

Comment Table, Agency Administrative Draft Environmental Impact Statement/Report

Comment Number	Chapter/ Sub-Chapter	Page Number	Paragraph, Section, or Table No.	Commentor/ Agency	Comment
1.	Attach "A"	A-26 to A-30	Alternative 3 Description	DWR P.Sandhu/ Modeling Support Br.	Under 15000, 10000 and 5000 cfs Isolated Facility, reference to Hood Diversion in various places should be changed to Isolated Facility.
2.	Attach "A"	A-17 to A-31	Section A.3	DWR P.Sandhu/ Modeling Support Br.	Assumptions in Attachment 'A' need to be revised to be consistent with Chapter 5/5.1
3.	Attach "A"	A-2	Section A.2.1	DWR P.Sandhu/ Modeling Support Br.	Kern Water Bank Facilities are not included in DWRSIM No Action Study.
4.	Attachment A	A-37	Paragraph beginning "Hamilton City Pumping Plant ..."	Andrew DWR	The tense of this paragraph should generally be changed from future to present; the Hamilton City Pumping Plant Fish Screen Improvement Project, including the fish screen extension, internal fish bypasses, improvements to the intake and bypass channel (actually, an oxbow in the Sacramento River), and gradient facility, is currently under construction.

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5.	Attachment A	A-20, 24, 25, 26, 27, 28, 29, 30, 31; also throughout main document	Various	Andrew DWR	Banks Pumping Plant already has the capacity to pump 10,300 cfs. CALFED probably means to say that the ability to pump 10,300 cfs at Banks should be improved, via physical and regulatory modifications, by increasing diversions into Clifton Court Forebay. This issue is better described in the ISDP description on page 5.1-94, and in Table A-6, page A-33, under "South Delta Modifications."
6.	Attachment B	B-10	Delta Conveyance Program	DWR/Steve Yaeger	In bullets 4 and 5 this program needs to state that the design of operable barriers needs to be integrated with flood management elements of the Comp.Study for the San Joaquin River so as to maintain the appropriate flow splits during flood operations
7.	Attachment B	B-10	Paragraph beginning "If the Water Quality Program . . ."	Andrew DWR	Delete the reference to "pumps" or revise per the following discussion. The reference to "pumps" in the description of the Hood Division Facility is too vague even for a Programmatic document. Are the pumps an integral part of the fish facility (i.e. for hydraulic control), or are they part of the conveyance between the Sacramento and the Mokelumne Rivers?
8.	Attachment B	B-5	Delta Levee Program	DWR Steve Yaeger	This program needs to specify in the Special Improvement Projects and Emergency Management and Response Plan that these plans may need to be modified to respond to flood management concepts developed in the Comprehensive Study of the Sacramento and San Joaquin River Basins(Comp.Study).

9.	Attachment B	B-3,4	Ecosystem Restoration Program	DWR/Steve Yaeger	This program needs to state in bullets number 2, 4, and 7 that these measures (dam removal, set-back levees, constructing bypasses, channel-forming flows, etc) must be implemented such that they integrate with and protect the existing and future needs for flood damage reduction on the Sacramento and San Joaquin Rivers as well as the tributaries.
10.	1	1-8	Ecosystem quality	Nobriga/DWR	Bullet 2 "Improve the in-Delta...movement of...life stages of aquatic species" is vague. I suggest adding the phrase "to facilitate completion of their life cycles."
11.	2	2-24	2.3 Environmentally superior alternative	Nobriga/DWR	This alternative could not be evaluated because no text was included.
12.	2	2-14	Bullet 5 and 8	DWR/ Jim Spence	Bullet 5 delete "accessability" replace with "predictability" Bullet 8 delete "new"
13.	2	2-9	Table 2-1	Nobriga/DWR	Yolo Bypass should be listed as an ecological unit of the Yolo Basin ecological zone.
14.	2	2-7	Paragraph 3	Nobriga/DWR	Figure 2-5 does not depict the ecological zones the reference says it does.
15.	Chapter 2	2-19, 2-20, 2-21, 2-22	General comment	Andrew DWR	Implementation of a 15,000 cfs fish screen, at Clifton Court and/or an up-to-4000 cfs facility at Hood, is a highly complex technical project, which should proceed in a staged manner that could take a decade or more. Presently construction of USBR's experimental, 500 cfs fish facility at Tracy is scheduled for completion in September 2002; because of start-up facility debugging, research will likely not begin until September 2003. Following at least a year or more of research, a 2500 cfs prototype facility (or full-scale module) should then be constructed at Clifton Court, before proceeding to 15,000 cfs. Similar staging is envisioned and recommended at Hood.

16.	Chapter 2	2-22	Paragraph beginning "If the Water Quality Program . . ."	Andrew DWR	<p>Delete the reference to "pumps" or revise per the following discussion. The reference to "pumps" in the description of the Hood Division Facility is too vague even for a Programmatic document. Are the pumps an integral part of the fish facility (i.e. for hydraulic control), are they "fish-friendly lifts" within the facility, or are they part of the conveyance between the Sacramento and the Mokelumne Rivers?</p> <p>Delete the word "pilot." The use of the term "pilot" for an up-to-4000 cfs Hood Diversion is inconsistent with the scale of such a facility, which could be the second single largest diversion from the Bay-Delta estuary.</p>	
17.	3	None	Table 3-3	S. Spaar DWR	Groundwater resources/Geology and soils – Resource Categories – Some of the 'Adverse Impacts' for these categories contradict the 'Beneficial Impacts' for these categories in Table 3-2. Ex. - Increased groundwater extractions resulting in land subsidence (3-3) vs. reduced pumping-induced subsidence (3-2), Increases in soil erosion and soil salinity (3-3) vs. Reduced soil and wind erosion and soil salinity.	GC ✓
18.	3	None	Table 3-3	S. Spaar DWR	Table is missing the following Resource Categories: Agricultural economics, Ag. social issues, Urban water supply economics, Regional economics, Environmental justice, and Indian trust assets. If there are no adverse effects than it would be helpful to indicate that in the table.	GC (ECON)
19.	3	None	Table 3-5	S. Spaar DWR	Geology and soils – Another long-term impact of the Preferred Program Alternative would be to sediment supply downstream of new surface water storage facilities, unless this is already included in geomorphology.	GC (IN geomorphology)

20.	3		Table 3-2/Vegetation and Wildlife	Nobriga/DWR	The statement, "...reduced bioaccumulation of organic and inorganic constituents in the food web" is merely a statement of what food webs are, suggest changing to " <u>toxic</u> organic and inorganic constituents...". Same section: it is unclear in what context wetlands and riparian areas need flood protection. These are areas that are adapted to flooding.	I
21.	3	3-7	3.6	Nobriga/DWR	The bullet list of laws that provide safeguards against cumulative impacts lists "Endangered Species Act". It should list both "California Endangered Species Act" and "Federal Endangered Species Act".	I
22.	Chapter 3	3-14	Table 3.1-1	Andrew DWR	Delete the reference to entrainment. Properly designed, constructed, operated, and maintained fish screens do not increase entrainment loss of fish into diversions into offstream storage and/or increased exports.	IV
23.	4	4-16	Alternative 2	Andrew DWR	Delete the word "pilot." The use of the term "pilot" in conjunction with the proposed 10,000 cfs diversion at Hood is inconsistent with the scale of what could be the second largest single diversion from the Bay-Delta estuary.	I
24.	5	5.1-95	Red Bluff Diversion	Andrew DWR	The last word in the fourth sentence should be "screens."	
25.	5	5.1-56	Table 5.1.8-1	DWR/ Jim Spence	These numbers are overly optimistic and probably double or triple count same water. Suggest reducing by half.	
26.	5	5.1-25	Paragraph-Banks Pumping Plant	DWR/ Jim Spence	First sentence valid. Delete the rest of the paragraph. The Accord now governs flows, pumping etc.	
27.	5	5.1-25	Paragraph-Wheeling	DWR/ Jim Spence	Delete this paragraph. Accord and interim Board Order now governs.	
28.	5	5.1-10	Red Bluff Diversion Dam	Andrew DWR	It would be better to say that "the RBDD gates are closed <i>only</i> from May 15 through September 15 because of concerns for winter-run chinook salmon passage."	

29.	5	5.1-1	Second paragraph line 5	DWR/ Jim Spence	Delete "would" replace with "may." EWA "may" allow.....	
30.	5	5.1—94	Hamilton City Pumping	Andrew DWR	The Hamilton City project is now under construction	
31.	5.1	5.1-61	Paragraph 1	DWR P.Sandhu/ Modeling Support Br.	Calfed is in the process of updating information on latest DWRSIM Study results. The present information on deliveries/exports/flows etc. for study alternatives needs to be corrected. For example deliveries in this paragraph vary from 4.6 to 6.7 MAF.	
32.	5.1	5.1-39	Criteria 'A' iii And Criteria 'B' iii	DWR P.Sandhu/ Modeling Support Br.	Delta Cross Channel gates are closed in all months, except for the month of June for below normal, dry and critical years. Also under Criteria 'B', Delta Cross Channel gates are closed, except for July and August.	
33.	5.1	5.1-32	Paragraph 2	DWR P.Sandhu/ Modeling Support Br.	San Joaquin River tributary surface storage is 260 TAF.	
34.	5.1	5.1-31	Paragraph 4	DWR P.Sandhu/ Modeling Support Br.	Level II Refuge Demand is 124.5 TAF/year and Cross Valley Canal demands are 128.0 TAF/year.	
35.	5.1	5.1-29	Paragraph 6 Wheeling	DWR P.Sandhu/ Modeling Support Br.	There is no D-1485 Wheeling under Existing Conditions Accord Study.	
36.	5.1	5.1-7	Table 5.1.3-1	DWR P.Sandhu/ Modeling Support Br.	Delta Exports and Total Delta outflow for dry and critical years should be 4.2 and 5.0 MAF respectively.	

37.	5.1	5.1-26/27	Paragraph 6 Yuba River	DWR P. Sandhu/ Modeling Support Br.	Hydrology HYD-D06E was used for 1995 Level. Reference to other 1995 hydrologies should be eliminated.	
38.	5.2		Figure 5.2.6- 8	DWR T. Smith/ Delta Modeling	Figure is for Vernalis not Freeport injection.	I
39.	5.2		Figure 5.2.8- 9	DWR A. Miller / Delta Modeling	Misspelling of "Delta" in title.	I
40.	5.2	5.2-45	Paragraph 3 and following	DWR A. Miller / Delta Modeling	Flow locations plotted imply DSM2 output, this appears to be DWRSIM output which differs slightly.	I ✓
41.	5.2	5.2-9	Paragraph 3	DWR T. Smith/ Delta Modeling	Change 2 nd sentence to read "Additionally, input to DSM2 was modified to represent different delta geometries and export diversion locations. Flow patterns, velocities, water levels and transport processes within the Delta were evaluated reflecting the differences in input hydrology and Delta configuration. The DSM2 simulation output captures the effects..."	I
42.	5.2	5.2-2	Paragraph 1, 3	DWR T. Smith/ Delta Modeling	The statement "Net Delta flows during most months is landward..." implies negative QWEST or negative Net Delta Outflow.	I
43.	5.2	5.2-2	Paragraph 1	DWR A. Miller / Delta Modeling	Misspelling of seaward.	I

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44.	5.2	5.2-2	1	DWR/John Pacheco	What does "seastream" mean; should it be "seaward"	
45.	5.3	5.2-ii or 5.3-ii	Header/footer	DWR/John Pacheco	Change 5.2 to 5.3	I
46.	5.3	5.2-44	Paragraph 4	DWR A. Miller / Delta Modeling	The statement "The predicted mean annual and monthly peak EC values in absolute terms" is unclear. From the figures the annual is the mean for 16 years not for individual years. The mean monthly peak is finding the peak value and taking the 16 year monthly average.	cc
47.	5.3	5.2-41	Paragraph 3	DWR T. Smith/ Delta Modeling	The statement "The predicted mean annual and monthly peak EC values in absolute terms" is unclear. From the figures the annual is the mean for 16 years not for individual years. The mean monthly peak is finding the peak value and taking the 16 year monthly average.	cc
48.	5.3	5.2-38	Paragraph 2	DWR A. Miller / Delta Modeling	The statement "The predicted mean annual and monthly peak EC values in absolute terms" is unclear. From the figures the annual is the mean for 16 years not for individual years. The mean monthly peak is finding the peak value and taking the 16 year monthly average.	cc
49.	5.3	5.2-33	Paragraph 6	DWR T. Smith/ Delta Modeling	The statement "The predicted mean annual and monthly peak EC values in absolute terms" is unclear. From the figures the annual is the mean for 16 years not for individual years. The mean monthly peak is finding the peak value and taking the 16 year monthly average.	cc NI

*Called Staff
A/ices. THIS
will be clarified.*

50.	5.3	5.2-28 or 5.3-28	5.3.7.5	DWR/John Pacheco	Delete first sentence in Water Transfer Program section and replace with the following text from the Water Transfer Plan, "The Water Transfer Program proposes a framework of actions, policies and processes that, collectively, will facilitate water transfers and the further development of a state-wide water transfers market." The existing lead-in sentence paints a picture that the current system is broken and needs fixing, in reality getting transfer proponents more familiar with the transfer process through education will result in a greater number of successful transfers.	I
51.	5.4	5.4-25	¶ 2	DWR/John Pacheco	This paragraph essentially says that a water agency is going to set up a permanent economy (demand) based on a temporary imported water supply. Is this realistic? Suggest deleting this paragraph.	
52.	5.4	5.4-24	Water Transfer Program ¶ 2 and sidebar	DWR/John Pacheco	Delete the phrase "Reducing barriers to water transfers..." and replace with "Promoting development of a state-wide water transfers market..." The existing lead-in phrase paints a picture that the current system is broken and needs fixing, in reality getting transfer proponents more familiar with the transfer process through education will result in a greater number of successful transfers.	
53.	5.4	5.4-11	¶ 2	DWR/John Pacheco	Check reference to Figure 5.4-3; no Corcoran clay shown on this figure.	
54.	5.4	5.4-9	¶ 5	DWR/John Pacheco	Check reference to Figure 5.4-1; should it be Figure 5.4-3?	
55.	5.4	5.4-2	Table	DWR/John Pacheco	Missing Mitigation Strategies 1 through 5.	

56.	5.5.1	5.5-1	Para. 2	S. Spaar DWR	Sentences beginning on line 6 and 12 of paragraph 2 appear contradictory. Do the 'overall long-term benefits from the CALFED Program to geomorphology' outweigh the 'potentially significant and unavoidable...changes in downstream geomorphology...from expanding existing storage facilities'?	
57.	5.3.6	5.2-22	Line 5	DWR/John Pacheco	Construction of Coastal Branch and Los Vaqueros is complete	I
58.	6		General comment	Nobriga/DW R	An interesting challenge/experiment for adaptive management occurred to me while I was reviewing this document. The question regards what type of channel configuration is preferable for channels leading to large delta diversion facilities. If these channels have high quality habitat values they may attract fish into an area of high entrainment risk. If the channels are designed to have little or no habitat value, they probably won't attract too many fishes, but they may be areas of high predation loss to fish that are entrained into them. It would be very interesting for CALFED/CMARP to determine which configuration is preferable.	
59.	6		General comment	Nobriga/DW R	I was impressed to see our current thinking regarding floodplains and native/exotic species interactions incorporated into this EIS/EIR given the short time periods you have to assimilate huge amounts of information.	
60.	6	6.1-53	Isolated Facility	Andrew DWR	Delete reference to "low lift pumps" or revise per the following discussion. The reference to "low-lift pumps" in the description of the Hood Division Facility is too vague even for a Programmatic document. Are the pumps an integral part of the fish facility (i.e. for hydraulic control), are they "fish-friendly lifts" within the facility, or are they part of the conveyance between the Sacramento and the Mokelumne Rivers?	

61.	6	6.1-51	First paragraph under Alternative 2	Andrew DWR	Delete reference to "low lift pumps" or revise per the following discussion. The reference to "low-lift pumps" in the description of the Hood Division Facility is too vague even for a Programmatic document. Are the pumps an integral part of the fish facility (i.e. for hydraulic control), are they "fish-friendly lifts" within the facility, or are they part of the conveyance between the Sacramento and the Mokelumne Rivers?
62.	6	6.1-51	Second paragraph under Alternative 2	Andrew DWR	<p>It is not intuitively obvious that, downstream of a Hood Diversion (to the Mokelumne River), the proportion of Sacramento River flow entering Georgiana Slough and the Delta Cross Channel (if open) would increase. Water removed from the Sacramento at Hood will re-enter the Delta through the Mokelumne, thereby increasing flows and levels in that river system (to which Georgiana Slough also drains) and providing new hydraulic constraints on flows entering it downstream. Likewise, a screened Hood Diversion would not necessarily increase the movement of juvenile salmon from the Sacramento River to the Mokelumne River.</p> <p>In contrast, a similar discussion of the same hydraulic impacts of an Isolated Facility (beginning at Hood) does appear correct, in that water removed from the Sacramento at Hood via an Isolated Facility does not re-enter the Delta at another location.</p>

63.	6	6.1-48	Hood to Mokelumne River Channel	Andrew DWR	Delete reference to "low lift pumps" or revise per the following discussion. The reference to "low-lift pumps" in the description of the Hood Division Facility is too vague even for a Programmatic document. Are the pumps an integral part of the fish facility (i.e. for hydraulic control), are they "fish-friendly lifts" within the facility, or are they part of the conveyance between the Sacramento and the Mokelumne Rivers?
64.	6	6.1-47	South Delta Intake Facilities	Andrew DWR	Add potential northwest corner for new CCF intake. The Draft EIR/EIS should not limit the new intake to Clifton Court Forebay to just the northeast section of CCF. For example, a northwest location is also under consideration and may provide for better protection of fish and less impact on south Delta water levels.
65.	6	6.1-47	South Delta Intake Facilities	Andrew DWR	At the end of the second sentence, "screen efficiency" should be changed to "screening efficiency."
66.	6	6.1-45	Paragraph beginning "New surface storage . . ."	Andrew DWR	Delete reference to entrainment. Diversion to offstream storage will be screened and, thus, will not increase entrainment loss.
67.	6	6.1-38	Top of page	Andrew DWR	Net reserve flows could increase entrainment in <i>unscreened, local</i> Delta diversions.
68.	6	6.1-3	Table	Andrew DWR	(Bottom of first column) Delete reference to entrainment. Diversions to new offstream storage will be screened and thus avoid entrainment of chinook salmon.
69.	6	6.1-3	Table	Andrew DWR	(Bottom of second column) Delete reference to low-lift pumps. An on-river screen is likely for a Hood Diversion Facility; thus, low-lift pumps would be unnecessary.

70.	6	6.1-48, 49,	Last paragraph on 6.1-48	Andrew DWR	<p>It is not intuitively obvious that, downstream of a Hood Diversion (to the Mokelumne River), the proportion of Sacramento River flow entering Georgiana Slough and the Delta Cross Channel (if open) would increase. Water removed from the Sacramento at Hood will re-enter the Delta through the Mokelumne, thereby increasing flows and levels in that river system (to which Georgiana Slough also drains) and providing new hydraulic constraints on flows entering it downstream. Likewise, a screened Hood Diversion would not necessarily increase the movement of juvenile salmon from the Sacramento River to the Mokelumne River.</p> <p>In contrast, a similar discussion of the same hydraulic impacts of an Isolated Facility (beginning at Hood) does appear correct, in that water removed from the Sacramento at Hood via an Isolated Facility does not re-enter the Delta at another location.</p> <p>Delete the word "pilot." The use of the term "pilot" in reference to the Hood Diversion is inconsistent with the scale of the proposed facility.</p>	
71.	6.1	6.1-55	Second paragraph	Nobriga/DWR	<p>I personally could not determine whether any "potentially significant unavoidable impacts" would be associated with the preferred alternative given the level of detail provided in this document. However, in the first paragraph of page 6.1-57 it says "Habitat restoration activities may cumulatively enhance the productivity of introduced aquatic species to the detriment of native species." This sounds like a "potentially significant unavoidable impact."</p>	

72.	6.1	6.1-55	Fourth paragraph, last sentence	Nobriga/DWR	It would be more accurate to state that all target fish species could be potentially affected.
73.	6.1	6.1-53	Last paragraph	Nobriga/DWR	This paragraph is misleading. As I suggested in comment 42, increasing flow in the San Joaquin does not increase system productivity given the reasons for the river's productivity. Further, improved San Joaquin flow may enhance certain species movement, but may impact others passing a north delta diversion. It should be clearly stated that a north delta diversion would reduce entrainment in south delta diversions, but at the same time would result in north delta entrainment that does not currently exist. As stated, the paragraph suggests entrainment would be reduced in all delta diversions. It is further misleading to suggest reduced south delta entrainment will benefit salmon and steelhead when most of these fish come from the Sacramento basin and would have to pass a new facility under the preferred alternative. It would be more accurate to suggest that project specific EIS/EIRs will be necessary to determine if south delta improvements compensate for the north delta facility.
74.	6.1	6.1-52	Third paragraph	Nobriga/DWR	The effects of reduced net flow in the lower Sacramento River that are mentioned in this section for Alternative 2 are not mentioned in the equivalent part of the preferred alternative section. Suggest including the information in both sections. Also, lower net flow conditions in the lower Sac River would pose potential problems for all migratory species. Suggest phrasing that way rather than listing chinook, smelt, and striped bass.

75.	6.1	6.1-49	First paragraph	Nobriga/ DWR	It is suggested that the proportion of flow diverted into Georgiana Slough would increase during February – June, the primary salmon outmigration period. The impacts are outlined very well in the paragraph. It is a very big assumption to suggest those impacts could be mitigated to less than significant levels. This would be a good spot for some examples of how the impacts could be mitigated since this is likely to be a primary point of conflict with the preferred alternative.
76.	6.1	6.1-49	Fifth paragraph	Nobriga/ DWR	Pages 6.1-33 and 34 suggest improving habitat in the south delta would be less beneficial because of proximity to diversion facilities. This paragraph suggests habitat improvements in the Mokelumne, which would be a conduit for diverted Sac River water under the preferred alternative. It seems that this would be undesirable for the same reason south delta restoration would be now.
77.	6.1	6.1-47	First paragraph	Nobriga/ DWR	Salmonids should be discussed in association with the DCC, since, as mentioned elsewhere, a greater proportion of Sac River flow through Georgiana Slough will probably result in a greater proportion of salmonids moving through the central delta where their survival is impaired.

78.	6.1	6.1-45	Storage Program: fourth paragraph	Nobriga/DWR	New storage facilities would likely have extreme water level fluctuation that would limit habitat value. CALFED should consider the possibility of using these areas for native fishes. Tule perch produce live young and therefore may not be as adversely affected by water level fluctuation. Water level fluctuations that impair spawning success for centrarchids in general may provide a way to reintroduce Sacramento perch to the area. Their spawning would also be impacted, but perhaps they could maintain some numbers if fluctuations held down the numbers of exotic centrarchids too. As an alternative, sport fish habitat values may be able to be maintained in a highly fluctuating reservoir if certain arms included weirs or other structure to maintain the water levels.	
79.	6.1	6.1-42	Fourth paragraph	Nobriga/DWR	As above, artificial production cannot be used to increase the "fitness" of wild populations. It should also be stressed that artificial propagation can only be useful to conservation over the short-term.	
80.	6.1	6.1-40	First paragraph	Nobriga/DWR	The suggestion that native species will benefit from reduced "frequency" of sudden salinity shifts in the Delta due to levee failure is not well founded. This phenomenon is quite rare and is not considered to be a problem facing native species (many of which have relatively high salinity tolerance compared to non-natives). It would be more appropriate to suggest levee maintenance would provide benefits from decreased "likelihood" of rapid hydrologic/salinity change due to levee failure. Same comment for page 6.1-43, third paragraph.	

81.	6.1	6.1-40	Second paragraph	Nobriga/ DWR	In the previous section it is stated that the difference between water use efficiency between the no action alternative and the preferred alternative will be minimal. It is therefore unclear how the preferred alternative will provide any benefit through the water use efficiency program	
82.	6.1	6.1-39	First paragraph, last sentence	Nobriga/ DWR	Same comment as previous, it is doubtful the suggested CALFED actions can substantially reduce the abundance of undesirable non-native species.	
83.	6.1	6.1-39	Third paragraph, last sentence	Nobriga/ DWR	The list of artificial targets seems more appropriate to chinook salmon and steelhead. Striped bass are not a native species, so it is unclear why we would be concerned about the genetic "value" of the population.	
84.	6.1	6.1-38	Section 6.1.7.2 second paragraph	Nobriga/ DWR	As suggested in several other comments above, it is doubtful CALFED actions can control non-native species or their predation/competition impacts to target species to any significant degree. Suggest removing these as stressors reduced by program actions.	
85.	6.1	6.1-34	Second paragraph	Nobriga/ DWR	There is no data to support the claim that adverse impacts due to exotic fishes can be mitigated to less than significant levels. Suggest deleting this comment and stating it is hoped that habitat restoration will provide enough benefit to target species to counter losses due to undesirable exotic species.	
86.	6.1	6.1-31	First paragraph	Nobriga/ DWR	Summer temps in the American River are already marginal for salmonids. Any increase will certainly be an impact.	
87.	6.1	6.1-29	First paragraph	Nobriga/ DWR	It is unclear why an action can be considered beneficial if it merely sustains abundance or distribution of certain species, particularly listed species. Maintaining present numbers of species is simply the status quo.	

88.	6.1	6.1-27	Fifth paragraph	Nobriga/ DWR	Non-native species have already caused “unnatural levels of competition” etc. Suggest rewording to say controlling exotics to avoid continued escalation of unnatural levels of competition, etc.	
89.	6.1	6.1-27	Last paragraph	Nobriga/ DWR	It is an oxymoron to suggest the fitness of natural populations can be improved with artificial production. Suggest a rewording, perhaps that artificial production will be used to prevent extinction or to boost numbers for commercial harvest, but not to improve fitness.	
90.	6.1	6.1-25	Last paragraph	Nobriga/ DWR	Add longfin smelt to the list of fish that migrate seasonally.	
91.	6.1	6.1-24	Bullet list	Nobriga/ DWR	5 th bullet: substantial predator removal is generally not feasible and should probably not be considered as a means of reducing entrainment loss. Same comment for paragraph five.	
92.	6.1	6.1-24	Fifth paragraph	Nobriga/ DWR	The low salinity zone is more properly denoted by 2 psu (practical salinity units), rather than ppt.	
93.	6.1	6.1-24	Sixth paragraph	Nobriga/ DWR	Largemouth bass are also sensitive to water level fluctuations in rivers and floodplains because they spawn in shallow areas in those habitats too.	
94.	6.1	6.1-23	Last paragraph	Nobriga/ DWR	Suggest adding movement of fish into inadequate or inappropriate habitats to list of water diversion impacts on fish.	
95.	6.1	6.1-20	Fourth paragraph	Nobriga/ DWR	Suggest including a disclaimer statement regarding the possibility that exotic species (ie, Asian clam) may negate attempts to restore the system to natural conditions of energy and material transfer.	
96.	6.1	6.1-18	Fifth paragraph	Nobriga/ DWR	Suggest adding thermal pollution to the list of contaminant types	
97.	6.1	6.1-17	Sediment and nutrient input bullet list	Nobriga/ DWR	Bullet 4 is a broad statement that encompasses all of the other bullets. Suggest removing it.	

98.	6.1	6.1-11	6.1.3.3 third paragraph	Nobriga/ DWR	"... slough have been eliminate[d]; and less than 5% of historical wetlands remains." [suggest remain]	
99.	6.1	6.1-10	Second paragraph	Nobriga/ DWR	Chinook salmon do not feed "almost exclusively on zooplankton". Even young ones often have a large proportion of insects in their diet.	
100.	6.1	6.1-10	Fourth paragraph	Nobriga/ DWR	The first sentence is unclear. It is written so that it sounds like very low outflow is characteristic of drier years and very wet years. Suggest "and [with high outflow] during the very wet years..."	
101.	6.1	6.1-8	6.1.3.1 third paragraph	Nobriga/ DWR	Add chemical cues to the list of factors affecting adult and juvenile fish migration. Add preventing larval fish from migrating to nursery areas to the list of Delta reverse flow impacts.	
102.	6.1	6.1-7	Section 6.1.3 first paragraph	Nobriga/ DWR	"...including biological communities and associated species." Associated species are inferred by the term biological communities. Suggest deleting "and associated species"	
103.	6.1	6.1-4	Mitigation Strategies	Nobriga/ DWR	Mitigation strategy number 7 is probably not feasible. Suggest deleting this as a mitigation option.	
104.	6.1	6.1-4	Mitigation Strategies	Nobriga/ DWR	Removing predators (first part of Mitigation strategy number 10) is probably not feasible. Suggest deleting this from strategy 10.	
105.	6.1	6.1-4	Mitigation Strategies	Nobriga/ DWR	Mitigation strategy number 12 is a reiteration of the CALFED process. It is not mitigation in and of itself. Suggest deleting this as a mitigation option.	
106.	6.1	6.1-1	Summary, paragraph 2	Nobriga/ DWR	"The program also would increase abundance and distribution of...delta smelt...". This is not a defensible statement considering that we do not know what is limiting the delta smelt population. Suggest changing the phrase to "The program is <u>expected</u> to increase abundance and distribution..." Same comment for page 6.1-33, fourth paragraph.	

107.	6.1	6.1-33/34	Last paragraph of 6.1-33/first paragraph on next page	Nobriga/DWR	You suggest habitat improvements near south delta diversions would have little value due to entrainment impacts. You also suggest Central delta habitat improvements may have little value due to water depth. This basically leaves the north delta, but the preferred alternative suggests building a north delta diversion. Where should the habitat restoration be focused if the preferred alternative is implemented?
108.	6.1	6.1-27/28	Artificial production bullet list	Nobriga/DWR	The bullet list provides goals to maintain fitness, not improve it as the comment above discusses. The third bullet regarding marking all artificially produced fish allows assessment of impacts of hatchery fish on wild fish, but does nothing to improve or maintain fitness. It should be considered in the text as a management tool to achieve the general goal and removed from the bullet list.
109.	6.1	6.1-20/21	Last paragraph on 6.1-20	Nobriga/DWR	This paragraph has several problems. The host of diversions beginning upstream and ending with the SWP/CVP cumulatively affect productivity. Moving large diversions away from species of interest may still have effects on downstream productivity because anywhere large quantities of water are taken from the system, nutrients and organisms will be removed too.
110.	6.2.10	6.2-37	Delta Wetlands	Witzman/DWR	What is "exotic marsh wetland"?
111.	6.2.10	6.2-37	ISDP-last line	Witzman/DWR	More stable, higher average water levels won't necessarily benefit Mason's lilaopsis or the remnant freshwater emergent marsh in the South Delta. The intertidal zone where they currently exist is mostly a low gradient mudbank or instream island; higher water levels could place the intertidal zone at less appropriate habitat on steep sandy levee banks or permanently inundate the islands.

112.	6.1.3.1	6.1-8	¶2	Nelson/DWR	The statement that levees are kept bare of vegetation to reduce the probability of levee failure is an oversimplification and misleading. Vegetation on levees does not necessarily lead to levee failure. Vegetation is removed from levees primarily to facilitate inspection, repair and flood fighting when necessary. We need to stop casting vegetation as the culprit on levees. Properly managed vegetation on many of the Delta's levees is achievable within the context of flood control. FEMA and OES have given their consent for alternative vegetation management criteria on non-project levees pursuant to DWR's Delta Flood Protection Program (AB 360).	
113.	6.1.4	6.1-25	Para. 4	S. Spaar DWR	"Program elements that minimize human-caused isolation of aquatic ecosystem components include filling gravel pits..." Although filling these pits is preferred, the costs at large pits can be prohibitive and isolation of the pond is necessary. These activities can increase human-caused isolation of aquatic systems, or a conversion from one habitat type to another (river to pond).	

114.	6.1.4	6.1-23	Para. 6 (last)	S. Spaar DWR	American shad are also vulnerable to entrainment as juveniles during dark conditions. – 30-75 mm FL American shad (juveniles) tested under long-term (6 hr) swimming performance evaluations. American shad could swim at velocities of 24.4 cm/s in light conditions, however a significant reduction in performance and increase in mortality occurred in darkness. (Fisher 1981, DFG Anadromous Fish Branch, Admin. Rpt. No. 81-2) See also - Kano 1982, IEP Technical Report No. 4. Responses of juvenile salmon and American shad to long-term exposure to two-vector velocity flows. Testing was performed at the Hood Test Facility for the proposed Peripheral Canal intake.	
115.	6.1.4	6.1-22	1 st bullet	Nelson/DWR	“Levees and hard bank...breached, set back, removed or alternatively managed for biological benefits.”	
116.	6.2.3	6.2-6	4	Witzman/ DWR	Begin sentence starting on line 5 with "Many", since later you discuss the species that didn't survive....	I
117.	6.2.3	6.2.10	5	Witzman/ DWR	Large mammals and their fates should be referred to in the Delta section if they are compared here.	I
118.	6.2.6	6.2-20	San Joaquin River Region	Witzman/ DWR	Same as above: "changes would occur in flow and flow would be similar".	I
119.	6.2.6	6.2-19	Sac River Region	Witzman/ DWR	The first paragraph in this section is unclear: it seems to say that flow will be both different and similar between No Action and existing conditions.	I X

120.	6.1.7.1	6.1-34	Para. 4	S. Spaar DWR	<p>The paragraph on law enforcement in the Delta is somewhat misleading in that there is an existing DFG Delta-Bay Enhanced Enforcement Program, which has been in place and funded by DWR since 1992. This program provides additional law enforcement for striped bass, salmon, steelhead, and sturgeon, and increased public awareness through public outreach. Also, DFG has the existing CALTIP line to report illegal-harvest violations. Is CALFED planning on building another layer on top of these existing programs?</p> <p>Suggested rewording: "Such actions include improving harvest regulations, <u>supplementing existing enhanced law enforcement efforts and community outreach</u>, and developing <u>additional</u> cooperative programs to increase public awareness and provide <u>additional</u> means for reporting illegal-harvest violations."</p> <p>This comment also applies to ERP sections in Sections 6.1.7.2-3 (Bay, Sac/SJR).</p>	
121.	6.2.7	6.2-31	1	Witzman/ DWR	Large flat areas maintained devoid of vegetation would provide NO forage or cover values for wildlife!!	
122.	7 7.8.4		Paragraph 7	DWR DPLA Ray Hoagland	Expand direct benefits of flood management projects to include avoided loss of life and potential enhancements to wildlife habitat, water supply, and water quality from non-traditional management measures.	I
123.	7 7.8.4		Last Paragraph	DWR DPLA Ray Hoagland	Additional indicators of secondary benefits and costs are changes in tax revenues and the cost of providing public services.	I

124.	7	7.13-13	Storage Program	Andrew DWR	Add the following potential impact: "Fish facilities for intakes to the Hood Diversion Facility, Clifton Court Forebay, Tracy, and Sacramento River Tributary Surface Storage could have long-term, adverse (but mitigatable) impacts to visual resources, especially at low water stages."	
125.	8	8-22	California Nonpoint Source Program	Andrew DWR	The California Nonpoint Source Program is not a drinking water standard, and should thus be a separate section.	I
126.	8	8-21	Disinfectants/Disinfection By-Products Rule	Andrew DWR	The federal Disinfectants/Disinfection By-Product Rule is not part of the federal Surface Water Treatment Rule, and should thus be a separate section.	I
127.	8	8-21	Second paragraph of Disinfectants/Disinfection By-Products Rule	Andrew DWR	US EPA completed the Stage 1 regulations.	IM
128.	8	8-21	Federal Total Coliform Rule	Andrew DWR	The federal Total Coliform Rule is not part of the federal Surface Water Treatment Rule, and should thus be a separate section.	I
129.	8	8-21	California Surface Water Treatment Regulations	Andrew DWR	The state SWTR was recently amended to provide for filtration avoidance, similar to the federal rule.	I ✓
130.	8	8-20	THM regulations	Andrew DWR	Not all THMs form only when water is treated with a disinfectant (e.g. chloroform).	I ✓

131.	8	8-20	Federal Lead and Copper Rule	Andrew DWR	Violations of the lead and copper action levels do not necessarily trigger corrosion control treatment, source water treatment, and public education.	
132.	8	8-20	First paragraph under Federal Surface Water Treatment Rule	Andrew DWR	The federal SWTR was promulgated to protect against <i>Giardia lamblia</i> , <i>Legionella</i> , and <u>viruses</u> (not <u>heterotrophic bacteria</u>). In addition, <i>Legionella</i> is a bacterium, not a virus.	IV
133.	8	8-20	Second paragraph under Federal Surface Water Treatment Rule	Andrew DWR	Filtration <u>avoidance</u> (not <u>exemption</u>) does not require that the utility controls the watershed, but rather demonstrate control of activities in the watershed in some manner (e.g. San Francisco and Hetch Hetchy).	I ✓
134.	8	8-20	Third paragraph under Federal Surface Water Treatment Rule	Andrew DWR	Systems that are not required to filter (i.e. meet federal filtration avoidance criteria) do not have to meet disinfectant contact time criteria continuously; in fact, a one-day "disinfection holiday" per month is provided as part of the federal filtration avoidance criteria.	I ✓

135.	8	8-19	First paragraph	Andrew DWR	<p>Drinking water standards are not the same as maximum contaminant levels. The former can incorporate the latter, or can specify action levels (e.g. lead and copper) or treatment techniques (e.g. Surface Water Treatment Rule). Standards also include sampling frequency, location, and reporting requirements.</p> <p>Drinking water standards do not necessarily set the maximum permissible levels of contaminants that can enter a drinking water system. For example, THMs are formed within the drinking water system, and are enforceable at that location; the total coliform standard is also enforced within the system, not at its entrance. Further, the lead and copper rule is enforced at the consumer's tap.</p> <p>For the vast majority of contaminants, MCLs are based only on health effects, with only a handful derived considering technologic and economic impacts.</p>	IV
136.	8	8-19	Third paragraph	Andrew DWR	The discussion presented is for state action levels, not federal. The only federal action levels are for lead and copper, which have different requirements than state action levels.	IV
137.	8	8-19	Last paragraph	Andrew DWR	Secondary drinking water standards address only consumer acceptance of the water, and do not "assure a supply of pure, wholesome, and potable water."	IV
138.	8	8-18	Paragraph beginning "The Safe Drinking Water Act . . ."	Andrew DWR	The Safe Drinking Water Act was also reauthorized in 1986.	IV

