

DEPARTMENT OF WATER RESOURCES

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September 16, 2013

Peter Goodwin, Ph.D.
Delta Stewardship Council
Delta Science Program
980 Ninth Street, Suite 1500
Sacramento, California 95814

Comments on the *Second Draft Delta Science Plan*

Dear Dr. Goodwin,

The Department of Water Resources (DWR) appreciates the opportunity to review and comment on the *Second Draft Delta Science Plan*. Attached are specific comments on the document from DWR.

We look forward to working further with the Delta Science Program in this strategic development process. If there are any questions on the attached comments, or you would like additional information, please feel free to contact Stephani Spaar at the Division of Environmental Services at (916) 376-9703.

Sincerely,

A handwritten signature in blue ink that reads "Stephani Spaar For." followed by a period.

Dean F. Messer, Chief
Division of Environmental Services

Attachment

cc: Sean Bagheban
FloodSAFE Environmental Stewardship and Statewide Resources Office

**California Department of Water Resources
Review Document Comment Form**

Document: Second Draft Delta Science Plan

Name: Cindy Garcia, Louise Conrad, Karen Gehrts, Kristin Garrison

Affiliation: DWR

Date: September 16, 2013

| Comment # | Page # | Chapter, Heading, or Appendix | Line # (or Box-Figure#) | Comment |
|-----------|--------|---|-------------------------|---|
| 1 | ii | Second draft Delta science plan | 2 | Once "Delta Science Plan" is use the first time it should be followed by "(Plan)" then "Plan" should be used consistently throughout the document to refer to the Plan. |
| 2 | iii | Audience and Participants of Delta Science Plan | Table | Most of the roles of the various participants in the Science Plan look fine, but the synthesis of scientific studies into information is not included. Only in the "Delta science community" is "synthetic thinking" included. This is a critical component of the Science Plan that is not reflected in this introductory table. For example, the IEP has recently formed the Management, Analysis and Synthesis Team for the purpose of synthesizing IEP data. I suggest that synthesis activities be included at least for the Science Programs in the Delta, if not for other groups as well. |
| 3 | iii | Audience and Participants of Delta Science Plan | Table | <p>I have divided my comments to address each of the 2 columns (leftmost or rightmost) then and numbered them, and have indicated text that I have inserted by <u>underlining</u> it.</p> <p>My comments for the leftmost column are as follows:</p> <ol style="list-style-type: none"> 1. "Audiences and Participants" should include individual table rows and descriptions for: <ol style="list-style-type: none"> a. Science Steering Committee b. Adaptive Management Forum c. Policy Science Forum 2. How will the "Science Programs in the Delta" group share their roles, responsibility, and work? 3. The "Science Programs in the Delta" group should include Suisun Marsh (mentioned on page 5), and the Municipal Water Quality Program Investigation program (concerned with impacts in the Delta to drinking water quality). |

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| | | | | <p>4. Is the "Delta Science Community" the same group as the "Science Steering Committee" mentioned on page 2. Naming conventions should be used consistently throughout the document to avoid confusion.</p> <p>My comments for the rightmost column are as follows:</p> <p>5. "Use the Delta Science Plan to:" section talks about "what" to do but doesn't clarify "how" or "with who" (except for the Delta Science Committee). If this plan will build an overall Delta Community interested in the science of the Delta it should start with a brief mention of "who" to explain the organizational connection so that collaboration and responsibilities become apparent.</p> <p>6. "Use the Delta Science Plan to:" section does not mention adaptive management.</p> <p>7. The first box down in this column, the single bullet point should read: "Guide Delta Science Program activities including leading numerous Delta Science Plan actions (i.e., Develop, Update and Implement the Science Action Agenda <u>and the State of the Bay Delta Science</u>)"</p> <p>8. The second box down in this column begins with "Inform best available science...". What does this really mean? How do you inform an action?</p> <p>9. In the third box down in this column, second bullet point should read: "Provides the context and shared approach for implementing priority <u>Delta science actions and activities</u>"</p> <p>10. The third & fourth boxes down in this column should include an additional bullet point that reads: <u>Participate in the Policy Science Forum</u></p> <p>11. The fifth box down in this column, first bullet point should read: "Recognize and provide input on priority Delta science needs, <u>activities and actions</u>"</p> <p>12. The fifth box down in this column should include these 2 additional bullet points:</p> <ol style="list-style-type: none"> a. <u>Guide development of Restoration Framework and Water Management Framework</u> (mentioned on page 3) b. <u>Guide the work of the Policy Science Forum</u> <p>13. In the sixth box down in this column, I have a general question regarding who is the Policy Science Forum? Does this group include: Delta Independent Science Board, Delta Managers, Delta Science Community, Science programs in the Delta (all of which are mentioned in the Plan)? The Policy Science Forum should also include the Delta Stewardship Council and the public.</p> |

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| | | | | <p>14. The sixth box down in this column should include an additional bullet point that reads: <u>"Guide participation in the annual Adaptive Management Forum and assign adaptive management liaisons"</u></p> <p>15. In the seventh box down in this column, is the first bullet point supposed to read: "Provide input on priority Delta Science <u>Plan</u> activities"?</p> <p>16. In the eighth and last box down in this column, begins with "Inform oversight of...". What does this really mean? How do you inform an action?</p> <p>17. The eighth and last box in this column should include an additional bullet point that reads: <u>Guide the work of the Policy Science Forum</u></p> <p>I have two additional general questions regarding the table included on page iii:</p> <p>18. Who is responsible for the State of the Bay Delta Science summary (mentioned on page 2)?</p> <p>19. Who is responsible for the strategic and topical support for effective adaptive management (mentioned on page 3)?</p> |
| 4 | vii | List of Acronyms | N/A | Why is SBDS The State of Bay Delta Science <i>italicized</i> ? |
| 5 | 1 | Why a Delta Science Plan? | 11 | This line should read:... Management actions of achieving the coequal goals of a healthy ecosystem and <u>a reliable</u> water supply. |
| 6 | 1 | Why a Delta Science Plan? | 21 | The first word in this line should be "address", rather than "addressing" |
| 7 | 2 | Executive Summary | 1-16 | In addition to these descriptions of the three-part Strategy, it would be instructive to have an anticipated timeline for completion of each of these parts. |
| 8 | 2 | What Does the Delta Science Plan Achieves? | 17 | This section header should be reworded to read: "How Will the Delta Science Plan Be Achieved?" Since it talks about the "how" rather than the "what." |
| 9 | 2 | What Does the Delta | 23 | The objectives are listed here and they're listed again on page 6 which is redundant. |

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| | | Science Plan Achieves? | | |
| 10 | 2 | Manage Scientific Conflict | 24 | The Plan should clarify who determines, and how the high-stakes are determined. |
| 11 | 2 | Manage Scientific Conflict | 25 | The second sentence on this line starts with "Open and unresolved...", but it should start with "Unresolved" since open conflicts are unresolved conflicts. |
| 12 | 2 | Coordinate and Integrate Delta Science in a Transparent Manner | 34 | This line should read: "... Monitoring, data management, analysis, synthesis, and communication is proposed through the <u>Science Action</u> ..." |
| 13 | 3 | Enable and Promote Science Synthesis | 1 | The first sentence should read: "The <u>Plan</u> ..." once "Delta Science Plan" is used the first time it should be followed by "(Plan)" then "Plan" should be used consistently throughout the document to refer to the Plan. If "Plan" is not going to be used throughout the document then the word "plan" should be substituted with "Delta Science Plan". |
| 14 | 3 | Enable and Promote Science Synthesis | 1 | Is the "Science Steering Committee" the same as the "Delta science community" mentioned in the table on page iii? These are two different groups then the Science Steering Committee should be added to the table on page iii. |
| 15 | 3 | Build Effective Policy Science Interactions | 4 | The first sentence should read: "The <u>Plan</u> ..." once "Delta Science Plan" is used the first time it should be followed by "(Plan)" then "Plan" should be used consistently throughout the document to refer to the Plan. If "Plan" is not going to be used throughout the document then the word "plan" should be substituted with "Delta Science Plan". |
| 16 | 3 | Build Effective Policy | 5 | Who is the "Policy Science Forum"? This group should be added to the table on page iii. |

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| | | Science Interactions | | |
| 17 | 3 | Strategic and Topical Support for Effective Adaptive Management | 8 | "Restoration Framework and Water Management Framework" should be added and clarified in the appropriate table rows on page iii. |
| 18 | 3 | Strategic and Topical Support for Effective Adaptive Management | 9 | "Adaptive Management Forum" should be added and clarified in the appropriate table rows on page iii. |
| 19 | 3 | Strategic and Topical Support for Effective Adaptive Management | 10 | "Adaptive Management Liaisons" should be added and clarified in the appropriate table rows on page iii. |
| 20 | 4 | What is the problem? Found | 27 | The word "desperate" should be substituted with a more appropriate word. For example, vital, important, essential, etc. |
| 21 | 5 | How Does the Delta Science Plan Address the Problem? | 14-16 | These sentences state that the Science Plan creates the "institutional capacity" and "infrastructure" for supporting and making science available. I would be interested in understanding the specifics of how this will happen: will new positions be created for program managers? Will funds be set aside to set up web-based infrastructure to enhance transparency? |
| 22 | 5 | How Does the Delta Science Plan Address the Problem? | 16 | Typo: at the beginning of the sentence, change "It" to "The" |

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| 23 | 6 | Science Action Agenda and the State of the Bay Delta Science | 3 | This sentence should read: "The State of the Bay Delta Science (SBDS) is a summary synthesis <u>report</u> ..." |
| 24 | 6 | Science Action Agenda and the State of the Bay Delta Science | 3-6 | It is not clear here what sort of product the SBDS is- is this a written report (produced by whom?), a conference proceeding, a workshop, etc.? |
| 25 | 6 | What Are the Objectives of the Delta Science Plan? | 8 | Listing the objectives is redundant since they are already listed on page 2. |
| 26 | 6 | What Are the Objectives of the Delta Science Plan? | 10 | Same comment as on above pg 2 - The Plan should clarify who determines, and how the high-stakes are determined. |
| 27 | 6 | What Are the Objectives of the Delta Science Plan? | 13 | Similar comment as on above pg 2 – This line should read "scientific disagreement is healthy and even desirable, unresolved conflicting scientific findings...". Delete the words "open and" since open conflicts are unresolved conflicts. |
| 28 | 6 | What Are the Objectives of the Delta Science Plan? | 18 | The word "plan" in this line should be capitalized since it is referring to the Delta Science Plan (Plan). This type of correction should be consistent throughout the document as there are many occurrences where "plan" or "Delta Science Plan" is used inconsistently to refer to the Delta Science Plan. |
| 29 | 8 | What will the Delta | 21 - 29 | This paragraph is redundant from page 2 under the heading of "What does the Delta science plan achieve?" |

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|-----------|--------|-------------------------------|----------------------------|--|
| | | Science Plan achieve? | | |
| 30 | 10 | 2- Organizing Science | Box- "Efforts to Build On" | One suggested addition to this box: the IEP Science Advisory Group, which is occasionally tasked with independent review of IEP monitoring programs. In 2013, the SAG and other scientists conducted a review of the Delta Juvenile Fishes Monitoring Program and this review included a specific examination of how well the program is doing with providing information for management. |
| 31 | 11 | Actions 2.2 | 13 | The Action Participants include: the Delta Plan Inter-Agency Implementation Committee, and the Lead/Chief Scientists. Who are these entities? They should be added and clarified in the appropriate table rows on page iii. |
| 32 | 23 | 4- Adaptive Management | Box 4-1 | I like the bullets included here for areas that need to be enhanced to support a science infrastructure. One missing item, however, is that in addition to opportunity and training, we need <i>more</i> scientists. Given the sheer volume of the work that needs to be done, we are short-handed, even though in some cases we do have good expertise in house. Can the Delta Science Plan create mechanisms to expand our scientific workforce, in addition to supporting the existing one? |
| 33 | A-1 | Science Action agenda | 8 | The performance measures do not address Programs that don't routinely work under a work plan? |
| 34 | A-1 | Quality | 17 | This line should include an explanation of expected Quality Assurance/Quality Control (QA/QC) data quality objectives, quality assurance program plan, and data statistical summaries. |
| 35 | A-1 | Conflict | 23 | This appendix is not address any conflict resolution alternative strategies in case the strategies mentioned in chapter 3, 4.5, and 4.6 are ineffective or unsuccessful. |
| 36 | A-1 | Effectiveness | 27 | This appendix is not address any alternatives to the routine surveys in case the surveys are ineffective. |
| 37 | C-1 | Appendix C | 5 | How was the cycle length for the Action Agenda determined? |
| | E-1 | Content & Use | 7 | This sentence should read: "The State of the Bay Delta Science (SBDS) is a summary synthesis report..." |
| 38 | | General Comment | | I like the new layout and new appendices are super helpful. I'm still a little confused about the Science Action Agenda and the State of Bay-Delta science. I think I'm looking for more detail then is realistic for where you are at in the process. |
| 39 | | General Comment | | The DSC will develop the Science Action Agenda. Agencies will use the Action Agenda to help in developing their own "science work plans." There is no definition of exactly what a science work plan is. |
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