

Meeting Summary

Day 1: April 22, 2013

1. Welcome and Introductions

The meeting was called to order at 9:08 a.m., April 22, 2013, by the Chair of the Delta Independent Science Board (ISB or the Board), Dr. Richard Norgaard. Nine members of the Board were present: Brian Atwater, Tracy Collier, Ed Houde, Harindra (Joe) Fernando, Jay Lund, Judy Meyer, Richard Norgaard, Vince Resh, and John Wiens. One member participated by phone: Liz Canuel.

None of the Delta ISB members made any new disclosures.

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

2. Delta Stewardship Council (DSC) Chair's Report

Phil Isenberg said that the vote on the Delta Plan and the final regulations for the Delta Plan will take place at the May 16-17 DSC meeting.

Senator Wolk has introduced a bill that would enact the California Clean, Secure Water Supply and Delta Recovery Act of 2014, which, if adopted by the voters, would authorize the issuance of bonds in an unspecified amount to finance a clean, secure water supply and Sacramento-San Joaquin Delta recovery program. It would also repeal some existing sections of the Water Code and would exempt Natural Communities Conservation Plans (NCCPs) and Habitat Conservation Plans (HCPs) from the Delta Plan. The ISB's Habitat Restoration report will be relevant to Wolk's bill, which is being considered in the Senate Committee on Natural Resources and Water.

Isenberg announced the new Council member, Frank C. Damrell, Jr., who is a principal at Cotchett, Pitre, and McCarthy and was a distinguished Federal Judge of the United States District Court, Eastern District of California.

In 2014, three Council members will be leaving, and the Council will have a new chair.

3. Delta ISB Chair's Report

Norgaard announced that this meeting is a working session. Board members plan to finish the habitat restoration report, talk about lessons learned while working on the habitat restoration review, and listen to a preview of Wiens' presentation at the Interagency Ecological Program (IEP) conference. On Day 2, Board members will discuss the Bay Delta Conservation Plan and EIR/EIS.

4. Lead Scientist's Report

Goodwin introduced the new Deputy Executive Officer for the Science Program, Rainer Hoenicke. Hoenicke hopes to transfer knowledge that he gained about the lower estuary while working for the San Francisco Estuary Institute to the upper estuary. He has also worked at the Moss Landing Marine Labs, on acid precipitation issues in Las Vegas, on restoration efforts in Santa Monica Bay, and for the California Natural Resources Agency. He specializes in water quality and toxics.

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Goodwin explained the independence of the lead scientist, and then announced the following events:

- Brown bag luncheon seminar on tidal marsh restoration on April 29
- CABA seminar on tidal marshes and fish on June 10 at U.C. Davis. An effort will be made to summarize information presented at this seminar in a paper that would be submitted to the online journal, *San Francisco Estuary and Watershed Science* (SFEWS) for possible publication.

Isenberg proposed using SFEWS as a forum for scientific discussion, and others agreed.

- The latest issue of SFEWS
- Brown bag luncheon seminar on the Severn barrage project on July 17

The Severn Estuary tidal bores have a huge tidal range which will be captured for power. The project was delayed due to environmental reasons, but global warming has become too important to ignore power from non-carbon sources.

- California Water and Environmental Modeling Forum (CWEMF) and IEP workshops will be held the week of April 22. There will be a special session at the IEP Workshop on collaborative science – what happens if you are engaged in collaborative science and people still do not agree?

CWEMF promotes the collaborative development of models. Founded by Hugo Fisher, the goal is to look at what would/should be the next generation of models. Additional modeling expertise is needed within the agencies.

- Applications are being accepted through May 20 for the 2013 Delta Science Fellows Program
- Delta Science Plan—An [annotated outline](#) was presented to the DSC in April. A more detailed plan will be ready for the June DSC meeting. The plan will be organized around where Delta science should be. The Board will be asked to review the plan. The plan will include a section on how to conduct science so that it is flexible, and how to support research that is risky, but could make a big impact.

Norgaard said that current funding to support scientists and research is too low. Goodwin said that a cohesive science plan is needed first on which requests for additional funding can be based. Isenberg said that the science plan will help policymakers understand what science can and cannot do. The more understandable the scientific recommendations, the more likely they will be adopted as public policy.

Lund said that organization of public science needs to be very clear and plain enough that it can be summarized on one page. BDCP and other efforts need to fit under one science structure that needs to be built. The resulting science will be different from the current organization, and will be different from the National Science Foundation model. Lund is concerned that the Board is trying to do too much. He said that the Science Plan is important, and it needs to be good.

Fernando said that the NSF will reduce the number of grants by about 1000 next year. He suggested that a few people need to decide what the critical science issues are and how to direct limited resources to those issues.

5. Discuss Delta ISB business matters

Board members discussed and revised their [review assignments](#) for the Bay Delta Conservation Plan Administrative Draft Environmental Impact Report/Statement (BDCP ADEIR/S). Jeff Mount was going to help with the review, but now has a potential conflict due to his contract with Bechtel. Meyer asked if the Board could get help from ARCADIS. Brand explained that ARCADIS will be looking at the entire ADEIR/S in terms of policy. The Board needs to look at the science.

The DSP panel on the effects analysis has been delayed, possibly past the comment deadline for public review of the BDCP Draft EIR/S.

6. Habitat Restoration Review

Wiens gave a brief overview of his [PowerPoint presentation](#) for the IEP Workshop. Board members suggested that he add an overall finding about the lack of system coordination and adaptive management planning although Houde stated that the report should comment on science, not adaptive management.

Board members discussed the most recent version of the [report](#). They suggested changes to Table 1, which lists the agencies and people that Board members met with. They questioned how restoration projects can be prioritized when each was started at a different time and in different places. One board member indicated that he was uncomfortable with distributing the report without pertinent references and that at the very least, the Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) and the [paper about the CASCade model in PLOS One](#) references should be added to the report. The report also needs examples to illustrate, for example, adaptive management, and each of the Board's recommendations. The recommendations in the report should be made more firm by using "do" instead of "should." The report does not identify which agency should do what. Responsible parties are not listed because the Board decided not to single out agencies. If the Board receives comments on the final report after it is posted, comments will either be held until the next habitat review or the report will be amended.

Some members suggested that the Board submit the report to the *San Francisco Estuary and Watershed Science* (SFEWS) online journal for peer review and publication. Others disagreed because peer review could lead to changes to the report. Also, the report is an evaluation of current efforts rather than scientific investigation. Norgaard will talk to the SFEWS editor, Sam Luoma.

The report was approved with edits.

Board members discussed the lessons learned from working on the habitat restoration review. For future reviews, they will keep notes as the review progresses, and they will set up a schedule. They cannot review programs in detail, only the big oversight issues. They should decide ahead of time what to cover and what to ignore. They need to think about who they really need to talk to, and what to ask for from presenters. The questions used for the habitat review need to be updated. They should start with an annotated outline and then synthesize information as the review progresses. The two-person interviews of agency staff were useful, as were discussions at the Bay Delta conference, but Board members need to write their notes immediately. The Board did not interview stakeholders; possibly they could consider doing that during the next review.

The report reviewed the science process, but not the science itself in part because habitat restoration does not ask specific science questions. Important questions that relate to the next

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topic, fish and flows, are: Do unresolved science questions underlie the review? How should science incorporate uncertainty and non-linearity? What metrics should be used for flow? Board members suggested that they ask presenters what the critical science issues are, and that they hold a workshop to gather research priorities.

The report and a cover letter will be sent to the participants and legislative aides.

Public Comment

John Downs, California Department of Fish and Wildlife (CDFW), Water Branch – Downs works with the Fish Restoration Program Agreement (FRPA) program for CDFW. In February, Carl Wilcox (also CDFW) proposed that the Branch try to standardize tidal restoration monitoring. So far, the Branch has developed a list of metrics, but is also working on what they need to know, where the gaps are, and how to synthesize the data. He appreciates that this point was made in the Board's habitat review report.

In brief written comments, Downs also mentioned a master plan for restoration based on ecosystem needs, function, and location; and San Francisco Estuary Institute's online database of restoration projects.

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

None.

4:43 p.m. – Adjourned

Day 2: April 23, 2013

1. Welcome

The meeting was called to order at 9:02 a.m., April 23, 2013, by the Chair of the Delta Independent Science Board (ISB or the Board), Dr. Richard Norgaard. Nine members of the Board were present: Brian Atwater, Tracy Collier, Ed Houde, Harindra (Joe) Fernando, Jay Lund, Judy Meyer, Richard Norgaard, Vince Resh, and John Wiens. One member participated by phone: Liz Canuel.

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

2. Bay Delta Conservation Plan (BDCP)

The Board discussed its draft memo on BDCP Chapter 7, which was reissued in March along with the related Chapter 3. The Board reviewed Chapter 7 and section 3.6 of Chapter 3 and finalized the memo. The Board observed that Chapter 3.6 does not discuss implementation of adaptive management or how Chapter 3.6 affects Chapter 7. Atwater suggested changes to the structure of the memo in order to improve it. Meyer noted that steps 5 and 6 of the adaptive management wheel in Chapter 3.6 are in the wrong order and should be switched. Board members then discussed the section on BACI (before-after/control-impact) design in Chapter 3.6. Wiens said that the discussion was naïve and will cause problems later. Chapter 3.6 discusses monitoring, but Chapter 7 does not. Wiens noted that BDCP imposes a slow decision-making process with many decision points. This approach virtually assures that adaptive management will not happen in the Delta's dynamic system. The consensus-driven adaptive management decision-making proposed by the BDCP will be a major stumbling block.

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The Board also noted that there will be multiple adaptive management efforts occurring and that they should be coordinated. If not coordinated, the differing plans may keep each other from being successful.

The [BDCP memo](#) was approved with edits.

Board members next discussed their review of the BDCP EIR/S. They decided that their review should be 50 pages or fewer, which means one or two pages per chapter. Wiens' concern is that their effort will be ignored. The review will need to include a three-page summary. Meyer said that BDCP is supposed to be incorporated into the Delta Plan, but the DSC does not have discretion, so influencing federal agencies is more important.

3. Discuss the next Delta scientific program review

The Board's next science program review will be about fish and flows. Team members from the Board will be Joe Fernando, Ed Houde, Jay Lund, and Judy Meyer. The audiences for the review will be scientists, managers, and policymakers. The focus will be on scientific programs, not controversies. Board members will request some interviews and testimony, but their plan to collect information will be more structured than it was for the habitat restoration report. They will try to set up two sessions at the State of the Estuary conference—one with scientists, and another with managers and policymakers. They will collect background information in the form of short reports from programs. They might also ask DSP to convene a panel, possibly in conjunction with the State Water Resources Control Board (SWRCB), or pull people from previous panels, or use information from previous panels, or use syntheses from previous panels. The IEP is doing something similar, so the Board should talk to someone from that organization. Board members will use all of this information to organize interviews.

Wiens suggested that the fish and flows team describe areas of controversy and agreement, but not try to resolve them. He also suggested that the team include research needs or at least how to organize them. Lund added that he would prefer to have agencies meet to establish a common set of research needs. One of the recommendations of the fish and flows report may be to organize a workshop to identify research needs. Norgaard suggested including a section on how to strengthen IEP. This review will be postponed if the BDCP ADEIR/S review needs to be completed over the next few months.

Sam Harader, DSP, said that two more focused workshops will follow the SWRCB scoping workshops. Dr. Brock Bernstein (SWRCB) identified uncertainties and disagreements, so the focused workshops will be about Delta outflow, X2, and interior Delta flows.

Hoenicke said that uncertainty and disagreement need to be clearly separated.

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

None.

5. Meeting outcomes

The next meeting is a teleconference on May 17 from 9 to 11 am. Board members will discuss their initial impressions of the BDCP ADEIR/S and an update to their workplan diagram.

11:36 a.m. – Adjourned