proposed intake sites to the list of tours DCA staff is currently arranging. The maps that have been provided to members that show the suitability

could be used as a reference during the tours. Visiting the actual potential sites in the proposed project can be very helpful.

Ms. Mann said at the last meeting, a letter from a member was shared that said the intakes at these locations could not be approved by the State Water Resources Control Board and Delta Stewardship Council during the WaterFix project. What has changed since the previous project to make the proposed intake sites viable?

Ms. Buckman said that there was no determination made about water rights. Because the WaterFix project stopped moving forward, the DWR's Change in Place of Diversion and Water Rights hearing petition was withdrawn. Therefore, there was no finding about whether the project was acceptable or not acceptable because the process to make that determination was not finished. In regards to the Delta Stewardship Council, DWR submitted a Certification of Consistency. There were appeals to that certification, and the Delta Stewardship Council staff found that DWR's certification did not include substantial evidence in the record to document consistency on four of those appeals. Those four appeals were remanded to DWR. It wasn't a finding that the intakes would never be consistent with the Delta Plan, but rather that DWR had not provided substantial evidence that they were.

Mr. Gloski said he would revert to the locals regarding the siting of intakes because they know the area. It is important to tie together the ultimate use of the property at the end of the project. He would like to see this as a destination for boaters, a park, recreation center or education center. If it's a park, there could be vendors. Having this type of location near downtown could help local businesses. The potential end use for sites should be considered in the ranking.

The weighting in the methodology for ranking land for launch shaft siting suitability was mostly focused on design and construction. Ms. Mallon explained that DCA is trying to stay focused on design and construction with the environmental analysis being done by DWR.

Mr. Gloski said heritage would be an important factor to add to the siting ranking criteria. In one of the previous meetings a comment was made about staying out of environmental considerations. How can at least some high-level aspects of environmental considerations be completely disregarded in the ranking of potential sites? Regarding the ITR, SEC members rely on the DCA staff to deliver context as to what various reports mean. It would be helpful to provide a notification to SEC members about reports or board meetings that may be of significance to SEC members and the community.

Ms. Keegan noted it would be important to put into context, as well, such as how the ITR is the opinion of one group of people. Ms. Mallon said that was her oversight and that she should have included that in the meeting packet.

Ms. Keegan said we learn as we move forward and thanked the committee members for their feedback.

Dr. Lytle said he appreciated that the ITR was provided. ITR's provide a gut-check on the concepts a project team is considering. The people brought in to conduct the ITR were major experts on very difficult projects. Warner Berger is tunneling beneath the Alps. The team at

McMillen Jacobs are the ones who engineered the third intake on Lake Mead that was so dangerous and controversial. The things they said should not be discounted. The ITR didn't just address logistics. Drive length and TBM maintenance was also addressed. They also addressed posed questions for consideration such as how to respond if the TBM gets stuck. Their input should be very seriously considered, and it was no accident who DCA brought in to participate in the process. The team even included the firm who was in charge of the Alaska Way Viaduct, where the 57-foot TBM "Big Bertha" got stuck underneath the city and it took 2-3 years to figure out how to resolve the problem.

The proposed project is a 40-foot diameter TBM that is tunneling 40 miles. There may be four TBM's, but the process is the same. What happens if the TBM gets stuck? What about safety in the tunnels? These questions raised by the ITR team really need to be expounded upon. Logistics, worker safety, tunneling through a gassy area, etc. are all important considerations. The ITR was a watershed moment for SEC members because it raised a lot of important issues that there have been questions about.

In regards to RTM, the conversation will continue for some time because the soil has been tested that are thought to make up the muck. Once the material is run through a TBM, lots of other things are in that muck that comes out.

Will the ITR's recommended adjustments to the corridors as specified in the NOP be considered as an alternative? Ms. Buckman said the ITR team's recommendation will be considered as an alternative in the same way that other alternative suggestions from public scoping are considered. DWR looks for alternatives that will reduce impacts and there are anticipated impacts with the adjustments suggested. It will be analyzed further before any decision is made about whether to include it in the EIR for further evaluation.

Mr. Tarango said he is honored to speak on behalf of tribal communities in the state. He read a statement on behalf of tribes addressing the historical and current importance of the Delta rivers to Miwok and Nisenan communities. The Cosumnes River is based on the Miwok language and means "The Place of the Salmon," the native communities still see themselves as the ancestral stewards of these lands. Indigenous peoples of the Delta are concerned about the further disruption of their sacred sites, burial grounds and village sites that will be inevitable during the drilling. They also share concerns about potential destruction of water ways that provide drinking water, fish and medicines used in prayer and traditional practices.

Mr. Tarango said tribes are also concerned about the lack of response sent requesting AB 52 tribal consultation and the lack of information and consideration regarding the possibility of desalination, its cost and other possible alternatives. It is irresponsible and anti-ethical to the promises made by California's government to continue this project without more robust consultation. With a failure rate of 64% of this plan, tribes are forced to wonder what their future will hold for tribes and all communities 5, 20 and 30 years from now. What economics effects will we see if those people reliant on the Delta lose its use? Why are the tribes being forced to sit idly by while they watch the destruction of land that we once called home to our ancestors and remain the final resting place for so many? These questions are true to our concerns, our lives as traditional people and true for those who reside in and rely on the Delta.

Mr. Tarango said tribes also wanted to express understanding to the other SEC members' struggles and hope we can come together as one to do the best thing. The proposed project impacts everyone who inhabits the Delta now as well as the people who have been here. In regards to the question about siting the intakes, all 3 intakes are highly sensitive to the Miwok and include several village sites and more than 5 burial grounds. Mr. Tarango said he understands trying to indicate which site may be least sensitive or which would be the most tolerable for siting the intakes. It hurts to provide that input as a tribal person who knows what is there, but if a site must be selected to move forward, for tribes it would be C-E-5. However, all three intake sites are burial grounds and well-known village sites. The specifics cannot be shared in this meeting but could be shared in confidence with the project team.

Ms. Tayaba said that the questionnaire was difficult for tribes because not all of the tribes were present and each tribe has different knowledge about the various locations. The questionnaire would need to be a part of the consultation with DWR that the tribes are still awaiting. Also, it may be worth considering hiring tribes as consultants to assist with project needs.

Ms. Keegan thanked Mr. Tarango and Ms. Tayaba for their comments and noted the sensitivities with impacting resources that affect the tribal communities so deeply.

Mr. Cox said he doesn't know any property owners in the area of the intakes, so the questionnaire input he received is mostly from fishermen and fishing clubs. Intakes and fish screens are most important to those groups. While there are many questions about the screens, one primary question is regarding the ability of Delta smelt and salmon fry to swim against the flow of water into the intakes given the length. How long would it take a salmon fry to move past ¼ mile of intakes and how many times would that fry have to swim back out of the flow? Is it possible that the outgoing tide at the lower end of the screen will be full of dead fish that didn't have the stamina to continue swimming for the entire length of the intake, and how has that been factored into the design? Mr. Ryan said some information is available regarding fish passage times but he does not know it off the top of his head. It depends on the speed of the river flow, as fish generally move with the river. However, a fish biologist will be needed to fully understand fish swimming patterns in front of the screens. The intake design is considering fish refugia, which is a designated place for fish to rest. The environmental team and regulatory agencies will be evaluating the different measures and mitigations to provide fish a better chance of getting past the intakes because of the lengthy exposure time.

Ms. Keegan asked when more information could be provided. Mr. Ryan said that as an engineer he could provide a calculation about how much time it takes to get swept downstream past the screens at various flow rates. When it comes to concerns about the fish behavior around the screens, however, that would be part of the environmental analysis.

Ms. Keegan noted that fish survival is important to the tribal representatives, recreational fishermen, recreational boaters and The Nature Conservancy.

Mr. Moran said it was enlightening that folks were questioning if they were qualified to provide input on the questionnaire. SEC members are all qualified to respond based on their respective interests. DCA, as the design and construction team, has a certain limit to their point of view about what may be important and relevant impacts on the operation of a construction site. The

strength of SEC member input is that they are not engineers but can offer information that goes beyond what the DCA could practically glean from a project.

Ms. Whaley asked if the Department of Fish and Wildlife (DFW) completed a CEQA process for their decision for the WaterFix project as to where the intakes would go? Ms. Buckman said there was a siting study to consider intake locations. DWR led the CEQA effort as the lead agency. DFW completed an incidental take permit related to that application, but all of these have been withdrawn at this point.

Is there an option to have more intakes with a smaller capacity? Ms. Buckman said it should be suggested as a scoping comment.

Mr. Robertson shared that a few years ago the Port of Stockton was considering constructing a low walk bridge that recreational boaters would not be able to go under. The City of Stockton conducted an analysis to determine the financial impact of recreational boaters, whose primary activity is fishing, regardless of boat size. The study determined that each boat that went to Stockton for the weekend added $306/day to the Stockton economy. The idea of putting in a park or pier could make this process smoother. Recreational boaters like to fish and would like to do it through this project, should it prevail.

Ms. Mann asked why the tunnel needs to go 40 miles when it looks like there is a straight shot from around Antioch to Clifton Forebay? It seems like it would mitigate more problems, the land seems more stable, there are hills and it is not all necessarily residential areas. It feels restrictive to only be able to choose between the intake sites listed in the NOP. If the goal is to get water to other parts of the state, a shorter tunnel from Antioch to Clifton Forebay would cost less to taxpayers and could potentially be more environmentally sensitive to tribal concerns along the river. Ms. Buckman encouraged Ms. Mann to submit the comment as a CEQA scoping comment.

Ms. Mallon addressed a number of tours that are currently being coordinated for members. DCA has identified an active tunneling project in the Redwood City area that is amendable to providing a tour of their launch shaft site in the first or second week of March. It is a 20-foot diameter tunnel with segment lining, and members would be able to go down into the tunnel, see the face of the TBM and get a sense of the activities that take place on an active launch site.

DCA is also coordinating a tour of the 2,500 cfs capacity Red Bluff intake and of the ISI fish screen manufacturing facility, currently the only manufacturer of cylindrical “T” screens.

DCA will also arrange a ½ or full day tour of each corridor with stops to look at some of the areas considered for siting facilities.

Any SEC members interested in these tours should contact Ms. Martinez and provide availability and preference regarding weekday or weekend. The DCA can provide bus transportation or meet members at the location.

b. Basics of Retrieval and Maintenance Shafts

Ms. Mallon explained the team left the last meeting trying to find the best places for the launch shafts and then trying to place the maintenance and retrieval shafts along those identified routes. To the point Dr. Lytle made, it was very beneficial that the ITR addressed advances to TBM's. Advances in manufacturing have made it possible to do much more repair inside the machines, enabling longer tunnel drives such as those suggested at the last meeting. It is an iterative process between where the launch shafts are and then placing the maintenance/retrieval shafts every 4-5 miles. In some cases, a particular launch shaft site would seem to work, but then placing the other facilities didn't quite work out as well. In the Central Corridor it was a struggle to identify good access to some of the islands that are in between the drive shafts in order to site maintenance shafts. The process entailed adding new roads and bridges in order to keep heavy construction traffic off of the levee roads. As Mr. Cosio noted, planning a road is easier than the realities of constructing the road.

Today's presentation will demonstrate the team's thinking around where launch shafts are placed and therefore were retrieval and maintenance shafts could go. Mr. Finney will discuss the basics of maintenance and retrieval shafts and Mr. Bradner will discuss the siting analysis.

Mr. Finney started the presentation with an illustrated schematic of launch, maintenance and retrieval shafts that showed their diameter and explained their purpose. A similar illustration was shown at the last meeting. Since that time, the project team has performed additional engineering that led to a slight increase in the diameter of the maintenance shafts.

Mr. Finney noted that the presentation slides have lots of words and descriptions so that SEC members can take the information to share with their respective communities.

Maintenance shafts provide an opportunity to conduct inspections and repairs on the TBM. Even though a lot of TBM maintenance can be conducted from inside the tunnel, repair to the cutter head must be conducted externally. Planning maintenance shafts along the tunnel drive is a proactive way to ensure the drive can be completed without stoppages, excessive wear or break-downs. If only the TBM cutterhead needs to be access, the maintenance shaft diameter can be smaller. Maintenance shafts can also serve as emergency egress and fresh air ventilation.

The purpose of Retrieval Shafts is to recover the TBM at the end of the drive. At this location the TBM is disassembled and removed from the ground. Retrieval Shafts can receive a TBM coming from either direction, and a launch shaft can also be used as a retrieval shaft for a TBM coming from the opposite direction.

A conceptual rendering of a retrieval shaft was provided to demonstrate typical size as well as the components typically included on a maintenance/retrieval shaft site. These sites are much smaller than launch shafts and are around 10 acres in size. There would be some additional soil stock piles, but not the large-scale storage areas required for RTM storage at launch shaft sites.

A cross-section conceptual rendering of a retrieval shaft was shown, demonstrating how the TBM could be disassembled and lifted out of the shaft piece by piece, starting with the TBM and followed by its trailing gear.

A cross-section schematic of a maintenance shaft shows how the TBM cutter head could be lifted out of the shaft for inspection, maintenance or replacement. The TBM would then continue tunneling through the maintenance shaft to the other side.

Mr. Finney showed a French Metro construction project video featuring a TBM entering a maintenance shaft to provide an idea of the TBM's cutter head and how it is accessed for maintenance. The video showed an entry portal, or "soft eye", which is a shaft with no steel reinforcement to allow the TBM to enter. The video also showed how maintenance and inspection is conducted on the cutter head in the maintenance shaft before launching through the shaft to the other side in order to continue tunneling.

The construction sequence of a maintenance shaft was shared. At the end of the first six months of construction, the raised shaft pad is completed. At the 18-month mark the shaft construction would be taking place. At two and a half years into construction, tunneling would be occurring and very little work would be taking place at the surface. Past the third year, the TBM would be pulled into the shaft for inspection, maintenance, cutter-head replacement or TBM retrieval. Ultimately the shaft would be capped at the end of the project.

A slide was shared that showed anticipated construction activities, truck trips per day and employee trips per day throughout the length of construction. Early during shaft construction there would be a higher amount of truck traffic. Once the pad and shaft are completed, there is almost no traffic, but then there is some traffic again during the TBM maintenance or recovery period.

Mr. Gloski asked if tunnel segments would still be lowered into the tunnel from launch shafts even if there was a maintenance shaft available. Mr. Finney explained that tunnel segments would be entering the tunnel from the launch shaft in order to keep the maintenance shaft sites small. There is infrastructure needed in order to deliver tunnel segments via rail or barge, space needed at the site to lay the segments out and the heavy gantry crane to lift them down the shaft and either rubber-tired vehicles or locomotives that run the segments down the length of the tunnel and deliver them to the segment erector.

What is the power source for the tunnel cutter head? Mr. Finney said the TBM is electrically powered, and the power demands are beyond what a generator can provide. Part of the infrastructure needed at the launch shaft site is dedicated high-voltage power supply.

Ms. Giacoma asked if any of the images or videos shared showed tunneling through peat soils. Mr. Finney said the demonstrations shown did not show peat soils. Peat soils are not anticipated at the tunnel horizons; they are at the surface. The tunnel is over a hundred feet below the surface and peat is not found at those depths.

Ms. Giacoma asked how the project team knows about the soil composition at the depths of the tunnel, which is over 100 feet below the surface. Mr. Finney explained that the geotechnical team has collated data from soil borings conducted not only for the prior project but from other construction projects across the Delta, such as roads, bridges and levee maintenance. Based on these data, there is a reasonable understanding of the depth of the competent soils. While there is still some information that needs to be obtained, it is certain

the project will not be constructed in peat. If peat is found at 100 feet below the surface, the tunnel will be deeper.

Ms. Mann asked what happens if a levee surrounding a shaft site breaks, since the shafts will be built on islands that are lower that the surrounding levees? The Delta has critters that chew through levees and cause them to break. How will the shafts not fill with water if a surrounding levee fails? Mr. Finney said there are some minimal elevation levels required for the shaft pads to protect against sunny day levee breaks. The engineering team is currently working to determine the exact elevation.

Ms. Mann said when a levee breaks you assume the water level that is on the other side of the levee. Mr. Finney noted that the water levels fluctuate depending on the time of year, and there are other considerations as well, such as King Tides. All of those factors are being considered by the engineering team. The easy answer would be to make the construction elevation the final elevation, but the DCA is trying to consider the trade-offs of the impacts that would be created by having to import soil to raise the pad levels and considering lower pad heights during construction.

Ms. Mann said the islands are not stable and seem to be sinking due to alluvial soil. If heavy concrete is put on top of these soils, how will the sites be stable? Getting to some of the islands that have no bridges is only possible by ferry. In the past there was a cement truck travelling by ferry and it fell off into the waterway. There are many engineering considerations necessary if the shafts are constructed in conditions where the ground is sinking at the same time that burrowing animals could potentially cause breaks to the surrounding levees.

Mr. Finney said the shaft construction itself includes a diaphragm or concrete shell that is founded below the tunnel horizon where there are more competent soils and is therefore not expected to settle. However, the soil around the pad sites will settle which would cause the shaft's concrete shell to protrude from the surface without a way to get into it. Therefore, some form of ground improvement may be required to stabilize the shaft pad.

In terms of access to the islands, Mr. Bradner's portion of the meeting presentation will focus on access logistics. There is much less equipment required at the maintenance and retrieval shafts sites than at the launch shaft sites. The infrastructure to get onto the islands is not as great as the infrastructure requirements for the launch sites, but it is still a concern and was factored into the screening criteria for potential siting. In terms of heavy equipment on levee roads, the project team is trying to avoid levee roads because they are fragile.

Ms. Mann asked if the project includes plans to eliminate the critters that eat away at the levees. Mr. Finney said the project team is charged with understanding the risk that a particular island's levee system imposes to the project. The team must analyze levee height and the likelihood of erosion, seepage or a sunny day levee failure to determine possible effects on construction and to what extent coordination with Reclamation Districts will be necessary to address additional risk.

Ms. Hsia asked are if the maintenance and retrieval shafts are being kept after construction of the project. Mr. Finney said decision about end use has not been made yet. There are many considerations currently being discussed, such as capping the shafts with concrete and keeping

the raised pads in order to avoid having to move the imported soil back off of the site. Another consideration is whether or not DWR would want to maintain an open maintenance shaft for accessing the tunnel after the project has been constructed. There are also questions as to whether or not the sites would be viable for agriculture after construction. All of these considerations will be evaluated by the project team. Ms. Mallon said member feedback in this regard would be valuable.

Ms. Barrigan-Parrilla asked what flood standard is being used to determine the height of the shaft pads compared to what DWR has analyzed in the fourth climate change assessment for storm surge and downstream flood risk? Mr. Finney said the height needed for construction may differ from the ultimate end use height necessary and reiterated that the team is trying to find the balance of reducing impacts caused from hauling away soils with maintaining an appropriate height. Ms. Buckman said there are two considerations information the height decisions; the 200-year flood event coupled with climate change and sea level rise. Based on the Ocean Protection Council's guidance for a project that is considered high risk, the most conservative scenario is a 10.2 feet sea level rise by 2100. There is not a requirement to design the project to that consideration, but rather to explain how DWR would adapt over time. For the permanent facilities, it is more of a consideration but for temporary facilities it is just being documented how the sea level rise is being addressed over time if the design is not addressing the full 10.2-foot rise up front.

Ms. Barrigan-Parrilla said she asked the question because the U.S. Army Corps of Engineer's flood standard is 200 years, but the flood maps currently being used by the San Joaquin COG are looking at 500-year storms down the San Joaquin River. For the amount of investment required for this project, a 200-year flood standard makes her nervous.

Ms. Swenson said it would be helpful if there was a map that could provide where all of the shafts would be located in order to understand how much prime ag land would be taken and rendered useless for the project. Soil test results have been previously requested and members are still waiting for those results. Members would like the data to see for themselves and not be told that the DCA disagrees with the results because they are from a different contractor than the one DCA wants to use. Borings have been taken for the past 7 years. Can members please have the soil analysis results from those borings? Can members also have a map with approximate locations of all the project components along the NOP corridors as well as the alignment suggested by the ITR team?

Ms. Keegan asked if that information is requested for both during and after construction, because those numbers will vary. Ms. Swenson said the main concern of the public is how many acres of farmland will be pulled out of production for this project. Members of the public had no way of knowing that there were multiple ways that the project would be affecting the land needed. The discussions have been very segmented, but members want to see the cumulative effects of the noise, the water pollution, the air pollution and the acres of farmland that will be pulled out of production and where those effects would be along the various corridors.

Mr. Moran asked if the slide showing truck trips per day reflected the number for one shaft or for multiple shafts? Mr. Finney said the data was shown for one maintenance/retrieval shaft site, but there might be multiple shafts in construction at the same time. These shafts are

typically spaced every five miles. As Ms. Mallon mentioned, part of the benefit of the ITR is that they indicated tunnel drives could go as long as 15 miles if there is periodic maintenance of the TBM via the maintenance shafts.

Mr. Moran asked if all of the shafts are constructed simultaneously or is their construction staggered? Mr. Finney said it is not yet known, but most likely at least two maintenance shafts would be constructed in the Delta simultaneously. Ms. Mallon said once it is determined where the sites will go, then it will be possible to determine the construction sequence. The longer drives will start first, then the shorter drives will be started. As the maintenance shaft schedule shows, the maintenance shaft construction needs to be completed at least one year before the TBM is expected to arrive to that shaft.

Mr. Moran asked if construction of the maintenance/retrieval shafts would utilize the same staging areas (parking lots, roads, etc.) as the launch shafts. Ms. Mallon confirmed that is accurate.

Dr. Lytle asked if the safe haven shafts are included as part of the planned components or if they are only created in case of emergency. Mr. Finney said a “safe haven” shaft is the same idea as the maintenance shaft. The maintenance shafts being shown to the committee are formalized safe haven shafts so that more than just cutter head inspection can be performed if necessary.

Dr. Lytle asked what happens if something happens between a launch shaft and a maintenance shaft? Ms. Mallon said that situation would necessitate an emergency shaft. Ms. Buckman asked if the maintenance shafts are being planned to prevent the necessity for emergency shafts. As an environmental planner, Ms. Buckman would like to make sure the complete project is analyzed and minimize surprises. Ms. Mallon explained that this is a vocabulary issue: maintenance shafts are the safe havens.

Dr. Lytle said the ITR report sought to determine if CEQA could have an approach for the unknowns. How can that comment be assimilated? The Big Bertha TBM used on the Alaska Way Viaduct got stuck 1,000ft. into the tunnel drive. How is that type of possibility going to be addressed from the engineering point of view?

Ms. Mallon said the ITR team and TBM manufacturers felt very comfortable that if full maintenance was performed every 4 to 5 miles along the drive, there would be no reason the TBM couldn’t make it to the next 5-mile maintenance shaft. Additionally, TBM technology is continually evolving and much of the maintenance is now possible within the tunnel. What is being discussed today may change significantly six or ten years from now. DCA is being conservative in planning full maintenance shafts every five miles in order to minimize the chance an emergency shaft will ever be needed.

Dr. Lytle said the Alaska Way Viaduct TBM got stuck 1,000 feet into the tunnel due to a main bearing failure caused by “gunk” in the system. When tunneling in the Delta, this type of scenario needs to be considered. Ms. Mallon said the ITR team documented one case of a main bearing being replaced from inside the tunnel. The tunneling team is keeping an eye on changing technology. Depending on the tunneling location, an emergency shaft can take some time. If repair from inside the tunnel is possible in order to minimize environmental analysis

and permitting delays, that would be the preference. The TBM manufacturers will be brought together for another ITR two or three years down the road as tunnel construction is closer. The technology is continuing to evolve due to projects like the tunneling in the Alps where emergency shafts are not possible. These advances are enabling more and more maintenance to be performed from within the tunnel.

Dr. Lytle said the NOP launch shaft elevations would be considered up to 45ft. from ground surface. Ms. Buckman said that height was specifically in regards to the some of the sited areas. Ms. Mallon explained the 45ft. height was in consideration of subsidence and a 200-year flood level, but the height will be different in every site that is selected.

Mr. Cosio said the current levee system has 1-2 ft. of free-board above the 100-year flood level. The shaft site pads and access roads to them will be as high as the levees. If the project proponents had helped get all of the money that was designated for Delta levees in Prop 1-E and Prop 1, there would be a lot less risk to these sites.

Ms. Liebig said this project in its entirety proposes to take out thousands of acres of prime ag land. Some of the project sites are deemed temporary, but once this land is taken out of production, it will not be brought back, especially not in a prime capacity to the degree of agriculture currently on these sites. In order to provide adequate comments on any questionnaires or proposed siting, we need actual maps and coordinates. Right now, community groups can only give input on siting for intakes because the intake longitude and latitude locations are actually provided.

The SEC conversations are mentioning ten acres here, one hundred acres there. That is a lot to Delta residents and farmers. That is millions of dollars taken out of this county's economy and all the five counties in the Delta. There is a ripple effect of impacts to a community. There will be catastrophic economic impacts to all of the economies in the Delta and all of the communities this area serves. Stakeholders primarily want to know if it the project comes through their property. The project seems very much in the wind as far as where facilities, components or haul roads will actually be located. It is difficult to comment when you don't know where these things will be. Ten acres in one direction or the other is a big difference in the Delta. The earlier members can have proposed sites, the better the input that can be provided. Taking out an orchard or taking out a row-crop field is a different economic impact. It's not that one is more important than another, but there is different level of impact and a different landowner that is affected. Everyone wants to know if it is their land that will be used for the project and members can't answer that question.

Ms. Keegan asked Ms. Liebig to expound on the difference between the economic impact of an orchard or a row crop. Ms. Liebig said there are different values on different commodities. Nut and fruit trees have a higher value right now than does wheat or corn. Vineyards are a different value as well.

Mr. Hsia asked for the compensation calculations for land owners displaced due to shaft construction or underground tunneling? Ms. Buckman said that information is not yet available. It is an aspect that is typically included in project implementation and is something DWR will work on once there is a better idea of where the project will be going.

Ms. Keegan recessed for a short break, noting there was food available for the SEC members and then the public is welcome to partake as well.

c. Siting Retrieval and Maintenance Shafts

Ms. Keegan reconvened the meeting.

Mr. Bradner introduced the retrieval and maintenance shaft siting discussion.

The siting analysis methodology for retrieval and maintenance shafts was similar to the approach taken for ranking the launch shaft sites. The main criteria were construction considerations, geotechnical/geological, property and land use and existing infrastructure. There are some differences in the sub-criteria because the maintenance and retrieval shafts only require approximately 10 acres compared to the launch shafts which may require several hundred acres depending on the area allocated for stockpiling of RTM. The smaller footprint does allow for more flexibility in the siting, and areas were pre-screened out if they did not fit the key criteria. The areas screened out of consideration were not evaluated or ranked further.

The only areas considered for further evaluation were lands that were within NOP corridors, within 1/8 mile of an existing road, 1/4 mile away from existing conservation land, refuges, preserves and vernal pool critical habitats, 1/4 mile away from existing residential structures, 1/2 mile away from schools or hospitals, or offset at least 300-feet from existing levees. . Areas not ruled out (i.e. outside of the gray areas) could still be considered for locating maintenance or retrieval shafts even if they are beyond 1/8 mile from existing public roads, but the siting study focused on those areas adjacent existing roads as a starting point.

The presentation will first review the Central Corridor siting options and then the Eastern Corridor alternatives. The first map of the Central Corridor shows the access roads in the area. The quality of access roads to the potential sites were ranked as either high (green), moderate (yellow) or low (orange). The intention is to avoid using orange roads and focus on roads that are higher quality when trying to screen and evaluate potential maintenance and retrieval shaft sites.

Ms. Mann asked if the access rating quality was based on the quality for Delta residents or for the construction vehicles. Mr. Bradner said that the ranking is a general ranking based on tight bends, turns and other factors.

Ms. Swenson asked where the road quality data came from. Mr. Bradner said the internal team conducted site visits, drove the routes and reviewed pavement ratings developed by cities and counties and compiled all of that information. Ms. Swenson asked what are Mr. Bradner's qualifications to accurately survey roads. Mr. Bradner said he is responsible for siting the shaft sites but there are others on the team who are qualified to survey roads. His charge was to evaluate sites within 1/8 mile adjacent to those roads in order to minimize new road construction. Some of the sites in the greyed-out areas on maps for the maintenance and retrieval shafts could still be considered for other uses, but these maps reflect the ranking process specific to these particular sites.

Ms. Mann pointed out the only middle school that serves the entire communities of Byron, Discovery Bay and the rural areas of Brentwood is located at the convergence of Highway 4

East and West and Byron Highway North and South. Mr. Bradner said that point is outside of the NOP corridor although they are located within the general Delta. There is no reason to consider placing maintenance or retrieval shafts in that area.

Ms. Mann said there has already been one child killed by a truck on that highway. Because there are no sidewalks in that area, students must either be transported by their parents or on buses, so the school traffic in the morning and afternoon would prevent trucks from being able to get through. Staff thanked Ms. Mann for the input.

Mr. Bradner said when looking at access limitations, there are a couple of places that are very difficult to get to, including Venice Island, Woodward and Rindge Tract. Those areas were greyed-out and removed from further consideration.

Ms. Swenson interjected that Clarksburg buses all students in. There are three schools in Clarksburg but the map only seems to show one school. Members should verify the schools in their areas are reflected on the map.

Mr. Bradner said the greyed-out areas on the map also include the preserves, wildlife habitats and conservations as well as a 1/4-mile buffer around those locations. Any areas with residential structures within a 1/4 mile were also avoided in the ranking process, as were areas within 1/2 mile of hospitals or schools or that had less than a 300-foot set back from existing levees.

Working within the remaining areas on the map, there are a couple of different drive lengths that will be reviewed in this presentation.

Using Central Launch Site A that was presented at the last meeting and tunneling north to Intake Sites 5 and 3, a map was shown demonstrating the favorable or acceptable areas in which the maintenance and retrieval shaft could be located. The first option (Drive C/E- 1a) features a Launch Shaft near Twin Cities and I-5 and tunneling 5 miles to a maintenance shaft at the back of Intake Site 5 and driving 2.3 miles to a retrieval shaft near Intake 3.

A different option (Drive C/E- 1b) going to Intake Sites 3 and 2 would entail the same Launch Shaft location, but would tunnel to the back of Intake 3. For this option, an additional maintenance shaft would be needed off of Lambert Road before tunneling north because the total distance between the Launch Shaft and Intake 3 would be greater than the 5-mile range recommended for maintenance shafts.

For the tunneling drive between Central Launch Site A and Central Launch Site B, the tunnel drive is maximized on the southern end to five miles between shafts. It is not possible to clear the Cosumnes Reserve and McCormick-Williamson Tract in a five mile drive from Central Launch Site A, so a maintenance shaft would be located near Walnut Grove short of five miles from the launch site. From there the TBM would tunnel five miles down to Staten Island to the next maintenance shaft, and then five miles further to Bouldin Island.

In the southern part of the Central Corridor is Launch Shaft Site B, with a launch shaft on Bouldin Island and a launch shaft at the Southern Forebay. Due to the long distance between these two points, the engineers are considering a retrieval shaft on Bacon Island. This option

would involve sites in the middle of Bacon and in the middle of Mandeville. There would be an effort to avoid using the existing public road along the levee crest on Bacon as construction access, so sites in the center are being considered, recognizing there would have to be new road construction and bridge modifications to get to those sites.

In the Eastern Corridor, the same criteria were used to rule out potential siting locations and those areas are greyed out on the map.

At the last meeting, an Eastern Corridor Launch Shaft Site A was identified as a possibility for tunneling north from Canal Ranch Tract to the potential intake sites. However, the siting of maintenance shafts along that drive (Drive E-1c) was resulting in multiple drive lengths less than five miles, especially if the drive goes all the way to Intake Site 2 (Drive E-1d). Therefore, the slide demonstrating how the facilities would need to be sited for this particular drive is shown crossed-out with a dashed red line to show that this option is preferred. The additional maintenance shafts that would be needed would increase construction and construction traffic in this area, so the team is still working on options for this drive.

Right now, the team is leaning towards using the same northward drive to the intakes for the Eastern Corridor as would be used for the Central Corridor (Drive C/E- 1a).

Ms. Mallon said that tunneling northward from Eastern Corridor Site A to the intakes would have added an additional one or two maintenance shafts that brought a lot more construction traffic to the Courtland and Walnut Grove areas, so making the shorter drive up north and moving the significantly-sized launch shaft site over towards I-5, taking advantage of the rail and minimizing the construction work taking place in the northern Delta seemed to have a lot less impact on a number of issues. While the initial thinking was to have a 10 to 15-mile drive on the Eastern Corridor, that ended up adding shafts rather than reducing them.

Mr. Bradner added that increasing the spacing on the shafts and didn't allow for 5-mile drives between maintenance shafts based on all of the constraints. Ms. Mallon said to Mr. Wallace's earlier point, you can get from a launch shift near I-5 to Intakes 5 and 3 without a maintenance shaft, but a maintenance shaft is needed to get to Intake 3 and then 2.

Mr. Bradner said the drive from Central Launch Shaft Site A in the north near Glanville Tract to Eastern Launch Site B near Lower Roberts is too long, so a retrieval shaft would be planned near Terminous Island, which has favorable accessibility. There is still the restriction that requires clearing the Cosumnes and checking on equipment before making the next push, and a maintenance shaft would be needed near West Peltier to inspect the equipment before completing the last 5 miles of the tunnel drive to Highway 12.

Starting at the south on Lower Roberts Tract, there would be tunneling northward 4 miles to a maintenance shaft before proceeding another 5 miles to the retrieval shaft near Highway 12.

At the lower end of the Eastern Corridor, between the Southern Forebay and Lower Roberts Tract, there could be a tunnel run 3.9 miles northwards to a maintenance shaft that would be near Highway 4 on Victoria Island and then a 5-mile drive to a maintenance shaft near the BNSF line with a potential reception shaft at Lower Roberts (Drive E-4).

Ms. Mallon said to the points raised by Ms. Swenson and Ms. Liebig, DCA will create full size drawings showing all of the plots from the last meeting as well as the points on the map presented in this meeting. Basically, these sites were chosen because they follow the roads, so that there isn't a need to construct more roads in these areas. Lot locations can be added and printed full-size paper maps can be provided upon request. Maps can also be provided digitally. If members feel that layering on with Google aerials, that can also be arranged. DCA will send maps to members so they can clearly understand what is being discussed.

The goal is to optimize and fine tune where these sites would be located, and the bus drive along the two proposed corridor options would probably be helpful in that regard.

Mr. Wallace asked if the railroads are just being considering for siding to off-load equipment and take muck south, or is the DCA still considering spurs? The purpose of the question is that the railroad parallels Franklin Blvd and the rail beds are about 8 or 9 feet higher than the road. It seems like it would take maybe a 2-mile spur to get off and get back on the main line. Ms. Mallon said at the next meeting DCA can show the SEC members what the team is considering. The advantage of using rail is to relieve truck traffic for transporting tunnel liner segments, especially on the I-5 and to be able to transport RTM to other places in the Delta where it may be needed or used. On the Central Alignment from the Southern Forebay up, there would be a shortage of RTM to go from the Southern Forebay up to Bacon, which is about 8 miles. About 16 miles worth of material is needed. Using the rail to transport that RTM could be beneficial. The thinking is that having a major launch shaft next to rail is going to provide a greater level of flexibility to reduce traffic impacts for transporting massive quantities of RTM.

Mr. Wallace said it is important to know because when you factor in rail and crossing Franklin Rd. and other issues, those impacts become very significant. At-grade crossings in California have been either discouraged or banned. This would create another issue with crossing roads that serve the Delta. Ms. Mallon said the team has an idea for this issue that can be shared with members at the next meeting.

Ms. Barrigan-Parrilla said there will need to be a drive route that her group can evaluate independently. SEC members need their own checklists for what to see and evaluate that is independent from the DCA, but there will be issues accessing certain places like Bouldin and Rindge Tract. Perhaps a bus tour or a led tour with a caravan is the answer, but it is essential to try to put the pieces together and would enable a better response. Google Maps aerial views can only take you so far; you have to see what's living out there.

In addition to a bus tour, Ms. Mann recommended the Rose Marie charter boat currently docked at Tower Park Marina. The top deck would enable views over the levees into the actual islands. That is all private land that hasn't yet been taken by imminent domain, so members would not be able to enter. Having accessors' parcel numbers on printed maps during the tour available would be helpful.

Ms. Liebig asked if the launch shafts are about 100 acres. Ms. Mallon said the drive length will determine the amount of acreage needed. Materials were provided to members that indicate the acreage needed depending on drive length.

Ms. Liebig asked if maintenance and retrieval shafts were about ten acres. Ms. Mallon said those sites would at most be about ten acres because there is much less activity occurring on them as compared to the launch shafts.

Ms. Mann asked about trestle bridges in the Delta that the trains cross. Has DCA determined if these trestle bridges would be a hazard for either the trains or the workers in the dig areas? Will the TBM be tunneling under the bridges? Ms. Mallon said future discussions will include much more detail about how rail and barging might be used. The amount of truck traffic is greatly reduced by using barge or rail. For the launch shaft that could be sited on Lower Roberts Tract, barging could be used to alleviate traffic off the roadways for delivering the concrete pre-cast liners. The liners will most likely be made in Stockton, as it is likely the closest location. Alternately, the liners could be made in Antioch. A map provided to members in the last meeting included the existing concrete batch plants. Members are encouraged to provide input on the use of barge, which is compelling to the project team because of its ability to take so many trucks off of roads like Highway 4. If 50% of the truck traffic could be reduced by using barge and rail, it seems that would be a benefit to the Delta.

Ms. Mann said if the barge is on the main river, such as Deep Water Channel on the San Joaquin, it would be less of a problem. The concern is about the simultaneous use of the waterways by barges and ships if barge traffic increases significantly. Where would barges be parked at nights and on weekends? Ms. Mallon said there is a barging specialist firm advising the team. Once the sites are settled on, the cumulative information on truck trips that SEC members have requested can be provided. Then, it can be considered how to reduce that truck traffic using rail and barge. The barging consultants would put together the details on how exactly the barging would work, and the same for rail; key experts would be brought in to determine how to make it work.

Ms. Mann said the key is to keep the barges off of the narrow sloughs. Ms. Mallon advised looking at the barging maps provided at the last meeting showing the primary barging waterways and secondary waterways where smaller barges could reach. Members are welcome to comment on those maps, as the team saw few places that major barges could actually access.

Ms. Swenson asked about the timing of the scoping meetings. A ton more scoping letters would have been received by residents from Locke and Walnut Grove if they were aware of not only the intakes but about all the other project components that are required. It feels like the scoping meetings are ill-timed compared with the information that is being given to people who are going to be directly affected. This presentation is helpful to amplify to the communities of Locke and Walnut Grove that it's not just the intakes or the impacts of that construction, but it's the cumulative impacts of launch shafts, maintenance shafts and reception shafts that are all going to directly affect residents for a very long time. The scoping meetings did not provide enough information about the realities of this project and impacts for anyone to be able to provide worthwhile scoping comments. If you really want to do this right, do the scoping meetings providing the actual information they need so that you are aware of what the impacts will be on the communities sitting in ground zero. Ms. Buckman said that scoping is often a frustrating process because it comes at the beginning of the project when not much is known. Scoping is required in order to publish and collect information at the up-front part of planning so as much of the information can be used as possible. Scoping is not the end

of opportunities to provide public input; there will be many continued opportunities. Scoping is the start of a process.

Ms. Swenson said that the information provided in this SEC meeting should have been provided at the scoping meeting because it was known at that time. It feels like you know what the plans are but have chosen to be very narrow about the scoping process and only give a limited amount of information out at a time. It is frustrating because the people who actually live there have an absolute, fundamental right to be given clear information and clear ideas about what you propose to do to their property, communities and long time, multi-generational farmland. There was no mention of launch shafts, maintenance shafts or retrieval shafts at scoping meetings. How can you do this process right if you are not disclosing this information up front?

Ms. Keegan asked Ms. Buckman if more information will be shared with the public as the CEQA process progresses.

Ms. Buckman said the shafts were mentioned in the NOP and this is not the first time that shafts are being discussed. The purpose of scoping meetings is to hear from people about their concerns. The SEC has had five 3-hour meetings in order to thoroughly review information and materials. It is difficult to convey 15 hours of information in a scoping meeting when the time is meant for listening to commenters.

Mr. Bradner mentioned that the maintenance and retrieval shafts shown on the backside of the intakes are actually attached to the intake structures. Mr. Ryan has been showing these shafts each time he has shown intakes; they are not new elements to the project.

Ms. Barrigan-Parrilla said as barge traffic is analyzed, be aware that there is a skulling center being proposed on Port property in the Deep Water Channel. There needs to be thought about what to do with people-powered boats.

Mr. Moran said that the Frank Tracts Futures Project with State Parks, located across the Deep Water Channel from the west side of Bouldin Island, is currently in in the planning process and coordination might be merited in regards to a barge landing in the area where boat traffic is being funneled. Also, the Delta National heritage area might have some overlapping areas or interests to help connect some dots along the way.

Ms. Keegan opened public comment for agenda items.

Osha Meserve, Local Agencies of the North Delta, said she agrees that there is lack of detail in the NOP which causes frustration when trying to provide meaningful responses. This is a huge project with many components and the public deserves to see all of these in the NOP. Any day levee failures are concerning, not just sunny day failures. Therefore, the JPA and DWR should be fully supporting Delta levee funding in the state budget and the upcoming resiliency bond.

Regarding the SEC Question Tracking Document, there were quite a few questions about groundwater, including questions 4.15 and 4.28 on pages 6 and 10. The JPA and SEC should be made aware that changes in river water levels are significant and unavoidable impacts in the prior review. This happens because when you lower the water level of the river, you lower the recharge. It is a huge issue for folks complying with SGMA.

Question 4.21 says DCA will coordinate with RD's. There has never been coordination. Some of these were cooperating agencies under NEPA, however there has never really been a track record of that. There should be follow-through on that issue.

Question 4.22 says it is difficult to compare the WaterFix with the new Delta Conveyance Plan. She had a map made showing the intake sites were the same, the answer does not do justice to the truth.

Ms. Meserve was surprised to see that the access road straight through Stone Lake Wildlife Refuge is indicated in green as high-quality access road. The Refuge and the Friends Group has been clear this is unacceptable. It goes right past the visitor center and right through a sensitive area, as well as through the town of Hood. It looks like there are also maintenance and reception shafts planned within the Refuge boundary that is designated by Congress from which the Official Wildlife Service can then purchase lands for conservation purposes. It doesn't look like the criteria has taken that into account.

5. PUBLIC COMMENT – NON-AGENDA ITEMS

Ms. Keegan opened public comment for agenda items.

Mr. Whaley said a private developer would not do the project in this way. First, it would be determined whether the Delta Stewardship Council would even certify a project, next, whether or not the State Water Resources Control Board would even allow it to be done. Thirdly, a conversation would be needed with Fish and Game to find out what is anticipated to be their statement that these intakes are not properly placed. The first thing a developer would do is determine the existing infrastructure of the Delta. There is an expected 10 years of construction and no sewer connection in Hood. Current day, at 7:30 am, 350 cars drive off of I-5 and take River Rd. to get to town. Has an updated traffic study been done to know what's going on? Now there is discussion about going through the town of Franklin. Going through the town of Franklin between 8:00 am and 3:00 pm is gridlocked with cars because of school traffic. If that's the plan, that study must be done, as well. In 1986, Hood Franklin Rd. was under three feet of water in heavy rain. It doesn't make sense to use that road as the major way to complete construction. If the existing levees are not maintained, there won't be a place to put this project. Money needs to be spent up front to make sure that the system that's there will function. One breech will destroy the $50 billion tunnel that supplies no water.

Mr. Gaston, Greater Delta School District, said there have been three prior state projects that were delayed and caused significant issues for schools. A power line was hit and caused power outages. The wind caused dirt and dust to go through the school. The noise from construction interfered with instruction and the kids could not go outside because they wouldn't be able to focus. Schools all run on well water, so everything pulled in and out of the ground causes issues to the drinking water and irrigation for landscapes. Napa recently tried to use recycled water and several thousand trees died due to salinity. Access points on property and adjacent properties were a huge concern, even though the school worked with the state to ensure no trucks came through their property. The schools had adjustment routes and time frames. It would have a huge impact considering the duration of the project. Transportation is a huge consideration. Buses are 104" wide and can't be on the road at the same time as a big rig. Buses go through

every side road and every levee road. Just repainting the bridge required the hiring of extra bus drivers and extra staff. Bus routes are in use all day from around 4:45am-6:00pm.

Mr. Keegan encouraged the comments be submitted in scoping for CEQA process.

Ms. Mallon stated DCA will follow up and try to access school bus routes in the Delta.

Dominick Gulli, Reclamation District Civil Engineer, said the alignment should take into consideration the McDonald-Diamond gas storage field on McDonald Island. Google "Red Adair" for more information.

6. FUTURE AGENDA ITEMS

Ms. Keegan provided an overview of the next SEC meeting. We will have a member roundtable on tonight's presentation and discuss tunnel alignment refinements and South Delta facilities siting and design.

Ms. Mallon noted maps will go out as soon as possible, as well as full size maps. The hope for the next meeting would be to pencil through the alignments some more. Once the launch shaft sites are identified and all that is left to do is determine the line to get to the next one, there are not many options, in terms of areas are that able to handle significant amount of construction traffic and use. As we look, we are not finding a lot of alternatives.

The next SEC meeting will be Wednesday, March 11, 2020 at 3:00 pm at Willow Ballroom, 10724 CA-160, Hood, CA.

7. ADJOURNMENT

Ms. Keegan adjourned the meeting at 6:06pm.