San Joaquin River Dissolved Oxygen Total Maximum Daily Load Technical Working Group (TWG) Open-Forum Meeting

Tuesday, April 20, 2010 9:00 a.m. – 12:00 p.m.

650 Capitol Mall, 5th Floor Sacramento, CA 95814

Note: This was an information roundtable discussion to learn more about ideas, plans, or actions stakeholders are engaged in to address the immediate needs of securing funding for the remaining studies and/or how to initiate those studies. Discussion about any ideas, plans, or actions to address the prohibition (e.g., commitments to operate the aerator, or other stakeholder-driven options) was also encouraged. This was an open discussion with no formal agenda or presentation.

Attendees

Allenuees	
Name	Agency
Brown, Russ	ICF International
Brunell, Mark	UOP Stockton
Centerwall, Steve	ICF International
Cozad, Daniel	IPM for CV-Salts & RTMP
Domagalski, Joe	USGS
Fong, Stephanie	Central Valley Regional Water Board
Godwin, Art	Merced Irrigation District
Grimes, Russ	ICF International
Harringfeld, Karna	SEWD
Joab, Christine	Central Valley Regional Water Board
Johnson, Mike	MLJ-LLC
Lee, Gene	USBR
Martin, Sara	ICF International (Notes)
McLaughlin, Bill	DWR Bay-Delta Office
Pedlar, Bob	CA Department of Water Resources
Petruzzelli, Ken	SJRGA
Will Stringfellow	University of the Pacific
Turner, Melissa	MLJ-LLC
Wackman, Mike	SJ County and Delta Water Quality Coalition
Westcot, Dennis	SJRGA
Wilson, Danielle	ICF International (Facilitation)

Summary of Action Items

- Christine Joab will get input from the Regional Board on the following issues:
 - whether or not starting the downstream studies constitutes compliance with the TMDL program;
 - the possibility of postponing the conditional discharge prohibition in light of unforeseen economic roadblocks;
 - the Regional Board's perception of the aeration facility, including what role they feel the facility should play in the final implementation of the TMDL program; and
 - o if long-term operation of the aeration facility to meet DO objectives would be enough to satisfy the Regional Board's TMDL criteria.
- **Christine Joab** will also get the name of the new DFG contract manager for the San Joaquin River downstream studies.
- Danielle Wilson will:
 - invite the new DFG contract manager for the San Joaquin River downstream studies to the next stakeholder meeting.
 - schedule the next stakeholder meeting once the Regional Board responds to some of the questions above.
- **Dennis Westcot** agreed to consider initiating discussions with the Steering Committee regarding applying political pressure to sell Proposition 13 bonds to re-start the San Joaquin River downstream studies.

Introductions and Agenda Review

Danielle Wilson welcomed everyone to the meeting. She explained that the TWG normally meets every other month. However, this meeting is a special open forum (falling in what would normally be an offmonth for the TWG) scheduled specifically to discuss future actions relating to the San Joaquin River dissolved oxygen total maximum daily load (DO TMDL) in the San Joaquin River. Stakeholders and other parties who do not normally attend the technically-focused TWG meetings were invited to this particular open forum to provide their input. Danielle facilitated a round of introductions, and noted that two of the attendees were first-timers to the TWG:

- Daniel Cozad, representing the Central Valley Salinity Coalition. He stated that his group wants to learn more about how they can connect on a real-time level with DO levels in the SJR.
- Mike Wackman, representing the San Joaquin county and Delta Water Quality Coalition.

Danielle reminded the group that for this meeting, there is no formal agenda, just a round-table discussion. The goal is to discuss thoughts, ideas, and projects that are currently underway, and to find out if any of the groups in attendance would like to become more active in working with the TWG through the DO TMDL process.

Christine Joab, from the Central Valley Regional Water Quality Control Board (Regional Board), explained that this meeting is a follow-up to the CVRWQCB February public meeting. In January, Christine presented an informational item before the Board regarding the stipulation within the DO TMDL requiring that all studies be completed by December 2008, providing an update on the status of

the studies. The upstream studies were the first set to meet the study obligations, and were completed in June 2008. The downstream studies (focusing on the tidal estuary area) were to start immediately after the upstream studies were completed, but bond funding was frozen at the end of 2008. Since then, this particular Calfed Ecosystem Restoration Program (ERP) project has not received any funding to continue the studies.

There was some frustration among members of the Board that this TMDL is not moving forward fast enough. The Board gave Christine instructions to go ahead and get the downstream studies completed, and to work with the stakeholders to get them participating in the TMDL again. As a result of this direction, a stakeholder meeting was held in February of this year. However, there was a very small turnout, with an especially slim showing of folks interested in policy. The purpose of the stakeholder meeting was to open up a dialogue regarding how to get the studies completed before the conditional discharge prohibitions go into effect on January 1st, 2012. No resolutions were made at the February stakeholder meeting, so this meeting was called to make further progress. Christine said she hopes that the stakeholders have had time to think about the issue and have come up with some ideas about how to get these studies back on track, which will allow the TMDL to move forward.

Danielle added that at the last TWG meeting, two presentations were given on the status and success of the aeration device, and a representative from the City of Stockton gave a presentation on the positive San Joaquin River water quality effects of their wastewater treatment plant's new nitrifying biotowers. A report on the 2008 performance operations of the aeration device is currently in the process of being finalized. Another topic of discussion for this meeting is ultimate ownership and funding of the aeration device. DWR is only lined up to run the device through the test phase. Danielle then opened up the meeting to discussion on both topics (TMDL studies and eventual ownership/operation of the aeration device).

Karna Harringfeld asked Christine to explain exactly what the downstream studies are, and what the associated costs are expected to be. Christine answered that the University of the Pacific (UOP) would be the chief investigator if the studies are funded. The current cost estimate is \$2.9 million. Christine turned the discussion over to Will Stringfellow for additional background information.

Will said that UOP has a signed agreement with the California Department of Fish and Game (DFG) to perform the downstream studies, but that since the funding was frozen at the end of 2008, there has been no indication that funding would be reinstated. Will attempted to illuminate the history behind the necessity for the background studies. He explained that after the upstream studies were completed, there were a series of TWG meetings at which the attendees put together a list of tasks that needed to be accomplished to provide the Regional Board with enough information to meet the requirements of the DO TMDL process. The TWG determined that studies needed to be performed to determine the link between discharge coming into the San Joaquin River at Vernalis and the transport of organic materials into the Deep Water Ship Channel (Ship Channel). Another major requirement is to enhance the WARMF model so that it is able to link algae to dissolved oxygen (DO), and to link the estuary to the upstream area within the model.

The goal of the study is to provide Systech with enough data to be able to determine what organic materials actually get transported from upstream into the Ship Channel and end up contributing to low DO levels. The goal of the downstream studies are to (1) resurrect the WARMF model, (2) improve it with current information, and (3) collect all the data that is required to calibrate the model. There is

also a desire to collect more upstream data, so additional monitoring may need to be done upstream, depending on how the Irrigated Lands Program is going. A complicating factor is DFG's desire to push the effort towards more of an ecosystem approach in order to address some of their management problems. If the studies were to be funded through a source other than DFG, the costs could be reduced by removing the DFG-requested components. However, the most important thing is to get the WARMF model linked into the estuary.

Danielle added that previous studies and discussions can be found on the TWG website: http://www.sjrdotmdl.org/.

Ken Petruzzelli asked what the timeframe for the downstream studies would be. Will responded that multiple years' worth of data will be required to calibrate the WARMF model. It is designed to be a three-year study, which would include two years of fieldwork/data collection and one year to process the data and calibrate the model.

Ken then asked about the current timeframe for the conditional discharge prohibitions. Christine explained that the conditional discharge prohibitions will go into effect after December 31, 2011. The Regional Board's lawyers are currently reviewing the conditional discharge prohibition language to determine whether the prohibition could be avoided if the downstream studies are funded and started. She said she doesn't know what the lawyers will say, but she does know for sure that if the studies do not get started, the prohibition will definitely go forward. Of course, the prohibition will only go into effect under certain flow conditions when DO requirements are not met.

Ken suggested to the group that if the Regional Board's lawyers decide that the conditional discharge prohibition will be put in place regardless of the status of the downstream studies, the group may want to consider spending the \$3 million on figuring out how to comply with the discharge prohibition, instead of on the studies. He pointed out that it would be nice to know what the Regional Board's decision is going to be on the matter, because it would help the stakeholders decide how to spend the money. An extension on the conditional discharge prohibition would also be helpful, since the downturn in the economy is a cause for frustration and concern for a lot of people.

Danielle asked Christine when she expected to hear back from the Regional Board's legal staff. Christine answered that she didn't know. Stephanie Fong added that they had hoped to hear from the legal staff on the issue before this meeting, but that did not happen. Christine assured Ken that the Regional Board is very aware of the stakeholders' economic situation, which is why they're hoping to prevent the prohibition from being put in place.

Ken observed that if the stakeholders have assurances that there is enough time to complete the studies before the conditional discharge prohibitions go into effect, it would be a good incentive for the stakeholders to fund the studies.

Christine mentioned that the \$2.9 million price tag is the amount of the contract with DFG, so if the studies are stakeholder-funded, some of the tasks could be redlined to reduce costs.

Ken pointed out that it would be helpful for the stakeholders to know what the amended cost of the studies would be before any funding decisions were made.

Will said that the process would start with the stakeholders deciding to fund the studies. Once that decision is made, UOP would then negotiate costs. He pointed out that he is trying his best to hang on to a number of talented researchers who have a lot of experience. This means there is some urgency to making the decision to fund the studies. Training new recruits could add significant costs to the effort.

Ken asked if the upstream studies need to be revisited due to the new barrier operations. Will responded that they would just need to confirm that the new barrier operations did not change conditions that much. He said it is kind of a gamble. A lot of data is being collected by the Irrigated Lands Program that could be used to confirm the conditions. This relates directly to calibrating the WARMF model, which may have advanced some since this group worked on it last. There is a land use component to the planned WARMF upgrades—he hopes to add a component to the model that would help landowners decide how to manage their land to fix runoff problems. This component of WARMF is proposed to be developed under the \$2.9 million.

Danielle asked when the original scope was developed, and whether it needs to be revisited. Will stated that he does not think the idea of the downstream model is something that needs to be debated. A lot of work went into the scope, and a lot of input was provided from a lot of folks.

Danielle then asked what parts of the scope are "optional". Will explained that he put a lot of work into the scope and is not excited about revisiting it unless there is a commitment made to fund it.

Christine asked if the Bureau of Reclamation contracted with Systech to extend the WARMF model. Gene Lee responded in the affirmative. It will be extended as part of the San Joaquin River restoration program. Christine pointed out to the group that this is confirmation that WARMF is being used by other agencies—that it is a good model and that it is being extended within the San Joaquin River Watershed.

Danielle mentioned that the next TWG will focus on modeling, including:

- an update on the status of different models,
- a discussion of which models the TWG has investigated,
- a discussion about which models the TWG is pursuing, and
- a summary of Dr. Russ Brown's report on modeling recommendations.

Will conceded that the items in the contract that can be removed are the things that were on DFG's agenda. Danielle said she felt it would be a good idea for the sake of the stakeholders to revisit the contract and identify those optional items and their price tags. Will said he would only do that if he was talking to someone who is serious about funding the studies, though he did say that the land use additions to the WARMF model could potentially be done at a later time.

Gene asked Will to list the critical immediate pieces of the studies. Will responded with the following items:

- sampling in the estuary,
- calibrating the nutrient part of the estuary model,
- compilation of data from the Irrigated Lands Program and analysis of that data to see if it is enough to confirm our data, and

 getting up to speed on what modifications and additions have been made to the WARMF model since we last looked at it.

Russ Grimes asked what Irrigated Lands Program data is relevant to the DO studies. Will said that the Irrigated Lands Program has four critical flow stations that measure water quality data (including nutrients and EC, which are monitored continuously at a number of stations). This only provides four data points per year, but if that data lines up with the masses of data we've already collected for our DO efforts, we can statistically confirm our data. Melissa Turner offered to share some SWAMP-compatible data that is collected on a monthly basis. Will added that DWR also collects nutrient data at Vernalis.

Danielle attempted to identify priority tasks. She asked the group if there is an interest to ask Christine and Will to do a minimal amount of work to identify the optional items as well as to prioritize tasks and associate costs with them. The general consensus from the group was that they would first like to hear back from the Regional Board on their plans for implementation of the conditional discharge prohibition. Will reiterated his desire for a process as follows: (1) find out the Regional Board's position on delaying the discharge prohibition, (2) determine if there is a willingness to fund the studies, then (3) revisit the contract/scope.

Russ Brown asked Christine to review how the conditional discharge prohibition is tied to overall TMDL implementation. Where does the prohibition pop up in the TMDL? How is the prohibition related to improving DO in the Ship Channel? Christine explained that the discharge prohibition was included in the TMDL as a 'regulatory backstop' in case the items that were laid out in the regulatory program were not implemented. If the regulatory program requirements are not met in the approved timeframe, the Regional Board then has the authority to conditionally prohibit discharge for point and nonpoint sources discharging organic compounds. It was to ensure that the regulatory actions were completed.

Dennis Westcot asked how far the prohibition would extend. Does it cover downstream of the Ship Channel? Christine responded that the prohibition would cover the whole study area, and include any discharge source that could be suspected of discharging "oxygen-eating" substances.

Ken reminded the group that the discharge prohibition is "conditional," meaning that the restrictions only kick in when two conditions are met: (1) a 3,000 cubic feet per second (cfs) or less net daily flow in the river and (2) the DO water quality objective is being violated. Additionally, if a discharger is operating under a current discharge permit, they would be exempt from the prohibition and would be allowed to continue discharging. Christine pointed out that under the conditional discharge prohibition, discharge permits could be opened back up to add more detailed language about what the discharger needs to do relative to DO.

Mike Johnson pointed out that under the Irrigated Lands Program, coalitions are required to develop management plans. If these coalitions are operating under management plans approved by the Regional Board, could they continue discharging if the conditional discharge prohibitions kick in? Christine answered, "not necessarily." She explained that the conditional discharge prohibition is in place to ensure that the studies get done. Unless the Irrigated Lands Program is doing their own studies that could meet the TMDL study requirements, participants in the Irrigated Lands Program would not be exempt from the discharge prohibitions.

Mike asked why, if dischargers with permits are allowed to keep discharging, the management plans wouldn't be treated the same as the permits. Christine responded that the discharge permits and Irrigated Lands Program management plans are two separate things. She assured Mike that she hears his frustration, and said that she recently met with Susan Fregien at the Irrigated Lands Program to discuss the language in the waiver versus the language in the TMDL. If the Irrigated Lands Program could get the waivers to be more specific about what needs to be done to comply with the TMDL, the Regional Board could treat the waivers the same as discharge permits.

Mike observed that \$3 million is a lot of money, especially for a group of stakeholders. Is there a reason for participants in the Irrigated Lands Program to contribute money to this effort? Ken agreed, pointing out that Irrigated Lands Program waivers are already considered permits that allow landowners to operate in compliance with the Program. Therefore a lot of stakeholders might already be considered "in compliance". Why would they want to contribute money to these studies?

Art Godwin asked how the Regional Board would implement the prohibition on a real-time basis. By the time the relevant flow and water quality conditions are measured and acknowledged, and the prohibition is communicated to all dischargers, it could be several days later, and the conditions could have already improved by then. Christine acknowledged this as a very good question, and admitted that she does not know the answer. It is territory that the Regional Board has not yet assessed. The Regional Board did not foresee needing to implement the conditional discharge prohibitions, but now may be forced to do so because of the unexpected financial restrictions.

Ken asked how much compliance is actually occurring in the San Joaquin River now. Russ Brown said that DWR is currently trying to answer this question. They're trying to figure out if the problem stems from upstream input, the physical conditions in the Ship Channel, or from lower flows entering into the Ship Channel. Everyone is seen as fully responsible for the DO problem until ownership of the problem can be assigned. The aerator is a technological fix at the problem site that is, in essence, similar to solving pollution with dilution. Art agreed, describing the aerator as something similar to a treatment plant for discharge. Russ Brown asked how the Regional Board views the aeration device—is it viewed as a possible long-term solution?

Russ Grimes asked whether the San Joaquin River has been more often in or out of compliance with the DO objective than in the past. Ken agreed that knowing the answer would be helpful to the stakeholders. Knowing how often conditions are in or out of compliance would give the group a sense of how much progress has been made and how much remains to be done. Christine responded that the Steering Committee saw the aeration device as an interim measure to raise DO levels in the Ship Channel while other studies, looking at reducing load or increasing flow, were being done in the watershed. The aerator is not viewed as a long-term solution.

Russ Grimes recalled that the Steering Committee provided a letter to the Regional Board and CBDA stating that if the device were to show that it provided increased DO levels, the Steering Committee would look into funding it as a long-term solution. Christine said the letter stated that the Steering Committee may be willing to step forward and fund the aeration device, but there was no description of what "long-term" meant, or use of the phrase "long-term". She understands that the Steering Committee was still defining it as an interim measure. She acknowledged that the aeration device is a good first step, but asked, "Is it a final step?"

Russ noted that in the past few years, with the improvements to the City of Stockton's wastewater treatment plant, the Ship Channel has been in compliance a lot more than in the past, and in three critically dry years at that. With operation of the aeration device, compliance with the DO objective can be achieved almost all of the time.

Ken observed that ceasing discharges once an exceedance has already occurred wouldn't address the cause of the actual exceedance.

Will explained that the original plan involved utilizing the model as a tool to predict when operation of the aerator would be necessary. It was going to be part of an integrated solution, with the model keeping the operating costs of the aerator down. The Regional Board never intended to get this close to the discharge prohibition. He acknowledged that the only way the discharge prohibition would work is if it were a system based on fines.

Dennis remarked that the original intent of the Regional board was to determine which variable was most responsible for reduced DO conditions (upstream input, physical conditions in the Ship Channel, or lower flows), and to develop an adaptive management program. He said they already have difficulty with the VAMP program—they need four days notice to get the flows down from Vernalis. To get the flows from above Vernalis, they would have to tack on several extra days. We need to know how much of the input is coming from above Vernalis. The hydrology of the system is changing because of the water shortages. Agricultural return flows are ending earlier in the year than they used to—they're now ending in August instead of September. There are all sorts of other sources between Vernalis and the Ship Channel.

Will responded that that is the purpose of developing the estuary model as well as the land use component of the WARMF model. The estuary component is necessary to better understand how to apportion things, and the WARMF land use component is what allows the approach to be adaptive.

Dennis suggested going back to the Regional Board and talking to them about implementation of the prohibition. The Regional Board has a lot of leeway in implementing it. They could postpone the implementation of the prohibition by taking economics into consideration when establishing timeframes. Christine observed that even if the schedule were extended, it would be very hard to raise money for the studies in the next couple of years.

Danielle turned the conversation back to Ken's question about how often conditions in the Ship Channel have been in compliance with the DO objective. She asked Russ Brown if the TWG could present the DO compliance history to the Regional Board, showing that not only have the economics changed, but that progress has been made towards meeting the DO objective on a more regular basis.

Russ Brown said that once the City of Stockton installed their new nitrifying biotowers in the summer of 2007, the DO objective was met, or close to being met, all summer long. The same was true in the summer of 2008 when operation of the aerator began. The aerator studies found that aeration could add a milligram or so to the Ship Channel over the distance of a few miles. This means that if the aerator is turned on, DO levels in most of the Ship Channel can be raised by about one milligram. When flows in the San Joaquin River are low, it means that not very much San Joaquin River water even makes it into the Ship Channel—most of it is going into Old River. Russ said he wonders if it will ever be possible to account for the share of responsibility attributed to upstream input, physical conditions in

the Ship Channel, and flows. It sounds like in the WARMF model, all of the responsibility will be assigned. It's hard to say exactly how much of the current increased DO levels in the Ship Channel are due to flows, reduced discharges, or the City of Stockton's new nitrifying biotowers. Could the model figure this out?

Will responded that he has a lot of respect for the model. He believes it is the only approach to take, and that it's a step in the right direction.

Art asked what the Regional Board plans to do at the Port of Stockton for the conditional discharge prohibition. Does the discharge prohibition apply to the Port? Russ Grimes responded that right now, the Port has to implement aeration remediation when the flows and DO levels drop below a certain point.

Ken asked if the aerator was intended to mitigate for the Port's impact on DO levels. Russ Grimes answered that the aerator mitigates for the 1982 deepening of the Ship Channel.

Mike Johnson asked if the WARMF model is hydrodynamic and if it has 3-D capacity. Without 3-D capacity, it won't be able to take into account the actual contribution of the bathymetry, and could not get at the Ship Channel's depth and shape. Mike said he's not sure that we'll ever be able to get at the relative contribution of upstream input versus physical conditions in the Ship Channel versus flows.

Will responded that the 2-D model was adequately predicting water quality outcomes for the San Joaquin River. As for assessing the hydrology of the Ship Channel, one could look at residence time and might be able to get some handle on the channel's effect.

Russ Grimes asked if the upstream studies gave any consideration to the unnatural conditions and relative health of the upstream San Joaquin River. Will stated that the San Joaquin River is an engineered system with lots of variables to manipulate. He asked Russ to clarify his question. Russ explained that in natural systems, phytoplankton and zooplankton exist naturally—what are the natural levels of those constituents, and what are the levels of those constituents in the San Joaquin River? Will responded that the San Joaquin River is a highly trophic system; it is heavily impacted, enhanced, and stimulated. In summary, it is not in good shape. The river's condition is what you would expect in a highly modified system with high sediment and salt inputs. One of the things DFG also wanted to look at in the downstream studies was what would happen in the Delta if the nutrient supply from the San Joaquin River was cut off.

Daniel Cozad observed to Christine and Will that \$3 million is a lot of money. He feels they should figure out what the first task needs to be, and find limited funding to do it first. He asked if political pressure could be applied to DFG. Christine explained that although the contract is through DFG, the CA Department of Water Resources (DWR) actually holds the purse strings. Will further explained that the Regional Board needs the studies to be done, DWR has the money, and DFG has the responsibility to allocate the money. Christine clarified that this was originally a CALFED effort, so responsibilities for the project got split in a strange way.

Mike Johnson asked if the Stewardship Council could apply pressure to DWR and DFG. Daniel suggested that the Stewardship Council could convene a meeting and explain that these downstream studies are a

legacy project. Art suggested that if they didn't want to convene a meeting, they could show up at an already-scheduled meeting to make the same case.

Danielle advised the group to put together a list of action items, or a sequence of events, so everyone understands what the next steps are. It sounds like the first step is to hear back from the Regional Board's attorneys on how they are interpreting the possibility of postponing the conditional discharge prohibition. Christine agreed, clarifying that the attorneys are determining whether or not starting the downstream studies constitutes compliance with the TMDL program.

Danielle asked Christine how she will communicate the attorney's answer to this group. Christine responded that she could issue a statement through the DO TMDL and TWG distribution lists. Danielle suggested that once Christine gets an answer from the Regional Board attorneys, the stakeholder group would come together to meet again. Danielle asked Christine if she would be willing to ask Regional Board management about postponement of the conditional discharge prohibition. Christine agreed to bring it up with Regional Board management, but she was unable to guarantee a timeline.

Some of the stakeholders expressed concern about being asked to pay for studies in such a dire economic climate. Danielle assured the group that no commitment of funding is being made at this time. If the Regional Board's attorneys say that starting the studies is enough to satisfy the requirements of the TMDL (and delay the discharge prohibition), the stakeholders can meet again and discuss moving forward with a smaller piece of the studies to get the momentum going.

Will said that if DFG could be convinced to commit some amount of funds to get the studies started, he could get the effort going in a hurry. If the contract has to be negotiated with another party, it could take another year to revisit the contract. Getting the money from DFG would be the most expedient way to get something out the door.

Danielle asked about the best way to get funding moving through the DFG/DWR elbow. Russ Grimes said the funding is through Proposition 13, so someone needs to apply political pressure to sell those bonds and get the work started up. Danielle observed that a subgroup of the stakeholder group may need to do some lobbying. Christine made sure everyone understood that the stakeholder group, not the Regional Board, is suggesting lobbying activities. Dennis felt that the stakeholders present at the meeting might not be the right group to do the lobbying. It would be a more appropriate activity for a Steering-Committee-type group, with representation from the US Army Corps of Engineers (Corps), the Port of Stockton, upstream interests, and interests from the South Delta. Russ Grimes agreed that this is really a matter of the Steering Committee deciding to get this effort back together and going again. Dennis agreed to think about initiating discussions with the Steering Committee.

Will revisited his earlier contracting statements. He clarified that if a private party wanted to fund part or all of the studies, the contract could be negotiated and put into place in an expedient manner. However, if the funding was to go through the State, it should go through the existing contract, otherwise the contracting process could take up to a year.

Ken observed that the TMDL identifies Proposition 13 as a potential funding source. If that is the case, shouldn't the Regional Board have a "lobbying role"? Christine responded that DFG is the intermediary and that DWR holds the money. She understands that there is a funding committee that decided which bonds get sold and which projects get funded. The downstream studies are hindered when it comes to

funding decisions because it is not a hammer and nails project. It does not rate high enough to meet the language of Proposition 13. Since it's a "study," it falls to the bottom of the list.

Danielle asked if the Regional Board could meet with DWR to explain the urgency of the studies. Will responded that part of the problem is that this group does not have anyone at the table where the funding decisions are made.

Art asked who the DFG contract manager for the downstream studies is. Christine responded that Mary Manconi was the contract manager, but she retired last year. Christine understands that there is a replacement now, but she doesn't know who it is. Russ observed that it would be nice to get that new contract manager involved in this group. Danielle said that she would be happy to invite the DFG contract manager to the table if Christine could get that person's name.

Will mentioned that part of the hang-up is whether Proposition 13 is the right source of money for these studies. The State doesn't seem to feel it is their responsibility to implement the studies on their own. Christine said that DFG is looking for other funding options, but any funding source would be bond-related.

Melissa asked if the proposal for the downstream studies could be made available to the stakeholders for review. Danielle asked if the scope and costs could be made public as well. Will responded that the scope should contain all the tasks and costs. He will see what he has and send it out. He said that the proposal could definitely be sent out, since it was already made public. Danielle offered to post it on the TWG website, on the page for this meeting.

Some discussion of scheduling the regular May TWG meeting ensued. Consensus was reached that the TWG would prefer not to meet at 650 Capitol Mall in the future.

Moving on to the other topic of the meeting, Christine announced that she and Bill McLaughlin of DWR are interested in discussing the aeration facility transfer of ownership. Bill added that the 2008 aeration facility experimental testing report is final and will be posted online April 21. It will be available on both the TWG's site (http://www.sjrdotmdl.org/) and on DWR's site (http://baydeltaoffice.water.ca.gov/sdb/af/index_af.cfm). Bill emphasized that it is a very good report. He encouraged the group to read it, and to direct any questions to himself or to Dr. Russ Brown. He acknowledged that it is DWR's intent to turn the facility over to someone else for long-term operation. He would like everyone to understand the facility and what it can and cannot do. He is open to hearing suggestions of any good groups to take over operation of the facility.

Russ Brown asked Christine if she could ask the Regional Board how they perceive the aeration facility. It would be helpful to know the Regional Board's opinion on what role the facility should play in the final implementation of the TMDL program. Christine said she thinks the Regional Board would be very open to looking at the aerator as part of a long-term solution, as long as there are other components involved, including reducing the nutrient load coming down the San Joaquin River. The Board is hoping that the process of upstream improvements can continue in hopes that the aerator might not have to be operated much in the future, if at all. She agreed to bring this topic up with the Regional Board and get them to communicate their thoughts to this group.

Danielle agreed that getting answers from the Regional Board on the many questions that have been raised at the meeting would be important to help inform how the stakeholders move forward. The Regional Board's input would shed some light on what the stakeholders' options are. She also pointed out that the topic for a future TWG meeting (probably the July meeting) is long-term management of the aeration device.

Ken wondered, if the DO objective is being met, based solely on the City of Stockton's wastewater treatment plant upgrades and on the aerator, could the Regional Board would be comfortable with that? Or would the Regional Board still want to keep looking at upstream reductions and flow modifications? Could they be happy that the objectives are being met and leave it at that? Christine responded that all of the responsible parties need to contribute to solving the problem, not just the Port and City of Stockton.

Ken asked if the Regional Board would be happy if the aeration device was purchased by a third party and operated to meet the DO objectives. Would that be enough to meet the Board's TMDL criteria? As long as the DO objectives are satisfied through use of the device, the conditional discharge prohibitions would not go into effect. It seems to be the best option, since the downstream studies can't seem to get funded. Stephanie said that the best she and Christine could do would be to bring this idea to Regional Board management. If they agree that no more work needs to be done as long as there is no more exceedance, she will report back to the stakeholders.

Danielle posed the following question to the group: given the economic situation, what are the stakeholders' options? They appear to be either to fund the long-term downstream studies, or to ensure that the DO objectives are met.

Karna asked what the regulatory constraints would be related to getting a group of stakeholders together to fully fund long-term operations of the aeration facility. She mentioned that she had heard NMFS was worried about the effects of the aeration facility on fish. Bill responded that UCD is currently completing studies on the effect of the facility on fish. So far, no problems have come out of the study, so he is not expecting there to be any negative impacts. The study should be complete sometime in May.

Will acknowledged that if a group comes forward to operate the aerator long-term, it could very well be that there are not any other feasible options available to improve DO conditions other than the aerator.

Danielle pointed out that the Regional Board should be aware of how successful the aerator has been throughout its study phase. Art asked if there were any plans to present these results to the Regional Board. Christine answered that time is scheduled to present the aeration facility testing results to the Regional Board at the end of 2010.

Danielle closed the meeting by reiterating that the stakeholders will wait to hear back from the Regional Board on some of the questions raised at the meeting before meeting again. Once the group hears back from the Regional Board, a meeting will be scheduled ASAP. Danielle said she would be in touch with responses and next steps, and encouraged the stakeholders to contact her with questions, ideas, or requests for information.