From: amgibr-lttr@yahoo.com
Sent: Tuesday, July 29, 2014 3:31 PM
To: BDCP.Comments@noaa.gov
Subject: BDCP dEIR/EIS comment letter
Attachments: BDCP comments to NMFS.Gib.docx

We submit the **attached** comment letter on the BDCP and its dEIR/EIS, which is also **reprinted below**. Thank you for the opportunity to comment.
Alan and Meg Giberson

July 29, 2014

Via e-mail: BDCP.Comments@noaa.gov

BDCP Comments
Ryan Wulff, NMFS
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814

RE: Comments on the BDCP and Associated Draft EIR/EIS

Dear Mr. Wulff:

Thank you for the opportunity to comment on the Bay Delta Conservation Plan (BDCP) and related draft Environmental Impact Report/Environmental Impact Statement (dEIR/S). These items are insufficient as informational documents. Failures include incorrect description of the project, failure to consider all viable alternatives to the project, and insufficient analysis of significant aspects and impacts of the project. The project should proceed, if at all, only after re-evaluation in refined draft documents, and after those refined drafts have been made available for further public review.

The BDCP and its dEIR/S do not succeed in providing important and necessary information to the public, including, without limitation:

- failing to make information in the BDCP and dEIR/S concise and readily available to the public,
- failing adequately to convey the extent of energy to be used by the "BDCP proposed project" (preferred alternative),
- failing to reduce reliance on water supplied through or from the Delta,
- failing to address climate change adequately,
- failing to include a reasonable estimate of all costs, and
- failing adequately to analyze all proposed viable alternatives.

Information in the BDCP and dEIR/S is not clear, concise or readily available to the public

Documents of intense public importance should present clear, concise information that is readily available to the public. The BDCP and associated draft Environmental Impact Report/Environmental Impact Statement (dEIR/S) typify documents of tremendous public importance. The BDCP and dEIR/S are predicated on providing a framework for authorizing the issuance of permits for "taking"i protected Delta species in the context of continuing and potentially increasing diversions from the Delta and its watersheds, while achieving the mandated goals of protecting, restoring and enhancing the declining ecosystem of the Sacramento-San Joaquin Delta (Delta).

The California Environmental Quality Act (CEQA) Guidelines clearly state that public participation is an essential part of the CEQA process.ii Yet, the BDCP and dEIR/S have been published in a formatiii that impedes the public's ability meaningfully to evaluate all relevant aspects—and thus, impacts—of the project.

BDCP 1418

Inability to conduct convenient searches hinders public review and input. The entire document, for instance, cannot be searched using one search query. Multiple searches are needed for a single query because of the number of document parts involved. The BDCP itself includes 12 chapters and 25+ Appendix parts; the dEIR/S comprises 185 separate parts. As a result, a search for a single term in the BDCP and dEIR/S would involve repeating the same query over 220 times, through each of the individual chapters and sections. In view of the internal inconsistencies in the dEIR/S (discussed, below), the ability to complete sufficient searches is critical to accessibility and the public's ability to file comments timely. Additionally, the dEIR/S Index includes thousands of page references for specified topics, but no hyperlinks. Hyperlinks throughout the BDCP and dEIR/S would improve information accessibility and public's ability to search, review and respond timely with comments on the BDCP and dEIR/S.

Individual sentences and paragraphs cannot be saved reliably to another file (only parts of the desired text typically can be copied, requiring multiple attempts to reproduce a selected text). Notes, highlighting, etc., cannot be saved using the standard pdf "annotate" functions. Annotations to the text of the BDCP and dEIR/S cannot be saved without saving the entire annotated document to a separate file on separate media (desktop or flash drive). However, the newly-saved document cannot be copied normally (because copying results in nonsense characters), and needs to be re-typed for use in a comment letter, making even the ability to save to a flash drive problematic.

Time for response is inadequate; format is not user-friendly

CEQA Guidelinesiv recommend that the "text of draft EIRs ... for proposals of unusual scope or complexity should normally be less than 300 pages" while also recommending public review for such documents of $\leq$ 60 daysv. Since the bloated BDCP and dEIR/S documents (+30,000-pages) are +100 times the length of the described dEIR of "unusual scope or complexity", one hundred times that review time would be 6,000 days, not the $\pm$182 days that have been granted. The review period granted is inadequate under CEQA standards.

Full disclosure and complete public involvement are signature elements of CEQA. However, this BDCP and dEIR/S combination appears to be an electronic document dump. It does not constitute full or adequate disclosure and its obfuscated contents preclude proper public involvement. Information must be comprehensible in order to be useful. The agencies that have created this collection of documents should reissue the BDCP and DEIR/S as a searchable document on DVD disc, with hyperlinks and with adequate additional time granted for public review, so that the public review function, which is essential under CEQA, can be adequately and timely performed.

Information about energy impacts of water conveyance should be readily available to the public; information should be clear and concise.

Information about preferred alternative CM1's energy use disseminated through the BDCP and dEIR/S process is misleading, as it claims that the proposed twin tunnel alternative, will save energy by using gravity flow ("a conveyance system designed to use gravity flow to maximize energy efficiency..."vi), and "involves ... two tunnels to convey water by gravity; no intermediate pumping plant; and operations guided by Scenario H (described in Section ES.5.2.2)."vii This fails as adequate public disclosure because it fails to mention in this broad claim the impact(s) of the 18 to 21 new pumps (500 horsepower each) that will be used to lift water from the intake tunnels into a proposed new forebay. While clean energy sources may be sought as a power source for these 18 to 21 new pumps, it is clear the large amounts of energy that will be expended could be better used in other ways that don't involve the transfer of enormous amounts of water over long distances.

The dEIR/S states, that "[s]ome utility grid reinforcement and upgrade may be needed to accommodate this large new pumping load." viii It also states: "Alternatives 4 and 5 could result in a net increase or decrease in GHG emissions, depending on the analysis condition (2025 or 2060) and pumping scenario."ix With no easily-searchable reference to either analysis condition 2025 or 2060, or to pumping scenario(s), this statement is vague and uninformative. The projected increase or decrease of GHG emissions should be clearly set forth in the dEIR/S Executive Summary and elsewhere in the documents, so that the documents reflect proposed and foreseeable conditions.

The dEIR/S states "caution is required when interpreting outputs from the model results as a basis for trying to predict energy consumption associated with water deliveries."x "Also, different regulatory

environment settings in the CALSIM-II model would produce different allocations and system water deliveries, thereby also incidentally affecting energy consumption."xi As the dEIR/S implies, the analysis done does not adequately discuss the different regulatory settings that would produce differing energy figures. Others have discussed the inadequacy of the CALSIM-II model used in these calculations. It is outdated; calculations should be done with a more updated model.

While claiming, "[i]t is unlikely that any new generation will be constructed solely to provide power to the BDCP conveyance (or an alternative) facilities...", the DEIR/S states "[p]urchased energy may be supplied by existing generation, or by new generation constructed to support the overall energy portfolio requirements of the western electric grid."xii The statement that energy *may be* supplied through these sources is not sufficiently definite to address a very significant issue. Energy sources that contribute to increased GHG, and consequently global warming, must be specified and evaluated in the document.

"PG&E's distribution system would likely provide power for the through Delta/separate corridors alignment (Alternative 9) because the system currently reaches most of the proposed facilities."xiii Again, guesses as to the energy use of the proposed alternative are not an adequate basis for public review. This is an inadequately-addressed problem that requires more certain statements in order for public review to be meaningful.

Interbasin transfers require effective opportunities for informed public participation

The BDCP, including all alternatives, is a clearly plan to transfer water from one basin to another, and thus effective opportunities for public participation are required. As mentioned throughout this comment, informed public participation in this case cannot occur because the public is not able to access pertinent information, and information provided is conflicting, incomplete or obfuscated.

As stated above, the proposed BDCP (twin 40-foot tunnels) would exacerbate the existing over-allocation of water from the Delta.

As the dEIR/S states:

> [t]he purposes of the proposed actions under the BDCP are to achieve the following. ...
> 3. Restore and protect the ability of the SWP and CVP to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water, consistent with the requirements of state and federal law and the terms and conditions of water delivery contracts held by SWP contractors and certain members of San Luis Delta Mendota Water Authority, and other existing applicable agreements.
> The above Purpose Statement reflects the intent to advance the coequal goals set forth in the Sacramento–San Joaquin Delta Reform Act of 2009 (Delta Reform Act) of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem.xiv

Succeeding text claims to limit the breadth of the statement above by relating it to the upper limit of legal CVP and SWP contract deliveries as an "upper bound" for alternatives, and not a target. However, setting an upper bound for the CVP and SWP deliveries, which is clearly far above the historical full natural flows, biases consideration of projects, and skews evaluation of alternatives. It seems to offer validation for an amount of water that was never delivered and likely cannot be delivered from current sources without serious environmental consequences.

Perhaps these documents are suggesting that increased amounts of water, over historic CVP/SWP deliveries, could be obtained through other Northern California sources. This might account for the larger-than-historic upper limits included in the purpose statement. Such origin-of-waters change has not received study in this BDCP/dEIR/S process, and language proposing delivery of these larger amounts should be eliminated from these documents, barring further information, review and opportunity for public comment.

The SWRCB found that "mean annual unimpaired or full natural flow in the Delta Watershed between 1921 and 2003 was 29 million acre-feet per annum (AFA), with a maximum of 73 million AFA in 1983. ... The Central Valley Project and State Water Project hold ... permits and licenses within the Delta watershed that account for 53% of the total face value of the water rights within the watershed."xv The total face value of those water rights and licenses is approximately 245 million AFA.xvi Thus, full deliveries of CVP and SWP contract amounts would take 53% of 245 AFA, or 129.5 AFA, which amounts represent almost twice the largest amount of full natural (unimpaired) watershed flow in the reported 80-year period. The "purpose" of restoring and protecting the ability of the SWP and CVP to deliver up to full contract amounts has no place in this document. The DEIR/S should be purged of this "purpose" and re-evaluation of

alternatives should be done, along with recirculation of the documents for adequate public assessment.

The National Research Council (NRC) found that "in some basins, the Water Board has overallocated available supply by more than 800 percent (measuring supply as average annual runoff)."xvii

The NRC also noted "[w]ater scarcity has long existed in much of California.... The magnitude or intensity of scarcity has grown over time and it continues to grow."xviii The current drought, with the prospect of decades more, requires a purpose and a solution that do not promote the unattainable goal of allocating water which cannot be satisfied under any likely scenario.

Selection of the dual conveyance twin tunnels does not demonstrate compliance with state policies regarding reduced reliance on the Delta

The Delta Reform Act of 2009 declared the policy of the state to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency.xix Instead, the BDCP state-preferred action would harden demand through construction of twin tunnels that would facilitate and enhance the ability to transfer increased amounts of water from the Delta in the future. As discussed above, CM1 calls for exports in a range of 4.71 to 5.59 maf/year—over a half million acre-feet more than have actually been exported on average. Further, CM1 aims to "protect and restore" CVP/SWP contract amounts, which could mean transfer of up to 129.5 maf/y (under certain conditions), or about 25 times what has been historically conveyed. The amount of export has not been clearly stated, making adequate comment on potential exports impossible.

Not only do these potential amounts (up to 5.59 maf/year on the one hand, and up to 129.5 maf/y) conflict with state policy of reducing reliance on the Delta, but the upper range identified indicates the possibility of transfer amounts that have not been evaluated in the BDCP dEIR/S. The clearly-anticipated potential for transfer of water in amounts well over historical transfers should be adequately discussed in a revised and re-issued dEIR/S.

The BDCP and dEIR/S fail as informational documents in their failure adequately to discuss water supply reliability secured from differing sources in the breadth required under state law. Adequate discussion cannot not occur in an information vacuum. Here, the BDCP and dEIR/S discussions do not include water sources other than the CVP and SWP. However, in addition to the required reduced reliance on the Delta, mentioned above, the Delta Reform Act says that "[p]roviding a more reliable water supply for the state involves implementation of water use efficiency and conservation projects, wastewater projects, wastewater reclamation projects, desalination, and new and improved infrastructure, including water storage and Delta conveyance facilities".xx These sources therefore should have been included and should have been fully evaluated in the BDCP and its dEIR/S.

The publication in mid-June 2014 of the Natural Resources Defense Council/Pacific Institute's issue brief, The Untapped Potential of California's Water Supply, represents information that clearly should have been developed during the BDCP dEIR/S process, but wasn't. It could have been considered in the BDCP review process, had that process not been unreasonably curtailed (see "Time for response is inadequate", *supra*).

The NRDC/Pacific Institute issue brief identified 14 million acre-feet (maf) in new supplies and reduced demand — more than all California cities use yearly—that would better supply California with locally-sourced water and that would also protect environmental and natural resources. Ignoring that potential, the BDCP and dEIR/S analysis proposes a 9,000 cfs facility that would only provide 6.5 maf of water per year, at huge cost, with uncertain funding and uncertain benefits, along with likely serious environmental damage to the Delta.

Irresponsibly, the BDCP and dEIR/S focus on increased water deliveries from conveyance through or around the Delta to supply "reliable" water for California, discussing water supply reliability only in terms of the "current and projected future inability of the SWP and CVP to deliver water to meet the demands of certain south-of-Delta SWP and CVP water contractors—in all water year types and considering ecosystem and species requirements...."xxi These demand amounts are recognizably unattainable, as discussed above,xxii yet the BDCP and dEIR/S seek to promote deliveries beyond the system's capacity, claiming "[i]t is the responsibility of the SWP and CVP to meet these beneficial uses regardless of hydrologic

conditions."xxiii

BDCP and dEIR/S analysis should, instead, include the options the Water Code suggests and which are identified in the NRDC/Pacific Institute issue brief—efficiency and conservation projects, wastewater projects, wastewater reclamation projects, etc., in a discussion of a coordinated approach that could meet demand amounts from a variety of sources.

Climate change

Climate change impact is treated in BDCP and dEIR/S as reflecting only the need to construct new conveyance infrastructure that will

> "improve water supply reliability (i.e., increase the long-term average of Delta exports), and will therefore, provide more reliable water supplies which will provide additional resilience and adaptability to increases in water demand as a result of higher temperatures and increased evapotranspiration and evaporation. [Other alternatives] actually result in reduced water supply reliability and therefore provide reduced resilience and adaptability to the impacts of climate change."xxiv

BDCP and dEIR/S climate change analysis begins by citing increased annual precipitation in the U.S., with statistics from 2007, and a warming trend in the Sacramento River basin... accompanied by a gradual trend toward increasing precipitation, starting in the 1930s."xxv This biases the discussion and ignores the well-recognized trend toward a drier climate with generally lower precipitation in California.

BDCP and dEIR/S climate change analysis should include full discussion of the drier climate change models, which predict 17% reduction in Sacramento River flows by 2030 and 34% by 2080.xxvi These climate models predicting significant drying were not considered in the BDCP and dEIR/S climate modeling, which used only middle-amount precipitation ("central tendency") scenarios in its modeling,xxvii even while acknowledging that "one recent analysis generally indicated a drying trend in California during the 21st century (Cayan et al 2009)."xxviii

Discussion of the 55-inch sea level rise requirement was largely inadequate, despite the California Water Code that requires the BDCP to include a comprehensive review and analysis of "potential effects of climate change, possible sea level rise up to 55 inches, and possible changes in total precipitation and runoff patterns on the conveyance alternatives...."xxix Discussion of the legally-required 55-inch rise needs to be more than ceremonial in these documents.

Des Jardins pointed out that the dEIR/S used an upper value of 18 inches for sea level rise analysis instead, in violation of the 55-inch standard enunciated in the Water Code.xxx The dEIR/S noted that a National Research Council report 2012 projected a range of up to 66 inches, but those projections from the NRC study were not used directly in the BDCP analysis because it was published after the BDCP modeling analysis, and the projection years were not directly aligned with the 2025 and 2060 analysis periods used for BDCP.xxxi It was decided, instead, to use the mid-range of the estimates for each BDCP timeline: 6 inches by 2025 and 18 inches by 2060.xxxii While this failure to follow legislative directive regarding sea level rise analysis might not seem fatal to the analysis, under Water Code provisions it could mean that the BDCP will not be incorporated into the Delta Plan, and that public benefits associated with the BDCP would therefore not be eligible for state funding.xxxiii

A full analysis of sea level rise that includes the 55-inch mandated amount would also demonstrate that—even if the twin tunnels were built—salinity intrusion could reach the north Delta intakes of the proposed tunnels and drastically curtail exports by 2100.xxxiv

Large tunnels with potential to convey huge amounts of water to areas outside the Delta will not provide much benefit under the predictable lower-precipitation models. The BDCP and dEIR/S need to perform modeling that adequately takes into account the drier scenarios, and re-release the BDCP and dEIR/S with adequate time for public comment.

Nonstructural and minimal-structure alternatives should be evaluated preferentially

Water supply sources should be evaluated with emphasis on nonstructural alternatives. Certain federal

law also endorsed nonstructural solutions in assessing the value of projects for water resources development and management.xxxv This proposal, however, suggests construction of redundant and unnecessarily large infrastructure that would be capable of exporting more water than the system is currently capable of producing.

The project alternatives should be re-analyzed with full recognition of the preference for nonstructural approaches.

COSTS, financing must be adequately assessed

All short- and long-term economic costs should be examined and assessed in terms of economic, social and environmental costs and benefits of water. In this case, costs have not been sufficiently accounted for, or analyzed.

The California Legislative Analyst's Office (LAO) reported an estimate of $24.8 billion for total BDCP costs over the 50-year term of the permits, but pointed out that that estimate does not include financing costs, such as interest payments.xxxvi The LAO also detailed the uncertainty of the costs, finding that: land acquisition prices could be higher than anticipated; actual construction costs can differ significantly from estimates due to cost overruns (up to 34% on average); cost estimates do not capture the potential range of costs; it is unclear whether the benefits of the tunnels will outweigh their costs.

Additionally, the LAO suggested problematic issues with funding sources. It warned of the following: about terms of contracts between DWR and water contractors that will need renegotiation, which could put the state at risk for extra expenditures; that future bond measures for ecosystem restoration may not be approved even though needed for the state share of restoration actions, including even some restoration actions needed before tunnel construction and despite the BDCP statement that the SWP and CVP will not pay additional costs or forgo water in the event of a funding shortfall; about the potential for additional public (state and federal) liability if species do not recover and costly restoration actions were necessary, beyond those already specified. These LAO-identified problems were not dealt with in depth—or sometimes at all— in the BDCP and dEIR/S. Recent disclosures of intent to pay for BDCP through higher taxes and likely bonds exemplify these sorts of previously-undisclosed and unexamined expenditures and funding sources.xxxvii

Some water district officials have also echoed those cost concerns. At a 1/27/2014 BDCP update presentation to the Santa Clara Valley Water District (SCVWD) Board, a Directorxxxviii noted that it was hard to determine the accuracy of figures presented to the board when estimates were given in 2012 dollars and with the project at only a 10% design level. The responding BDCP presenter noted that the contingency range might change as more design was determined—perhaps even closer to 50%. At that meeting, another SCVWD Director also cited concerns about low BDCP contingency percentagesxxxix. As a professional engineer, she noted that the channel tunnel project had been 50% over budget; other projects she was aware of had been up to 100% over budget.

The uncertainty of cost figures due to early design stage could be cured in part by re-releasing the BDCP and dEIR/S for public comment after more certain cost figures become available. For instance, the presenting professional at the 1/27/2014 SCVWD BDCP update said that geotech is key in tunneling project. However, at a state-sponsored BDCP Open House on 1/22/2014 in San Jose for this project, state staffers reported that many more geotech borings needed to be done. Maps of current borings were not available, they said, because of privacy concerns, some having been done on private land. The BDCP and dEIR/S should not move forward until more certain costs have been revealed for analysis.

Cost analysis in the BDCP for the preferred CM1 (pipeline/twin tunnel) has tended not to focus on the annual debt service, which would average approximately $1.1 billion/year from 2021 through 2055.xl Added to the $24.8 billion O&M cost acknowledged by the LAO, the financing would bring the conservative estimate (not including other identified uncertainties) for the project to $62.2 billion. This was not clear, or clearly discussed, in the BDCP and dEIR/S.

Alternatives to the preferred pipeline/twin-tunnel should have received in-depth consideration:

The NRDC's "Portfolio Alternative"xli—which would include a single new water intake and single tunnel under the Delta, with investments in local water supply development, levee improvements, and south of Delta storage—was incorrectly analyzed by the state as a two-tunnel alternative, resulting in the Portfolio plan's being rejected on the basis of cost. This kept the Portfolio plan from receiving the benefit of full CEQA analysis, which analysis would have demonstrated the potential benefits of $5.9 billion funding of local water supplies, storage, and levees.

The state later acknowledged the plan would cost $5.9 billion less than the state's preferred pipeline/twin tunnel option, but has not corrected its inadequate evaluation of the Portfolio Alternative.xlii

Flow conditions in the BDCP have not been adequately described

The hydrologic conditions description in the BDCP is inadequate to describe existing conditions. Only three years were rated as to Delta inflow, outflow and export. Given the importance of flow determinations, and the importance of flows that reflect the current and increasing drought conditions, the amounts of those flows should be easily-accessed and should receive extended discussion as to availability and likelihood of continuing.

Insufficient yearly inflow/outflow and average annual export rates

A hydrograph of the Delta is mentioned on page 2-26, BDCP, where Figure 2-10 is cited, but there is no link to that figure, either on the disc supplied or in the online chapter. Finding it required paging through 139 of the chapter's pages.
Only years 1998, 2000, and 2001 were depicted in the Figures following Ch. 2 describing "existing conditions". Export figures for these years range from:

4,780 TAF in 1998 (a "Wet Water Year, BDCP Fig. 2-7), to
6,321 TAF for 2000 (an "Above Normal Water Year", Figure 2-8), to
5,076 TAF for 2001 (a "Dry Water Year", Fig. 2-9).

Average monthly flow rates by water year type (wet, dry, above-normal below-normal and critical) between 1956 and 2006 for the Sacramento, Mokelumne and Consumnes, and the San Joaquin Rivers are given in Fig. 2-10 (BDCP).
These figures are not approachable. They do not provide information about the numbers of wet or dry years, for instance. Thus, actual flow numbers cannot be determined.

Conclusion

Limitations in the BDCP and its dEIR/S analyses include, without limitation, the difficult-to-use format, the failure to include important data, the failure to ensure reduced reliance on water from or conveyed through the Delta (and its watershed), and failures to conform to requirements of California law, as discussed above. State policy requires a reduced reliance on the Delta for California's water supply needs. This should be met through improved regional supplies, conservation, and water use efficiency. Rather than constructing the proposed monolithic infrastructure that the twin tunnels represent, the state should first develop the necessary water supplies through water use efficiency, water recycling, advanced water technologies, local and regional water supply projects and improved regional coordination of local and regional water supply efforts.

The twin tunnels project, CM1, is premature. It should not be considered before all other local and regional methods have been exhausted.

Respectfully,

Alan and Meg Giberson

cc: Felicia Marcus, Chair, State Water Resources Control Board
Mark Cowin, Director, California Department of Water Resources

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i Under the California Endangered Species Act (CESA), "take" can mean "hunt, pursue, catch, capture, or kill" or to attempt any of the same; under the federal Endangered Species Act (ESA), "take" includes "harass, harm, pursue, hunt, shoot, wound, kill trap, capture, or collect, or to attempt to engage in any such conduct."

ii California CEQA Guidelines section 15201
iii The format was a DVD disc supplied by state staff during a visit to a state-sponsored BDCP "open house".
iv CEQA Guidelines § 15141
v *Id.*, § 15103
vi dEIR/S Ch. 3, sec. 3.2.3, page 3-12
vii *Id.* at page ES-23
viii *Id.*, p 3-108
ix dEIR/S, ES-58
x dEIR/S, Ch 21, page 21-12
xi *Id.*
xii dEIR/S, Ch. 2, p. 3; Executive Summary p. 3-109
xiii *Id.*
xiv Exec. Summary, dEIR/S, p. ES-10
15 Water Rights within the Bay/Delta Watershed, SWRCB, 9/26/08.
16 *Id.*
17 page 33, Sustainable Water and Environmental Management in the California Bay-Delta, National Research Council, 2012
18 *Id.* at page 32
19 California Water Code § 85021
20 California Water Code § 85004(b)
21 dEIR/S, ES.2.2.2.2; *see also* dEIR/S 2.5.2.
22 Restored and protected contract amounts have the potential to reach 129.5 maf/year, for instance.
23 dEIR/S, ES.2.2.2.2
24 dEIR/S, ch . 29, page 29-20
25 BDCP Ap2C § 2.C.2.4
26 Des Jardins, California Water Research, presentation on March 1, 2014, PowerPoints available at: http://www.lwvlamv.org/wp-content/uploads/2014/03/BDCP-LWV-deidredesjardins-presentation.pdf, citing, e.g.: US Geological Survey, California Water Science Center, Hanson et al. 2012; Null and Viers, Water and Energy Sector Vulnerability to Climate Warming in the Sierra Nevada: Water Year Classification in Non-Stationary Climates, CEC White Paper, July 2012.
27 *Id.*
28 BDCP Ap2C, § 2.C.2.4.
29California Water Code § 85320(b)(2)(C)
30 Des Jardins remarks, California Water Research, presentation on March 1, 2014; see footnote, *supra*
xxxi dEIR/S ch. 29, page 29-13.
xxxii DEIRS, App 5A, page 5A-A69
xxxiii Water Code § 85320, especially § 85320(b)(2)(C)
xxxiv Des Jardins remarks, California Water Research, presentation on March 1, 2014; see footnote, *supra*
xxxv H.R. 1495, the Water Resources Development Act of 2007 (Pub. L. No: 110-114, § 2031)
xxxvi Legislative Analyst's Office, Financing the Bay Delta Conservation Plan, February 12, 2014, available at: http://www.lao.ca.gov/handouts/resources/2014/Financing-the-BDCP-02-12-14.pdf
xxxvii *See, e.g.*, Goldman Sachs discussion and document at http://www.c-win.org/webfm_send/445; Santa Clara Valley Water District (SCVWD) memo from agenda item 4.2, July 8, 2014 "State Water Project Tax Discussion".
xxxviii Director LeZotte, SCVWD
xxxix Director Keegan, an engineer, quoted an article from the California Management Review, 2009, *Delusion and Deception in Large Infrastructure Projects*: "Large infrastructure projects almost invariably arrive late, cost overruns of 100% are not uncommon." The article is available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2229781
xl BDCP, Ch. 8, Table 8-5 lists a cost estimate for water facility construction showing a 50-year total expenditure of $1.456 billion, but those costs do not include the financing costs.
xli The Portfolio alternative is supported by numerous water districts and municipalities, business organizations, governmental organizations and independent bodies, as well as elected officials. *See*, e.g., http://switchboard.nrdc.org/blogs/dobegi/growing_support_for_analysis_o.html
xlii *Id.*