

Meeting Summary

Day 1: November 21, 2013

1. Welcome & Introductions

The Independent Science Board's (ISB or the Board) joint meeting with the Delta Stewardship Council (DSC) was called to order at 9:00 a.m., November 21, 2013, by the Chair of the DSC, Phil Isenberg.

Eight members of the Board were physically present: Brian Atwater, Elizabeth Canuel, Tracy Collier, Joe Fernando, Jay Lund, Judy Meyer, Richard Norgaard, and John Wiens. One member participated by phone: Vince Resh.

None of the Delta ISB members made any new disclosures.

Delta Science Program (DSP) Staff in attendance: Peter Goodwin, Marina Brand, Lauren Hastings, Rainer Hoenicke, and Joanne Vinton

2. Roll Call – Establish a Quorum of the Delta Stewardship Council Board (Water Code §85210.5)

Council roll call was taken and a quorum established at 9:14. The following members were present: Patrick Johnston, Frank Damrell, Randy Fiorini, Gloria Gray, Phil Isenberg (Chair), Hank Nordhoff and Larry Ruhstaller.

3. Delta ISB Chair's Report

Collier asked ISB members to introduce themselves and briefly describe their [backgrounds](#). Following the introduction of the ISB members, Isenberg introduced himself and the Council members introduced themselves and briefly described their [backgrounds](#).

Collier and Isenberg discussed the history of the independent science boards and the DSC as successors of CALFED. Collier said that the current ISB has its roots in the late 1980s, when a severe, persistent drought led to restrictions on water allocations and uses. As a result, federal and state agencies formed CALFED in 1994 to address problems in the Delta systematically. An Ecosystem Restoration Science Board was formed and guided implementation of the CALFED Ecosystem Restoration Program. The Board met until 2000, when the CALFED Record of Decision (ROD) was executed. It included a Science Program and a new Independent Science Board. The Board met until 2003, when the Legislature passed the California Bay Delta Authority Act. The Act included an 18-member Independent Science Board. In 2006, Governor Schwarzenegger called for an independent review to help CALFED refocus. The review led to the Delta Vision process, which then led to the 2009 Delta Reform Act. The Delta Reform Act included formation of the current Delta ISB. Its first meeting was in September 2010.

Isenberg added that the DSC is the legal successor to the CALFED Bay-Delta Authority. He noted that this is really a discussion of how science and government do or do not work together. Isenberg also mentioned the recent release of the California Water Action Plan which addresses what should be done to secure the water supply and ecosystem protections between now and when the BDCP facilities are functioning (if approved and implemented).

Delta Independent Science Board Meeting
November 21-22, 2013

Collier reported on the ISB's October 28 teleconference. During the teleconference, the Board discussed and approved (with edits) its [memo](#) to the Council about implementation of the Delta Science Plan (Plan). The memo commends the Delta Science Program for preparing the Plan and urges prompt action on the Plan's priorities by the Delta Science Program, DSC, other state and federal agencies, and nonprofit organizations.

The Board and DSC discussed the Plan. Board members said they do not have any continuing substantive issues with the Plan, and they want the Plan to be implemented. They asked if the DSC could, through the Implementation Committee, use its authority to require incorporation of the Science Plan into other agencies' science activities. Isenberg responded that agencies always agree to cooperate and coordinate but none are willing to give up their authority. Knopp asked for more discussion from Board members about next steps. Board members said that they want to see the Plan's recommendations implemented immediately and although they don't have any authority they are willing to do what they are asked to facilitate its implementation. Meyer said that the Plan calls for development of a Science Action Agenda (SAA), which will give agencies an opportunity to collaborate, and will be the Plan's first test. Collier said the Science Steering Committee is also important. He asked what incentives are available to the DSC to assure implementation of the Plan. Five ISB members—Lund, Meyer, Wiens, Norgaard, and Resh—volunteered to discuss implementation and incentives with the DSC. Fiorini, who will be the chair of the Implementation Committee, stated that they are trying to carefully craft development of the Committee and agreed with Lund about potentially including two to three ISB members as part of the development team. However, Collier reminded the Council that the ISB can only contribute on Science Plan issues. Lund, Resh and Norgaard agreed to participate in the Implementation Committee planning effort.

Johnston stated that the short-range funding strategy is to have enough money to support the DSC, ISB and their respective activities. However, the long-range funding strategy is much more challenging as evidenced by the water bond discussions in the Legislature.

Isenberg announced the release of a U.S. Geological Survey [groundwater report](#) prepared in cooperation with the U.S. Bureau of Reclamation and the San Luis and Delta-Mendota Water Authority: *Land Subsidence along the Delta-Mendota Canal in the Northern Part of the San Joaquin Valley, California, 2003–10*.

Isenberg asked the Board to comment on the [2013 Draft California Water Action Plan](#) (WAP) before the end of 2013. Damrell stated that the ISB's review of the WAP could be an opportunity to recommend that the role of science be included as part of the implementation of the WAP. Lund agreed. The Council urged the Board to provide comments by the due date of December 31 as it is important to comment prior to the governor's State of the State address.

At the October 28 teleconference, the Board also approved an update to the [Delta ISB Operating Guidelines](#) to clarify the term of office. The Operating Guidelines now state that when a member resigns prior to the end of the five-year term of office, the term of office for the new member who fills the vacancy is five years from the date of the appointment.

4. Delta Stewardship Council (DSC) Executive Officer's Report

Executive Officer Chris Knopp welcomed the Independent Science Board members. Knopp briefly updated the Council on activities that have taken place in the last month:

- Continued work on a FY14/15 budget for the DSC as it moves from creating a plan to implementing a plan, taking into consideration the new tasks that will be necessary to carry out these activities including covered actions, integration and coordination of

Delta Independent Science Board Meeting
November 21-22, 2013

agency actions, accountability functions, and the emerging role of science in the science community. The budget will probably not allow programs to expand, yet the DSC is required by law to expand. The DSC will make its case to the Governor in June.

- Support for the ongoing litigation.
- Creation of an end-of-year report that includes financial accountability and a description of the outcomes achieved based on the performance measures included in the Delta Plan
- The Science Program has been working productively with the [Collaborative Adaptive Management Team](#) (CAMT), to produce an adaptive management process by February 15, 2014 to inform implementation of the current Biological Opinions as required by the court. The significance of the team is that they are integrating different aspects of science.
- Progress has been made on establishing the Implementation Committee.
- Knopp made presentations at the State of the Estuary Conference and to the Food and Agriculture Council in Modesto. The topics were water supply and integration of agency programs and actions, two of the DSC's major charges.

Councilmember Patrick Johnston discussed the Council's necessary transition from bond funding to the general fund, and the need for careful analysis of which activities can be supported by each.

Adam Borchard, the Council's legal intern, briefed the Council on a legal case involving the California Farm Bureau Federation vs. the State Water Resources Control Board (SWRCB). The case is about the SWRCB's annual water rights fees and regulations. The Sacramento Superior Court's decision invalidated the regulation of the fees. The case is on remand from the California Supreme Court, which decided that the fees are constitutional, but how they were applied from 2003-2004 is in question.

5. Lead Scientist's Report

Goodwin discussed the importance of the CALFED program. Even though the program was criticized, lessons were learned and additional insight was provided by the Little Hoover Commission review. The DSC, the successor to CALFED, is watched closely around the world to see how to use science to balance the coequal goals. The Delta ISB is also being used as a model.

Goodwin reported on several DSP activities:

- State of the Estuary conference— The 11th biennial conference was held Oct. 29-30, 2013. About 1000 people attended, including ISB members Meyer and Lund. The purpose of the conference was to cover contemporary issues and bring scientists, managers, and policymakers together from the Bay and Delta. The Conference theme revolved around the 20th anniversary of the Comprehensive Conservation and Management Plan for the Estuary (including the five Delta Counties). Knopp participated in a panel discussion on cooperation among the many plans for the Bay-Delta system. Lund gave an invited talk on managing the Delta ecosystem adaptively. Posters were presented by DSP Sea Grant State Fellows and Delta Science Fellows. The conference program and abstracts can be found at: <http://www.sfestuary.org/soe/>.

Delta Independent Science Board Meeting
November 21-22, 2013

- Bay Delta Conservation Plan (BDCP) Effects Analysis Review—DSP will host a review of the BDCP Effects Analysis. Coordinating these independent reviews on difficult topics is one of the DSP's most important activities. The Effects Analysis is one of the key points of BDCP. It covers the effects of restoration activities on flows and the benefits of new habitat. This is the third phase of this review. Important dates for the review are as follows:
 - December 13: Release of draft BDCP for public review
 - December 18: Effects Analysis Review Panel briefing
 - January 28-29 (two days): Effects Analysis Review Panel Meeting
- Long-term Operations Biological Opinions (LOBO) Review—On November 6-7, 2013, DSP held the fourth LOBO Review. Required by the National Marine Fisheries Service and U.S. Fish and Wildlife Service Reasonable and Prudent Alternatives (RPA), this annual workshop reviewed operations of the Central Valley Project and State Water Project in water year 2013 to determine whether any measures prescribed in the RPA should be altered in light of information learned from the year's operations or research. Questions for the reviewers change from year to year depending on the type of water year that occurred. The coming year could be very dry, and the reviewers recommended continued research. Wiens agreed that studying systems under stress is more beneficial than studying systems under normal conditions. For more information about this review, including the panel's report (expected in December), see: <http://deltacouncil.ca.gov/science-event/9954>. For preliminary findings, see: http://deltacouncil.ca.gov/sites/default/files/documents/files/Initial_Panel_Findings.pdf.
- State Water Resources Control Board outflow workshops—DSP is helping plan the format of the Delta Outflow workshops currently scheduled for February 10-11, 2014. Organizers are looking for innovative ways to structure the workshops. The plan is to find ways to get information to panelists in a timely, efficient manner so that time in the workshops can be used for discussion.

Goodwin was asked to give a presentation on “Research & Innovation: Research collaboration” at the National Science Foundation [EPSCoR conference](#) in Tennessee. He discussed the newly released Delta Science Plan, which was well received. The final draft of the Delta Science Plan will be posted after making some minor corrections. The next steps are to form the Science Steering Committee, develop the interim version of the Science Action Agenda, plan the data summit, and prioritize the actions listed in the Plan to achieve big, early successes.

6. Review of Draft Bay Delta Conservation Plan (Water Code §85320)

Dan Ray, Chief Deputy Executive Officer of the DSC, reported on the DSC's plan for reviewing the Bay Delta Conservation Plan (BDCP) Draft EIR/S. The role of the Department of Fish and Wildlife is to approve the BDCP as a Natural Communities Conservation Plan (NCCP). Federal agencies also need to approve it as a Habitat Conservation Plan (HCP) under section 10 of the federal Endangered Species Act. Only then can it be incorporated into the Delta Plan. The DSC is working to understand the legal requirements. For information about the DSC's review and products, see http://deltacouncil.ca.gov/sites/default/files/documents/files/Item_6_Attach_2_3.pdf.

Board members expressed concern over the 120-day review period, which will not be long enough, especially if the documents do not include chapter summaries. Board members found substantial problems in earlier administrative drafts of the EIR/S. Both the Board and DSC

Delta Independent Science Board Meeting
November 21-22, 2013

submitted comment letters on previous drafts, so will need to check the public draft to see if the questions were answered.

The Board will need to have comments ready before the 120-day deadline so that the DSC can incorporate the comments into its review. DSC staff wants to present a compilation of draft comments to the Council in early March.

The Board is concerned about the thoroughness of its review given the 120-day review period. Wiens stated that if science is done in a half-baked way because of schedule, it will come back and haunt everyone. Council member Damrell said that because Board members are asking for a longer review period, the Council should go to the Natural Resources Agency and ask for another 60 days. However, Fiorini stated that he does not support a review period longer than 120 days because the problems in the Delta are severe and need to be addressed sooner rather than later. He suggested trying to meet the earlier deadline, and then ask for more time, if needed. Lund said that the amount of time needed to review the draft EIR/S will depend on how well it is written. Norgaard said that the Board will have only two meetings (January and February) to discuss their findings as a group. Ray suggested that a draft letter be written for Isenberg and Collier to sign that will formally ask to increase the review period to 180 days, and Isenberg agreed. (At their November 22 meeting, however, the Board decided to prepare a focused interim report within 90 days, and the request to increase the review period was not sent. See Day 2, Agenda Item 3 of this summary.)

Lund suggested providing interim comments to the DSC. ARCADIS will help Board members with the review, if needed.

For additional information, see

http://deltacouncil.ca.gov/sites/default/files/documents/files/Item_6_14.pdf.

Public Comment

Walter Bourez, MBK Engineers, represents a large group of water agencies that may be affected by BDCP. The water agencies asked MBK Engineers to evaluate the CALSIM Model, which is used for water operations (provides estimates of flow, temperature, etc.) and was also used for the BDCP Effects Analysis. MBK Engineers and Saraceno and Mount feel that some of the assumptions may be faulty. They have discussed this cooperatively with the Department of Water Resources and the Bureau of Reclamation. Bourez asked the DSC and the ISB, when making comments, to link it to the basis for the conclusion because the modeling will change but the change will not be incorporated into the DEIR/S. In this manner, when the modeling changes, the conclusions can be re-evaluated. Bourez offered to make the MBK models available.

Burt Wilson, Public Water News Service, expressed his concern with the timing for public comment on the review of the BDCP draft EIR/S and urged the Council to request a longer comment period. He also expressed concern with executive summaries for the EIR/S chapters, which could be misleading and/or incorrect. Wilson commented on fracking and questioned if people care about water after it leaves the Delta.

Melinda Terry, North Delta Water Agency and California Central Valley Flood Control Association, said that the North Delta Water Agency is helping to fund some of the work on modeling that Bourez mentioned because the agency questions some of the outputs in the effects analysis. Regarding the summaries, Terry cautioned the Council about relying on summaries because details are missing, some conclusions are not substantiated by the data, and they don't disclose what was not analyzed. She urged the Council to look at the level of analysis performed and the baseline. Terry expressed concern that many analyses have been

put off until the future and that there are cumulative impacts among the chapters that are not tied together. Terry said that the chapters are linked, so, for example, the chapter on agricultural resources needs to be read with the chapter on soils. Terry requested clarification on the intent of the Delta Reform Act – was it meant to secure a water supply at the expense of the Delta?

7. Follow-up on Oversight Session: Getting Habitat Restoration Done and Doing it Right

In the July [oversight session](#), the Board presented its [habitat restoration report](#) to the DSC. Jessica Davenport was asked to follow up on implementation of the recommendations in the report. She described some of the work underway to address two of the issues raised in July: integration of habitat restoration with other Delta Plan goals (Delta as place and water supply reliability) and the use of performance measures to track progress and guide adaptive management.

One of the ideas being discussed is development of regional conservation strategies and is consistent with the Delta Plan's identification of six priority restoration areas. Groups such as the Delta Restoration Network (DRN), a group of agency and stakeholder representatives, suggest that conservation strategies should include the Board's recommendations and should coordinate with other activities such as agriculture, levees, and roads.

Many of the restoration areas are available because in the past they were protected from development. Stakeholders have a strong interest in maintaining waterfowl habitat. The DSC has an opportunity to find synergies between these similar interests.

Agricultural land stewardship planning could also be integrated with restoration planning. The Department of Water Resources convened an agricultural land stewardship group to discuss going beyond the mitigation required by BDCP. The group has formed a working group to vet project level strategies, such as good neighbor policies and payments for ecosystem services.

The Delta Plan lists three types of performance measures (see page 46): administrative, output or driver, and outcome. DSC staff developed an internal approach for organizing and tracking existing restoration projects, and they are considering how to align the projects with the performance measures. The Delta Conservancy also wants to track restoration projects in the planning phase, so [EcoAtlas](#), which is based on a geographic information system, is being expanded to include all restoration projects. After a project is implemented, it will be linked to performance tracking.

One of the Board's recommendations was that habitat restoration projects cannot be done in isolation. The Board emphasized the importance of coordinated planning even if it is only two to three projects. Another recommendation was to factor in sea level rise and climate change when planning restoration projects. During the review, Board members found that agency staff were aware of the problems posed by climate change and sea level rise, but not actively including them in the planning. The restoration gains could be lost to sea level rise.

Lauren Hastings said that the Delta Restoration Framework (DRF) and DRN are key to addressing those issues. The DRN brings practitioners together, and many are participating, including consultants. In the past, project planning included lowering elevations to create tidal marsh. Now, practitioners are starting to understand the value of upland areas as sea level rises.

Meyer said that the regional conservation groups will need to work together. Hastings agreed and said that the plan is to have one DRF and a common meeting place to discuss the big picture. Meyer said that the State Coastal Conservancy has made good progress in restoring the Baylands, and they have good performance measures and agreed on goals from the start.

Delta Independent Science Board Meeting
November 21-22, 2013

Restoration groups in the Delta could learn from this experience. Hastings said that the vision is to organize a place where interested parties, including practitioners and managers, will have dynamic, interactive sets of models and visualization tools for evaluating restoration scenarios.

Canuel noted that the development of regional conservation strategies is a great outcome of the ISB's habitat restoration report. Restoration approaches need to be more holistic and consider other factors associated with climate change and not just sea level rise. Canuel also stated that restoration practitioners need to use a range of models including conceptual and analytical models. Crediting the extent to which specific projects can be used to satisfy the habitat requirements contained in the Biological Opinions, is another structural issue that needs to be addressed.

Davenport will be writing another paper on structural issues, including crediting.

Campbell Ingram said that sixteen agencies participate in the DRN, which is sponsored by the Delta Conservancy. Local Delta groups also participate, along with water contractors, consultants, and nonprofit organizations. Participation in the DRN is voluntary. Participants do so because they recognize that the tools to do the restoration are not fully available.

Collier asked who is responsible for accountability in restoration projects and how success is measured. Davenport said that she hopes that question will be answered in the Science Action Agenda. The Delta Plan also includes performance measures. Regarding measuring success, the plan is to produce a report for the public that includes indicators. Hastings said that a key driver is the amount of restored acreage required by the Biological Opinions.

Isenberg said that an opportunity exists to accelerate the pace of restoration. He suggested developing a restoration process through test cases on land owned by public or nonprofit organizations. He also noted that while sea level rise is important, urbanization is a much more pressing issue. Ingram said that additional detailed restoration planning is needed but there is no intent to stop implementing restoration projects while additional planning occurs.

Lund and Hastings briefly discussed the problem of projects affecting each other by changing the tidal energy that reaches each project. Lund suggested including a discussion of what can happen if restoration occurs in a non-coordinated manner.

DSC is interested in the cost of monitoring and the potential for system-wide monitoring. Wiens suggested that system-wide monitoring could be the standard and include a tiered framework so that more detailed monitoring would be done if it adds value to the larger picture. Collier recommended that a third party do the monitoring, to avoid either a perception or a reality of bias in reporting on outcomes. Canuel noted that the monitoring time frame should be carefully considered as monitoring over long time periods is needed to observe an ecological response. Meyer asked how the DRN is planning for monitoring and noted that it must be part of a regional strategy. Ingram said that the focus of the DRN has been on the framework and that monitoring will be addressed once the framework is completed. Fernando said that monitoring is not a simple task and that a central repository for monitoring data will be needed, along with people to organize and manage it. This could be part of the test case that Isenberg suggested. Hoenicke said that the Wetlands Monitoring workgroup of the California Water Quality Monitoring Council is developing protocols for monitoring that are cost effective and sustainable. Resulting data will be added to EcoAtlas. The Board and DSC might benefit from a presentation from the Wetlands group.

Goodwin said that this is one of the reasons that the Science Program will be planning a data summit. It is hoped that the summit will provide direction on what to do with the data once they are collected. This is key to being able to understand trends in a rapidly changing system.

Delta Independent Science Board Meeting
November 21-22, 2013

Fernando again suggested using a small test case to develop a prototype for monitoring and data collection.

Collier asked the Council what the ISB could do to make its reports more valuable. Isenberg responded that distillation of the key principles as bullet points would be very helpful.

For additional information, see

http://deltacouncil.ca.gov/sites/default/files/documents/files/Item_7_13.pdf.

8. Public Comment

Melinda Terry, California Central Valley Flood Control Association, said that she appreciated the Board's comments. Terry was not aware of the DRN. She urged involvement of the local agencies early on. She said that BDCP and the Biological Opinions require habitat restoration to mitigate the biological impacts of the state and federal water projects. This does not leave much land to mitigate the impacts of levee projects. Terry also spoke about the Army Corps of Engineers' levee standards and eligibility for federal funding support in case of floods. Ingram will present information about the DRN to the organizations that Terry represents. Terry asked for quarterly meetings with the DRN. She expressed concern about the competing goals of various agencies/groups.

3:00 p.m. – Adjourned

Day 2: November 22, 2013

1. Welcome

The meeting was called to order at 9:00 a.m., November 22, 2013, by the Chair of the Delta ISB, Tracy Collier.

Eight members of the Board were physically present: Brian Atwater, Elizabeth Canuel, Tracy Collier, Joe Fernando, Jay Lund, Judy Meyer, Richard Norgaard, and John Wiens. One member participated by phone: Vince Resh.

Delta Science Program (DSP) Staff in attendance: Peter Goodwin, Marina Brand, Lauren Hastings, Rainer Hoenicke, and Joanne Vinton

2. Delta ISB Business Matters

In May 2013, Dr. Ed Houde resigned from the Board due to increased commitments at work. Goodwin explained the process DSP used to fill the vacancy. Goodwin and the Board decided to fill the vacancy with someone who has a similar background to Houde: fish ecology. The vacancy announcement was posted on the Delta Stewardship Council website and also distributed to the American Fisheries Society, American Institute of Fishery Research Biologists, National Association of University Fisheries and Wildlife Programs, Coastal & Estuarine Research Federation, and Consortium for Ocean Leadership for posting on their websites. Nominations and applications were invited from the Delta Stewardship Council and the broader Delta Science Community. Applications were accepted through September 3 because the vacancy announcement overlapped with the field season.

Applications were screened using the following criteria:

- Relevance of scientific expertise and experience with the challenges of the Bay-Delta system and the specific needs identified by the ISB
- Scientific accomplishments including publications
- Awards
- Seniority of positions held
- Diversity of research funding relevant to Delta issues
- Availability of the applicant – the time commitments of the ISB can be substantial as exemplified by the BDCP review
- A separate screening was done for potential conflicts of interest

Other criteria were the requirement of the Delta Reform Act that members of the Board are nationally and internationally recognized scientists; and the need to maintain about a 70-30 percent split of outsiders to local experts or scientists with experience in the Delta.

References were taken for the top two applicants, either by phone or by written response, according to the preference of the reference. The federal furlough delayed interviews with the top two applicants until the last week of October. An offer was made to the top applicant, and the applicant, [Steve Brandt](#), was approved by the DSC on November 22.

The Board briefly discussed the November 21 joint meeting with the DSC. All members enjoyed it and would like to hold joint meetings at least once or twice per year.

Delta Independent Science Board Meeting
November 21-22, 2013

The Board discussed the [2013 Draft Water Action Plan](#) (WAP), as requested by DSC Chair Phil Isenberg. The WAP does not mention the Delta Science Plan, but it does mention the DSC and implementation of the Delta Plan. The Board will use this opportunity to comment on the need to incorporate the model and process described in the Delta Science Plan into the WAP. Collier and Lund will write a comment [memo](#) and send it on behalf of the Board to the authors (California Natural Resources Agency, California Environmental Protection Agency, and California Department of Food and Agriculture).

3. Delta ISB Review of the Bay Delta Conservation Plan Draft Environmental Impact Report/Statement (EIR/S)

Norgaard is the Board's lead on review of the EIR/S. He discussed three approaches for reviewing the EIR/S: follow the [charge from the DSC](#), address the overarching issues which seem to revolve around fish and flows, or address the issues that the Board decides are most important including: reverse flows, fish screen efficiency, substituting habitat for flow, the baseline, the range of alternatives, changes in water quality, levees, and climate change. Norgaard is concerned that if the Board uses the charge from the DSC, the review will miss the big picture. Meyer would like to use the charge, so that the Board responds to what the DSC wants.

Board members discussed using Norgaard's list of issues as a framework for their review. The ISB team assigned to each EIR/S chapter will decide how to fit their comments into the framework. Other ideas were to organize comments by chapter, by overarching issues, by a matrix of issues and chapters, or according to [Natural Community Conservation Planning Act findings](#) (as suggested by Brian Gray at the [June 19-20 ISB meeting](#)—see Day 1 agenda item 2). The Board will consider who the audience will be, the message, and who the review needs to reach. An option is to review the chapters and then decide how to organize the comments later. The Board will discuss the organization at their January meeting. In the meantime, Norgaard will develop a formatting structure to be used by all ISB members as they prepare their individual comments. Staff will distribute the formatting structure to each member. Members agreed to complete their chapter summaries prior to the January meeting.

In mid-December and depending on contracting, ARCADIS may develop a memo with attachments that summarizes the work it has done to date for the Council on the BDCP. If developed as anticipated, Board members would be provided with a copy of the memo. Members also hope to meet individually with ARCADIS subject matter experts, as needed.

The Board may de facto end up providing additional comments about the BDCP beyond the 120-day deadline as part of its fish and flows review. The Board also discussed preparing a focused interim report within 90 days, sending it out for comment, and then preparing a final report based on comments received.

The Board discussed the need to finalize its review of the Draft EIR/S during one of its public meetings within the 120-day comment period. The Board also noted that the BDCP has been developed as a joint habitat conservation plan (HCP) and natural communities conservation plan (NCCP). The preferred alternative is the construction of twin tunnels; however, the tunnels are also proposed as a conservation measure and the Board will need to address them as such during its review of the draft EIR/S. HCPs and NCCPs are required to give landowners regulatory certainty in spite of increasing scientific uncertainty.

Board members were interested in public comment about assumptions used in the CALSIM modeling that Walter Bourez of MBK Engineers gave during Thursday's meeting. They requested a written report from Bourez, who will try to have it ready in early January.

Delta Independent Science Board Meeting
November 21-22, 2013

Board members expressed concern that public comment about the EIR/S could take up too much time during their meetings. They discussed the idea of accepting written comments only that address science rather than policy issues. The Board also decided to limit speaker's times to three minutes, if needed.

Public Comment

Timothy Mussen, Sacramento Regional County Sanitation District—Mussen asked if public comment about the BDCP Draft EIR/S review will always need to be written. Lund said that spoken comments will be accepted, but if many people want to speak, a time limit per speaker will be set. Mussen also requested that this protocol be implemented only for the BDCP Draft EIR/S discussion.

4. Fish and Flows Program Review

Meyer explained the [draft plan](#) for the fish and flows review. The next step is to collect more information. Fish and flows team members decided that the survey described in the plan would take too long to fill out and therefore, response could be minimal. They discussed sending a more general (limited) survey that would only take about 10-15 minutes to complete and include a question about the three people in their agency, etc. that the ISB should talk to. Then based on the results of the first survey, they would target a few individuals for more detailed questions and responses. The team would like to receive written materials, and also conduct interviews with small groups of agency representatives, as they did for the habitat restoration program review.

The team is not sure who should receive the survey. They would also like to hear from the public, so might develop a web form, such as Google Forms, for submitting comments and might announce their review plan at the IEP workshop in February.

Public Comment

Audrey Patterson, San Joaquin Tributaries Authority—Patterson likes the idea of setting up a web form for submitting comments. She said that the public needs to have a way to comment on Delta ISB activities. A web form will allow more people to be involved, especially groups that have been uncertain how to give comments.

5. Public Comment (For matters that were not on the agenda, but within subject matter jurisdiction of the Delta ISB.)

None.

6. Meeting Outcomes

Board members discussed the agenda for their January 16-17 meeting. The main agenda item will be review of the BDCP EIR/S. They also decided to limit verbal public comment to three minutes and that written comments on the science issues can be submitted separately. This directive is to be included as part of the meeting notice.

11:20 a.m. – Adjourned