From: Allen, Jaclyn <jaclyn.allen@urs.com> on behalf of BDCP <BDCP@urs.com>
Sent: Monday, May 05, 2014 10:57 AM
To: BDCP.comments@noaa.gov
Subject: FW: The Bulletin - Apr 26, 2014

From: Hilbert Morales [mailto:hmorales@el-observador.com]
Sent: Saturday, April 26, 2014 11:36 AM
To: info@baydeltaconservationplan.com
Cc: Elizabeth Morales
Subject: Fwd: The Bulletin - Apr 26, 2014

BDCP officials & Planners,

What you are proposing in your recent BDCP proposal is not enough. The State of California must undertake a project to PRODUCE ADDITIONAL POTABLE WATER using existing technology and know-how.

An alternative to the current BDCP proposal could be the investment of public resources (money) into two efforts:

FIRST....The Addition of potable water from desalination sources and SECOND: The requirement that all water districts recycle as much of the existing water supply as possible.

FIRST: Historically, DIVERSION of natural water sources has been practiced. Naturally produced potable water has been diverted to 'where significant human populations live'. It is time to consider producing potable water from sea water....which is already done in the Mid-East (Israel, Saudi Arabia, Abu Dhabi, etc.). Begin by investment into a pilot project which uses electric power (generated by solar panel on home rooftops, let's say in San Diego & Los Angeles. The electricity produced would blow 'backwards through existing circuitry to distribution centers which could send it to Desalination plants built near the seashores (easy access to seawater). At these desalinaiton plants, existing technoloby and know-how could be used to desalinate sea water using reverse osmosis, filtration, electrophoresis, & distillation methods). The sunlight and seawaters are in plentiful supply and 'free'.

THIS APPROACH ADDS RELIABLE PRODUCTION OF POTABLE WATER to the existing unreliable and unpredictable natural water sources which depend upon the right weather patterns. Global warming has seriously impacted the traditional sources (rivers, snow banks, reservoirs & diversion conduits).

`The large investment is in equipment (solar panels, windmill generators, and electric conduit/circuitry) and the desalinization plant. Commitment to the creation (at first with a pilot project approach to determine economic cost and feasibility), then a full production system which would add potable water to existing sources. A requirement would be to have all components and skilled labor be provided within the State of California. Silicon Valley (and other locales) could produce the needed solar panels; windmill driven generators, and construct the desalinization plants. Production, operations, quality testing, and management jobs would be created.....and as already stated, the product, potable water, would be produced IN ADDITION to the natural sources already almost 'tapped out' and certainly unreliable as in the current drought.

SECOND: Recycle as much sewage/waste water as existing know-how permits. All existing water districts must be required to capture, clean up, and return to the reservoirs or natural aquifers as much potable water as may be possible. Such approaches exist now in Santa Barbara, Oragne, San Diego and Santa Clara Counties. Near Fresno agribusiness has invested in a system which recycles brackish waters which originated from irrigation efforts. The cost is about $500 per acre-foot (San Francisco Chronicle report earlier this spring).

Final comment: The High Speed Rail project could be expanded north from Sacramento to the Shasta Dam area. Objective is to encourage a higher population occupancy in Northern California. Let's save the existing Sacramento River waters for that population growth....which would reside where land is not that expensive now, and right of way could be bought and set aside for future development. This could slow down the very dense populations of Southern California (San Diego/Los Angeles, etc.). And may reduce the need to have the Delta Tunnel Project at all.

Best Regards,

Hilbert Morales, M.P.H.
Publisher, EL OBSERVADOR, San Jose, CA, 95113 Cell PH: 408-718-9590

Begin forwarded message:

From: "The Rotary Club of San Jose" <mailservice@clubrunner.ca>
Date: April 26, 2014 12:49:06 AM PDT
To: hmorales@el-observador.com
Subject: The Bulletin - Apr 26, 2014
Reply-To: "The Rotary Club of San Jose" <richard@rfriberg.com>

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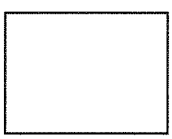

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88 South 4th Street
7th Floor
San Jose, CA 95112
United States

From: Sharon Snyder <ishopsafe@gmail.com>
Sent: Tuesday, April 22, 2014 11:29 AM
To: BDCP.comments@noaa.gov
Subject: Suggestions for Bay Delta Conservation

The BDCP makes faulty assumptions about the amount of water that Nature will provide. With climate change, the supply of water will become even more unreliable and uneven. We are already taking so much water from the Bay that fish populations are in catastrophic decline and the irreplaceable aquifers are collapsing as water is pumped out of them. We cannot sustain this imbalance. We must not rely on the Bay Delta as much as the BDCP does.

We must look to other strategies for the best use and best management of the water that we do have. Below are some suggestions.

All California water users should have water meters – farmers, residents, businesses – so the State Water Control Board would know who is using how much water. Getting the information is a start at better management. See how other states do it and learn from successful programs.

Ideally, residential districts would have tiered rates.

New development should meet high green standards for water conservation.

Since agriculture uses 80% of the water, smart sustainable farming could do much to ease the demand. Perhaps CA could provide low-cost loans for installing water sensors and drip irrigation for some crops, for learning to use mulch and rotation planting to build up the soil so it retains water, and to decrease the water-polluting use of industrial fertilizer. See the Union of Concerned Scientists "Healthy Farms" initiative.
http://www.ucsusa.org/assets/documents/food_and_agriculture/The-Healthy-Farm-A-Vision-for-US-Agriculture.pdf

Since much agricultural land has been taken from former wetlands and grasslands, migrating birds now depend on private agricultural lands for their food and water. Habitat restoration, a proper concern of the BDCP, would include private lands being managed to support these populations, a project of the Audubon Society, which BDCP should support.

BDCP552

Is it true that some organizations with rights to "agricultural water" are selling it to developers? This is not the highest use. We need much better monitoring of where the water goes.

The controversial use of water for fracking – which renders water undrinkable – needs another look.

Thank you for your attention.

Sharon M. Snyder

17341 El Rancho Ave.

Monte Sereno, CA 95030

From: Burt Wilson <burtwilson1933@yahoo.com>
Sent: Friday, May 02, 2014 11:32 AM
To: BDCP.Comments@noaa.gov
Subject: 3 comments
Attachments: BDCP Complaint by Burt Wilson.docx; Document comment for BDCP.docx; New Forebay at Clifton Court.docx

BDCP553

To BDCP comments

From: Burt Wilson
Public Water News Service

My complaint deals with Chapter 22 -- **Air Quality and Greenhouse Gases** -- of the latest Bay Delta Conservation Plan's EIR/EIS.

Under paragraph 22.3.1.1—Construction **of the Water Conveyance Facility**—it reads, "Construction of the water conveyance facility (CM1) would generate emissions of criteria pollutants (ROG, NOX, CO, PM10, PM2.5), and CHG's (CO2, CH4, N2O and SF6) that would result in short-term effects on ambient air quality in the air quality study area. Emissions would originate from mobile and stationary construction equipment, exhaust, employee vehicle exhaust, dust from land clearing and earthmoving, electrical transmission, and concrete batching from onsite plants."

The paragraph ends with hilarity by allowing that "these emissions would be temporary, i.e. "limited to the construction period" -- **which is 10 years or more**!

Paragraph 22.2 – **Regulatory Setting** – states that "The study area is subject to air quality regulations developed and implemented at the federal, state, and local levels," i.e., the federal and state Environmental Protection Agencies.

Paragraph 22.1.2 – **Background Information on Criteria Air Pollutants** – states that "the federal and state governments have established national ambient air quality standards and California ambient air quality standards, respectively, for six criteria pollutants." They are "ozone, Carbon monoxide, lead, nitrogen dioxide, sulfur dioxide and particulate matter (PM) which consists of PM 10 microns in diameter or less and PM 2.5 microns in 32 diameter or less."

Paragraph 22.1.1.1 – **Sacramento Valley Air Basin** – states that "The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells collect over the Sacramento Valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduce the influx of outside air and allow air pollutants to become concentrated in a stable volume or air. The surface concentrations of pollutants are highest when these conditions are combined with temperature inversions (warm air over cool air) which trap pollutants near the ground."

Paragraph 22.2 – **Regulatory Setting** – sub-paragraph **General Conformity Regulation** – states that "If the conformity evaluation indicates that emissions are in excess of any of the General Conformity *de minimis* thresholds, the applicant must perform a conformity determination. A conformity determination is made by satisfying any of the following requirements:"

1. Showing that the emission increases caused by the federal action are included in the SIP.
2. Demonstrating that the state agrees to include the emission increases in the SIP
3. **Offsetting the action's emissions in the same or nearby area.**

Burt Wilson complaint, page 2

4. Mitigating to reduce the emission increase.

Paragraph 22.2.1.2 – **Environmental Protection Agency Endangerment and Cause and Contribute findings** – states "…the current and projected concentrations of the six key well-mixed GHG's—CO2,CH4, N20, PFC's, SF6 and HFC's in the atmosphere threaten the public health and welfare of current and future generations.

Sub-paragraph – **State CEQA Guidelines** – states "…measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision [are] "…implementation of project features, project design, or other measures which are incorporated into the project to substantially reduce energy consumption of AGHG emissions, offsite measure, including offsets that are not otherwise required, to mitigate a project's emissions and measures that sequester carbon or carbon-equivalent emissions.

TESTIMONY OF STEVE CENTERWALL, ICF ITERNATIONAL
At Delta Stewardship Council Meeting, Dec. 19, 2013

Speaking for the Bay Delta Conservation Plan, Mr. Centerwell related that the effect of construction on air quality can increase criteria pollutants such as carbon monoxide, reactive organic gases and dust and that project on-site measures will be implemented such as electrifying equipment, making sure equipment runs well and other standard measures that are taken to reduce air quality emissions. **(He did not elaborate or say what equipment would be electrified or how that would come about.)**

Mr. Centerwall: "In addition, there was off-site mitigation to basically **off-set** any additional emissions that we couldn't reduce to net zero, and that's really the bottom line for air quality. We're going to reduce it to net zero." (He did not elaborate)

MY COMPLAINT

It is evident all through the BDCP's Air Quality Chapter of their EIR/EIS that to "zero out" over pollution in the Delta workplace will depend upon "off-sets." This is a benign word until it is explained and the EIR/EIS carefully avoids any explanation. There are good reasons why.

Off-setting over-pollution of the workplace is based upon buying carbon credits under the "Cap & Trade" law from an AQMD district that has significantly lower pollution. They can buy them from any AQMD in the world who wants to sell!

However, buying carbon credits only zeros-out over-pollution **on paper! The fact of over-pollution remains**. This does not leave the Delta zeroed out at all. Workmen who have jobs in construction with the BDCP will still have to work in an over-polluted atmosphere at the construction site, subjecting themselves to all the horrific contaminants found there,

To use this tactic in order to "zero-out" pollution during construction of the BDCP's tunnels in the Delta is an untruthful statement in fact!

It is clear from the BDCP's own documents that the only way they can zero-out harmful pollution at the workplace is through off-setting by purchasing carbon credits. Without this ability, the BDCP cannot even begin to fulfill its mission in the Delta. Therefore, the EIR-EIS of the Bay Delta Conservation Plan should be denied and the whole plan scrapped.

We are looking to the BDCP to make good on its promise of protection of workers and Delta residents from harmful pollutants as it is evident the BDCP can only think about ways to make it *appear* that protection is there while it really isn't.

Burt Wilson
Editor & Publisher
Public Water News Service
4311 Attawa Ave. #204
Sacramento, CA 95822
(916) 402-5031
<burtwilson1933@yahoo.com>

BDCP553

Public Water News Service

4311 Attawa Ave. Suite 204, Sacramento California 95822 Phone: 916-402-5031

BDCP Comment by Burt Wilson

RE: Notice of Additional Document for Public Review

Thank you for this opportunity to respond to the above-name document concerning the Economic and Fiscal Impact Statement. This statement concerns assessments, fees and charges that will be applied to individual and businesses, but most of the charges are unknown. In a sense, this is understandable, but the most grievous error is in omitting charges for the BDCP tunnels which will be incorporated into the Delta Plan.

The document says: "...costs to the State or local agency proposing a covered action could be passed on to specific private businesses and individuals through assessments, rates, fees or other charges."

The Private Sector Cost Impacts you list are mostly unknown whereas you should be able to estimate the impact ("Beneficiaries Pay") that the Delta Plan (including the construction of the twin tunnels) will have on all water rate-payers.

This is necessary because of the private funding of the tunnels by the Association of State and Federal Water Contractors, the authorized funding authority that will provide the revenue stream to the Dept. of Water Resources to construct the tunnels.

I am concerned that because this is not a state agency they can set rates of return on their investment that could be so high as to be considered usury! These rates should be known before any ground is broken. These rates should be part of the Delta Plan.

Sincerely,

Burt Wilson

Editor & Publisher

Public Water News Service

BDCP553

PUBLIC WATER NEWS SERVICE

4311 Attawa Ave. #204, Sacramento, CA 95822

RE: Comment to BDCP EIR/EIS by Burt Wilson

After Gov. Pat Brown's State Water Project (SWP) brought Sacramento River water down to Los Angeles, the Southland quickly developed a taste for it. The Metropolitan Water District took note and soon our river water became known as "sweet" water and there developed a growing demand for it in that dry, desert big city.

As time went on, it was found that as our clean, fresh Sacramento River water meandered through the Delta on its way to the Clifton Court Forebay to be pumped south, it picked up a lot of strange contaminants, toxic chemicals, microorganisms and all kinds of perverse fluids which were dumped into the Delta by businesses along the way.

Of course, the people in LA complained, so the Metropolitan Water District (MWD) invested in five huge ozone generators which bubble ozone gas through untreated water to disinfect it and improve its taste.

These Ozone generators work fine except for one thing: keeping them all going 24/7 costs a lot of money! The energy costs are staggering. Of course the rate-payers are footing the bill for the Ozone generators and are evidently happy to do so.

This brings us to the proposed second Forebay planned to be right next to the present Clifton Court Forebay. This is where Sacramento River water is going to be collected before it is pumped south. This second Forebay is to keep Sacramento water that arrives from the twin tunnels from mixing with run-of-the-mill Delta water in the regular Clifton Court Forebay.

Two things stand out here: one is that the tunnel water will have no fish in it so it will go through and come out of the pumps still in pristine condition. The second is that this water is ideal for fracking purposes in the valley--a financial bonanza for the water agencies that make such sales.

Third, by importing fresh and pure Sacramento River water into LA, the MWD will be able to cut down their energy costs considerably by not having to run their Ozone generators as much, if at all! This will save them millions of $$$$$!

Of course, these benefits are not written down in the BDCP's EIR/EIS or anywhere else for that matter or in any public statement of the MWD. In fact, it's hidden from public view. So much for transparency!

So the bottom line is that the MWD customers in the Southland will be paying through the nose for years for their part of the twin tunnels fiasco while the MWD will be saving loads of money on water purification. And Big Oil will have all the pristine water they need for fracking!

BDCPSS3

--Burt Wilson

From: john mcnear <john@mcnear.com>
Sent: Saturday, May 03, 2014 11:29 AM
To: BDCP.comments@noaa.gov
Subject: Comment on the Bay Delta Conservation Plan

Comment on the Bay Delta Conservation Plan:

The peripheral canal, pardon me, tunnel has an astronomical cost. The presently estimated $24,700,000 will, if judging from recent public capital estimates and final costs, will balloon to almost $100,000,000.

Most of this would be paid for by the public water agencies receiving the tunneled water. Their costs will, presumably, be passed on to their customers. If the price of water goes so high that it costs $5000 to fill a swimming pool and $50 for enough water to grow a head of lettuce or a bale of alfalfa, they won't use much of the water. Then who recoups the cost of the tunnel?

I remember hearing of a couple of similar stories. There is an Erskine Bridge across the River Clyde in Glasgow, Scotland. It is toll free. A new bridge was built, with a toll to pay for it. Few vehicles use the new bridge, opting instead to cross the Erskine Bridge. There is a Lake Pontchartrain, north of New Orleans. A bridge was built across it, with a toll to pay for it. Few vehicles use it, opting instead to drive around the lake.

Besides the tunnel's cost, and assuming that water customers will buy the water, how will it change the ecology of the Delta? When I was a wee lad, living at McNears Beach on San Pablo Bay, I remember that every fall and winter, seaweed would start to grow on the rocks. Every spring it would disappear. After Shasta Dam was built, the seaweed never disappeared.

Sincerely,
John Erskine McNear

From: Sara Mitchell <Sara@vica.com>
Sent: Monday, May 05, 2014 10:58 AM
To: BDCP.Comments@noaa.gov
Subject: Letter of Support for BDCP Alternative No. 4
Attachments: BDCP Alternative 4 - SUPPORT.pdf

Mr. Wulff -

Attached is a letter of support for BDCP Alternative No. 4 from the Valley Industry and Commerce Association (VICA).

Thank you.

Sara Mitchell
Legislative Affairs Manager
Valley Industry & Commerce Association
5121 Van Nuys Blvd., Suite 208
Sherman Oaks, CA 91403
(818) 817-0545
sara@vica.com
www.vica.com

Stay connected to VICA

BDCP555

May 5, 2014

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

Subject: SUPPORT Alternative No. 4 – Bay Delta Conservation Plan

Dear Mr. Wulff -

On behalf of the Valley Industry and Commerce Association (VICA), we urge you to support Alternative No. 4 of the Bay Delta Conservation Plan. Alternative 4 will restore and protect the Delta environment, while ensuring that California has a reliable water supply for years to come.

The construction of a new water conveyance facility — specifically the twin tunnel system — is an essential element of the BDCP. Until a reliable conveyance system is built to separate a portion of water from the fragile Delta levees, the California business community is at risk of losing a key source of water.

California's water system — including the largest estuary on the West Coast, the Sacramento-San Joaquin Delta — is highly vulnerable. It is time for California to abandon the status quo and advance the BDCP, with the right plan option. As the CEQA-preferred alternative, No. 4 will ensure that our state's water infrastructure is renovated with a twin tunnel system in a timely manner. We ask that you go forward with Alternative No. 4.

Sincerely,

Coby King
Chair

Stuart Waldman
President

BDCP556.

From: James Volb <jamesvolb@yahoo.com>
Sent: Wednesday, April 30, 2014 4:21 PM
To: BDCP.comments@noaa.gov
Subject: BDCP comments

Form Master
Form #3

Dear Mr. Wulff:
Before take permits can be issued under a habitat conservation plan, funding must be shown to be sufficient for all proposed activities, and all financial contributors and planned allocation of funds must be identified. You should be very skeptical of any Implementing Agreement that BDCP planners eventually submit, given the fact that they have been unable to give the public a reasonable amount of time to evaluate the funding proposal before the close of the EIR/EIS comment period.
The State and federal water contracts argue that the twin tunnels should be built because they have spent a quarter of a billion dollars on producing a Bay Delta Conservation Plan draft and environmental documents, including paying millions of dollars to consultants, holding years of meetings, and making dozens of presentations. However, they admit that the engineering for the actual tunnels is only 10% complete. This provides a poor basis for estimating the cost of building the twin tunnels that are the centerpiece of this habitat conservation plan.
It is therefore not surprising that urban and agricultural users that would be the beneficiaries of BDCP are balking at paying for these tunnels that cannot guarantee them more water. Now that the whole state sees the effect of prolonged drought, it is obvious to users that the tunnels could not even guarantee a more reliable supply of less water, even if water quality protections for fish and people are suspended. Metropolitan Water District member agencies in Southern California do not have take or pay contracts; some are looking for their own water supply alternatives and could opt out of taking SWP water, making MWD unable to meet its financial obligations. Similarly, agricultural users in the San Joaquin Valley have made it clear that they will not be able to afford the cost of water delivered by the tunnels. If contractors cannot meet their financial obligations for the project once it is built, taxpayers will end up paying.
As far as funding the actual habitat restoration portion of the plan, the water contractors have redefined ecosystem work as a public benefit and are counting on federal assistance and bond funding to pay for it. But there is absolutely no guarantee that Californians will approve a water bond this year or in the future, or that any bond they do approve will include funding for BDCP. Similarly, there is not guarantee that the federal government will come up with the $3.5 billion that BDCP is counting on from that source.
No one wants to pay for this ill-conceived infrastructure project, so I encourage the fisheries agencies to refuse to issue permits that would enable it to go forward.

Respectfully,
James Volberding
Antioch, CA

L # BDCP557

- ✓ Unused
- ☐ Duplicate of _____
- ☐ Out of Scope
- ☐ Other: _____

(replace original)

BDCP558.

From: McKenzie Hubert <mah446@cornell.edu>
Sent: Tuesday, May 06, 2014 8:06 AM
To: BDCP.Comments@noaa.gov
Subject: BDCP Comments
Attachments: HORT 2240 - Final Paper.docx

Hi,

I have attached my comments about some of the environmental measures of the BDCP, as well as my thoughts on water management and water conservation. Thank you.

Sincerely,

McKenzie Hubert
Cornell University '16
Chemical Engineering

BDCP558

780 Alison Circle
Livermore, CA 94550

May 6, 2014

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

Dear Mr. Wulff,

From my understanding, the Bay Delta Conservation Plan (BDCP) is a balance between promoting environmental conservation, and improving water management in California. Everyone is aware of the fact that California is facing an extreme drought after three consecutive years of below average rain fall. With reservoir levels far below their historical averages, the state is in desperate need of a plan to uphold water conservation strategies[i]. When Governor Jerry Brown announced the Water Action Plan, he not only called for citizens to make a voluntary effort to reduce water consumption by 20%, but he also noted the BDCP as one of the measures to improve the state's water management strategies. After reading through some of the goals and proposals, I developed an understanding of how water management strategies will be affected by the BDCP, but I failed to see how this plan would actively conserve water. While I agree that the Delta is in need of ecological repair, I don't think that this plan can be justly labeled and identified with the Water Action Plan because I don't think that it supports Governor's Brown call to action. In the following comments, I would like to address a few of my concerns: first, those related to ecological measures, and secondly, those pertaining to the water management aspects of the plan.

Sincerely,

McKenzie Hubert

Why does the current design exist?

This plan actually shares several characteristics with the origins of the current delta watershed which was developed back in the early 1900s. Settlers of the San Joaquin Valley immediately planted vegetation, not realizing the inconsistent periods of rainfall (or lack thereof), while those in the Sacramento Valley struggled to control the flooding of the Sacramento River. The Central Valley Plan (CVP) was enacted in 1933, calling for the construction of the dams and canals that we currently have today, to distribute water more equitably throughout the land. The goal was to improve water access to farmers south of the Delta, and control floods so that cities could form along the banks of the Sacramento. The CVP was not overly concerned with environmental conservation or the protection of California native fish, like salmon and steelhead. These fish once migrated up the Sacramento and San Joaquin Rivers to lay their eggs, but the dams along these rivers and along many of their tributaries prevent most of them from reaching their breeding ground, thus ending the once awesome Central Valley salmon run and endangering these fish species[ii]. Similarly, the goals of the BDCP are also to improve water access to farmers, but there is definitely a much heavier emphasis on fixing the problem of endangered wildlife that the CVP created.

Fish Movement Considerations

In the current design of the Delta, every 2 out of 3 fish trapped near the pumps that transport water from the northern reservoirs to the farmlands south of the Delta are killed[iii]. With this problem in mind, I can see why fish take priority in the BDCP when it comes to water management. As stated in the public draft, fish movements will dictate the diversion rates of water from rivers into the diversion tunnels to encourage salmonid migration upstream to their breeding ground. In theory, this would help to save the species from the edge of extinction. However, I am hoping that the design of this plan would also respond to an increase in human demand for water, even during times when the fish population is dense near the tunnels; otherwise, I fail to see how this measure would improve water access to farmers. It seems to have the potential to limit water access during the months when the salmonids migrate.

From the BDCP draft, it was not clear if a study had been done to determine how much the water levels in the rivers would vary depending on the flow rates exiting the river. I propose that an ecologist conduct this study and use the data to assess if any plant or animal species along the shores would be adversely affected by this variation. The fluctuation in water levels could lead to fragmentation of ecosystems, alter life-history schedules, and impact biodiversity along the shores of these rivers[iv]. While these affects will likely occur as a result of the drought, regardless of whether the BDCP is implemented or not, I would not want these effects to be exacerbated by the BDCP. Yes, the main purpose of this project is to save native fish, but why should that come at the expense of other ecosystems.

I also found it unclear as to what type of barriers (physical or non-physical) would keep fish out of the intake streams, regardless of whether there were dense fish populations present or not. In order to control the intake flow rate, I suppose there would need to be some type of physical barrier to block the flow. But when this barrier is open, what will prevent fish from accidentally entering these channels? I propose that a combination of physical and non-physical barriers, as described in Conservation Measure (CM) 16, be implemented to keep fish out of the tunnels. Even if these physical gates will be closed during the months of heavy salmonid migration, fish will be still be present in these areas year round when these barriers are opened. To divert these fish away from the tunnels, it seems logical to take precautionary actions such as

installing strobe lights, acoustic, bubbles, and/or electric field barriers. One of these non-physical barrier devices alone would not be as effective as if a combination of these technologies were installed. Research has shown that no one technique completely blocks all fish from taking a certain path, and that the effectiveness of a technique also depends on the size and type of fish species[v].

Rehabilitating Floodplains

The CVP has already destroyed some of the main functions of California's natural floodplains, which were to serve as a natural area for flood control, facilitate clean water, and provide other natural resources such as timber and fisheries[vi]. Now we are trying to engineer our way around this problem that our ancestors created, to restore the functionality of these lands. Before the CVP began in the 1930s, the Sacramento River used to flood regularly, naturally creating these floodplains. But by creating dams and reservoirs to control these floods and re-route the watershed, the natural floodplain ecosystems are struggling to stay afloat.

The BDCP calls for the modification of the Yolo Bypass to increase the frequency, duration, and magnitude of floodplain inundation to benefit the existing ecosystems. I can see the headlines now: "California uses remaining water to save floodplains while crops suffer." If the public is expected to make substantial voluntary reductions to their water usage, then shouldn't there also be some kind of water conservation effort here as well, even when it comes to something as important as preserving the environment. I'm all for promoting and restoring these fragile floodplain ecosystems, but I foresee a lot of backlash coming from public perception of "wasting" water.

The public would likely benefit from this restoration, but I think the issue here is more about the timing of this project. Water is already becoming a difficult resource to come by in most regions of California, and I don't think that implementing this plan to improve water quality will help the issue of scarcity. I agree with the intentions and motivation behind this measure, but California has become too dependent on using all of the water that the CVP made available to farmers and other residents. We cannot afford to "water" the wetlands in the midst of this extreme drought.

Localized Removal of Predatory Fishes (CM 15)

The endangerment of fish (in particular the Delta smelt, Chinook salmon, and steelhead, which are referred to as "covered species" in the draft of the project) seems to be one of the main drivers of the BDCP. These fish populations are dwindling due to the maze of dams and pumps that they must try to avoid on their migration upstream to return to their breeding ground. It seems justified to try to protect these endangered species; however, the systematic elimination of predatory fish, like catfish and large-mouth bass, in local areas seems almost like a form of fish genocide. However, looking at the big picture, I realize that in order to save these endangered species, predatory fish populations must be monitored.

The methods described in the BDCP to remove these predator species include electrofishing, hook-and-line, passive trapping, fishing tournaments, and modifying the habitat. I'm skeptical of this last technique in particular. In the process of trying to eliminate the predator species there is a possibility that altering the habitat could negatively impact the "covered species" that the BDCP is trying to protect. In all of these cases, actually, there is the potential to unintentionally harm "covered species," but it does seem that the overall net effect of these actions would encourage the growth of endangered populations. This plan has significant

potential to achieve its goal, but the BDCP does not distinctly outline the limitations that would be set to control how many predatory fish are removed. Once the salmon and steelhead populations eventually rise, some kind of predator will be needed to keep the food chain within the ecosystem in balance, and prevent overpopulation. Even though it may take several years, maybe even decades, to restore the populations of these endangered species, I think it is critically important that we don't overlook the possibility that the removal of too many predator species could also harm the balance of the food chain.

Another concern related to this measure (from more of an administrative standpoint) is what would happen to all of the fish that are removed from the rivers. Which party would be responsible for disposing of these fish, and where would they be disposed of? This issue could potentially lead to an opportunity for the governing agency to recover some of its program implementation expenses by selling these large predator fish. For example, if a fishing tournament is organized (where competitors are restricted to catch only particular predatory species), tournament officials could collect and sell all of the fish caught by the competitors and sell them to local markets. This would help to offset costs and make the program more sustainable.

Non-Physical Fish Barriers (CM 16)

As I mentioned previously, research has shown that there are many different types of non-physical barriers that can guide fish along a preferred path. Some examples are bubble walls, acoustic barriers, strobe lights, electric fields, magnetic fields, and even chemical barriers. However, not all of these techniques are effective against all sizes and types of fish species. Based on results from the Old River Project, the combination of underwater strobe lights, sound, and bubbles affects salmonids, but not some other types of fish species[vii]. Using these types of barriers to guide salmonids along paths where they are most likely to reach their breeding ground sounds like a great idea in theory, but there are some adverse effects that may need to be considered. As observed in the Old River Project, predatory fish adapted to these new barriers and actually used them as herding tools. Soon after the barriers were implemented, researchers found an increased number of predators in the surrounding area, negating the benefits of the barriers. This may seem like a blow to the design of this plan, but this unintended side effect could also be used to our advantage to eliminate these predatory fish. If predators tend to aggregate in these areas, then targeting these locations with the removal strategies described in CM 15 could significantly improve survival rates of salmonids and other "covered species."

There is another possible adverse side effect that could be studied before this measure would be implemented: how would the diversion of fish from certain tributaries affect those ecosystems? There would most likely be a substantial impact on the food chain of those ecosystems, and it could also change fishing patterns in surrounding areas, affecting local economies. I think that the BDCP proposal could give a more holistic view of how implementing non-physical barriers to guide salmonids along specific routes would affect surrounding areas, not just salmonid survival rate.

Recreational Users Invasive Species Program (CM 20)

I appreciate the fact that California is making an effort to prevent the spread of invasive species. Water hyacinth and hydrilla are two invasive species particularly relevant to the San-Joaquin Delta region[viii]. Both are fast growing plants that form dense mats on the surface of the water, impeding water flow and blocking sunlight from penetrating into the depths of the water

to reach plants in the sand bed. This inhibits photosynthesis, which thereby decreases the amount of oxygen in the water, negatively affecting both native plants and animals[ix]. Clearly the introduction of either of these species would have a substantial impact on an ecosystem. These species are very commonly spread when stem fragments or buds stowaway on boats and trailers. When boats are not cleaned when they are removed from a body of water, these invasive species may be transferred to other bodies of water where the watercraft is next launched.

I noticed that the Aquatic Nuisance Species Task Force and 100th Meridian Initiative were two model programs that the BDCP's Implementation Office was going to collaborate with before starting a program in the Delta[x]. The Lake Tahoe Invasive Species Program, which requires watercraft to be cleaned and then inspected by trained professionals before entering and exiting the site, may also provide valuable information on how to effectively organize this type of initiative[xi]. While their program is focused on preventing the spread of zebra mussels, similar techniques (cleaning, draining, and drying the boat) would also prove effective for any other type of invasive species.

The *Uniform Minimum Protocols and Standards for Watercraft Interception Programs for Dreissenid Mussels in the Western United States* [xii] (on which the BDCP's inspection program would be based) did not specify how recreational boaters would be held accountable for avoiding inspection sites. I'm assuming that there are other locations in the Delta besides just the seven inspection sites that this measure would fund, and what is to prevent people from simply bypassing inspection sites to avoid the fees and inconvenience of it. Outreach and education would of course appeal to the morals and good judgment of most, but consider how many people litter even when in the vicinity of a trash can? Even if adequate information and opportunity are provided to prevent the spread of invasive species, people may still not comply with regulations, and there should be some form of consequence. A ticket or fine, for example, would hopefully discourage boaters from simply avoiding inspection sites altogether. Perhaps local officials in regions of the Delta could monitor boats on the water to determine if any watercraft does not have the necessary permits signifying that it had passed inspection. In order for this plan to work though, the boats that pass inspections would need some kind of visible marker, like a brightly colored flag, to distinguish them from violators.

Other questions that remain unanswered include, "Who will be running these inspection stations? Would governance of these programs depend on whether the existing launch site was run by the city, county, or state?" I suppose any revenue from inspection fees and fines incurred by violators could go toward sustaining these inspection programs, and that any additional funds could be used to extend outreach and education to other areas.

Reservoir Levels

One of the most frequently asked questions on the BDCP's website is "Will the BDCP affect upstream reservoirs or cause 'dead pool' conditions?" According to the response given on the site, some sort of modeling has shown that the BDCP will allow water managers more flexibility when it comes to draining water from reservoirs to avoid "dead pools" (where the water level in the reservoir falls so low that it can no longer drain by just gravity power). The provided answer on the site also points out that the main cause of reservoir depletion would be primarily due to climate changes, and that the BDCP would only affect reservoir levels at certain times of the year to accommodate fish. But this would still result in a 10% decrease in the amount of water delivered compared to the average amounts over the last 20 years[xiii]. This may not seem like a lot, but in this drought, every drop of water counts. Governor Brown declared the

drought as an official state of emergency on January 17, 2014, and the first order given was for the Department of Water Resources (DWR) to promote the Save the Water campaign to encourage Californians to conserve at least 20% of their usual water consumption[xiv]. If the governor is asking for voluntary actions by citizens to reduce consumption by 20%, how can the BDCP then justify a reduction in the amount of water available for use by 10%. Sure, the main driver of decreased reservoir levels would be climate change rather than the BDCP, but the project definitely wouldn't help the state save any water, and would only add to the existing stress on water supplies.

What are the real goals?

While the BDCP was "designed to restore and protect ecosystem health, water supply, and water quality," I mostly saw proposals to "conserve ecosystems in a sustainable manner and contribute to the recovery of threatened and endangered species"[xv]. While one of the goals is to improve water access for farmers, it appears as if the main interest of this project lies more with environmental adaptive management and ecological conservation strategies. The plan is currently not well supported by California Congressmen, with strong negative feedback coming from several representatives from districts surrounding the Delta, including George Miller (District 11), John Garamendi (3), Ami Bera (7), and Doris Matsui (6)[xvi]. These officials are concerned that the plan does very little to actually encourage water conservation, and believe that the costs of implementing this plan do not outweigh the benefits[xvii]. I don't believe that these representatives are against restoring the habitats and native species of the Delta, rather they feel as if it should not be considered as a part of the state's Water Action Plan. This association is misleading because the plan seems to do very little to conserve water. These officials would rather that California focus its time and money on implementing a plan or policy more concerned with protecting one of its most precious resources, water, in this state of emergency. Once the drought has subsided, these Congressmen may be more inclined to adopt the BDCP. Although at a high cost of $19 billion[xviii], it may be more feasible to expect just a few of its measures to be approved at a time, perhaps adopting sections of it in stages.

Conclusion

I appreciate the intent of the BDCP to improve environmental conditions for endangered native fish while simultaneously making it easier for farmers south of the Delta to get access to water. However, I would have to agree with the politicians on this one: I do not think that now is the right time to implement an expensive water management plan that does not actively conserve water. I fail to see how the BDCP could be considered part of California's Water Action Plan, and I don't think that California should expend its resources on this project when the state is facing a much more serious water crisis. In the future, I would definitely support a plan like this if it were installed in stages, rather than all at once, to spread out the high costs over a longer period of time.

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BDCP558

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BDCP559.

From: Food & Water Watch <act@fwwatch.org> on behalf of Walker Foley <wfoley@fwwlocal.org>
Sent: Monday, April 28, 2014 9:00 AM
To: BDCP.comments@noaa.gov
Subject: I Oppose the BDCP

Apr 28, 2014

Ryan Wulff
650 Capitol Mall. Suite 5-100
Sacramento, CA 95814

Dear Wulff,

I am concerned and alarmed by the proposal for the new tunnel project to redirect water from the Sacramento River.

This project will cost billions of taxpayer dollars at a time when our state cannot afford it. An entire river should not be redirected for the sake of large-scale, unmetered agriculture and the oil industry.

This kind of thinking about water policy is last century. California cities need to begin spending their money developing local infrastructure for groundwater storage, recycling and replenishment -- not this boondoggle approach to above-ground storage/river diversion that will mostly benefit corporate ag and the frackers on the monterey shale.

The proposed tunnels have already been rejected by voters in 1982, and similar tunnel projects in places like Santa Barbara County have not been cost effective and have provided little benefit to taxpayers.

Overall, the tunnels are unnecessary and fiscally irresponsible. The existing aquaduct could be reinforced and other local water projects like rainwater collection could be implemented instead, providing a much greater benefit at a lower cost.

Sincerely,

Mr. Walker Foley
9652 Keokuk Ave
Chatsworth, CA 91311-5430

From: douglas.humble@conservationtechnology.com
Sent: Monday, April 28, 2014 9:39 AM
To: BDCP.comments@noaa.gov
Subject: Graywater Recycling Augmentation Options

To whom it concerns:

We are in the process of augmenting local water supplies in San Francisco Bay and Los Angeles River watershed through graywater recycling and are trying to identify what codes we need to be aware of and whom to speak with. We would appreciate any direction on these matters.

We are eager to facilitate the growth of this technology but would first like to understand what local grants or incentives are in place so we can help companies eager to adopt such technology.

Thanks for your time and have a nice day.

Respectfully,

Douglas Humble
Conservation Technology
tel: 970-286-8686
email: douglas.humble@conservationtechnology.com

From: James Volb <jamesvolb@yahoo.com>
Sent: Wednesday, April 30, 2014 4:19 PM
To: BDCP.comments@noaa.gov
Subject: BDCP comments

Increased bromide
levels: Antioch (51% increase),
CCWD's Mallard Slough (41% increase) in months
intakes most likely utilized, and North Bay Aqueduct
(40-98%) almost entirely from Alt. 4 ops.

Water quality
degradation for 7 constituents:
bromide, chloride, salinity, mercury, organic carbon,
pesticides, selenium.

Chloride increases may be greater in western Delta locations from
increased salinity intrusion caused by increased tidal exchange volumes in the Delta from
creation of tidal habitat restoration under CM4.
EIR Impacts WQ-5, 7, 11, 14, 18, 22, and 26.

46 UNAVOIDABLE ADVERSE
DELTA IMPACTS
Water Quality
(7 constituents: bromide, chloride,
salinity, mercury, organic carbon, pesticides,
selenium);
Soils (2);
Land Use(1);
Agriculture(4);
Recreation(2);
Aesthetics(5);
Cultural(7);
Transportation(5);
Public Services & Utilities(2);
Air Quality(4);
Noise(3);
Hazards & Hazardous Materials(1);
Public Health(1);
Paleantologilocal(1)
This is NOT co-equal .
Unavoidable is Unacceptable.

7 Significant and Unavoidable Adverse Impacts on
Delta water quality: bromide, chloride, salinity,
mercury, organic carbon, pesticides, selenium is
not coequal.

Substantially degrading Delta water quality so at
least 4 urban intakes cannot pump water without
spending millions to upgrade treatment facilities to
meet drinking water health standards is not
coequal.

Increasing bromide concentrations 40
-
98% and

chloride up to 33% while reducing concentrations
for export water by 45% is not coequal.
What good are water rights without water quality?

Thank You,
James Volberding

BDCP561

BDCP562.

From: Bill <Bill@thekearnsco.com>
Sent: Wednesday, May 07, 2014 5:17 PM
To: BDCP.Comments@noaa.gov
Cc: BDCP.Comments.COPY@nodeltagates.com
Subject: STOP THE TUNNELS

I am William Kearns owner of 17075 Terminous Rd. Isleton, Ca. 95641. We are waterfront on the Georgiana Slough. I am strongly against the Tunnels. This will damage the delta and all the habitat forever. It will also lower all our property values of residents who have lived on the delta for many tears. If Southern California needs water then make them spend the money on a desalinization plant down south. DO Not ruin the Delta at the expense of water hungry Southern CA. If they do not have enough water they should put a moratorium all new construction in Southern CA.

From: remaxbarnes@gmail.com on behalf of Laurelee Barnes <llbarnes@remax.net>
Sent: Wednesday, May 07, 2014 7:29 PM
To: bdcp.comments@noaa.gov
Subject: Fwd: Delta concerns

Please note your records that I have these concerns:

> The farmers can't water crops with salt water and if they keep re-routing Delta water, the bay water comes further up stream.

> The DWR gives water rights to people or business, but that doesn't prevent water rights from being sold to other states or other countries.

Thank you for your support.

Laurelee Barnes
113 Oxbow Marina
Isleton, CA

LLbarnes@remax.net

From: Abigail Shaw <abishaw@gmail.com>
Sent: Wednesday, May 07, 2014 4:22 PM
To: BDCP.comments@noaa.gov
Cc: BDCP.Comments.COPY@nodeltagates.com
Subject: I am against the Delta Tunnel plan

I am a homeowner on a tributary of the Sacramento River, as well as a working professional. I believe that this plan will undermine the value of my home and interfere with my happiness. I depend on the River to soothe the anxieties of modern life, to provide a good incentive to lead an active life and stay healthy, and to bring beauty to everyone who lives on or visits the delta. Please do not approve this plan.

The people who live and visit here have a right to continue to enjoy the value of the River and the River environment. Our happiness should not be the cost of every glass of water for those who have chosen to live in the desert.

I am also shocked and amazed that these comments are not posted publicly as is usual. Shame on you.

Thank you.

--
Abby Shaw
510-506-6601

From: LaVeta Gibbs <lavetag@sbcglobal.net>
Sent: Wednesday, May 07, 2014 12:56 PM
To: BDCP.Comments@noaa.gov
Subject: Use Technology to Create and Save our water - stop this project!!!!

Importance: High

All efforts relating to the California water crisis should be focused on Creating and Saving more usable water. Spending any money on simply redistributing existing water does not solve the problem and takes the resources and focus away from what is really needed.

California has the best technology experts in the world. Let's challenge them to creatively resolve this issue with a Sustainable water project. These very smart guys and gals could do more than we can imagine. And whatever they come up with will be of great value to the world. We could sell the solutions to other locations and get a return on our investment.

Please stop all this moving around of such a limited resource and begin to seriously focus on solutions. All money and priority should be to make more usable water. Anything short of that is an expensive distraction and delays what should be done right now. This crisis is an opportunity to make California great (and possibly wealthy!).

LaVeta Gibbs
Resident of both southern and northern Calif.

From: Huppler, Thomas R. <huppler1@llnl.gov>
Sent: Wednesday, May 07, 2014 11:59 AM
To: BDCP.Comments@noaa.gov
Subject: BDCP EIR/EIS comment

I am outraged that your organization has decided not to post all comments online as they come in so everyone can see what others are commenting. This can only be aimed at thwarting informed public participation because no legitimate purpose is served by keeping everyone in the dark about what others are saying. Posting comments in an online docket during an EIS process is standard federal government procedure. Why has this highly controversial project been selected for special treatment? I demand that all comments be posted online in an easily accessible format and that the comment period be extended for the length of time that comments were not posted online.

I also demand an explanation for the following:
"The Brown Administration admits the tunnels would have '52 Significant and Unavoidable Adverse Impacts' on the Delta region, including permanently degraded groundwater quality, long-term reduction of navigation opportunities, and exposure to unhealthy air quality bad enough in Byron to require people to move in order to avoid an increased cancer risk," said RTD Executive Director Barbara Barrigan-Parrilla. "Hidden deep in the 40,000 page project proposal, and further buried in a footnote (p.31-13, AQ-13 and fn 6), is the news that Byron area children, elderly and people with conditions like asthma will be so threatened by air toxins from the tunnels project that they would have to leave town. What about the thousands of people just up the road in Brentwood and Discovery Bay?"

There will be hell to pay if any work begins on a water diversion system that will destroy the ground water resources that I need for my home, or result in higher salt content in the Delta.

Thomas Huppler
Discovery Bay resident

From: Torneden, Roger <RTorneden@uclaextension.edu>
Sent: Wednesday, May 07, 2014 9:25 AM
To: BDCP.comments@noaa.gov
Subject: One Question

Does the Bay Delta plan increase the **total amount** of water available for California? I'm led to believe it re-directs water but does not increase the amount to mitigate the Central Valley and SOCAL water deficits.

Thank you,

Roger

Roger L. Torneden, Ph.D., CFP®
Director of Business, Management and Legal Programs
UCLA Extension
10995 Le Conte Avenue, Suite 515
Los Angeles, CA. 90024-1333
(310) 206-1720

BDCP568.

From: Ray Brant <r_abrant@sbcglobal.net>
Sent: Tuesday, May 06, 2014 6:00 PM
To: BDCP.comments@noaa.gov
Subject: Stop the Tunnels

Ryan Wulff
National Marine Fisheries Service
650 Capitol Mall
Suite 5-100
Sacramento, CA 95814

Dear Mrt Wulff,

I have owned a home on the Sacramento River since 1986, across from Isleton. Prior to 1986, I boated and rented a small Island in the South Delta.
I have boated the entire delta area and up the Sacramento River to Verona.

I began boating in the Delta in the late 50's and since that time I have have observed the water quality diminish and the fishery decline!!!!

The Twin Tunnel Project is no better than the Peripheral Cannel of 1986---

With this project, Brown has the opportunity to adjust California's historic relationship to water. As he does so, he should keep these principles in mind:
Moving water is not a sin, but using it to favor big farms over family farms is unacceptable.
And protecting Southern California's water future is commendable, but it shouldn't come at the expense of the delta's.

This Project is very bad for the Fisheries and the people who live in and around the Delta.

It is time to push for MORE water storage and better farming methods that use less water.

No one wants to pay for this ill-conceived infrastructure project, so I encourage the fisheries agencies to refuse to issue permits that would
enable it to go forward!!!!!

Thank you
Raymond F. Brant
17400 Grand Island Rd.
Walnut Grove, CA. 95690

BDCP569.

From: Huppler, Thomas R. <huppler1@llnl.gov>
Sent: Tuesday, May 06, 2014 5:42 PM
To: BDCP.comments@noaa.gov
Subject: Comments to the Draft BDCP

I really need to know how I am supposed to interpret and accept the following:

"The Brown Administration admits the tunnels would have '52 Significant and Unavoidable Adverse Impacts' on the Delta region, including permanently degraded groundwater quality, long-term reduction of navigation opportunities, and exposure to unhealthy air quality bad enough in Byron to require people to move in order to avoid an increased cancer risk," said RTD Executive Director Barbara Barrigan-Parrilla.
"Hidden deep in the 40,000 page project proposal, and further buried in a footnote (p.31-13, AQ-13 and fn 6), is the news that Byron area children, elderly and people with conditions like asthma will be so threatened by air toxins from the tunnels project that they would have to leave town. What about the thousands of people just up the road in Brentwood and Discovery Bay?"

The financial interests of a few wealthy So Cal residents would forever contaminate one of the most beautiful delta areas on earth, and it happens to be where I have my home. This will not be taken lightly. I have no intention of having to move, and there should be no program allowed in CA that would knowingly (or NOT) contaminate the ground water that thousands of residents depend on. To destroy the Delta of the fresh water it needs so that permanent crops can be grown in Kern County and other desert areas south of us is simply an insane proposal. There is not enough water from No Cal to satisfy So Cals interests so So Cal simply needs to find other sources.
Desalination, hint. Hint.

BDCP570.

From: Sarah Alexander <petitions@moveon.org>
Sent: Wednesday, May 07, 2014 1:34 PM
To: Ryan Wulff, BDCP Comments
Subject: 100 signers: Submit a Public Comment to Stop the Tunnels! petition

Form #4

Form Master - MoveOn.Org

Dear Ryan Wulff,

I started a petition to you titled *Submit a Public Comment to Stop the Tunnels!*. So far, the petition has 100 total signers.

You can post a response for us to pass along to all petition signers by clicking here:
http://petitions.moveon.org/target_talkback.html?tt=tt-73301-custom-41510-20240507-x9pDBj

The petition states:

> "I urge you to reject the proposal for the tunnel project to redirect water from the Sacramento River. This project will cost billions of taxpayer dollars at a time when our state cannot afford it. An entire river should not be redirected for the sake of large-scale, unmetered agriculture and the oil industry. The tunnels are unnecessary and fiscally irresponsible. "

To download a PDF file of all your constituents who have signed the petition, including their addresses, click this link: http://petitions.moveon.org/deliver_pdf.html?job_id=1211956&target_type=custom&target_id=41510

To download a CSV file of all of your constituents who have signed the petition, including their addresses, click this link:
http://petitions.moveon.org/deliver_pdf.html?job_id=1211956&target_type=custom&target_id=41510&csv=1

Thank you.

--Sarah Alexander

If you have any other questions, please email petitions@moveon.org.

The links to download the petition as a PDF and to respond to all of your constituents will remain available for the next 14 days.

From: Adam Moule <petitions-noreply@moveon.org>
Sent: Wednesday, May 07, 2014 11:32 AM
To: Ryan Wulff, BDCP Comments
Subject: I'm the 11th signer: "Submit a Public Comment to Stop the Tunnels!"

Dear Ryan Wulff,

I just signed a petition addressed to you titled *Submit a Public Comment to Stop the Tunnels!*. So far, 18 people have signed the petition.

You can reach me directly by replying to this email. **Or, post a response for MoveOn.org to pass along to all petition signers by clicking here:** http://petitions.moveon.org/target_talkback.html?tt=tt-73301-custom-41510-20240507-x9pDBj

The petition states:

> "I urge you to reject the proposal for the tunnel project to redirect water from the Sacramento River. This project will cost billions of taxpayer dollars at a time when our state cannot afford it. An entire river should not be redirected for the sake of large-scale, unmetered agriculture and the oil industry. The tunnels are unnecessary and fiscally irresponsible. "

My additional comments are:

> The central valley is a desert. It is not responsible to have large agriculture in a desert. The central valley farmers should switch to lower water tree crops and the money should be invested in water savings rather than the tunnel. Prof. MOule

To download a PDF file of all of your constituents who have signed the petition, including their addresses, click this link: http://petitions.moveon.org/deliver_pdf.html?job_id=1211820&target_type=custom&target_id=41510

To download a CSV file of all of your constituents who have signed the petition, including their addresses, click this link:
http://petitions.moveon.org/deliver_pdf.html?job_id=1211820&target_type=custom&target_id=41510&csv=1

Adam Moule
Davis, CA

From: Dave Bakay <petitions-noreply@moveon.org>
Sent: Wednesday, May 07, 2014 11:58 AM
To: Ryan Wulff, BDCP Comments
Subject: I'm the 55th signer: "Submit a Public Comment to Stop the Tunnels!"

Dear Ryan Wulff,

I just signed a petition addressed to you titled *Submit a Public Comment to Stop the Tunnels!*. So far, 56 people have signed the petition.

You can reach me directly by replying to this email. **Or, post a response for MoveOn.org to pass along to all petition signers by clicking here:** http://petitions.moveon.org/target_talkback.html?tt=tt-73301-custom-41510-20240507-x9pDBj

The petition states:

> "I urge you to reject the proposal for the tunnel project to redirect water from the Sacramento River. This project will cost billions of taxpayer dollars at a time when our state cannot afford it. An entire river should not be redirected for the sake of large-scale, unmetered agriculture and the oil industry. The tunnels are unnecessary and fiscally irresponsible. "

My additional comments are:

> Money could be used to help farmers use water more efficiently!

To download a PDF file of all of your constituents who have signed the petition, including their addresses, click this link: http://petitions.moveon.org/deliver_pdf.html?job_id=1211837&target_type=custom&target_id=41510

To download a CSV file of all of your constituents who have signed the petition, including their addresses, click this link:
http://petitions.moveon.org/deliver_pdf.html?job_id=1211837&target_type=custom&target_id=41510&csv=1

Dave Bakay
davis, CA

From: Cindy Coen <petitions-noreply@moveon.org>
Sent: Wednesday, May 07, 2014 12:15 PM
To: Ryan Wulff, BDCP Comments
Subject: I'm the 63rd signer: "Submit a Public Comment to Stop the Tunnels!"

Dear Ryan Wulff,

I just signed a petition addressed to you titled *Submit a Public Comment to Stop the Tunnels!*. So far, 65 people have signed the petition.

You can reach me directly by replying to this email. **Or, post a response for MoveOn.org to pass along to all petition signers by clicking here:** http://petitions.moveon.org/target_talkback.html?tt=tt-73301-custom-41510-20240507-x9pDBj

The petition states:

> "I urge you to reject the proposal for the tunnel project to redirect water from the Sacramento River. This project will cost billions of taxpayer dollars at a time when our state cannot afford it. An entire river should not be redirected for the sake of large-scale, unmetered agriculture and the oil industry. The tunnels are unnecessary and fiscally irresponsible. "

My additional comments are:

> Farmers have already worked to update their water usage to a minimum and by the time this tunnel is done the drought might be long over. If we are allowing fracking in California, those companies can import the water from the ocean, why should fresh water resources be wasted on oil? Have oil make a way to pull sea water and use it not fresh water, they have the resources. If I have to limit my water use so should all businesses, agricultural has a valid water use and tend to reuse water runoff as they invest in wells to collect the ground water.

To download a PDF file of all of your constituents who have signed the petition, including their addresses, click this link: http://petitions.moveon.org/deliver_pdf.html?job_id=1211849&target_type=custom&target_id=41510

To download a CSV file of all of your constituents who have signed the petition, including their addresses, click this link:
http://petitions.moveon.org/deliver_pdf.html?job_id=1211849&target_type=custom&target_id=41510&csv=1

Cindy Coen
Citrus Hts, CA

From: Evelyn Falkenstein <petitions-noreply@moveon.org>
Sent: Wednesday, May 07, 2014 12:33 PM
To: Ryan Wulff, BDCP Comments
Subject: I'm the 73rd signer: "Submit a Public Comment to Stop the Tunnels!"

Dear Ryan Wulff,

I just signed a petition addressed to you titled *Submit a Public Comment to Stop the Tunnels!*. So far, 75 people have signed the petition.

You can reach me directly by replying to this email. **Or, post a response for MoveOn.org to pass along to all petition signers by clicking here:** http://petitions.moveon.org/target_talkback.html?tt=tt-73301-custom-41510-20240507-x9pDBj

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My additional comments are:

> In Davis and Woodland our aquifers are depleted and of poor quality. We "agreed" to divert water from the Sac River. An access deal ($$$) was made and construction for the water treatment plant alone will raise our water prices by 3-5 times in five years. Two entire crews will maintain the new source and the groundwater wells, too. I have nightmares about this region becoming like the lower Colorado. The Sacramento is fed from the shrinking glaciers and erratically negligible snowpack of the Sierras. Like tomatoes? They grow in fields all around here. For now. Fracking in an earthquake State means pushing enormous amounts of water into unstable earth; this is just as bad as the potential for pollution. I came from near Youngstown OH where fracking caused an earthquake where there never was one before in my long lifetime.

To download a PDF file of all of your constituents who have signed the petition, including their addresses, click this link: http://petitions.moveon.org/deliver_pdf.html?job_id=1211865&target_type=custom&target_id=41510

To download a CSV file of all of your constituents who have signed the petition, including their addresses, click this link:
http://petitions.moveon.org/deliver_pdf.html?job_id=1211865&target_type=custom&target_id=41510&csv=1

Evelyn Falkenstein
Davis, CA

From: janelle lathrop <petitions-noreply@moveon.org>
Sent: Wednesday, May 07, 2014 12:45 PM
To: Ryan Wulff, BDCP Comments
Subject: I'm the 79th signer: "Submit a Public Comment to Stop the Tunnels!"

Dear Ryan Wulff,

I just signed a petition addressed to you titled *Submit a Public Comment to Stop the Tunnels!*. So far, 80 people have signed the petition.

You can reach me directly by replying to this email. **Or, post a response for MoveOn.org to pass along to all petition signers by clicking here:** http://petitions.moveon.org/target_talkback.html?tt=tt-73301-custom-41510-20240507-x9pDBj

The petition states:

> "I urge you to reject the proposal for the tunnel project to redirect water from the Sacramento River. This project will cost billions of taxpayer dollars at a time when our state cannot afford it. An entire river should not be redirected for the sake of large-scale, unmetered agriculture and the oil industry. The tunnels are unnecessary and fiscally irresponsible. "

My additional comments are:

> Tunnels are not the answer. Money for the tunnels could be better spent on other alternatives such as desalination. Come on Calif. we should be leading the way to better water use, not destroying the environment for over population and over use of our natural resources.

To download a PDF file of all of your constituents who have signed the petition, including their addresses, click this link: http://petitions.moveon.org/deliver_pdf.html?job_id=1211870&target_type=custom&target_id=41510

To download a CSV file of all of your constituents who have signed the petition, including their addresses, click this link:
http://petitions.moveon.org/deliver_pdf.html?job_id=1211870&target_type=custom&target_id=41510&csv=1

janelle lathrop
Sacramento, CA

From: Marcel <petitions-noreply@moveon.org>
Sent: Wednesday, May 07, 2014 12:45 PM
To: Ryan Wulff, BDCP Comments
Subject: I'm the 80th signer: "Submit a Public Comment to Stop the Tunnels!"

Dear Ryan Wulff,

I just signed a petition addressed to you titled *Submit a Public Comment to Stop the Tunnels!*. So far, 80 people have signed the petition.

You can reach me directly by replying to this email. **Or, post a response for MoveOn.org to pass along to all petition signers by clicking here:** http://petitions.moveon.org/target_talkback.html?tt=tt-73301-custom-41510-20240507-x9pDBj

The petition states:

> "I urge you to reject the proposal for the tunnel project to redirect water from the Sacramento River. This project will cost billions of taxpayer dollars at a time when our state cannot afford it. An entire river should not be redirected for the sake of large-scale, unmetered agriculture and the oil industry. The tunnels are unnecessary and fiscally irresponsible. "

My additional comments are:

> Why not direct water from regions with surplus water like Oregon to help Northern California? Why are we going to suck dry our rivers when we know that we will be experiencing a dry period for the next couple years. Rain will be scare in the coming years, we have to think ahead, and not use up what little water resources California has.

To download a PDF file of all of your constituents who have signed the petition, including their addresses, click this link: http://petitions.moveon.org/deliver_pdf.html?job_id=1211871&target_type=custom&target_id=41510

To download a CSV file of all of your constituents who have signed the petition, including their addresses, click this link:
http://petitions.moveon.org/deliver_pdf.html?job_id=1211871&target_type=custom&target_id=41510&csv=1

Marcel
El Macero, CA

BDCP577.

From: Geraldine Knatz <knatz@usc.edu>
Sent: Tuesday, May 13, 2014 4:02 PM
To: BDCP.comments@noaa.gov
Cc: Geraldine Knatz
Subject: Submitting comment letter on BDCP in 6 separate files (attached)
Attachments: cover letter bay delta plan.docx; Fish & Aquatic Resources Comments Bay Delta Plan.docx; Water Quality Comments, Bay Delta Plan.docx; Water Supply Comments - Bay Delta Plan.pdf; Air Quality & GHG Comments, Bay Delta Plan.pdf; BDCP DEIR_DEIS Socioeconomic Impacts Comment letter_Spring 2014 (1).pdf

Geraldine Knatz
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562-343-0226 cell

BDCP577

Geraldine Knatz
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knatz@usc.edu
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May 12, , 2013

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

SUBJECT: Comments on the Bay Delta Plan EIR/EIS from Students from USC's Environmental & Regulatory Compliance Course

The graduate students enrolled in the Spring Semester course, ENE 502 Environmental and Regulatory Compliance have devoted a significant part of the semester in evaluating key sections of the subject EIR/EIS. Attached you will find their comments prepared in five specific areas: Water Supply, Water Quality, Socio-economics, Fish and Aquatic Resources and Air Quality & Greenhouse Gas Emissions.

Because the semester will be over before the release of the final EIR/EIS we request that you include each of the following names and email addresses attached in your notification of response to comments and any subsequent actions taken on the project.

Sincerely,

Geraldine Knatz

BJCP577

Yongxiorg Ren
yongxior@usc.edu

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-

Analysis of Joint Environmental Impact Report (EIR) and Environmental Impact Statement (EIS) for the Bay Delta Conservation Plan (BDCP); Chapter 8, Water Quality

final paper for

ENE 502, "Environmental and Regulatory Compliance"
University of Southern California

written by

Team "DEN + 1"
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Jing (Joseph) Song Xi, joseph.xi.45@gmail.com

April 28, 2014

Introduction

The authors, a team of graduate students from the University of Southern California (USC), reviewed the joint Draft Environmental Impact Report and Environmental Impact Statement (Draft EIR/EIS) for the Bay Delta Conservation Plan (BDCP). This EIR/EIS was prepared by the California Department of Water Resources (DWR), U.S. Department of the Interior (DOI) Bureau 2 of Reclamation (Reclamation), U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries 3 Service (NMFS).

The Draft EIR/EIS has been made available for public comment in accordance with the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA). The current document totals over 40,000 pages, including data tables and appendices. Public comments were originally due by 13 December 2013, but as of the writing of this report, comments are due by 13 June 2014.

Background of BDCP

According to its website, the BDCP is a comprehensive conservation strategy aimed at protecting dozens of species of fish and wildlife, while permitting the reliable operation of California's two biggest water delivery projects. The proposed project has two primary objectives:

1. To secure California's water supply infrastructure
2. To protect and restore habitat in the Sacramento-San Joaquin Delta area

The BDCP includes several project components that are identified within the Draft EIR/EIS as conservation measures. These conservation measures (or CMs) include the proposed construction and operation of a dual-conveyance water delivery system (CM1); measures to protect and restore natural communities (CM2-CM11); and management of environmental stressors (CM12-CM22).

Bay Delta Background

The Sacramento-San Joaquin Delta (Bay Delta) is an important region economically and environmentally. As described by the State Water Resources Control Board in *Frequently Asked Questions on the Bay Delta Process dated May 17, 2012*, "[t]he Sacramento-San Joaquin Delta is a critically important natural resource for California and the nation. It is the hub of much of California's water supply. It power $400 billion of California's $1.5 trillion economy." Furthermore, "[t]he Delta and Suisun Marsh support more than 55 known fish species and more than 750 plant and wildlife species. Of these species, approximately 100 wildlife species, 140 plant species, and 13 taxonomic units of fish are considered special-status species and are afforded some form of legal or regulatory protection."

Water quality objectives of the Bay Delta are outlined within the State Water Resource Control Board's San Francisco Bay/Sacramento-San Joaquin Delta Estuary Water Quality Control Plan. This plan identifies the beneficial uses of the Bay Delta, the water quality objectives for protection of these beneficial uses, and an implementation plan to achieve water quality objectives. These objectives are referenced in the Draft EIR/EIS.

Water Quality Background

The Draft EIR/EIS evaluates water quality impacts for the affected area, which includes areas upstream of the Delta, the Delta itself, and water export areas.

In terms of thresholds for significance in determining impacts, the Draft EIR/EIS evaluates whether the project and its alternatives:

1. Cause an exceedance of applicable or federal numeric water quality objectives/criteria or other relevant water quality effects thresholds.
2. Increase levels of bio-accumulative pollutant.
3. Cause long-term degradation of water quality of a water body resulting in likely exceedances of water quality objectives/criteria.
4. Further degrade water quality by measurable levels for water bodies that are already impaired for a pollutant/parameter.
5. Substantially alter the existing drainage pattern of the site such that it would result in substantial erosion or siltation.

A more thorough discussion the methodology used is contained in section 8.4 of the Draft EIR/EIS.

There are several existing water quality issues of concern in the Bay Delta area including salinity, mercury, selenium, and pesticides. Many of these water quality issues have been cited as concerns by interested parties such as the authors of the Delta Revision website (www.deltarevision.com).

In its water quality analysis, the Draft EIR/EIS has identified significant impacts in either the proposed project or one of the alternatives in the following parameters:

> Ammonia, Boron, Bromide, Chloride, Dissolved Oxygen, Electrical Conductivity, Mercury, Nitrate, Dissolved Organic Carbon, Pathogens, Pesticide, and Phosphorus.

Scope of Report and Analysis

Given the scope and sheer volume of the BDCP's Draft EIR/EIS, the authors have limited the scope of their review to water quality and water quality impacts as covered in Chapter 8 of the document. This report and comment letter summarizes the results of our review.

In total, this report includes sixteen (16) comments regarding Chapter 8 of the Draft EIR/EIS. These comments address deficiencies, inaccuracies, and concerns that the authors have identified.

The authors recommend that this paper be merged with other ENE-502 team papers and the combined report be submitted under the requirements for submitting public comments. The authors expect that the BDCP proponents incorporate the comments addressed herein.

Issue 1: Future Regulations

Issue discussion

Section 8.3 "Regulatory Setting" (pages 8-112 to 8-126) lists plans, policies, regulations from federal, state, and other bodies that apply to the Project.

Recommendation

This section should include a discussion on future scheduled changes to these items and identify any proposed and/or draft regulations that may be implemented in the future. The EIR/EIS should ultimately discuss the risks of future regulation that is more stringent than existing regulation (e.g. endocrine disruptors).

In the case of TMDLs that are to be established within the Project Area and in affected areas, there should be an evaluation of how these TMDLs (once established) may modify thresholds of significance and/or change assumptions used in the EIR/EIS.

Issue 2: Beneficial Attributes of Exported Water from Proposed Intakes

Issue discussion

The EIR/EIS does not clearly identify what the beneficial changes are in the quality of water delivered to the export areas under the proposed alternatives.

Recommendation

For better public transparency and improved regional planning among stakeholders of affected areas, each alternative should explicitly compare the water quality of the water taken from the proposed intake structures to that of the current system. This would entail the inclusion of a table showing the average values for various water quality parameters. In all likelihood the quality of water taken from the alternatives will be "better" in many aspects--however, this information is also valuable to the public and should be clearly presented in the report.

Issue 3: Lack of qualitative analysis depth and transparency

Issue discussion

The qualitative methods used to analyze water quality were ambiguous and particularly noncommittal. The readers are left to imagine what their specific tactics were, and whether these strategies can be trusted as reliable. With little transparency or reporting about the methodologies, it makes it hard to draw a conclusion regarding the validity of the report's findings. "Best available assumptions" might have been collected from experiments that are extremely old, and thus no longer accurate, or from those that utilized faulty/unreliable technologies.

All construction-based impacts were solely measured by manipulating expectations regarding the duration, scope, location, and overall conditions of construction. They use

speculative information about the chemicals they think will be utilized as well as the locations for storage, disposal, and production of manufacturing equipment; none of which are disclosed anywhere in the text. Though it is standard to use approximations for such values, it is imperative to list these assumptions in the EIR and allow the public to review their estimations and conclusions. This is especially true since a change in these expectations can trigger a significant change in water qualities near construction sites.

Some of the parameters examined qualitatively include some of the most important substances including ammonia, pesticides and pathogens. In the case of pesticides, concentration values are heavily dependent upon assumptions about future pesticide market growth and local demand. However, again we find no explanation as to how these proposed growth quantities were determined.

Recommendation

1. Each qualitatively based conclusion should be accompanied with a brief description of the processes used that led to their determinations.

2. The assessment should also report, or at least consider, multiple construction practices, time schedules, and locations; and document how these factors could alter their construction-based impact conclusions.

3. Expected market demand and usage of pesticides should be disclosed and justified.

Issue 4: Frequency and Distribution of Assessment Locations in Delta

Issue discussion

The Delta Bay conservation plan is a vast project with the ability to affect an extremely large region, one containing various different ecosystems and structures. Thus, it is important that the measurements taken for water quality testing purposes accurately represent all of the project's area of influence, including key locations. Some of the testing sites should include zones next to waste treatment plants, fragile or protected habitats, and water extraction facilities for municipal tap water. I find this EIA is lacking in that it only tested water in 11 different locations, whereas a project of this magnitude should have significantly more test sites.

Water quality values and contaminant concentrations in lakes can be extremely erratic and irregular. We cannot asses the consequences of altering flow patterns without measuring water qualities at areas that are sufficiently close in proximity. If data about a parameter was not available at a particular site, then it would have been prudent to either attempt to gather the data from a field study or use some best available approximations. These would have been better than omitting the site altogether. This issue holds especially true in regards to parameters that were analyzed through qualitative methods, since a greater number of quality control locations could also imply less speculation and minimize the margin of error.

Recommendation

1. In appendix 8B, this EIR lists the 23 different environmental settings for which they found available data. I believe that their testing sites should have included all of these locations. They offer a greater variety in terms of ecosystems and flow models. They also explore water quality in some key locations such as next to water treatment plants.

2. Conduct a much more comprehensive and all inclusive study by considering a wider array of water quality testing locations.

Issue 5: Compound Concentrations and Climate Change

Issue discussion

This environmental assessment does not factor in climate change into its analysis of water quality. Though it does contain a section dedicated to the purpose of examining global warming as it relates to their plan, it does not include a thorough exploration of water quality. Even the slightest change in temperature can severely affect the quality of water. Factors such as sedimentation and rate of decomposition are extremely temperature dependent, and cannot be appropriately quantified without first assessing temperature changes. For instance, the chemical reactions that occur in pesticides, and that oftentimes create even more harmful and pervasive byproducts, are almost always a factor of temperature. Additionally, the rate of soil-water partitioning and volatilization are similarly bounded by thermal conditions.

The fate and transport of water contaminants are also interconnected with currents and the fluid dynamics within the Delta. These movements dictate the interactions between precipitation, runoff, and sedimentation; and are directly affected by temperature changes. Though the intricacies of these issues make it nearly impossible to accurately predict near exact values, their effects are relevant enough to call for some further degree of consideration.

Recommendation

1. The EIA should incorporate some data indicating how their projected water quality values might change in the face of unexpectedly warm or cold temperatures.

2. Include a section explaining how their data might change in the face of drastically changing seasonal temperatures.

BDCP577

Issue 6: Salinity Impacts in the Delta

One of the water quality aspects that the EIR/EIS evaluates is the salinity of the water in the Delta. [It is actually the electrical conductivity (EC) of the water that is measured and modeled and the salt content of the water is extrapolated from that.] Changes in the salinity of the Delta waters could have wide ranging impacts on the flora and fauna of the ecosystem, as well as on the local agriculture dependent upon the Delta for water.

Issue discussion

A key part of the balance between fresh and salt water in the Delta is the amount of fresh water coming into the Delta. The amount of fresh water that comes into the Delta has a direct impact on the amount of fresh water that flows out of the Delta into the seawater bays to the west. And the outflow of fresh water from the Delta to the bays has a direct impact on the amount of corresponding sea water that flows into the Delta from the bays. Therefore, when the preferred alternative (Alternative 4) of the BDCP predicts that it will export 36% more freshwater (4705 MAF in Alternative 4 vs. 3446 MAF under existing conditions) from the Delta versus existing conditions, certain conclusions must be drawn. Specifically, with 36% less fresh water unavailable to the Delta each year, there will be far less freshwater to balance the incursion of sea water from the bays. More sea water flowing into the Delta means higher salinity levels in the Delta's waters.

Recommendation

The authors of the EIR/EIS must address how increasing the amount of freshwater taken from the Delta by 36% results in an insignificant impact to the salinity of the Delta waters. Ideally, this will be done using numerical results from an effective modeling tool (see next issue).

Issue 7: Inconsistencies with DSM-II QUAL Model

Chapter 8 of the EIR/EIS discusses water quality issues in detail across 15 possible contaminants and to do so it relies upon the DSM-II QUAL computer model. This model is in turn fed hydrodynamic data from the CALSIM II computer model. Appendix 8H shows the detailed results of salinity (EC) measurements in 11 key locations based on the DSM-II QUAL model.

Issue discussion

The data in Appendix 8H (Table EC-4) for the preferred alternative (#4) shows that salinity (EC) levels in 63% of the measurement sites are out of compliance at least 10% of the time. Further, the model shows 27% of the measurement sites are out of compliance 25% of the time. This demonstrates a significant impact to the Delta in terms of salinity, as stated in the appendix. However, the appendix then goes on to state that even though the model results show a significant salinity impact to the Delta environment, due to a problem with the model overestimating salinity levels in the Delta, there actually is no impact after all. It is very convenient to dismiss these unfavorable results by citing a flaw in the model. However, if the model is admittedly flawed, then it calls into question how much the other results of the model can be trusted. In other words, the writers of the EIR/EIS cannot have it both ways. Either there

is a significant salinity impact in the Delta that must be mitigated, or the model is flawed and its results must be called into question.

Recommendation

There are two approaches to address this issue, either of which would suffice. The first recommended approach is to stand by the results of the model and accept that the salinity impacts predicted in the Delta must be properly mitigated, or a non-impactful alternative must be chosen. The second recommended approach would be to accept that the model results are incorrect and that the model must either be corrected or replaced.

Issue 8: Current Drought Conditions and Forecast in California

The EIR/EIS describes that the data used in completing the Water Quality chapter extends to 2009. Data after 2009 was not used.

Issue discussion

The State of California is in an unprecedented drought, which causes numerous water quality issues, such as higher metals concentrations and salinity. Given that this drought event could have unforeseen impacts on the Project, data after 2009 should be obtained and included in the study.

Recommendation

It is recommended that additional data after 2009 be considered as part of the study.

Issue 9: Naturally Occurring Selenium in Soil Already

The EIR/EIS provides a discussion on probable selenium impacts to the Bay Area as a result of the Project. However, more detail needs to be included on possible selenium leaching from excavation caused by the Project, particularly as the Bay Area basin is an area with naturally elevated selenium concentrations in the native soils.

Issue discussion

Selenium leaching is a widely experienced problem in heavy earthwork projects, especially in areas where soils are naturally selenium-rich. Exposing soils from excavation could create selenium heavy runoff. For example, in 1984-85 wildlife at the Kesterson Wildlife Refuge experienced death or deformity from selenium laden runoff caused by the uncompleted San Luis Drain.

Recommendation

It is recommended that additional evaluation be conducted to explore potential selenium leaching scenarios, as may be caused by potential delays in construction or excavations of areas with high selenium concentrations. Furthermore it is recommended that the construction Stormwater Pollution Prevention Plan contain language to focus on selenium control for the Project.

Issue 10: Model of Air Transport of Dioxins/Furans, Air to Water

The EIR/EIS describes dioxins/furans as a potential constituent of concern for water quality. However, no atmospheric modeling (the most common transport mechanism through which dioxins/furans are introduced into surface water) was conducted.

Issue discussion

Dioxins/furans pose a significant threat to both human and environment, and should be considered with more scrutiny as related to water quality impacts on the Project.

Recommendation

It is recommended that further evaluation be conducted, either through atmospheric modeling, or a more robust defense of why exclusion of modeling is acceptable, for dioxins/furans.

Issue 11: The Effect of Hydraulic Fracturing (Fracking)

The EIR/EIS does not contain any information on the effect that Fracking may have on the project, the public, and/or the environment. This is critical since fracking has been shown to have a detrimental effect on people and the environment.

Issue discussion

Fracking is relevant to BDCP because the Monterey Shale in San Joaquin Valley is believed to contain 15 Million barrels of oil. Tapping this oil requires a copious amount of high pressure water laced with toxic chemicals to be injected into the well to break the rock and release the fossil fuels. It is estimated that each well uses an average of 5 million gallons of water over the life of the well, which was not considered in the EIR/EIS. Not considered also are the effects that the chemicals have on the public and the environment.

Although a law passed recently to require the state to study fracking safety, it does not prevent new wells from being dug. The petrochemicals released during this process can contaminate the surrounding air and water for many miles.

Finally, the wastewater injection performed post-fracking has triggered slips in preexisting faults in many states, including Texas, Ohio, Oklahoma, and Arkansas as well as in British Columbia. These slips are believed to cause earthquakes as large as 5.0 on the Richter scale. This is especially critical in California, because large scale fracking has yet to take place in such active earthquake territory.

Recommendation

It is recommended that further investigation be conducted not only on fracking safety and environmental effects but also on a buffer zone to see how far away fracking needs to be from BDCP so that the infrastructure is not affected.

Issue 12: No discussion on water quality impacts during partial system failure

Chapter 8 discusses water quality impacts during standard planned maintenance requirements for continued operation. Appendix 3E.2.6.2.1 discusses water quality degradation due to earthquake causing a levee breach and projected salinity increase in BDCP

Issue discussion

No discussion of full or partial system failures of BDCP at inlet(s), at tunnel(s), at pumping station(s), etc. due to such unplanned events. These unplanned events could be caused by a natural disaster (e.g., earthquake, flood) or by humans (e.g., accidental or sinister activities). Impacts to system performance and hence impacts to water quality (and perhaps other chapters within the EIR/EIS) are not discussed.

Recommendation

EIR/EIS shall expand discussion of analyses to include;

1. Risk identification for unplanned outages beyond planned maintenance. Such risk assessment shall address both probabilities of occurrence as well as impacts on the system if risk is realized.

2. Risk mitigation plan that identify actions that are to be taken which will have an environmental impact. That is, what are the plans to react to unplanned partial system failures,

3. Assessment of impacts to water quality analyses when such outages occur. This shall include partial system failures and the impacts they have on water quality (and other perhaps other chapters in the EIR/EIS). For instance, if one inlet suffers a catastrophic failure due to an earthquake, discuss how water quality (and other chapters within the EIR/EIS) would be affected until repairs could be implemented and flow restored.

Issue 13: Incorrect Numbering

Issue discussion

In section *8.1.1 Overview* the EIR/EIS reads:

> *The chapter is divided into three main sections.*
>
> - *8.1 Environmental Setting/Affected Environment*
> - *8.2 Regulatory Setting*
> - *8.3 Environmental Consequences*

BDCPS77

Recommendation

The numbering should be changed to 8.2, 8.3, and 8.4, respectively.

Issue 14 – Bromide impacts to drinking water should more specific

Issue discussion

Page 8-421, lines 23-28 state that "[t]he substantial changes in long-term average bromide predicted for Barker Slough under all operational scenarios of Alternative 4 could necessitate changes in treatment plant operation or require treatment plant upgrades in order to maintain DBP compliance. The model predicted change at Barker Slough is substantial and, therefore, would represent a substantially increased risk for adverse effects on existing MUN beneficial uses should treatment upgrades not be undertaken. The impact is considered significant."

Recommendation

In this impact analysis, it does not mention specifically which water districts, purveyors, etc. would be affected. The EIR/EIS should explicitly state what water purveyors are likely to be impacted by this predicted impact. Further, the EIR/EIS should identify what treatment plants would have to treat this water; list what treatment processes are used at these plants; and evaluate what treatment changes may be necessary.

Issue 15: Vaguely-Defined Mitigation Measure WQ-5

Issue discussion

Mitigation Measure WQ-5 for Bromide states that BDCP proponents will conduct additional evaluations and modeling to define the extent at which modified operations could reduce or eliminate bromide increases. However, if operational changes are not possible, then the impact remains.

Recommendation

As written, Mitigation Measure WQ-5 is vague and does not state what types of operational measures may be undertaken to reduce bromide increases caused by the alternative. The reader has no idea as to what type of flexibility exists under the "modified operations." The measure should at least state what options/parameters are within control, and examples of what types of changes could be done to lower bromide concentrations.

Issue 16: Additional Bromide Mitigation for Disinfection Byproducts (DBPs)

Issue discussion

In the discussion of bromide impacts, the EIR/EIS references Appendix 3B for environmental commitments BDCP proponents have made to address. Section 3B.2.1.3 states some concepts

that could be considered to address effects of DBPs—which is an identified impact of increased bromide concentrations. The section lists the option to "Provide funding to implement treatment for DOC and/or DBPs in water treatment facilities… this could include pre-treatment of DOC or modification of disinfection facilities to minimize DBP formation, or post-disinfection treatment for DBPs or modifications to distribution systems to limit DBP formation.

Recommendation

This Mitigation Measure should include and explicitly state how much of an environmental commitment BDCP proponents would take. As it is presently construed as a "concept", there are no concrete assurances as to what extent this environmental commitment entails. There should be discussion of this in the bromide mitigation discussion to directly and outline address how and to what extent impacts will be mitigated.

Concluding Remarks

The authors recognize that a project of this scope is a daunting task. To write the perfect EIR/EIS takes unlimited resources, unlimited budget, and unlimited time. Therefore, the authors of this document greatly appreciate the effort made by those involved in developing the Draft EIR/EIS.

The authors expect that by incorporating the contents contained in this report, the EIR/EIS for this project will improve and better identify and mitigate the environmental impacts of the proposed project. Ultimately, the authors expect that a revised EIR/EIS will contain the best information practicable while being clear and concise so that the resulting document is as transparent and readily accessible to members of the public as possible.

Given the complexity of modern environmental analysis, the authors recognize that these ends are difficult if not impossible to meet. Nevertheless, we appreciate the time taken in reading and responding to this report and comment letter as all parties involved strive to reach that ideal. As commenters sending our concerns to the agencies in charge of this project, we are honored to be part of this process for the public.

USC

UNIVERSITY OF SOUTHERN CALIFORNIA

ENE-502

ENVIRONMENTAL AND REGULATORY COMPLIANCE

Spring 2014

Comments on

BDCP EIR/EIS Chapter 22

Air Quality and Greenhouse Gases

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Introduction

In the chapter 22 of draft environmental impact report of the Bay Delta Conservation Plan, it describes existing conditions related to air quality and GHG in the air quality study area. It then discusses federal, state, and local regulations related to air quality that would apply to the alternatives. The chapter assesses local and regional air quality impacts associated with criteria pollutants and toxic air contaminants (TAC) generated by construction and operation of the BDCP alternatives and evaluates the impact of the BDCP alternatives on climate change.

The air quality study area encompasses the following three air basins: Sacramento Valley Air Basin (SVAB), San Joaquin Valley Air Basin (SJVAB), and the San Francisco Bay Area Air Basin (SFBAAB). It is managed by four air management district, Yolo-Solano Air Quality Management District, Sacramento Metropolitan Air Quality Management District, Bay Area Air Quality Management District, San Joaquin Valley Air Pollution Control District.

The federal and state governments have established national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS), respectively, for six criteria pollutants: ozone, carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO2), sulfur dioxide (SO2), and particulate matter (PM), which consists of PM10 microns in diameter or less (PM10) and PM 2.5 microns in diameter or less (PM2.5).

Present in the Earth's lower atmosphere, GHGs play a critical role in maintaining the Earth's temperature; GHGs trap some of the long-wave infrared radiation emitted from the Earth's surface that would otherwise escape to space. GHGs include the following gases: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), perfluorinated carbons (PFCs), sulfur hexafluoride (SF6), and hydrofluorocarbons (HFCs). The primary GHGs generated by the alternatives would be CO2, CH4, N2O, and SF6.

Construction of the water conveyance facility (CM1) would generate emissions of criteria pollutants (ROG, NOX, CO, PM10, PM2.5), and GHGs (CO2, CH4, N2O, and SF6) that would result in short-term effects on ambient air quality in the air quality study area. Emissions would originate from mobile and stationary construction equipment exhaust, employee vehicle exhaust, dust from land clearing and earthmoving, electrical transmission, and concrete batching from onsite plants. These emissions would be temporary. Construction emissions were calculated using spreadsheets based on the methodology and default emission factors from the California Emissions Estimator Model (CalEEMod).

Operation of the water conveyance facility would generate long-term (permanent) emissions of criteria pollutants (ROG, NOX, CO, PM10, PM2.5), and GHGs (CO2, CH4, N2O, and SF6) that would result in long-term effects on ambient air quality in the air quality study area. Emissions would originate from onroad vehicle exhaust, maintenance equipment exhaust, and electrical generation. Emissions associated with vehicle traffic and maintenance equipment were estimated using the EMFAC2011 and CalEEMod models. To reduce the significant of criteria pollutants and GHGs, mitigations are taken. Mitigations are decided according to impacts.

Issue 1

" The primary GHGs generated by the alternatives would be CO2, CH4, N2O, and SF6. Each of these gases is discussed in detail below. Note that PFCs and HFCs are not discussed as these gases are primarily generated by industrial processes, which are not anticipated as part of the project." (page 22-7 in Chapter 22)

Comment: The overlook of PFCs and HFCs in this project is improper. In EIR/EIS should provide enough evidence to demonstrate the project has no any risks of PFCs and HFCs emissions. Otherwise, they should include these two GHGs impacts consideration.

Analysis:

Perfluorinated compounds [PFCs] are a large group of manufactured compounds that are widely used to make everyday products more resistant to stains, grease, and water. For example, PFCs may be used to keep food from sticking to cookware, to make sofas and carpets resistant to stains, to make clothes and mattresses more waterproof, and may also be used in some food packaging, as well as in some firefighting materials. Because they help reduce friction, they are also used in a variety of other industries, including aerospace, automotive, building and construction, and electronics. (National Institute of
Environmental Health Sciences (NIEHS)
http://www.niehs.nih.gov/health/materials/perflourinated_chemicals_508.pdf

Perfluorinated compounds

Designation or Name	Chemical formula	Lifetime (years)	100 yr GWP (SAR)	100 yr GWP (AR4)
Sulphur hexafluoride	SF_6	3,200	23,900	22,800
Nitrogen trifluoride	NF_3	740	12,300	20,700
PFC-14	CF_4	50,000	6,500	7,390
PFC-116	$C2F_6$	10,000	9,200	12,200
PFC-218	C_3F_8	2,600	7,000	8,830
PFC-318	c-C_4F_8	3,200	8,700	10,300
PFC-3-1-10	C_4F_{10}	2,600	7,000	8,860
PFC-4-1-12	C_5F12	4,100	6,510	13,300
PFC-5-1-14	C_6F1_4	3,200	7,400	9,300
PFC-9-1-18	$C_{10}F1_8$	>1,000d	>5,500	>9,500
trifluoromethyl sulphur pentafluoride	SF_5CF_3	800	13,200	21,200

(GHG Lifetimes and GWPs For ozone-depleting substances and their replacements)
http://www.climatechangeconnection.org/emissions/documents/GWP_AR4.pdf

Hydrofluorocarbons, or "super greenhouse gases," are gases used for refrigeration and air conditioning, and known as super greenhouse gases because the combined effect of their soaring use and high global warming potential could undercut the benefits expected from the reduction of other greenhouse gases such as carbon dioxide. Used as refrigerants, they were introduced by the chemical industry to

replace ozone destroying CFCs (chlorofluorocarbons) which have (almost) been phased out by the Montreal Protocol. However, HFCs production is rising by 15% per year. HFCs are 3,830 times more potent than CO2 with a lifetime of 14 years. (ThinkGlobalGreen)
http://www.thinkglobalgreen.org/hfc.html

Hydrofluorocarbons

Designation or Name	Chemical formula	Lifetime (years)	100 yr GWP (SAR)	100 yr GWP (AR4)
HFC-23	CHF_3	270	11,700	14,800
HFC-32	CH_2F_2	4.9	650	675
HFC-125	CHF_2CF_3	29	2,800	3,500
HFC-134a	CH_2FCF_3	14	1,300	1,430
HFC-143a	CH_3CF_3	52	3,800	4,470
HFC-152a	CH_3CHF_2	1.4	140	124
HFC-227ea	CF_3CHFCF_3	34.2	2,900	3,220
HFC-236fa	$CF_3CH_2CF_3$	240	6,300	9,810
HFC-245fa	$CHF_2CH_2CF_3$	7.6	3,380	314
HFC-365mfc	$CH_3CF_2CH_2CF_3$	8.6	2,520	241
HFC-43-10mee	$CF_3CHFCHFCF_2CF_3$	15.9	1,300	1,640

(GHG Lifetimes and GWPs For ozone-depleting substances and their replacements)
http://www.climatechangeconnection.org/emissions/documents/GWP_AR4.pdf

The predominant refrigerant currently in use is HFC-134a, a hydrofluorocarbon and a powerful greenhouse gas (GHG). It can slowly leak out of the MAC system in a manner that may occur with any closed high-pressure system such as permeation through hoses, and leakage due to compromised connections and deterioration of parts, seals, and fittings. Larger leaks may occur during accidents, maintenance and servicing, and vehicle disposal at the end of useful life. (CalEPA Air Resources Board)
http://www.arb.ca.gov/cc/hfc-mac/hfc-mac.htm

Ninety percent of HFCs today are used in refrigeration and air conditioning units. So it is not surprising that these are the two main sources of global HFC emissions. Automobile air conditioning tops the list. Unlike CO2 that is emitted as a product of burning fossil fuels to generate energy, most HFCs are contained within equipment. Any emissions are the result of old equipment, faulty maintenance, leakage during maintenance, or escape at the end of the product's lifetime. One would expect the US government to have a network of HFC recycling plants and recapture centers, as well as increased efficiency standards and maintenance regulations. This is not the case. Recapture regulations are on the books but enforcement is difficult and under funded. Industry data show that 59% of HFC 134a ever produced has already been release into the atmosphere (along with 80% of the main HCFC in the market, HCFC 22). According to recent investigations, about 60% of HFC emissions arise from routine leaks from refrigeration and air conditioning. (GREENPEACE)

http://www.greenpeace.org/international/Global/international/planet-2/report/2009/5/HFCs-Fgases.pdf

From the evidence we provide, it is improper to omit the impacts of PFCs and HFCs as greenhouse gases. Although PFCs are commonly used in industrial feilds, they can also be found in building and construction. Because of their super large global warming potential (GWP) and long lifetime, a few usage in the project could be significant. As for HFCs, about 60% of emissions arise from routine leaks from refrigeration and air conditioning, and larger leaks may occur during accidents, maintenance and servicing, and vehicle disposal at the end of useful life. Trucks, passenger cars, and other vehicles used in the plan area have their mobile air conditioning (MAC), so there are potential leak risks from those cars. Moreover, in EIR/EIS, there is no evidence that all vehicles are purely new and there will no leaks occur. If the vehicle which leak HFCs are not used in the plan area, they will also bring the adverse impacts for other projects. Right, indeed. But BDCP owes so many vehicles working for, the impacts of these two super greenhouses gases should not be overlooked.

Issue 2

"The primary GHGs generated by the alternatives would be CO2, CH4, N2O, and SF6." "Construction of the water conveyance facility (CM1) would generate emissions of criteria pollutants 4 (ROG, NOX, CO, PM10, PM2.5), and GHGs (CO2, CH4, N2O, and SF6) that would result in short-term 5 effects on ambient air quality in the air quality study area." "Operation of the water conveyance facility would generate long-term (permanent) emissions of 9 criteria pollutants (ROG, NOX, CO, PM10, PM2.5), and GHGs (CO2, CH4, N2O, and SF6) that would 10 result in long-term effects on ambient air quality in the air quality study area. "(page 22-7,22-31,22-34) NEPA Effects: GHG (CO2, CH4, N2O, and SF6) emissions resulting from construction of Alternative 1B 5 are presented in Table 22-33

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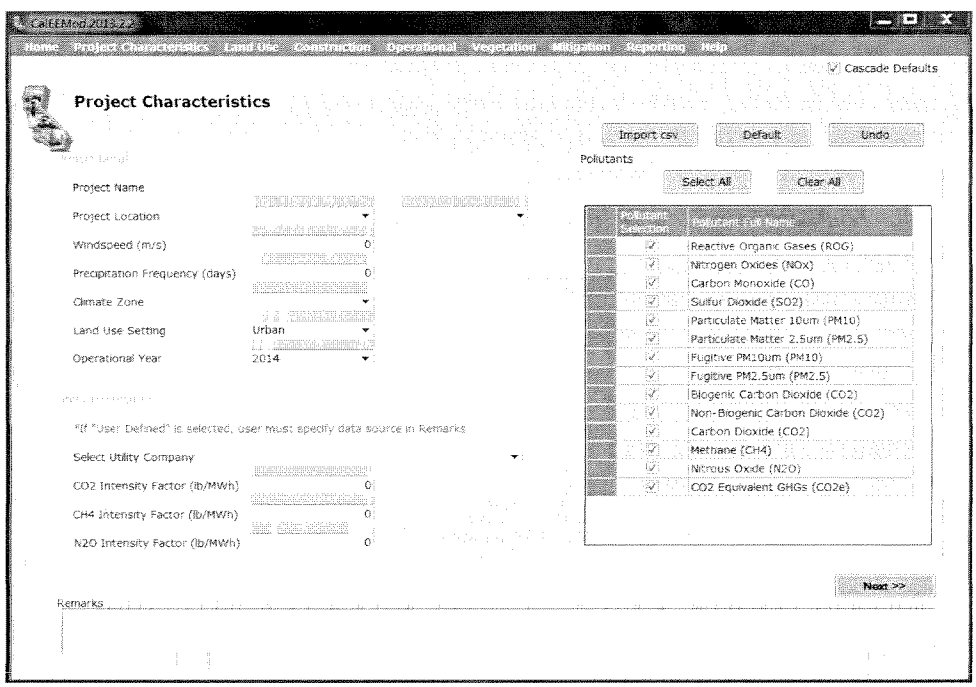
Table 22-33. GHG Emissions from Construction of Alternative 1B (metric tons/year)[a]

Year	Equipment and Vehicles (CO_2e)	Electricity (CO_2e)	Concrete Batching (CO_2)[b]	Total CO_2e
Emissions with Environmental Commitments				
2014	7,619	6,684	49,544	63,847
2015	89,219	12,495	49,544	151,258
2016	135,329	20,110	49,544	204,983
2017	83,854	25,288	49,544	158,687
2018	51,568	21,346	49,544	122,458
2019	27,612	18,823	49,544	95,980
2020	11,519	7,933	49,544	68,996
2021	3,924	5,337	49,544	58,805
2022	502	5,337	49,544	55,382
Total	*411,145*	*123,354*	*445,899*	*980,397*

Comment: The EIR/EIS does not provide the calculation method for SF6. From the graph above, we can see the GHG emissions for each year as total CO2e, CH4 and N2O can be altered as CO2e by their GWP in modeling, but the model does not include SF6. So how SF6 emissions are calculated is not clear in the EIR/EIS.

Analysis: "CalEEMod analyzes the type of construction activity and the duration of the construction period to estimate emissions (GHGs and criteria pollutants)." (page 22-31)

The GHG emissions (CO2, CH4, N2O, and SF6) are analyzed by CalEEMod software according to the EIR/EIS, while this model does not consider SF6 in it. So CO2 Equivalent GHGs (CO2e) in the final report of the model will not include SF6. We cannot find the calculation method for SF6.



Issue 3

"The NAAQS are divided into primary and secondary standards; the former are set protect human health within an adequate margin of safety, and the latter to protect environmental values, such as plant and animal life. Table 22-5 summarizes the NAAQS. " (page 22-13,22-14)

"Local monitoring data (Table 22-3) are used to designate areas as nonattainment, maintenance, attainment, or unclassified for the NAAQS and CAAQS." (page 22-11,22-12)

Comment: Moreover, in EIR/EIS the thresholds of significance are all used primary standards. Is it necessary to consider the second standards for some certain cataminants such like VOCs. Since some VOCs will confuse the wild life including birds and insects using particulates communicate with others.

Analysis: The predation rate was higher in the herbivore trees than in the control trees. This confirms that birds use cues from trees to locate insect-rich trees in the wild. The herbivore trees had decreased photosynthesis and elevated emissions of many VOCs, which suggests that birds could use either one, or both, as cues. There was, however, large variation in how the VOC emission correlated with predation rate. Emissions of (E)-DMNT [(E)-4,8-dimethyl-1,3,7-nonatriene], beta-ocimene and linalool were positively correlated with predation rate, while those of highly inducible green leaf volatiles were not. These three VOCs are also involved in the attraction of insect parasitoids and predatory mites to herbivore-damaged plants, which suggests that plants may not have specific adaptations to signal only to birds.(From plants to birds: higher avian predation rates in trees responding to insect herbivory)

http://www.ncbi.nlm.nih.gov/pubmed/18665271

The reference tells that the concentration of VOCs which produced natrually by herbivore tress, affacts the birds' predation rate. While the project will also produce a certain amount of VOCs, whether the total amount of VOCs has impacts on birds and other wildlife is vague. So we think the secondary standards should also be included.

Issue 4

In the draft BDCP EIR/EIS, *Developing a California cap-and-trade program that links with other Western Climate Initiative 29 partner programs to create a regional market system.* (Page 22-22 Chapter 22)

Comment: The BDCP EIR/EIS doesn't provide specific development of cap-and-trade program.

Analysis: The enforceable compliance obligation began on January 1, 2013, for greenhouse gas (GHG) emissions. California emits 447 million metric tons of carbon dioxide a year, according to CARB, which has been collecting and monitoring emissions data since 2008. The biggest chunk, 38 percent, comes from the transportation sector, largely from cars and trucks. 21 percent comes from electric power plants. 19 percent comes from industrial factories. 10 percent comes from

commercial and residential buildings; the rest comes from agriculture and natural events like wildfires. Because transportation emits huge amount of carbon dioxide, BDCP EIR/EIS should provide how much allowance they will purchase about cap-and-trade program.

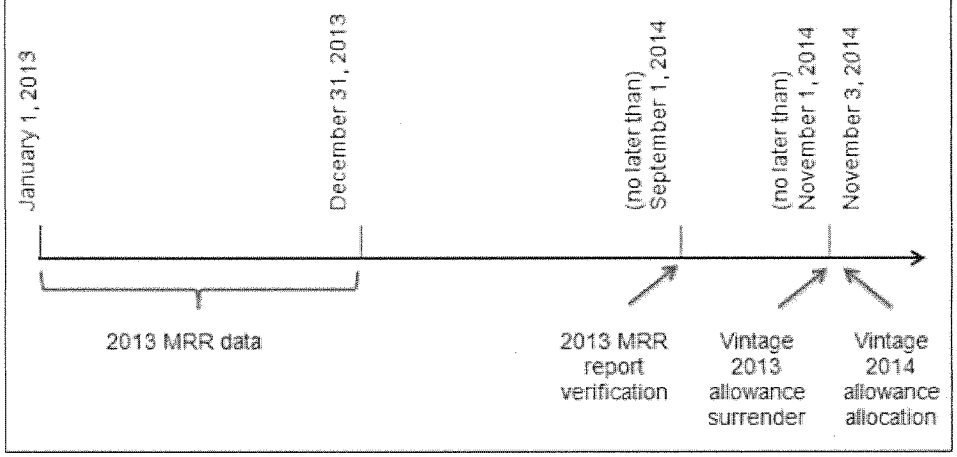
Table 3.1 shows the compliance period date

Table 3.1 Compliance Periods (2013-2020)

Compliance Period	Start	End
First	January 1, 2013	December 31, 2014
Second	January 1, 2015	December 31, 2017
Third	January 1, 2018	December 31, 2020

Section 95855(b) of the Cap-and-Trade Regulation requires covered entities to submit 30 percent of their compliance obligation for the previous years covered emissions within the current compliance period. As shown in Chart 3.2, the first compliance surrender date is November 1, 2014. At that time, entities will need to provide ARB with compliance instruments (2013 allowances and/or offsets) to cover 30 percent of their covered emissions for 2013.

Chart 3.2
Annual Compliance Obligation for 2013 Covered Emissions Due November 1, 2014



Section 95856 of the Cap-and-Trade Regulation states, "To fulfill a compliance obligation, a compliance instrument must be issued from an allowance budget year within or before the year for which an annual compliance obligation is calculated or the last year of a compliance period for which a triennial compliance obligation is calculated." An entity may bank allowances from previous vintage years, but not borrow from future vintage years to meet a compliance obligation.

Table 3.2 lists which vintage year allowances may be used to meet an annual or triennial compliance obligation. There are no restrictions on which vintage year of offsets are used to meet a compliance obligation. The offsets can only be used to meet up to 8 percent of a compliance obligation in each compliance period.

Table 3.2 Eligible Allowance Vintages for Annual and Triennial Compliance Obligations			
First Compliance Period			
Covered Emissions Year	**Compliance Obligation Due Date**	**Percent of Compliance Obligation Due**	**Eligible Vintages of Allowances**
2013	November 1, 2014	30% of 2013 covered emissions	Vintage 2013 only
2014	November 1, 2015	70% of 2013 and 100% of 2014 covered emissions	Vintages 2013 and 2014, any combination
Second Compliance Period			
2015	November 1, 2016	30% of 2015 covered emissions	Vintages 2013-2015, any combination
2016	November 1, 2017	30% of 2016 covered emissions	Vintages 2013-2016, any combination
2017	November 1, 2018	70% of 2015 and 2016, and 100% of 2017 covered emissions	Vintages 2013-2017, any combination
Third Compliance Period			
2018	November 1, 2019	30% of 2018 covered emissions	Vintages 2013-2018, any combination
2019	November 1, 2020	30% of 2019 covered emissions	Vintages 2013- 2019, any combination
2020	November 1, 2021	70% of 2018 and 2019, and 100% of 2020 covered emissions	Vintages 2013-2020, any combination

The AB 32 Scoping Plan identifies a cap-and-trade program as one of the strategies California will employ to reduce the greenhouse gas (GHG) emissions that cause climate change. This program will help put California on the path to meet its goal of reducing GHG emissions to 1990 levels by the year 2020, and ultimately achieving an 80% reduction from 1990 levels by 2050. Under cap-and-trade, an overall limit on GHG emissions from capped sectors will be established by the cap-and-trade program and facilities subject to the cap will be able to trade permits (allowances) to emit GHGs.

The California Air Resources Board (ARB) has designed a California cap-and-trade program that is enforceable and meets the requirements of AB 32. The development of this program included a multi-year stakeholder process and consideration of potential impacts on disproportionately impacted communities. The program starts on January 1, 2012, with an enforceable compliance obligation beginning with the 2013 GHG emissions.

References:

http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm
http://www.arb.ca.gov/cc/capandtrade/guidance/20130419%20Guidance%20Document%20Ch%203%20posting.pdf#page=6
http://www.mercurynews.com/ci_22092533/13-things-know-about-california-cap-trade-program

Issue 5:

In the draft BDCP EIR/EIS, *the CVP is operated using energy generated at CVP hydroelectric facilities and therefore results in no GHG emissions.* (Page 22-83 Chapter 22)

Comment: Hydropower generated by CVP is also source of greenhouse gases. A lot of carbon dioxide and methane is emitted from decaying vegetation.

Analysis: Large amounts of carbon tied up in trees and other plants are released when the reservoir is initially flooded and the plants rot. Then after this first pulse of decay, plant matter settling on the reservoir's bottom decomposes without oxygen, resulting in a build-up of dissolved methane. This is released into the atmosphere when water passes through the dam's turbines. In effect man-made reservoirs convert carbon dioxide in the atmosphere into methane. This is significant because methane's effect on global warming is 21 times stronger than carbon dioxide's.

From 2007 IPCC, GHG emissions vary with reservoir location, power density (W capacity per m2 flooded), flow rate, and whether dam or run-or-river plant. Recently, the GHG footprint of hydropower reservoirs has been questioned (Fearnside, 2004; UNESCO, 2006). Some reservoirs have been shown to absorb CO2 at their surface, but most emit small amounts as water conveys carbon in the natural carbon cycle (Tremblay, 2005). High emissions of CH4 have been recorded at shallow, plateau-type tropical reservoirs where the natural carbon cycle is most productive (Delmas, 2005). Deep water reservoirs at similar low latitudes tend to exhibit lower emissions. Methane from natural floodplains and wetlands may be suppressed if they are inundated by a new reservoir since the methane is oxidized as it rises through the covering water column (Huttunen, 2005; dos Santos, 2005). Methane formation in freshwater produces by-product carbon compounds (phenolic and humic acids) that effectively sequester the carbon involved (Sikar, 2005). For shallow tropical reservoirs, further research is needed to establish the extent to which these may increase methane emissions.

References:

http://www.ipcc.ch/publications_and_data/ar4/wg3/en/ch4s4-3-3-1.html
http://www.newscientist.com/article/dn7046-hydroelectric-powers-dirtv-secret-revealed.html#.U1rKV_ldWPw
http://www.epa.gov/cleanenergy/energy-and-you/affect/hydro.html

Issue 6 The Draft EIR/EIS does not point out that greenhouse gases contribute air pollution that may endanger public health or welfare.

Analysis: USA EPA released the 133-page proposed "endangerment finding" in response to a 2007 Supreme Court decision that ordered the agency to reconsider whether greenhouse gases are pollutants subject to regulation under the Clean Air Act. EPA's proposed endangerment finding is based on rigorous, peer-reviewed scientific analysis of six gases – carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride – that have been the subject of intensive analysis by scientists around the world. Concentrations of these gases are at

unprecedented levels as a result of human emissions, and these high levels are very likely the cause of the increase in average temperatures and other changes in climate.
The scientific analysis also confirms that climate change impacts human health in several ways. Findings from a recent EPA study titled "Assessment of the Impacts of Global Change on Regional U.S. Air Quality: A Synthesis of Climate Change Impacts on Ground-Level Ozone," for example, suggest that climate change may lead to higher concentrations of ground-level ozone, a harmful pollutant. Additional impacts of climate change include, but are not limited to:

- increased drought;
- more heavy downpours and flooding;
- more frequent and intense heat waves and wildfires;
- greater sea level rise;
- more intense storms;
- harm to water resources, agriculture, wildlife and ecosystems.

EPA Action:
On December 7, 2009, the Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:
Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases — carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6) — in the atmosphere threaten the public health and welfare of current and future generations.
Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.
These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite for implementing greenhouse gas emissions standards for vehicles. In collaboration with the National Highway Traffic Safety Administration, EPA finalized emission standards for light-duty vehicles (2012-2016 model years) in May of 2010 and heavy-duty vehicles (2014-2018 model years) in August of 2011.

References:

http://www.sciencedaily.com/releases/2009/04/090417183528.htm
http://www.epa.gov/climatechange/endangerment/
http://www.epa.gov/climatechange/Downloads/endangerment/Endangerment_TSD.pdf
http://www.epa.gov/climatechange/Downloads/endangerment/Federal_Register-EPA-HQ-OAR-2009-0171-Dec.15-09.pdf

Issue 7:

"Power plants located throughout the state supply the grid with power, which will be distributed to the study area to meet project demand. Power supplied by statewide power plants will generate criteria pollutants. Because these power plants are located

throughout the state, criteria pollutant emissions associated with all the Alternatives electricity demand cannot be ascribed to a specific air basin or air district within the study area. Comparing emissions to thresholds shown in Table 22-9, which are established to manage emissions sources under the jurisdiction of individual air districts, would therefore be inappropriate. Criteria pollutant emissions from electricity consumption are therefore provided for informational purposes only and are not included in the impact conclusion." (page 22-46)

Comment: However, this does not mean that there is nothing could be done for this emission problem.We think it is necessary to have monitoring programs designed for the electricity consumption, such as recording daily electricity usage and its source. If monitoring activities indicate that these power plants are located in certain air districts and the emissions of criteria pollutants have significant impact, these emission reduction measures and the strategy of power supplying should be re-evaluated and updated.

Analysis:

Taking Table 22-85 Total Criteria Pollutant Emissions from Electricity Consumption during Construction and Operation of Alternative 4 for example, the emission of NOx in 2021 is estimated to be 140 tons per year. If the electricity comes from 10 air districts at or near the study area, each air district will get 14 tons per year of NOx emission, in average. There will be significant environmental impact for these air districts. With all the mitigation measures and emission reduction plan mentioned in this chapter, it seems to be promising that the criteria pollutant emissions from the electricity consumption will be reduced in the future for this project. However, it is not safe to say that the situation stated above will not happen. Therefore, monitoring programs may help to prevent this emission problem from being overlooked.

BDCP571

Analysis of Joint Environmental Impact Report (EIR) and Environmental Impact Statement (EIS) for the Bay Delta Conservation Plan (BDCP)

Chapter 11, Fish and Aquatic Resources

final paper for

ENE 502, "Environmental and Regulatory Compliance"
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Executive Summary

The authors, a team of graduate students from University of Southern California (USC), reviewed the joint Environmental Impact Report (EIR) and Environmental Impact Statement (EIS) for the Bay Delta Conservation Plan (BDCP). This EIR was prepared by the California Department of Water Resources (DWR), U.S. Department of the Interior (DOI) Bureau of Reclamation (Reclamation), U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS). Public comments were originally due by 13 December 2013, but as of the writing of this report, comments are now due by 13 June 2014.

The BDCP is "a comprehensive conservation strategy aimed at protecting dozens of species of fish and wildlife, while permitting the reliable operation of California's two biggest water delivery projects" (BDCP website).

The Draft BDCP EIR/EIS focuses on analyzing "the regional effects of implementing the BDCP…[as] required under NEPA and CEQA" (ES-1).

We reviewed Chapter 11 – Fish and Aquatic Resources, and identified several issues and concerns within the Chapter that should be addressed by the EIR/EIS authors during the review period, to the extent possible.

In summary, we find that the Draft BDCP EIR/EIS does not employ the Precautionary Principle in their analysis of the impacts on species. Broad generalizations within the chapter often dismiss important considerations without providing adequate evidence for such dismissal. The authors should instead cite scientific literature sources for all decisions made within the analysis. Further, we find that more conservative assumptions should be employed in the determination of effects throughout Chapter 11. The covered species discussed in this chapter are threatened and/or endangered - they deserve concerted protection measures and a fair analysis. Therefore, the assumptions used within the analysis models should be based on more conservative recommendations obtained from *scientific literature.* Lastly, we find the reliance on the "no action alternative" findings in the CEQA analysis of the alternatives to be unreasonable. The purpose of the BDCP is reportedly "protecting dozens of species of fish and wildlife" (BDCP website). However, the conclusions state that although there will be negative impacts to the covered species that are worse than current conditions, the impacts are considered less than significant since the effects of the alternative are not anticipated to be worse than the "no action alternative". The goal of the project is to be protective of, and beneficial to, the covered species, not just no worse than it already will be.

We recommend addressing and incorporating the comments contained herein to improve the analysis and better identify the potential environmental impacts of the BDCP.

The authors are graduate students at the University of Southern California. This topic was selected to aid the authors in understanding the environmental regulatory processes and to fulfill the requirements of USC ENE-502's final paper and project.

Introduction

According to the Executive Summary of the Draft BDCP EIR/EIS, "prior to the 1840s, variability in the location and timing of flows, salinity, and habitat was common in the Delta. But for the past 70 years, the Delta has been managed as a tidal/freshwater system. During this same period, the ecological productivity for Delta native species and their habitats has been in decline. Removal of the mix of fresh- and brackish-water habitats has had a limiting effect on the diversity of native habitat within the Delta. In addition, urban development, large upstream dams and storage reservoirs, water diversions, hydraulic mining, and the development of a managed network of navigation, flood control, and irrigation canals have all affected water flow patterns and altered fish and wildlife habitat availability. These changes, coupled with higher water exports, declines in water quality from urban and agricultural discharges, and changes in the dilution capacity from managed inflows and diversions, have led to a decline in ecological productivity in the Delta" (Draft BDCP, ES-10 to ES-11).

The BDCP is "a comprehensive conservation strategy aimed at protecting dozens of species of fish and wildlife, while permitting the reliable operation of California's two biggest water delivery projects" (BDCP website).

According to the Executive Summary of the Draft BDCP EIR/EIS, "this Draft Environmental Impact Report / Environmental Impact Statement (EIR/EIS) is prepared in compliance with the National Environmental Policy Act (NEPA) and the NEPA procedures of Reclamation, USFWS, and NOAA. Additionally, this EIR/EIS is prepared in compliance with the California Environmental Quality Act (CEQA) and State CEQA Guidelines" (Draft BDCP, ES-1).

"The Bay Delta Conservation Plan (BDCP) proponents—the California Department of Water Resources (DWR) and six State Water Project and Central Valley Project water contractors—are applying for incidental take permits (ITPs) from USFWS and NMFS pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act (ESA). As a required component of the application for the ITPs, and to support the issuance of these permits for a term of 50 years, the BDCP has been prepared. The BDCP is a comprehensive conservation strategy for the Sacramento–San Joaquin Delta (Delta) to advance the planning goal of restoring ecological functions of the Delta and improving water supply reliability in the state of California" (Draft BDCP, ES-1).

"The NEPA Lead Agencies (Reclamation, USFWS, and NMFS) and the CEQA Lead Agency (DWR) have prepared this EIR/EIS to evaluate and disclose the potential effects on the human environment of issuing the requested ITPs. In addition to evaluating the potential effects of implementing the BDCP, the EIR/EIS evaluates a range of alternatives to the proposed action, as well as a no-action alternative, as required under NEPA" (Draft BDCP, ES-1).

"This EIR/EIS focuses on the regional effects of implementing the BDCP, emphasizing effects on water supply, surface water, groundwater, water quality, geology and seismicity, soils, fish and aquatic resources, terrestrial biological resources, land use, agricultural resources, recreation, socioeconomics, aesthetics and visual resources, cultural resources, transportation, public service and utilities, energy, air quality and greenhouse gases, noise, hazards and hazardous materials, public health, minerals, paleontological resources, environmental justice, and climate change, as

well as additional topics (such as cumulative effects and growth) required under NEPA and CEQA" (Draft BDCP, ES-1).

We have reviewed Chapter 11 – Fish and Aquatic Resources, and have identified several issues and concerns within the Chapter that should be addressed by the EIR/EIS authors during the review period, to the extent possible.

Issue 1: Fish Exposure to Construction Activities

"Once the cofferdam is installed, the area within the cofferdam would be dewatered using pumps with screened intakes… While the number of fish affected is unknown, entrapment could include a few hundred fish (total of all species)... Fish removal would result in handling stress and possibly in some physical injuries or incidental mortality" (11-187).

"The number of individuals affected is expected to be limited, based on the fact that delta smelt are typically present at low densities in the affected habitats during the in-water work window" (11-255).

Issue discussion

There is no research or evidence to support the claim that the entrapment will only include a few hundred fish. Statements are made in what seems to be a purely assumptive manner. The statements simply assume that fish will not be present, rather than properly addressing the potential impacts, should they be present during the work window.

Recommendation

The authors should perform a field study on a smaller scale to model the percentage of fish will leave the area when noise occurs, or cite specific literature that indicates such evidence.

Issue 2: Storm Water Runoff

"The tunnels would be drilled from portals that would provide access for equipment and materials. These portals are located in upland areas and would not affect the aquatic environment. The areas would be designed to minimize the potential for storm water runoff to surface waters" (11-190).

Issue discussion

It is possible that even though the portals are located in upland areas, they can still effect the aquatic environment due to the adjacent land being altered.

Recommendation

The document should provide more information as to what degree the storm water runoff to surface waters will be reduced, and should clarify the standards that will be employed to minimize the runoff.

BDCP577

Issue 3: Vibratory Driving Impacts

"Vibratory driving does not result in underwater sound great enough to injure fish" (11-192).

"Impact pile driving produces underwater sound levels that have the potential to harm fish, while vibratory pile driving does not" (11-250).

Issue discussion

Based on a notice published by the National Oceanic and Atmospheric Administration, it seems that vibratory driving may result in harassment to wildlife up to 3 miles from the source (NOAA 2013).

Recommendation

We suggest citing supportive research/modeling to validate the statement.

Issue 4: Suspension of Bottom Sediments

"Installation of sheet pile for coffer dam," "Increased suspension of bottom sediments and turbidity," and "Section 404 and Section 10 permits would require implementation of [Best Management Practices] BMPs to minimize suspension of bottom sediments" (11-197, Table 11-10).

Issue discussion

Table 11-10 states that best management practices will be employed. However, even with these management practices we can assume that there will still be some degree of suspension and turbidity issues associated with the overall environmental impact. Simply stating that BMPs will be employed is not sufficient evidence to discount the effects on wildlife. Many covered species and species habitats are extremely sensitive to changes in turbidity and suspension of bottom sediments.

Recommendation

The authors should specifically identify what measures will be taken to prevent impacts to species from the suspension of bottom sediments, and provide evidence illustrating the efficacy of such measures.

Issue 5: Pile Driving Impacts

"Pile Driving" "Increased suspension of bottom sediments and turbidity" "Suspension of toxic-contaminated sediment" (11-197, Table 11-10).

Issue discussion

In Table 11-10, no discussion is provided in the column, "Avoidance and Minimization Measures" for Pile Driving.

Recommendation

The authors should provide measures to mitigate at least a portion of the anticipated environmental impacts as a result of pile driving. Additional research should be done to determine the potential effects on wildlife, if necessary.

Issue 6: Accidental Spills and Releases

"Accidental spills (from construction equipment)" and the "small discharge of petroleum products" would be avoided or minimized by "pollution prevention plans" (11-197, Table 11-10).

Issue discussion

Accidental spills are likely unavoidable, even with pollution prevention plans.

Recommendation

There should be more discussion as to what pollution prevention plans will include. In addition, an action plan should be developed that clearly indicates how the spills will be addressed, and what will be done to minimize impacts to species once a spill has occurred.

Issue 7: Sediment Removal Rate

"A recent record of maintenance activities indicates that it would be reasonable to expect that approximately 1 million cubic yards (MCY) of sediment may be removed within 1 mile of the weir an average of every 5 years" (11-199).

Issue discussion

A citation to a specific source is not provided to support the validity of the statement.

Recommendation

The authors should provide a citation here to allow the reader to understand why this sediment removal rate is a reasonable expectation.

Issue 8: Avoidance and Minimization Measures and Best Management Practices

"However, adverse effects on covered fish species under this alternative from pile driving would be avoided or minimized through project-specific [Avoidance and Minimization Measures] AMMs, BMPs, environmental commitments and/or mitigation measures, which could include seasonal timing restrictions on in-water activities; the use of vibratory pile drivers when possible; the use of noise attenuation devices; and limitations on the duration of impact pile driving activities" (11-222).

"However, take of fish related to construction and maintenance activities would be minimized by implementation of project-specific AMMs, BMPs, environmental commitments and/or mitigation measures, which could include seasonal timing restrictions on in-water activities, and

implementation of species-specific fish rescue and salvage plans. As a result, effects are not expected to be adverse" (11-223).

Issue discussion

The language seems to assume that since AMMs and BMPs will be in place, no adverse effects are anticipated.

Recommendation

The authors should provide more detailed information regarding the AMM and BMP projects to show how the projects support these statements.

Issue 9: Water Operations Impacts

"Water operations in the [No Action Alternative] NAA are not expected to substantially or consistently affect spawning habitat for most covered fish species" (11-230).

Issue discussion

This statement implies there is no need to conduct the project, since the NAA water operations are not expected to substantially or consistently affect spawning habitat for most covered fish species. If the current water operations are not expected to substantially or consistently affect spawning habitat for most covered species, then why is the project being conducted?

Recommendation

The authors should clarify the language in the draft.

Issue 10: Increased Turbidity Impacts

"However, species such as delta and longfin smelt have evolved and adapted to life in turbid waters to avoid predators and to successfully forage on prey organisms, so increases in turbidity are expected to generally improve habitat conditions for these species" (11-239).

Issue discussion

No evidence for this statement is provided in the text. Further, the draft earlier stated that increases in turbidity would be minimized (11-197).

Recommendation

A citation to scientific literature should be provided to validate the statement that increases in turbidity generally improves habitat conditions for delta and longfin smelt. In addition, the text should be clarified to address the earlier discrepancy regarding expected increases in turbidity.

Issue 11: Maintenance Activity Impacts

"Maintenance activities are not likely to result in turbidity impacts sufficient to adversely affect delta smelt because smelt prefer turbid conditions and because all in-water maintenance activities would occur during approved in-water work windows, when smelt are least likely to be present near the facilities" (11-257).

Issue discussion

What are the expected turbidity conditions? What turbidity conditions are smelt tolerant of? While smelt may prefer more turbid conditions than other species, that does not necessarily mean they are tolerant of infinite increases in turbidity. When will the in-water work windows be? Has a study been conducted to illustrate the smelt will be less likely to be present near the facilities?

Recommendation

Please provide a reference to scientific literature to support these statements.

Issue 12: Exposure to Suction Dredging

"While these mechanisms are possible, the likelihood of smelt exposure would be low due to the nature of the affected habitats and the timing of maintenance activities. Delta smelt use main channel areas and the upper water column, which limits exposure to suction dredging" (11-258).

Issue discussion

Has a study been conducted to illustrate the areas the Delta smelt use? Can further support be provided regarding the low likelihood of Delta smelt exposure? It would be more conservative and protective of the species to assume that the likelihood of Delta smelt exposure would be high, and design the maintenance activities to still be protective, instead of seemingly assuming they would not be impacted.

Recommendation

Please provide a reference to scientific literature to support these statements.

Issue 13: Chinook Salmon Maximum Water Temperature Criteria

"Maximum Water Temperature Criteria for Covered Salmonids" "Winter- and spring-run spawning and egg incubation" "56 degrees F" (11-321, Table 11-1A-11, and corresponding table for all subsequent alternatives).

Issue discussion

Sources such as Myrick and Cech (2004) and Bureau of Reclamation (2004) indicate the tolerance of winter-run Chinook salmon to water temperatures depends on life stage, acclimation

history, food availability, duration of exposure, health of the individual, and other factors, such as predator avoidance.

According to Myrick and Cech 2004, "temperatures between 6 and 12° C appear best suited to Chinook salmon egg and larval development." This corresponds to a range of to 42.8 to 53.6° F. Further, according to Myrick and Cech 2001, Sacramento R. winter-run eggs experienced increased mortality as water temperature increased from 13.3 to 17.8°C (56 to 64° F).

Recommendation

The authors should use the more conservative temperature criteria recommended in the specific literature studies for each species. According to Myrick and Cech 2004, a maximum temperature of 53.6° F and should be used for the Chinook Salmon analysis.

Issue 14: Central Valley Steelhead Maximum Water Temperature Criteria

"Maximum Water Temperature Criteria for Covered Salmonids" "steelhead spawning and incubation" "56 degrees F" (11-321, Table 11-1A-11, and corresponding table for all subsequent alternatives).

Issue discussion

According to Myrick and Cech 2001, Temperatures between 6 to 10°C (42.8 to 50°F) are needed to maximize saltwater survival. In addition, Myrick and Cech 2001 indicate that cooler temperatures also reduce the risk of predation and disease, both of which are enhanced at higher temperatures.

Recommendation

The authors should use the more conservative temperature criteria recommended in the specific literature studies for each species. According to Myrick and Cech 2001, a maximum temperature of 50° F and should be used in the Central Valley Steelhead analysis to maximize survival.

Issue 15: Water Temperature Exceedance Criteria

"Table 11-1A-12. Number of Days per Month Required to Trigger Each Level of Concern for Water Temperature Exceedances in the Sacramento River for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis" (11-322, Table 11-1A-12, and corresponding table for all subsequent alternatives).

Issue discussion

Myrick and Cech (2001), recommend that water temperatures between the Bend Bridge and Keswick Dam (Sacramento R.) not exceed 13.3°C during the incubation period to prevent excessive mortality among developing winter-run eggs. However, according to the table, it is only considered a "red" level of concern if the maximum of 13.3°C or 56° F is exceeded by 1° F for more than 20 days in a given month. When the maximum water temperature is defined, any exceedance of the maximum should be considered significant.

Recommendation

The authors should revise the analysis such that *any* exceedance of the defined maximum water temperature is considered significant.

Issue 16: Levels of Concern for Water Temperature Exceedances

"Table 11-1A-12. Number of Days per Month Required to Trigger Each Level of Concern for Water Temperature Exceedances in the Sacramento River for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis" (11-322, Table 11-1A-12, and corresponding table for all subsequent alternatives).

Issue discussion

Justification for the number of days used to trigger a level of concern should be provided through citation to scientific literature.

Recommendation

A specific citation to the NMFS recommendation or scientific literature on the number of days per month required to trigger the levels of concern should be provided.

Issue 17: Accidental Spills

"Potential effects on steelhead from accidental spills are similar to those described for delta smelt (see Impact AQUA-1). Depending on the type and magnitude of an accidental spill, contaminants can directly affect the growth and survival of steelhead. Implementation of the environmental commitments discussed for delta smelt (see Impact AQUA-1) and contained in Appendix 3B, Environmental Commitments (Environmental Training; Storm water Pollution Prevention Plan; Erosion and Sediment Control Plan; Hazardous Materials Management Plan; Spill Prevention, Containment, and Countermeasure Plan), specifically the Spill Prevention, Containment, and Countermeasure Plan, would minimize the potential for introduction of contaminants to surface waters and provide for effective containment and cleanup should accidental spills occur. Pertinent measures included in these plans are discussed under Impact AQUA-1 for delta smelt" (11-430).

Issue discussion

There needs to be a plan ahead of time for spill response in the delta. This applies to all aquatic species, not just the Central Valley Steelhead.

Recommendation

How will potential spills be dealt with? Perhaps a company can be contracted to deal specifically with this possible problem.

BDCP577

Issue 18: Water Temperature Modeling

"Water temperature modeling was not conducted in the San Joaquin River" and

"Water temperature modeling was not conducted in the Mokelumne River" (11-454).

Issue discussion

Why was water temperature modeling not conducted in the San Joaquin River and in the Mokelumme River? How is the reader able to discern if this is significant or not?

Recommendation

A reason/justification for not conducting water temperature modeling in the San Joaquin River and Mokelumme River should be provided in the text.

Issue 19: Reduced Migration Conditions

"CEQA Conclusion: In general, Alternative 1A would reduce migration conditions for steelhead relative to the Existing Conditions" (11-461).

Issue discussion

How much will this actually reduce migration conditions? For example, is it approximately 5% or more like 30%?

Recommendation

Further study should be conducted to understand to what level migration conditions will be reduces, such that an actual economic impact on the Steelhead fishery can be determined.

Issue 20: Illegal Harvest Reduction

"NEPA Effects: CM17 Illegal Harvest Reduction would be applied to Chinook salmon, Central Valley steelhead, green sturgeon and white sturgeon and are expected to have positive effects on these species. The effects on steelhead would be beneficial, by reducing the loss of potential spawners" (11-474).

Issue discussion

How will illegal harvest reduction on the fishery be enforced? There are already many game wardens that patrol the delta and it does not do much to stop poaching. Adding more game wardens is expensive and will not necessarily have a strong impact as poachers will simply adapt.

Recommendation

The authors should specify exactly how illegal harvest reduction on the fishery will be enforced, such that strong beneficial impacts over existing conditions will actually be achieved.

Issue 21: Intake Screens

"Potential entrainment at the north Delta intakes occurs only under the action alternatives, including Alternative 1A, because there are no north Delta intakes operational under NAA. The north Delta intakes would be screened, and analysis indicates that splittail larvae less than 10 mm long would be vulnerable to entrainment (BDCP Effects Analysis – Appendix 5B Entrainment, Section B.6.2.4, hereby incorporated by reference). Very little is known of splittail densities in this area, so monitoring will determine their extent. The project's adaptive management plan includes monitoring of the new screens to determine their effectiveness. If the screens are not meeting expectations, additional measures may be implemented to improve screen performance, such as modifications to the screens or other structural components at the intakes, or changes in water diversion operations to reduce entrainment or impingement." (11-484).

Issue discussion

It would be better to build a bench-scale set of sample screens similar to what would be implemented in the project, such that the effects can be determined prior to project implementation. Bench-scale experiments could be conducted at a flow velocity comparable to the average assumed by the screens for the completed project to determine the unknown effectiveness of the screens. Not only is this potentially better for the environment and the affected species, but will likely also be overall less costly to the project.

Recommendation

Bench-scale experiments should be conducted at the predicted intake flow velocity to determine the effectiveness of the new intake screens, such that any necessary modifications can be made prior to implementation.

Issue 22: Water Temperature Impact Analysis

"Red boxes indicate that water temperatures under the alternative are more than 5% greater than water temperatures under the baseline" (11D.1 through 11D.9, Table 2: "Differences between Pairs of Model Scenarios in Mean Monthly Water Temperatures" for all alternatives, at all locations).

Issue discussion

What is the basis for highlighting alternative scenarios with only 5% or greater change? When conditions are already near their limit, a significant impact can be expected, independent of the percent change. For example, when a species can only survive up to a maximum temperature, and the current temperature is already near the maximum, even the slightest increase will be enough to cause significant impacts.

Recommendation

The analysis should be revised to include consideration of the species sensitive temperature in the analysis of impacts as a result of increased water temperature.

Issue 23: Temperature Model Analysis Locations

Appendix 11D –Sacramento River Water Quality Model and Reclamation Temperature Model Results Utilized in the Fish Analysis.

Issue discussion

A figure set specifically for the Appendix 11D is necessary, as it is difficult for a user to piece together the locations used in the model to determine which locations will be particularly sensitive to temperature changes based on their location along the particular rivers. While some locations are depicted on the general site plan figures (e.g. Keswick, Red Bluff), many of the locations in the temperature model analysis are not plotted anywhere on the figures accompanying the draft.

Recommendation

A series of figures should be prepared to accompany Appendix 11D to illustrate the locations used in the temperature model analysis. For example, a figure for the Sacramento River, Trinity River, Feather River, American River, Stanislaus River locations.

Issue 24: Determination of Significance

"Egg mortality (according to the Reclamation egg mortality model) in drier water years, during which winter-run Chinook salmon would already be stressed due to reduced flows and increased temperatures, would be up to 42% greater under Alternative 4, including climate change, compared to the CEQA baseline" (11-1325).

"Egg incubation conditions according to the SacEFT model are predicted to be 26% lower under H3, including climate change, than under the CEQA baseline" (11-1325).

"Further, the extent of spawning habitat predicted by SacEFT would be 60% lower under H3, including climate change, compared to the CEQA baseline" (11-1325).

"Exceedances above NMFS temperature thresholds would be substantially greater under Alternative 4 relative to the CEQA baseline" (11-1325).

"This impact is found to be less than significant and no mitigation is required" (11-1325).

Issue discussion

The findings of the analysis, as quoted above, do not seem to support the finding that the impacts to the species will be less than significant.

Recommendation

Please provide further justification for the reason these impacts are considered less than significant.

Issue 25: CEQA Conclusions

"These results are primarily caused by four factors: differences in sea level rise, differences in climate change, future water demands, and implementation of the alternative. The analysis described above comparing Existing Conditions to H3 does not partition the effect of implementation of the alternative from those of sea level rise, climate change and future water demands using the model simulation results presented in this chapter" (11-1325).

"The additional comparison of CALSIM flow and reservoir storage outputs between Existing Conditions in the late long-term implementation period and H3 indicates that flows and reservoir storage in the locations and during the months analyzed above would generally be similar between future conditions without the alternative (NAA) and H3. This indicates that the differences between Existing Conditions and Alternative 4 found above would generally be due to climate change, sea level rise, and future demand, and not the alternative. As a result, the CEQA conclusion regarding Alternative 4, if adjusted to exclude sea level rise and climate change, is similar to the NEPA conclusion, and therefore would not in itself result in a significant impact on spawning habitat for winter-run Chinook salmon" (11-1325).

Issue discussion

The text does not indicate that the alternative will in fact be beneficial to the covered species, but rather that it will be generally no worse than the current conditions that would be expected should there be no action. According to the BDCP website, the current conditions are recognized as unacceptable, and the purpose of the project is to be protective of and beneficial to the covered species.

Recommendation

Please further clarify how the selected alternative will be beneficial to the species under the CEQA conclusion, as required per the project description. If necessary, consider revising the CEQA conclusions to a significant impact, and list the expected benefits from the conservations measures as mitigation for the anticipated impacts.

Conclusions and Recommendations

In summary, we find that the Draft BDCP EIR/EIS does not employ the Precautionary Principle in their analysis of the impacts on species. Broad generalizations within the chapter often dismiss important considerations without providing adequate evidence for such dismissal. The authors should instead cite scientific literature sources for all decisions made within the analysis. Further, we find that more conservative assumptions should be employed in the determination of effects throughout Chapter 11. The covered species discussed in this chapter are threatened and/or endangered - they deserve concerted protection measures and a fair analysis. Therefore, the assumptions used within the analysis models should be based on more conservative recommendations obtained from *scientific literature.* Lastly, we find the reliance on the "no action alternative" findings in the CEQA analysis of the alternatives to be unreasonable. The purpose of the BDCP is reportedly "protecting dozens of species of fish and wildlife" (BDCP website). However, the conclusions state that although there will be negative impacts to the covered species that are worse than current conditions, the impacts are considered less than significant since the effects of the alternative are not anticipated to be worse than the "no action alternative". The goal of the project is to be protective of, and beneficial to, the covered species, just no worse than it already will be.

We recommend addressing and incorporating the comments contained herein to improve the analysis and better identify the potential environmental impacts of the BDCP.

BDCP577

References

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2. Bureau of Reclamation. 2004. Long-Term Central Valley Project and State Water Project Operations Criteria and Plan, Biological Assessment. Available at: <http://www.usbr.gov/mp/cvo/ocap/OCAP_6_30_04.pdf>.

3. Myrick, C. A., J. J. Cech Jr. 2001. Temperature Effects on Chinook Salmon and Steelhead: A Review Focusing on California's Central Valley Populations. Bay-Delta Modeling Forum Technical Publication 01-1. Available at: <http://www.cwemf.org/Pubs/TempReview.pdf>.

4. Myrick, C. A., J. J. Cech, Jr. 2004. Temperature Effects on Juvenile Anadromous Salmonids in California's Central Valley: What Don't We Know? Reviews in Fish Biology and Fisheries 14:113–123.

5. National Oceanic and Atmospheric Administration (NOAA). 2013. Takes of Marine Mammals Incidental to Specified Activities; Rockaway Delivery Lateral Project off New York, January 2013 through January 2014. December 27.

6. U.S. Department of the Interior, Bureau of Reclamation (Reclamation) and U.S. Department of Fish and Wildlife (USFWS); the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS); and the California Department of Water Resources (DWR). 2013. Draft Environmental Impact Report / Environmental Impact Statement (EIR/EIS), Bay Delta Conservation Plan, Alameda, Contra Costa, Sacrament, San Joaquin, Solano, and Yolo Counties, California. December 13.

California Bay Delta Conservation Plan
Chapter 5: Water Supply

5.1 Environmental Setting/Affected Environment:

Section 5.1 of the California Bay Delta Conservation Plan outlines the geographic areas studied by the BDCP team to evaluate impacts. Lines 19-22 explain that Tulare Lake, an area fed by the Delta, has been left out of the analyses. Tulare Lake was once the largest freshwater lake west of the Mississippi. Though the lake has run dry from agricultural usage and engineered diversion of its tributary waters, it does still receive Delta water. Tulare Lake has been considered by many to be a "phantom" since its 1930s demise however for the purposes of long-term planning, the construction of the BDCP, and in the face of changing California water resources as a result of climate change and swelling populations, Tulare Lake should be incorporated in the evaluation of BDCP water supply. Heavy rains in 1983 brought water levels in the lake to almost twice their normal levels and controlled drainage of the lake proceeded for four years following. Farmers have explained that when large 10 or 15 year flood events hit, the lake rises from its slumber flooding acres of farmland in its path. While the land covered by Tulare Lake may be classified as a desert because of its dry bed and miniscule annual rainfall levels, with the new water control mechanisms implemented by the BDCP and the unpredictable water supply conditions in the state of California, it is recommended that the BDCP consider the Tulare Lake area in its water supply assessment.

5.3 Environmental Consequences: Alternative 4

Change in SWP and CVP Reservoir Storage

There are 4 reservoir lakes that have been analyzed for the change in reservoir storage. The results for changes in May and September reservoir storage under Alternative 4 compared with existing conditions are shown in Table 1.

Table 1. Change in SWP and CVP reservoir storage under Alternative 4

Reservoir Storage	Scenarios	Increase/ Decrease	Amount (TAF)	Percentage (%)	Period of time
Trinity Lake	H2	Decrease	207	15%	Almost all of the year
	H3	Decrease	255	18%	Almost all of the year
Shasta Lake	H2	Decrease	339	12%	95% of the year
	H3	Decrease	541	20%	95% of the year
Lake Oroville	H2	Decrease	341	17%	95% of the year
	H3	Decrease	580	28%	Almost all of the year
Folsom Lake	H2	Decrease	103	20%	90% of the year
	H3	Decrease	154	29%	95% of the year

According to the result of change in SWP and CVP reservoir storage under Alternative 4 (all scenarios) that BDCP provided, the average annual end of September storages in 4 lakes decrease significantly in over 90% of the year, especially in Shasta Lake and Lake Oroville. The average annual storage under Alternative 4 H3 decreases more than 500 TAF in almost all of the year. It is questionable that SWP and CVP reservoir storage under Alternative 4 will be enough for increasing future demand.

Change in SWP and CVP deliveries

In impact WS-1, the NEPA effects mentioned that there is no effect of construction to the timing or amount of water exported from Delta through SWP and CVP facilities as well as CEQA conclusion also mentioned that the Alternative 4 water conveyance facility would not impact the operation of existing SWP and SVP facilities. The conclusion in this impact WS-1 is unclear, Why construction does not impact the operation, timing and amount of water exported is not explained. The construction plan as well as the schedules and time of construction should be provided and explained briefly to clarify how BDCP plans to avoid the impacts during the project. It is impossible that the construction would not affect the whole operation, timing and water exported. Moreover, for impact WS-2, it is also unclear why Alternative 4 scenarios provide operational flexibility compared to existing condition.

5.3 Environmental Consequences: Alternative 5

By carefully reading through Alternative 5, which presents the facilities construction of dual conveyance with pipeline/Tunnel and Intake 1(3,000 cfs; Operational Scenario C), here are our comments.

Facilities construction would be similar to those described for Alternative 1A

It is nearly impossible to build something exactly the same with different capacity. First of all, the draft does not mention whether this would be an underground or above ground construction. Either one gives many variables depending on the season of year due to unstable weather. Also, there are no specific plans or schedules pertaining to this construction. Referring to Appendix 5A, where it states the BDCP EIR/S Modeling, using CALSIM II, which is a generalized water resources simulation model for evaluating operational alternatives of large, complex river basins and a linear programming solver for efficient water allocation decisions, was used to show results. Its purpose is to provide a comprehensive modeling tool for water resource systems simulation. It is the latest application of the generic CALSIM model to simulate SWP/CVP operations.

Questions regarding data accuracy

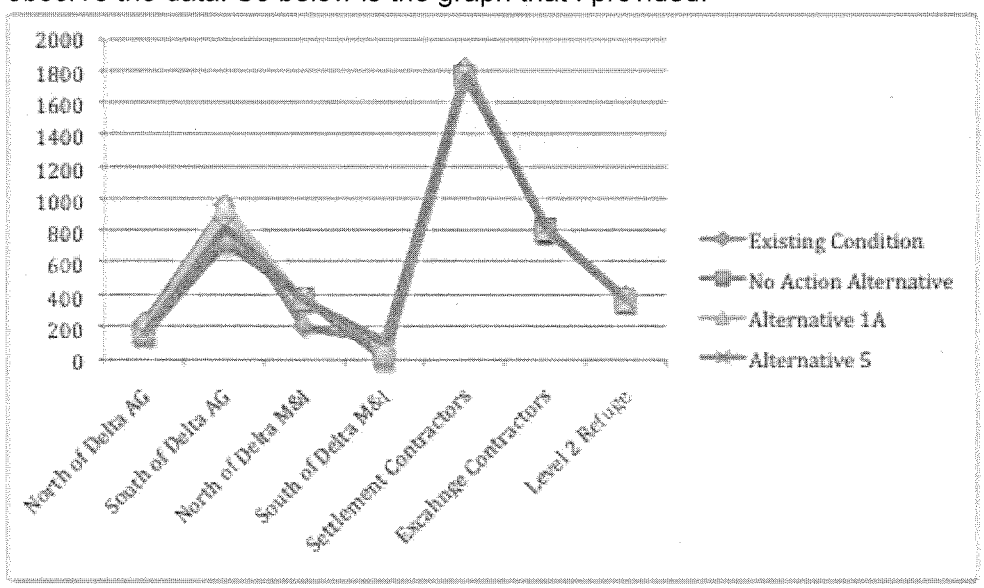
There is an issue of accuracy. It is questionable whether the data proposed is accurate. It is somewhat speculated in terms of dependent variables. The period of time for these channel gates from October to November is not constant because they would be closed if fish are present. From December to June, gates would be closed and from July to September, gates would be open for 3 months. Even if these periods of time are constant, months of October and November can vary and affect the result. Further researches are necessary.

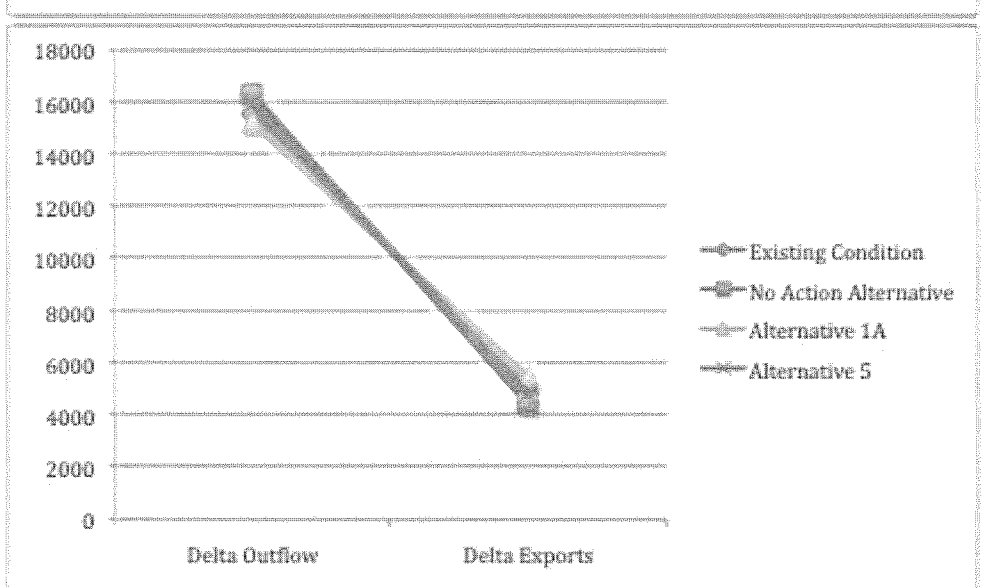
No details on construction details

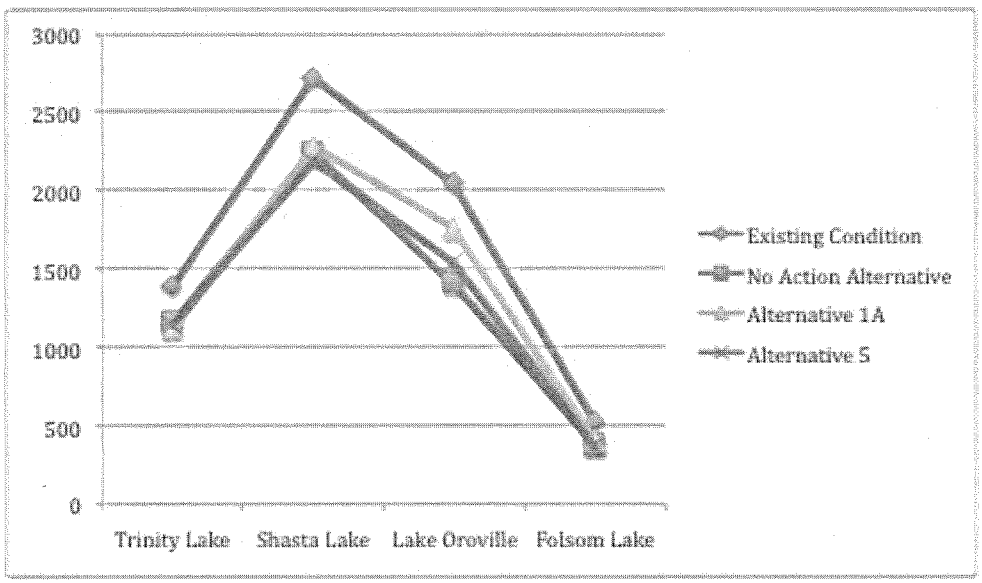
The chapters don't seem to have proposals and scope of work for building the facilities. According to Appendix 5A, there were some dimensions given for the gates but none of the proposed constructions had specific details on schedules, estimates, and other details. These are massive construction that would transport water from one place to another. If there are no plans proposed on how to build these, it is not a good beginning.

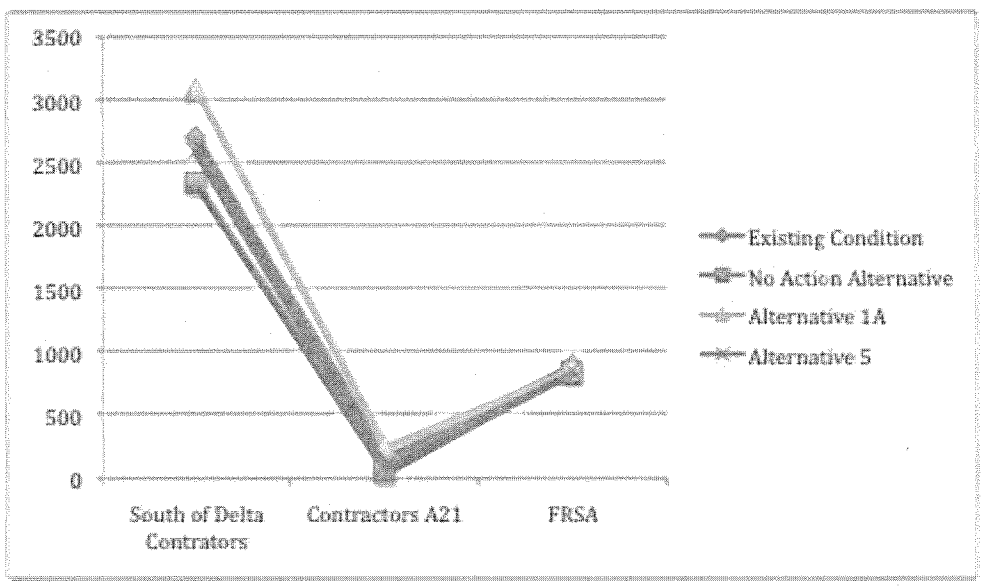
Lacking visual aids

Part of Alternative 5 has many comparisons in figures and percentages. However, it is hardly legible to notice differences in these comparisons without any visual effects. There are charts presented towards the end of the documents but not everyone can easily understand and observe the data. So below is the graph that I provided.









5.3 Cumulative Analysis:

State Water Resources Control Board flow objectives

The SWRCB is currently in the process of creating flow objectives for Delta priority tributaries. This could dictate how much water the Delta will receive which would in turn directly relate to which of the proposed alternatives is best for the Delta. However because SWRCB started this process after the notice of preparation for this EIR/EIS it is not required for analysis here. We would just like to have it noted that the decisions of the SWRCB at the end of their process will dictate the efficiency of the Bay Delta Conservation Plan and should be included in the cumulative analysis.

Appendix A: Modeling Technical Appendix

Those preparing the BDCP correctly assess the importance of rigorous technical modeling to back up SWP/CVP delivery estimates in the Near-Term (~2015), Early Long-Term (~2025), and Late Long-Term (~2060). It is important that stakeholders and the public be afforded the opportunity to review the BDCP's impact at these planning horizons. Unfortunately, a number of problems exist with the methods used to determine projected deliveries as well as with the dissemination of this critically important information.

Per the DWR, the State Water Project (SWP) serves 20 million Californians and irrigates some 600,000 acres. The Central Valley Project (CVP) provides drinking water to some 2 million consumers and irrigates over 3 million acres of farmland. Together they represent the water resources for 49.9% of California's 7.2 million acres of irrigated farmland and drinking water provider for 57.8% of California's 38 million residents.

Modeling for BDCP is inaccessible, not easily repeatable by stakeholders – need for WebGIS portal for display of information

Modeling of NT, ELT, and LLT deliveries through the SWP and CVP were performed using CALSIM II, a large-scale optimization model that uses inputs written in Water REsources Simulation Language (WRESL) to optimize the movement of water through a linear programmer. CALSIM II is one of 3 main modeling tools used by DWP. Of the three, it is the oldest and the most abstract; CALSIM II only models management decisions, whereas models such as WRIMS 2 (Water Resource Integrated Modeling System 2) and IWFM (Integrated Water Flow Model) provide a more comprehensive modeling capacity, improved ease of use, and in the case of the latter, ArcGIS integration. Both IWFM and WRIMS 2 would provide a clearer picture of how diversions due to the BDCP will increase groundwater extraction and impact hydrological conditions.

The importance of GIS, particularly WebGIS for allowing users to explore spatial datasets cannot be understated. That the BDCP would place calculations and figures detailing the impact on access to water for approximately half the population of the state in the appendix to a chapter of a 3000+ page EIR instead of utilizing the existing DWR IWRIS portal seems short-sighted at best and negligent at worst. The BDCP ought to add layers to IWRIS, which allows users to examine flows through the SWP/CVP based on estimated yearly flows.

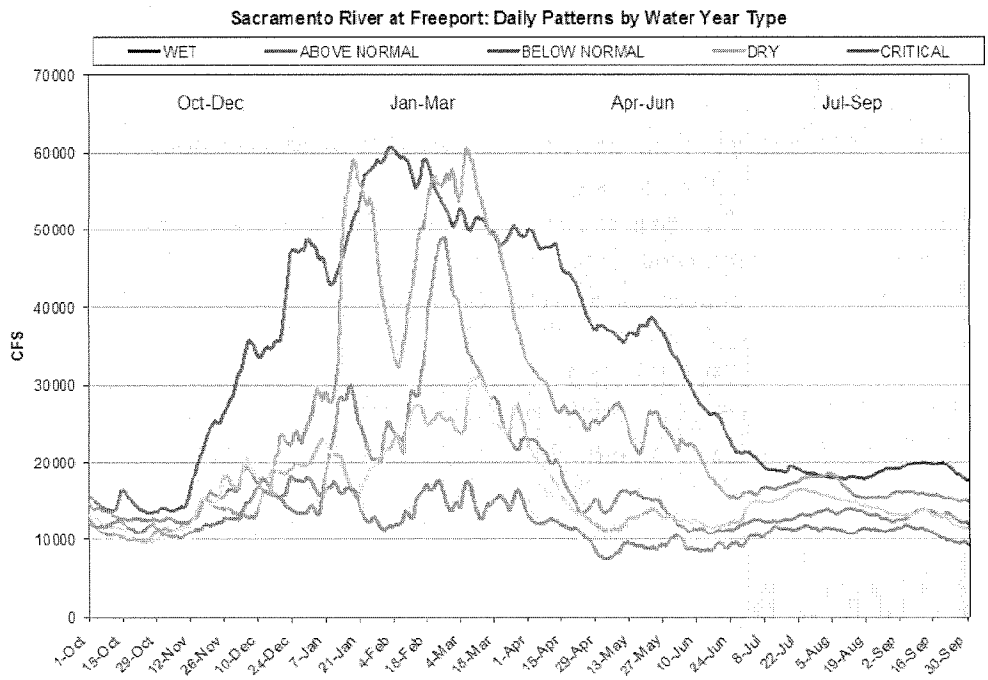
Modeling for BDCP uses incomplete methodology, does not fully characterize yearly flows

Modeling for the BDCP EIR relies on two major assumptions for projection of NT, ELT, and LLT scenarios. The first is sea level rise due to climate change. We take no issue with the current NT, ELT, and LLT estimates of sea level rise. The second major assumption is the characterization of available water. The majority of CA DWR's modeling relies on the utilization of an 82 year (1922-2003) modified historical hydrology. This contains monthly (and where available/interpolated daily) records of inflows and outflows to parameterize the CALSIM II model. Future demand is calculated by imposing projected land use on historical hydrological

and meteorological conditions. Allocations for delivery are generated using rule-based algorithms (called 'rule curves'), which then translate into contractor allocations.

Most reservoir operations and releases are governed by inflows to the reservoirs. It is unclear how the EIR determined the exact hydrological inflows used to project available water storage; most likely the EIR is averaging the 82-year historical record and abstracting an amount of water that may in fact never be available. Looking at Figure A-7: Mean daily flows by Water Year-type for Sacramento River at Freeport, it is clear that five different hydrological regimes exist within California: Wet, Above Normal, Below Normal, Dry, and Critical.

Figure 1 - A-7: Mean daily flows by Water Year Type for Sacramento River at Freeport



Rather than perform a single analysis for an 'average' water-year based on the historical record, the BDCP EIR needs to sort years within the 82-year historical record into these five categories, averaging hydrologic flows within each category and performing a separate analysis for each hydrologic regime.

San Joaquin Valley Groundwater Extraction due to reduced SWP/CVP deliveries

According to Chapter 7, groundwater supplies 75% of water for users on the valley floor. In Section 7.3.3.9 Impact GW-8, the EIR concludes that groundwater pumping will be greater than under existing conditions due to decreased SWP/CVP deliveries, especially under Alternative 4 Scenario H4, which could result in decreased groundwater levels of up to 50 feet, with a further decline possible if reduced stream flows are inadequate to meet surface water diversion requirements. Current groundwater yield within the San Joaquin basin is in the neighborhood of 730-800 TAF/year, well above the estimated safe yield of 618 TAF/year. Continued withdrawal in excess of safe yield is contributing to inelastic land subsidence in the region due to over-

pumping in areas where Corcoran Clay is present. An increase in extraction or even continued extraction at current levels irreversibly reduces groundwater storage capacity. By proposing a project, which will pass the buck to local Watermasters and all but force this to occur, the BDCP effectively is ensuring the continued destruction of groundwater storage in the San Joaquin Valley and other areas forced to increase extraction to compensate for reduced deliveries.

BDCPS77

Analysis of Joint Environmental Impact Report (EIR) and Environmental Impact Statement (EIS) for the Bay Delta Conservation Plan (BDCP) Chapter 16, Socioeconomics

final paper for

ENE 502, "Environmental and Regulatory Compliance"
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EXECUTIVE SUMMARY

The authors recognize that for such a large and complicated project, the generation of the Bay Delta Conservation Plan (BDCP) Draft Environmental Impact Report and Environmental Impact Statement (DEIR/EIS) requires a tremendous amount of effort made by those involved in developing the Draft. A perfect EIR/EIS would take unlimited resources, budget, and time, and thus, even the BDCP EIR/EIS will likely have room for improvement.

We have reviewed and analyzed the Socioeconomic Impact Analysis of the BDCP-preferred Alternative 4 for the Bay Delta area, and have concluded that the analysis is incomplete and does not analyze key aspects needed to holistically interpret the short- and long-term effects of BDCP implementation. Included in this report are comments and recommendations regarding issues found in the BDCP Draft EIR/EIS socioeconomic impacts as described in Chapter 16, *Socioeconomics*. The authors expect that the BDCP Lead Agencies will recognize these issues and fairly evaluate the following comments and recommendations. By doing so, the Final EIR/EIS for this project will improve and better identify and mitigate the socioeconomic impacts of the proposed project. Ultimately, the authors expect that a revised Final EIR/EIS will contain the best information possible while being clear and concise and the resulting document is transparent and accessible to the public.

In its definition, socioeconomics is the social science that studies how economic activity affects social processes. Socioeconomic forecasts can be modeled using software programs and consulting tomes of social sciences research; however, human nature can never be adequately predicted, which makes socioeconomic analysis in an EIR/EIS require great breadth and depth to fairly evaluate how a project may impact an area. Generally, analysis include impacts to housing, jobs, employment, population, agriculture, recreation, and other economic characters that related to social factors. The socioeconomics chapter in Draft EIR/EIS presents the impacts analysis of BDCP project on the social economics of Bay Delta Area. Specifically, it describes the potential changes and impacts on several socioeconomic aspects, including community character, housing, employment, labor force, industry, agriculture and land use, visual resources, and recreation for the five-county region of the BDCP. This area comprises Sacramento, San Joaquin, Yolo, Solano, and Contra Costa Counties, collectively referred to as the Bay Delta region. The study area includes the entire area covered by BDCP, which is largely formed by the statutory borders of the Bay Delta. Existing socioeconomic conditions in the Delta region and the effect of all the action alternatives, and No Action Alternative on socioeconomic conditions are discussed in the Draft EIR/EIS. Both quantitative and qualitative descriptions are provided.

COMMENTS ON BDCP DRAFT EIS/EIR ALTERNATIVE 4 (CEQA PREFERRED): AGRICULTURE, HOUSING/JOBS, VISUAL RESOURCES AND RECREATION

In the following, we will present our reviews and analysis on this chapter. The impact analysis of BDCP on lots of socioeconomics aspects have been discussed in the EIR draft. Here, we will only focus on the following four socioeconomics aspects: agriculture, housing/jobs, visual/ aesthetic resources, and recreations. The potential issues or points that might need to be reconsidered or improved with regards to these four aspects, as well as our arguments and recommendation for improvement will be discussed in the following.

Agriculture

Issue 1- Farmers may be Unfamiliar with the Legal Process

Introduction: Mitigation measure AG-1 (DEIR/EIS Chapter 14) involves developing an Agricultural Land Stewardship Plan (ALSP) to maintain agricultural productivity, and mitigate for loss of important farmland, lands subjected to Williamson Act contracts, or lands located in farmland security zones.
The Draft EIR/EIS states "Where the BDCP proponents, despite a good faith effort, cannot succeed in achieving the consensus necessary to carry out a feasible Optional Agricultural Land Stewardship Approach, they shall undertake instead, where necessary and feasible, a Conventional Mitigation Approach based on the purchase of property interests in agricultural lands, …requiring the preservation and/or enhancement of other land of similar agricultural quality."

Issue Discussion: The problem with this aspect of the mitigation plan is that farmers may be unfamiliar with the legal process, which leaves room for unjust compensation. The agencies and government entities that will acquire the land from affected landowners have the resources to participate in the process adequately, but this may not be the case with the average landowner. The legal system is designed in a way that benefits the party that has better representation. Eminent domain cases, just like any other legal battle, would require hiring a good attorney in order to ensure a fair compensation. With good representation comes the farmer's ability to fully exercise their rights as a landowner. This also translates into the ability to obtain fair compensation for lost land and damaged property.
One agricultural based newspaper known as *AgAlert*, has posted articles on how farmers in California are currently being affected by the eminent domain process. The paper urges farmers to familiarize themselves with the eminent domain process in order to ensure that they receive just compensation. The paper sums up the issue farmers are faced with by stating, "You have to be prepared early on in the process, because there are steps along the way that you want to take that are crucial to perfecting your ability to get what the Constitution guarantees you, and that is just compensation. You may or may not get that through the process, depending on how well you are represented."[2]

Recommendation: The DEIR/EIS needs to address creation of a program to ensure that farmers are made aware of their rights as land owners. Farmers are more likely to benefit from this knowledge if it is provided ahead of time as opposed to finding out at the last minute. This would give them a head start to acquire good legal support, knowledge of the process and legitimate documentation for court where it is needed.
Since the mitigation plan is based on purchasing land of similar agricultural quality, the EIR/EIS mitigation plan could be enhanced by re-evaluating the new land location. This is because it might be hard to tell if the new land would support agricultural production, without cultivating the land and analyzing the production results. Compensation could be provided for poor results due to temporary unforeseen land conditions. A replacement could be provided if the new location turns out to be unfavorable for the purpose it was intended for.

References

1. "The Power Of Eminent Domain And California Farmers And Ranchers Today." Eminent Domain - . California Farm Bureau Federation, n.d. Web. 12 May 2014. <http://www.cfbf.com/eminentdomain#justcompensation>.

2. Souza, Christine. "For farmers facing eminent domain, preparation pays." For farmers facing eminent domain, preparation pays. AgAlert, 20 Oct. 2010. Web. 12 May 2014. <http://www.agalert.com/story/?id=1620>.

Issue 2-Plans for Seepage Issues Does not Mention What Actions will be Taken for Cases where Mitigation Measures Fail

Introduction: In addressing areas that could be subjected to seepage, Mitigation measure GW-5 mentions that such cases will be monitored after construction, and mitigation measures will be performed where necessary to restore fields to conditions existing before construction. Thus the DEIR/EIS states, "These measures may include installation or improvement of subsurface agricultural drainage or an equivalent drainage measure, as well as pumping to provide for suitable field conditions (groundwater levels near pre-project levels). Such measures shall ensure that the drainage characteristics of affected areas would be maintained to the level existing prior to project construction."

Issue Discussion: The issue with this mitigation plan is that it does not mention what actions will be taken for cases where mitigation measures fail to effectively reduce the impact on agricultural production.
There is always the possibility that some portion of the mitigation procedures could be unsuccessful. For instance, piezometers and water pumps could fail, or overall seepage control plans could produce inadequate results. In such cases, agricultural production could be significantly affected leading to a loss of revenue to farmers. In such cases, it would be fair to compensate the farmer for damages or losses incurred due to seepage.

Recommendation: The mitigation plan for dealing with seepage issues should be enhanced to account for scenarios where seepage impacts result in agricultural production loss. It would be fair to compensate the farmer for cases where seepage issues from the project have an adverse effect. This would be similar to Mitigation measure GW-1 that addresses mitigation measures for disruption of farm irrigation systems. The plan explains the different steps that would be taken to handle these impacts on agricultural production arising mainly from project construction or implementation. This measure lays out conditions for compensation in cases where mitigation measures fail to produce an acceptable solution. Thus the EIR/EIS states, "If deepening or modifying existing wells is not feasible, the BDCP proponents will secure a temporary alternative water supply or compensate farmers for production losses attributable to a reduction in available groundwater supplies."
Further steps could be taken for serious cases where seepage issues cannot be resolved. Ideally plans should be made for relocating agricultural activity to a new location.
The EIR mentions that natural occurrences (such as climate changes and rise in sea levels) will also contribute to water level issues. Thus another cause for concern in handling the effect on

agricultural production is a means of differentiating between issues caused by implementing the BDCP project and by natural occurrences. It is safe to assume that the project will not be liable for impacts from the later, but there is a possibility that issues could occur due to a combination of both factors. Thus I suggest the project should take this possibility into consideration when designing a mitigation plan. There should be guidelines or policies for determining how the project plans to handle such cases.

Issue 3- Salinity economic impact analysis may fail to accurately portray the magnitude of the impact.

Introduction: Impact ECON-12 (EIR/EIS Chapter 16) mentions that changes in crop acreage were used to estimate the associated changes in economic values (EIR/EIS table 16-46).The EIR/EIS states, "Total value of irrigated crop production in the Delta region would decline on average by $3.8 million per year during operation and maintenance, with total irrigated crop acreage declining by about 4,500 acres."

Issue Discussion: The issue here is the salinity economic impact analysis may fail to accurately portray the magnitude of the impact. This is because the analysis makes exclusions such as the Suisun Marsh area, and areas that might be converted due to urbanization in the near future.
The BDCP Statewide Economic Impact Report mentions the exclusion of the Suisun Marsh area, thus stating, "The analysis is confined to the Statutory Delta and thus excludes Suisun Marsh (which contains only 2.3% of agricultural lands in the Plan Area)."[1] However, there is no explanation why the analysis is confined to an area that excludes the Suisun Marsh. The fact that the Suisun Marsh area only contains 2.3% of agricultural land still accounts for a significant amount of prime farmland or land covered by the Williamson act and/or security zones.
The report makes a case for removing areas that have a high potential for being converted by land urbanization. It does this by stating, "When forecasting future land use changes in the Delta, it is important to take into account the effects of urbanization around the borders of the agricultural regions … Areas categorized as having a high or very high probability of urbanization were assumed to be removed from agricultural production in the future, and are thus excluded from the salinity impacts analysis that follows."[1] Although the prediction is based off of research data from a credible source (UC Berkeley Resilient and Sustainable Infrastructure Networks (RESIN) project.), I feel there is a need to at least show how the impact would change if these areas are included in the analysis. Urbanization is most likely to occur in the predicted areas, but it is still not a total guarantee. Hence adding these areas to the analysis would show a better representation of a worst case scenario, and better inform people who are concerned with how the project might affect the Bay Delta region.
Throughout the analysis, salinity changes from operation are taken into consideration for the economic impact, but not climate change and construction. The Economic Impact report indicates that the DSM-II module was used to compare the salinity levels associated with high flow scenarios for the existing and the BDCP conveyance systems. However these scenarios are related to operation phases of the water conveyance systems and therefore the construction phase of the BDCP project is not accounted for. This could make a significant difference since the

current conveyance system is already in commission, and the effect from implementing the impact would be even greater once construction is accounted for.
Overall, the main issue is the exclusions made for performing the economic impact analysis would portray a lower loss of revenue due to less land areas being considered. There are already more hidden costs that are not mentioned in the analysis that might result from the implementation of the project. For example, the likelihood of irrigation cost, taxes, and overall operation cost going up after the project is completed. It is possible a good amount of the project operation and construction costs will be deferred to agriculture.

Recommendation: The Economic Impact analysis should incorporate the currently excluded areas into study. It would be nice to include an explanation for why the Suisun Marsh area has been excluded and why this is feasible for the salinity economic impact analysis. Although the agencies and parties involved with the project may not see the need to, the public might feel the impact is significant once the results are available. The reports should also account for the construction phase of the project. Although factors like climate change are bound to have an effect on agricultural production, construction only has an impact when a new project is implemented. If this has been deliberately left out from the analysis, the report should at least mention the reason. It would be nice to know if there is no practical means of accounting for salinity changes during the construction, or if construction would not affect salinity levels all together.
In general, adding all the excluded areas would give a better account of a worst case scenario. If the report wishes to justify their intentions for making these exceptions, it should at least offer a comparison between the current analysis and an analysis with these areas included. This would help to give the public a chance to give opinions on whether these omissions are actually insignificant.

References

1. Hecht, John , and David Sunding. "BAY DELTA CONSERVATION PLAN STATEWIDE ECONOMIC IMPACT REPORT." . N.p., 1Aug. 2013. Web. 12 May 2014. <http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Draft_BDCP_Statewide_Economic_Impact_Report_8-5-13.sflb.ashx>.

Employment

Issue 4 – Assumptions regarding direct and indirect labor force impacts to communities during construction phase are inadequately supported in BDCP Draft EIR/EIS.

Introduction: The above stated issue relates to two of the stated DEIR/DEIS Socioeconomics impacts in Chapter 15, "Econ-1" and "Econ-2". "Impact Econ-1:Temporary Effects on Regional Economic s and Employment in the Delta Region during Construction of the Proposed Water Conveyance Facilities" describes effects on direct and total employment and income during Construction Phase of implementation of BDCP Alternative 4 relative to No Action Alternative and Existing Conditions resulting from implementation-related spending. The BDCP DIER / DEIS states the region will have "substantial economic activity" if Alternative 4 is implemented (BDCP DIER/DEIS, p16-160).

"Impact Econ-2: Effects on Population and Housing in the Delta Region during Construction of the Proposed Water Conveyance Facilities" describes the impact of construction activities and employment to housing and local populations of the five-county region.

Issue Discussion: According to the California Employment Development Department (CA EDD), all five counties in the BDCP area have cyclical unemployment rates, with winter increases between 2-5% (CA EDD, 2014). As recreation and agriculture are large employment sectors for this region, the cyclical trend of changes in unemployment may be related to the cyclical nature of these two activities. The BDCP DEIR/DEIS includes direct and total employment impacts as well as agriculture-specific labor impacts, though does not specifically address any ***loss of direct and indirect permanent or seasonal recreational or seasonal agricultural employment due to BDCP construction.***
Additionally, as stated in the BDCP DEIR / DEIS, it is assumed that 70% of the required construction-related labor force will be supplied by local labor and only an estimated 30% of the total construction-related labor force will be served by out-of-region laborers (BDCP DEIR/DEIS, p16-163). While the BDCP DEIR / DEIS does conclude in Chapter 30 (*Growth Inducement and Other Indirect Effects)* that growth inducement resulting from the BDCP is not out of line with existing projected regional growth, the stated estimates of labor from both in and out of the region cannot be guaranteed without supporting labor contracts. Therefore, direct ***growth estimates resulting from BDCP Alternative 4 construction stated in the BDCP DEIR/DEIS are unreliable and may have negative impacts not discussed in the document.***

Recommendation: Lead Agencies responsible for the BDCP need to address the above stated issues to mitigate for both direct and indirect job displacement. It is highly recommended that the Lead Agencies along with local Bay Delta government agencies create and implement a Developer Agreement / Community Benefit Agreement that stipulates a local hiring policy to maintain the 70% in-region construction labor force as stated in the BDCP DEIR/ DEIS. Such an agreement would include job training and placement priorities for displaced, unemployed, and under-employed persons in the region interested and physically able to participate in BDCP construction, operations, and/or maintenance. Additionally, for residents of the five-county area who are uninterested or unable to participate in BDCP activities and are incurring job loss as a direct or indirect impact of BDCP implementation, the Developer Agreement / Community Benefit Agreement should include job placement and relocation services.

Housing

Issue 5 – Additional Analysis Needed for Short-term and Long-term Impacts to Housing

Introduction: In "Econ-2", the BDCP DEIR/DEIS states that housing for the estimated 30% out-region laborers can be accommodated by the approximate "53,000 available housing units" in the area (BDCP DEIR/DEIS, p16-163, lines 15-18), and "construction of the proposed conveyance facilities is not expected to substantially increase the demand for housing within the five-county region" (p16-163, lines21-23) .

Issue Discussion: The NEPA Conclusion states "Within specific local communities, there could be localized effects on housing. However, given the availability of housing within the five-

county region, predicting where this impact might fall would be speculative. In addition, new residents would likely be dispersed across the region, thereby not creating a burden on any one community." (p16-163, lines24-27) . The BDCP DEIR/DEIS analysis of implies that because the housing supply is dispersed throughout the region, no community will be unfairly burdened by the influx of relocating laborers. While the supposed availability and lack of any locational information of "53,000 housing units" in the region is of concern, the analysis only includes information regarding relocating laborers directly associated with the construction of BDCP, and ***does not include housing analysis for indirect increase in regional employment***. As shown in Table 16-41: *Regional Economic Effects on Employment and Labor Income during Construction (Alternative 4)* (p16-161), indirect Full Time Equivalent (FTE) jobs for Year One is approximately 13,500, and the total FTE jobs is over 16,000. Socioeconomic software models cannot predict if these jobs will be filled by local residents or if the possibility of indirect BDCP employment will draw out-of-region laborers to the region. The BDCP Draft Statewide Economic Report analysis of induced employment from the "Top Ten IMPLAN Sectors" concludes that over 63,000 jobs will be the direct result from the construction of the water conveyance facilities alone, not including any indirect FTE jobs (Draft Statewide Economic Report, *Table 5-2-5:Employment Creation by Top Ten IMPLAN Sectors for CM1 Construction).* ***There are no stated measures in the BDCP that will prevent these job opportunities from locating within the project area,*** and unless thoroughly addressed, potential growth of the Bay Delta Region may result in radically different environmental and socioeconomic impacts than presented in the BDCP DEIR/DEIS. Additionally, the BDCP DEIR/DEIS has ***no stated scenarios for BDCP –induced community growth post-construction.***

Recommendation: BDCP Lead agencies need to thoroughly investigate multiple scenarios of growth and population migration both into and throughout the Bay Delta Region in order to adequately assess both short- and long-term impacts to housing as well as impacts to the environment and all other socioeconomic factors.

Visual/Aesthetic Resources

Issue 6 - Data Required for No Action Alternative

Introduction: The EIR draft states that the No Action Alternative would result in an array of effects on existing visual quality and characters in the Delta. The following factors were considered when evaluating the potential impact on visual/aesthetic resources: changes to land use, local population growth (i.e., it would convert agriculture landscape into developed landscape), land subsidence, sea level rise, catastrophic levee failure, and the ongoing projects (including the restoration and environmental enhancement projects). The EIR draft states that implementing on-going programs and projects under No Acton Alternative would result in the potential for temporary and permanent effects on the study area visual environment that are not expected to substantially change visual resource elements in the Delta because of the current restrictions on development in the primary zone and city and county ordinances to preserve the visual quality of the Delta. The potential impact is considered less than significant and no

mitigation is required. The DEIR also states that the climate change impacts with and without the BDCP are provided in Chapter 3.

Issue Discussion: The problem with this aspect is that the assumptions that hidden behind are not necessarily valid. These assumptions are: 1) the on-going programs and projects that comply with NEPA, the federal Endangered Species Act, and other federal laws and regulations would not lead to significant impact. 2) the array of effects that caused by the factors mentioned above would be less than significant. 3) the climate change effects in the long term would not necessarily lead to significant impact on visual resources.
For the first assumption, the on-going programs/projects, including the restoration and environmental enhancement projects may have interactive effects on the visual resources. Although these projects are supposed to comply with the environmental laws and regulations, they may still have adverse impacts that are considered not significant on the visual resources. These impacts might interact with each other, which may cause further degradations on the visual resources to reach a significant level. For the second assumption, the array of effects mentioned in the Chapter is not necessarily significant. The EIR draft didn't provide us convincing evidence to support this claim. As to the last one, supporting data for this statement is missing. The potential effects of weather changes in a long term are not clearly stated, especially for the permanent effects. Moreover, there is no quantitative analysis for the influence of the visual and aesthetic changes on recreation income.

Recommendation: In accordance with the above discussion, our recommendations are listed as follows: 1) the potential effects that caused by mutual interactions between the on-going projects needs to be considered. 2) the visual quality ratings caused by the aforementioned factors should be given to provide a quantitative overall assessment on the visual resources. 3) the climate change effects on the visual quality should be incorporated to the analysis model and the quantitative analysis for the influence of climate changes should be provided.

Issue 7 - Quantitative Analysis Required

Introduction: The EIR draft states that construction of conveyance facilities (including under Alternative 4) would result in substantial alteration of the existing visual quality or character in the vicinity of project elements that can be viewed from local sensitive receptors and public viewing areas. The words in the EIR draft used to describe the impact of construction of conveyance facilities on the visual resource are too vague. For example, the EIR draft states that the impact associated with Intake 2 would be adverse.

Issue Discussion: The words "adverse", "negative" are too vague for readers to understand the actual impacts of each construction activities. As mentioned in this Chapter, the Scenic Quality Rating system (ranging from A-F) was used in the impact analysis model. However, when describing the impacts of facilities constructions, no quantitative analysis or specific visual quality rating was given. Meanwhile, the influence on the recreations economy is not quantified.

Recommendation: We would recommend the EIR to provide some analysis or predictions data for each alternative, especially Alternative 4 and its potential effects on the recreations economy. For example, a visual quality ratings system can be incorporated when evaluating the impact

caused by construction of each facilities, and a final rating value of the overall impact after implementing BDCP could be provided to give the readers a quantitative concept.

Issue 8 - "Future Effects" Should be Considered

Introduction: The constructions of intake, forebays, spoil/borrow areas, reusable tunnel material areas, shift sites, uploading barge facilities, access roads, transmission lines, concrete batch plants/fuel stations, and river operable barrier were detailed explained in the EIR draft (Chapter 16 and Chapter 17). The impact of each construction activities on the visual resources is analyzed, and the impacts on the visual resources could be temporal/permanent, or negative/adverse, according to the Draft. For example, as to the NEPA effects, the primary features that would affect the existing visual quality and character under Alternative 4, once the facility has been constructed, would be Intakes 2,3, and 5, the intermediate forebay and expanded Clifton Court Forebay, resulting landscape effects left behind from spoil/borrow and reusable tunnel material areas, the operable barrier and transmission lines. The EIS draft states that these changes would be most evident in the northern portion of the study area. The construction would take 9 years, and the intensity of the activities in contrast to the current rural/agricultural nature of the area would be substantial. The mitigation measures AES-1a to AES-1g were proposed to mitigate the effects on the visual resources.

Issue Discussion: In the analysis of construction of each facility, the weather, land/road, waterway, vegetation conditions, etc., were assumed to keep the same during the construction years (the overall construction lasts 9 years). However, this assumption is not valid. The draft includes the "future effects" on the visual and aesthetic changes when analyzing no-action alternative, but doesn't consider the "future effects" on the current proposed alternative. There is a possibility that the changes of weather conditions during the 9 construction years would occur. For example, the drought and flood might changes the vegetation conditions and cause overflow of the waterways, respectively, which would affect the visual resources of the bay delta areas. Thereby, the evaluation results of each construction activity need to be adjusted. Meanwhile, the mitigation measures themselves might cause the degradations of visual quality, and no mitigation measure for these degradations has been proposed. For example, mitigation measures, such as intake dewatering may have some negative effects on the visual views. Specifically, the amount of water needs to be dewatered was not clear stated in the Draft. The dewatering might change the water flow of the waterways as well as alter the vegetation of the study area.

Recommendation: The dynamic assessment of the visual quality across the 9 construction years may be required. Weather changes, vegetation conditions and other dynamic factors during these 9 construction years need to be considered. For example, if flood or drought happens in this construction period, the consequence on the visual resources as well as social economics aspects need to be analyzed and included in the Final EIR/EIS. Moreover, the impacts of the mitigation measures themselves on the visual quality might need to be incorporated and the corresponding mitigation measures need to be provided in the EIR.

Issue 9 - The Interaction Between BDCP and Other Projects in Cumulative Analysis

Introduction: The EIR draft states that the cumulative impact analysis considers projects that could affect the same resources and, where relevant, in the same time frame as the BDCP alternatives, resulting in a cumulative impact. The visual environment is expected to change as a result of past, present, and reasonably foreseeable future projects related to changes in land use. The change to the existing visual environment will take place, assuming that reasonably foreseeable future projects would include typical design and construction practices to avoid or minimize potential impacts.

Issue Discussion: The mutual interaction effect between BDCP and other foreseeable/ongoing projects in the region was not considered. Indeed, the changes that related to the past, present, and future projects are considered. However, the cumulative analysis didn't consider the negative effects of BDCP (caused by their mutual interactions) on the foreseeable/ongoing projects. The negative effects imposed on the foreseeable/ongoing projects might affects the visual quality evolution of BDCP reversely.

Recommendation: The analysis model should incorporate the mutual influences of BDCP and other projects, and their impacts on the recreations.

Recreational Activities

Issue 10 - Unconvincing Study Method for Research of Recreational Activities

Introduction: The Benefit Transfer Method (or Benefit Function Transfer) was used to evaluate impacts on recreational activities in draft EIR/EIS. The essence of Benefit Transfer Method is to transfer available information from studies already completed in another location.

Issue Discussion: There are several limitations with the use of the Benefit Transfer Method. The approach may not be scientific because the location of the site, resource, local policies and user specific characteristics could not be similar enough. The bay delta bioregion is surrounded by the IT industry of the "Silicon Valley" and the most famous wine tourism site "Napa Valley" in the United States. Expect for the unique economical surroundings, the geological borders of the BDCP are not specific, which made it more difficult to find transferred objects. Plant and animal species inhabiting the delta are unique as well. However, the BDCP aims to address the areas extending from the Central Valley to the mouth of San Francisco Bay.
In addition, studies that would be regarded as transferred ones are not clearly pointed out in the draft. Ecological conservation and environmental protection are not only related to science and technology but also affected by policies and economics. In order to include political factors, the proper transferred location should be identified in the United States. The other two significant river delta areas in the United States are Mississippi River Delta and Colorado River Delta. However, the above two areas are really distinct from the Bay Delta Area in terms of history, culture, economy, geology and so on. Mississippi River Delta supported economy of

surroundings by shipping traffic, oil supply and fisheries harvest. Except for land loss, there is the only obvious crisis there. While for bay delta area, it does not need to worry about shipping and oil supply problems. Colorado River Delta was established in river flows and ocean tides, forming a dynamic environment. Its current ecological crisis focuses on the loss of wetlands. However, effects resulting from the construction of the dams or waterways there are deserving to be considered when we discussed the delta area. The above analysis indicated that it is not accessible to ascertain a transferred position to study the recreational activities in the bay delta area via the Benefit Transfer Method.

Recommendation: If BDCP intends to keep the Benefit Transfer Method, more sound evidence should be provided to prove that the selected transferred position is convincing gradually. Next, individual distinction should be taken into consideration. The way to measure and evaluate experiences of recreational activities could be various. More other study methods may be discovered via a public hearing.

References:

1. "Benefit Transfer Method." *Benefit Transfer Method*. N.p., n.d. Web. 20 Apr. 2014. <http://www.ecosystemvaluation.org/benefit_transfer.htm>.
2. "Bay Delta Bioregion Overview." *Bay Delta Bioregion Overview*.N.p., n.d. Web. 27 Apr. 2014. <http://ceres.ca.gov/geo_area/bioregions/Bay_Delta/about.html>.
3. Kolb, van Lopik (1958). *Geology of the* Mississippi*River deltaic plain, southeastern Louisiana. Technical Report 3-483*. Vicksburg, MS: U.S. Army Corps of Engineers Waterways Experiment Station.
4. Clifford, Frank (September 21, 2007), "A trickle of water might save estuary", Los Angeles Times

Issue 11 - Overstatement of the Recreational Visits

Introduction: The draft EIR/EIS states that more visitors are expected to visit the bay delta area after the implementation of the construction and conservation activities and regional tourism may be boosted by the introduction of the programs of ecological habitats.

Issue discussion: The possibility of attracting more visitors was overstated after the construction of the project. Our arguments are described as follows. San Francisco is one of top ten travel destinations in the United States and ranked as the 4th most popular travel attractions in the 2013 US News Rankings. While, how many of the tourists around San Francisco and the bay area have the travel plan for the delta area? According to the visit recommendation on the websites TripAdvisor, international tourists usually spend three days in San Francisco and then head to Los Angeles or Las Vegas to continue their California trip or head to the eastern shore. Most locations of interests in San Francisco are concentrated in the downtown area and few of them located in the neighborhoods, such as Tiburon, Sausalito, Napa, Calistoga, Sonoma, Monterey,

Carmel and Pebble Beach. The above destinations are all closer to San Francisco compared to the bay delta area. Obviously, fewer advantages can allow foreign visitors to make decisions to change their travel plans. Similarly, domestic tourists have fewer possibilities to head toward east because of their intense travel schedule.

Even if some tourists plan to travel around the bay delta area after the proposed construction, is it convenient for them to arrive there and start their tour? Right now two main transportation methods connecting San Francisco and the bay delta area are ferryboats and vehicles through highways. Less noticeable features of the bay delta can allow its tourism to be developed further. The project intends to promote the development of its agricultural tourism. However, San Joaquin Valley region, which lies south of the Sacramento–San Joaquin River, gains fewer dollar revenue compared to Napa Valley. The success and distinguished rank of Napa Valley resulted from its long history and premier origins. The Bay Delta area will face intense competition if they plan to take advantage of the tourism.

Recommendation: We would recommend the Draft EIR/EIS to provide sufficient data and analysis to support this claim. On the other hand, the following measures could be considered to boost the regional tourism. First, the promoting development of various transportation methods could be implemented to attract more visitors to the bay delta. For example, developed biking network was built among San Francisco, San Jose and Palo Alto, which will promote tourism effectively. If the project aims to attract more people from out of the delta areas, public transportation from the San Francisco to the bay delta area should be developed further. Second, a tourism website could be built to introduce the beauty of the delta area or organize visitors and travel partners. Visitors who have the same travel destinations can be matched together, which not only practices sustainable travel but also add more interests to the whole tour. Further, tourism programs should be enriched in the Bay Delta area.

References:

1. "California's Water: Sacramento-San Joaquin River Delta." *Association of California Water Agencies* |.N.p., n.d. Web. 11 Apr. 2014. <http://www.acwa.com/content/delta/californias-water-sacramento-san-joaquin-river-delta-0>.

2."Bike Share Program Launched In 5 Bay Area Cities - CBS San Francisco."*CBS San Francisco*.N.p., n.d. Web. 10 Apr. 2014. <http://sanfrancisco.cbslocal.com/2013/08/29/bike-share-bay-area-cities/>.

3. "Mississippi Delta Attractions." *Mississippi Riverboat Vacation*.N.p., n.d. Web. 9 Apr. 2014. <http://www.visitthedelta.com/attractions/default.aspx>.

Issue 12 - Underestimate Reduced Recreational Opportunities

Introduction: The draft EIR/EIS claims that noise and visual disturbances happen during construction period only and ignores the long-term impacts on boating and other recreational activities (EIR Ch.15, pg. 141). The recreational visits will increase and recreational chances will be enriched in the Delta by BDCP.

Issue Discussion:

Water Flow: The construction will result in the reduced water flow in the Sacramento River and the reduced amount will be as much as 20% by 2050. Right now, the current surroundings have adapted to natural periods of low and high flow, which supports a rich diversity of organisms and habitats and ecological functions. The installation and operation of these structures always will shift natural water flow, which have been identified as a Key Threatening Process under the *Fisheries Management Act 1994*. Because native fish species have adapted to the drought and natural change of water conditions and their populations have the capacity to recover. The reduced water flow will disturb this ecological balance and there will be little chance for fish species to extend their ability to recovering.

Water Level: Reduced water flow will alter water levels as well. The 2003 Union of Concerned Scientists/ Ecological Society of America report stated that North America experienced the climatic change, which resulted in the change of water levels. Reservoirs will be constructed at popular recreation sites, which must cause effects to recreational activities. Those recreation sites are listed in the EIR(Chapter 15, Page 59), including Folsom Lake, Shasta Lake, Trinity Lake, and Lake Oroville. Under Alternative 9, some boating destinations are completely cut off. Boaters have to lose some recreational opportunities. Fishing lovers also have to face the same disappointed fact that many fishing sites will disappear. It will include the Boathouse Marina at Locke, Walnut Grove public guest dock, and Boon Dox guest dock; temporary impaired access to Cosumnes River Preserve, Landing 63, Deckhead's Marine Supply, Dagmars Landing, Brannan Island State Recreation Area, Bullfrog Landing and Marina, Union Point Bar and Grill, Clifton Court Forebay, and Rivers End Marina and Storage.

Additionally, the potential risks of new coming construction are so difficult to tell. For example, the water levels of the Great Lakes reduced owing to the Chicago diversion. The canal was built to flush sewage down the Mississippi from the Chicago River. However, 2.1 billion gallons drinkable fresh water has to be used to flush sewage down, which was not the original proposed consequence.

The process itself of decrease of water level will cause effects on bank stability, resulting in slumping, loss of riparian vegetation, erosion and sedimentation. Those impacts on salinity and habitat quality will hurt the regional ecological systems and reduce wildlife species. Wildlife watching and observation are also parts of recreational experiences. Although the movement of sediment and muck can be considered as a method to deal with block problems, the noise and pollutants caused by operation process still should be taken seriously.

Water Quality: The exacerbation of water quality resulted from the reduced water flow too. Water quality involves in the chemical, physical and biological characteristics of water and a significant measurement of water conditions. Recreational activities are based on people's feeling and visual experiences. So if the appearance of water environment looks bad or smell worse, people must not have the good mood to go on further exploration of site interests. Most common visitors who do not grasp considerate professional knowledge about water level and water flow. If they don't pay attention to the water trends in this area, they will not feel the differences and

gain negative impressions of this area. However, water quality such as water clarity is a kind of facial factor of one site and it is easy to be told out by general tourists.
In the bay delta area, sewage contaminations, illegal dumping and aquatic weeds are all observable factors which should be concerned seriously. A large amount of organisms are included in sewage contaminations like bacteria, viruses and parasites. Sometimes people's exposure to sewage-contaminated recreational water may lead to some diseases, such as gastro-enteritis, hepatitis and infected cuts or rashes. Marine animals could transmit those diseases even though contact with sewage-contaminated water. Those sewage contaminations will not only bring dramatic negative impact on visitors' recreational activities but also be a threat to health of human beings. Some sewage contaminations may come from the break or leak of large sewage lines.
Furthermore, it is a little bit disappointed to admit the existing phenomenon of illegal dumping in the Bay Delta area. Illegal dumping is rampant and may allow property values decline. Large items of illegal dumping will block boating lanes, disturb people's healthy and beautiful leisure environment. The future construction sites have the possibility to be an additional source of illegal dumping and bring damage to the regional environment. Last, the management and control of aquatic weeds are also very important to keep ecological balance of the bay delta area and promote the local development of recreational activities. Healthy aquatic plants are parts of water body's ecosystem, providing food, habitat and microclimate to local fish and other animals. Sometimes proper aquatic weeds can add interests to recreational uses such as boating, fishing and swimming. While invasive aquatic weeds can degrade water quality, destroy habitat and then reduce recreational opportunities. The aesthetic appeal of water bodies will be damaged by invasive weeds. The balance of the fish population will be disturbed. Fishes are dead due to the removal of too much oxygen from the water. Sometimes, terrible odors and tastes may be caused by invasive weeds. The project should not only concentrate on the proposed solutions to possible invasive aquatic weeds but also solve current aquatic crisis like hyacinth.
In previous analysis of this part, many recreational sites like camping areas and marinas do not show in BDCP maps. Maybe the plans or proposed construction of those sites are undecided. Probably BDCP just dismiss them because they have been kept. However, people here care every size of land, their lands, and they may think those sites which were not referred to would be removed from their hometown areas and their wonderful childhood memories as well.

Recommendation: It is not easy to persuade people to change their mind when they have to face the decrease of recreational sites. However, it is not difficult to accept the adjustment of recreational sites for the public. Some sites near or similar to Folsom Lake, Shasta Lake, Trinity Lake, and Lake Oroville should be chosen to replace the above missing positions. So the opportunities of recreational activities will not be reduced, which will be just changed or adjusted.
The Bay Delta Conservation Plan should provide solutions to release noise impacts during the construction period as well. Solutions could include the decrease of construction time length and

the increase of establishment efficiency. I believe with the increase of people's understanding of the project, more and more people could support the right man-made construction objects. In addition, special rules should be made for the construction period in order to avoid unnecessary threat to the surroundings and people's health, including control of noise level, disposal of construction debris and the related establishment of rules.
Effective and influenced education and promotion also should be given attention to. Once public could grasp the basic understanding of threat and crisis; everyone will do their best to join in the conservation plan.

References:
1. "Habitat management." *Water flow*.N.p., n.d. Web. 7 Apr. 2014. <http://www.dpi.nsw.gov.au/fisheries/habitat/threats/water-flow>.
2. "Habitat management." *Instream structures and other mechanisms that alter natural flows*.N.p., n.d. Web. 7 Apr. 2014. <http://www.dpi.nsw.gov.au/fisheries/habitat/publications/threats/instream-structures>.
3. Kling, George, and Katharine Hayhoe. "confronting climate change in the Great Lakes Region." . The Union of Concerned Scientists and The Ecological Society of America, 1 Apr. 2003. Web. 23 Apr. 2014. <http://ucsusa.org/assets/documents/global_warming/greatlakes_final.pdf>.
4. "Water Levels and Flows | Flow For Water." Flow For Water. N.p., n.d. Web. 20 Apr. 2014. <http://flowforwater.org/issues/water-levels-and-flows/>.
5. Diersing, Nancy (2009). "Water Quality: Frequently Asked Questions." Florida Brooks National Marine Sanctuary, Key West, FL.
6. "Ambient: Background." Ambient: Background. N.p., n.d. Web. 15 Apr. 2014. <http://yyy.rsmas.miami.edu/groups/ambient/student/water/SwaterInfo.html>.
7. "Avista - Aquatic Weeds." *Avista - Aquatic Weeds*.N.p., n.d. Web. 24 Apr. 2014. <https://www.avistautilities.com/environment/spokaneriver/resources/Pages/aquaticweeds.aspx>.
8. "Aquatic Weed Control." Aquatic Weed Control.N.p., n.d. Web. 22 Apr. 2014. <http://www.uky.edu/Ag/PAT/cat5/cat5.htm>.

Issue 13- Overstatement of the Recreational Benefits to Local Economy

Introduction: The draft EIR/EIS claims that the regional economy will be promoted further by the BDCP. The methods which can improve economic conditions include increasing recreational opportunities and creating more employment opportunities via construction projects. The profits of construction can balance the negative effects on the local economy.

Issue Discussion: As mentioned in the previous issue, the recreational opportunities will not necessarily increase after the construction. Water conveyance facilities construction brings inferior involvement. Also, land decrease and aesthetics changes probably lead to long lasting creation regression. Recreational activities will develop under a very negative trend.
There is no doubt that construction will result in adverse impacts on recreational industries. Recreation and travel provide more than 3,000 employment opportunities, $100 million labor income, and $175 million added value to the local economy. The number of visitors will possibly reduce due to the deterioration of their recreational experiences caused by the construction,

which inevitably brings visual, auditory, and air pollution, etc. The noise, visual pollution, and other problems coming from the water conveyance facilities will negatively affect a variety of creatures in the area. For example, the Sandhill Crane, an indispensable bird in the Delta area, is among the many species that will be directly affected.
The benefits of recreational activities after construction have been overemphasized as well. Recreation is a major contributor to the local economy currently. Recreation creates approximately 12 million visitor days of uses per year and brings over ¼ billion dollars expense. People who try to visit the bay delta area during the construction period may not visit the place again or may not remember the site passed by or even make a plan for future visit.

Recommendation: Effective promotion plays a significant role in the development of regional tourism industries after the construction. Now many residents near the bay delta area may still keep the wonderful memories of boating along the Delta on beautiful summer days and enjoying numerous recreational activities. Those recreational activities listed on the Delta official website include house boating, boating, waterskiing, tubing, fishing, relaxing at the beach, birding or simply driving. The amazing 1,000-mile waterways should not only be kept in people's memories completely. However, the topic used to promote the development of local tourism could be waking up old memories and inviting people to visit here again after the achievement of the construction.
If there are not enough employment opportunities created to make up the decrease, local and regional government can organize some educational programs to offer additional skills to local farmers or workers in other fields.

References:

1. "economic sustainability plan for the sacramento-san joaquin delta." . N.p., 1 Jan. 2012. Web. 11 Apr. 2014. <http://www.delta.ca.gov/Economic%20Sustainability%20Plan.htm>.
2. "Sacramento-San Joaquin Delta recreation in danger." Sacramento-San Joaquin Delta recreation in danger.N.p., n.d. Web. 30 Apr. 2014. <http://www.rivernewsherald.org/articles2013/deltarecreation_8-21-2013.html>.

CONCLUDING REMARKS

In summary, we have reviewed and analyzed the Socioeconomic Impact Analysis of the BDCP-preferred Alternative 4 for the Bay Delta area. The comments and recommendations regarding issues found in the BDCP Draft EIR/EIS socioeconomic impacts as described in Chapter 16, *Socioeconomics* have been described above as the Lead Agencies have not adequately addressed and mitigated for identified socioeconomic impacts. The authors of this comment letter conclude that the analysis of direct and indirect socioeconomic impacts of BDCP Alternative 4 implementation is incomplete and does not analyze key aspects to holistically interpret short- and long-term effects of the project. We therefore recommend BDCP Lead Agencies address and incorporate the comments contained in this report to improve the impact analysis and better identify potential socioeconomic and environmental impacts of the Bay Delta Conservation Plan.

BDCP578.

From: Lauren Peters <sjsulauren@gmail.com>
Sent: Sunday, May 11, 2014 4:49 PM
To: BDCP.comments@noaa.gov
Subject: against water tunnel

I am strongly against piping more water to the south.

I live in an agricultural area near Winters, CA. I have seen my neighbors need to dig deeper wells to access water this year. I have seen fish have to be trucked from their spawning grounds to the delta.

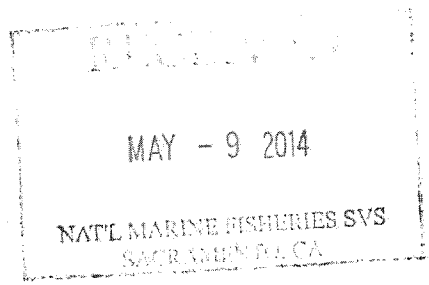
Northern CA shouldn't need to pay for the unsustainable farming practices in the south, nor should it pay for the unsustainable growth of Southern California. Once the aquifer is gone, it is gone forever.

Thank you,

Lauren Peters

សមាគមអាប្សរា
APSARA
Asian Pacific Self-development And Residential Association
3830 N. Alvarado Avenue, Suite C, Stockton, CA 95204
www.apsaraonline.org Office: (209) 944-1700, Fax : (209) 941-9516

May 7, 2014



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

Dear Mr. Wulff,

Our organization, Asian Self-Development and Residential Association (APSARA), is writing to you to request information about the Bay Delta Conservation Plan in Cambodian. We have not received any informational materials about the Bay Delta Conservation Plan in Cambodian to educate or to provide to our community in Stockton. This is a concern for us because one of our areas of assistance to our Stockton Cambodian community is health education.

Our community members are avid fishers and a majority of our families depend on fish for a huge part of their dietary and nutritional needs. We are aware of the possible negative impacts of the Bay Delta Conservation Plan's twin tunnels, which will affect the health, dietary and recreational lifestyle for many families in the Delta region and we'd like to know more details about it. The commentary period for the Bay Delta Conservation Plan will end in June and I don't have access to necessary information to make an informed comment and to share with our Cambodian constituents. Please send our organization informational materials on the Bay Delta Conservation Plan translated in Cambodian. Thank you for your time.

Sincerely,

Hengsothea Ung
Program Manager
APSARA

BDCP579

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Saturday, May 10, 2014 9:55 AM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS
Attachments: 20140502 - Upper San Gabriel Valley Municipal Water District.pdf; 20140507 - CCA - Central City Association Los Angeles.pdf; 20140507 - DEMBA - Downtown El Monte Busines Association.pdf; 20140508 - San Gabriel Valley Economic Partnership.pdf; 20140509 - APSARA - Asian Pacific Self-Development & Residential Association.pdf; 20140509 - Sheldon Moore of Lincoln, CA.pdf

---------- Forwarded message ----------
From: **Anita Deguzman - NOAA Affiliate** <anita.deguzman@noaa.gov>
Date: Fri, May 9, 2014 at 3:10 PM
Subject: BDCP COMMENTS
To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

I have attached comments from the following:

Upper San Gabriel Valley Municipal Water District
CCA | Central City Association (Los Angeles)
DEMBA | Downtown El Monte Business Association
San Gabriel Valley Economic Partnership
APSARA | Asian Pacific Self-Development & Residential Association
Mr. Sheldon Moore of Lincoln, CA

Copies have been made and are in your mailbox and the originals are up front at the receptionist desk.

--

Anita deGuzman
Administrative Assistant
NOAA Fisheries * West Coast Region
U.S. Department of Commerce
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814
916-930-3600 - main
916-930-3629 - fax
Anita.deGuzman@noaa.gov

Sheldon G. Moore
1584 Summerhill Lane
Lincoln, CA 95648
916-408-3676

May 7, 2014

BDCP Comments
Ryan Wulff, National Marine Fisheries Service
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814

Dear Mr. Wulff,

When I tried to call the BDCP with my concerns, I received a call from Delia Grijalva and then a letter from Allan Davis. I don't feel my concerns were understood. I want to insure that my comments are a part of the public record. Our property, Clifton Court, L.P. is the private property that lies between the Federal Delta Mendota Canal intake and the State of California Water Facilities on Old River. This property is approximately 600 acres in size. Clifton Court, L.P. is severely negatively impacted by all the water plans and water export operations in the Western Delta. We have owned and operated our property since the early 1960's and have been subject to enormous damage.

I have never seen an EIR on the 1950's Federal Water Project or the 1960's-70's California Water Project. Yet, according to the BDCP Public Draft (4.2.1.2.1), the gates on the Clifton Court Forebay will still be operated with an intake of up to 15,000 cfs. Your EIR is bogus because it does not address the many harms currently caused by diverting water via gravity (up to 15,000 csf) at the adjacent sites on Old River. The current State and Federal systems have cost us well over $1,500,000 in damages over the years. In fact, Mr. Davis, in 2012, you told us that we could get our damage expenses for that year reimbursed by the State if we submitted the Government Claims Form that you gave us. When we submitted the form, we were sent to the Victim's Compensation Board. At that hearing, we were told that we would have to sue the State to get compensation for our damages. We are very concerned about our yearly damages from State and Federal pumping continuing under the disguise of the BDCP. We want damages to cease and payment for the ongoing damage.

Next I asked about water removal from the Sacramento River. I asked how the 9,000 cfs and 15,000 cfs figures were obtained. You have yet to tell me exactly who decided on these amounts of water. Meanwhile we have seen the adverse effect of the water removal. I also asked when water could be taken from the Delta because as of April 25, 2014 the gates to Clifton Court Forebay were still open despite its being a very serious drought year. If the State can't be trusted to close the gates during a drought, when can the State be trusted?

Next I had gravity flow vs. pumping questions. It is clear that DWR does not understand the difference between gravity flow and pumping. Before the State and Federal pumping began, we used gravity pumping. Gravity water can be moved through a pipe, syphon or weir. Water flows by gravity. The energy cost is zero. The equipment used in our case was a 30 inch pipe with a cast iron Waterman Gate to control the flow. There was almost no maintenance cost. Once water export began, we were forced to put in pumps. Pumps are expensive and require constant maintenance. The energy to run the pumps has become very expensive, increasing

between 25 to 50 times the costs of over 50 years ago. Pump repair costs have also increased at least 10 times.

The pumping operation at the State and Federal facilities has lowered water levels, increase water velocity and brought silt, dirt, and trash into our pumps which causes rapid wear and destruction. Moreover, our pumps are destroyed when the water level suddenly drops due to trash on the trash racks. Therefore a drop in water level can cause a repair around $25,000 and up to a 3 week delay in irrigation. In short, silt, trash, and dirt brought into the pumping area by the massive water export flows cost us dearly. I request a direct meeting as soon as possible with someone who can address and solve our pumping problems caused by silt, dirt, and trash from the water projects. Furthermore, we would like compensation for all of the pumping costs that were forced upon us due to the water projects.

Then I asked where the State deposited the sediment that it dredged from Clifton Court Forebay in past years? I asked how much the dredging and barging cost? Clearly you did not hear my question, as you told me DWR is exploring various alternatives. I'm not talking about the future; I wish to know what past dredging has cost. Again I would like this public information at your earliest convenience.

The State seems to indicate that rip rap applied to levees to prevent erosion is a major ecological disaster. Prior to the exporting of mass amounts of water from the Delta, I maintained our levee banks without rock. These banks have no Peat soil. Since the State and Federal governments began pumping, I have had to re-rock three times. The last time our levees leaked in the 1990's, I applied rip-rap. Two years later I received an engineering bill from the State for $5,000 for the application of rip-rap. Clearly the government knew the damage the pumping caused our farm yet no one offered to pay for the damages, they simply sent another bill.

The Federal government rip-rapped their levees after they started pumping large amounts of water. The State built the Clifton Court Forebay using Concrete Treated Base on the inner side of the levee. They have now rocked both inner and outer sides of their levees. Unfortunately, the bottom of the Forebay leaks. The first year the Forebay was filled, I was unable to farm because of the seepage. I was forced to put in an expensive tile drainage system complete with pumps that pump that seepage back into the Forebay. Those drainage tiles are now over 45 years old and need to be replaced. Seepage from the Forebay is another expensive problem that needs to be fixed.

I wish to get the problems caused by water export fixed and Clifton Court, L.P. compensated for all the adverse complications it has endured over the years. Despite many letters, meetings, (Carl Torgensen, Sue Sims, Chuck Gardner) and assurances, we have never been compensated or had our problems solved. Perhaps the Victims Compensation Board gave the best advice -- sue the State. Is this how the BDCP will work as well? Until the State fixes past problems, I have no faith in the BDCP.

Sincerely,

Sheldon G. Moore

Sheldon G. Moore

BDCP580

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Saturday, May 10, 2014 9:55 AM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS
Attachments: 20140502 - Upper San Gabriel Valley Municipal Water District.pdf; 20140507 - CCA - Central City Association Los Angeles.pdf; 20140507 - DEMBA - Downtown El Monte Busines Association.pdf; 20140508 - San Gabriel Valley Economic Partnership.pdf; 20140509 - APSARA - Asian Pacific Self-Development & Residential Association.pdf; 20140509 - Sheldon Moore of Lincoln, CA.pdf

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Date: Fri, May 9, 2014 at 3:10 PM
Subject: BDCP COMMENTS
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CCA | Central City Association (Los Angeles)
DEMBA | Downtown El Monte Business Association
San Gabriel Valley Economic Partnership
APSARA | Asian Pacific Self-Development & Residential Association
Mr. Sheldon Moore of Lincoln, CA

Copies have been made and are in your mailbox and the originals are up front at the receptionist desk.

--

Anita deGuzman
Administrative Assistant
NOAA Fisheries * West Coast Region
U.S. Department of Commerce
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814
916-930-3600 - main
916-930-3629 - fax
Anita.deGuzman@noaa.gov

BDCP581.

SAN GABRIEL VALLEY
ECONOMIC PARTNERSHIP

Enrich the quality of life and economic vitality of the San Gabriel Valley

May 2, 2014

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

RE: Support BDCP EIR/EIS Alternative #4

Dear Mr. Wulff,

On behalf of the San Gabriel Valley Economic Partnership, I am writing in support of the Alternative #4 of the Bay Delta Conservation Plan (BDCP) as outlined in the Draft EIR/EIS. The Partnership is a regional business organization committed to enriching the quality of life and improving the economy of the San Gabriel Valley.

Water reliability is a crucial issue for businesses in California which count on a dependable water supply. The Partnership has closely monitored the BDCP approval process and has heard several presentations from water groups outlining the plan and going over the details. We are encouraged by the release of the public draft of the plan and the environmental review documents.

We believe that Alternative #4 is the best way to meet California's co-equal goals of water supply reliability and Delta ecosystem restoration. Alternative #4 reduces the risk to water supplies in the event of an earthquake, improving reliability. Habitat improvements will restore healthy ecosystems for native species. New intakes in the northern Delta reduce conflicts between water delivery systems and migrating fish. It is estimated that 1.1 million Californian jobs in water will be safeguarded with this critical delivery system and that its construction will create more than 177,000 jobs in building projects and environmental restoration.

Southern California needs the state to upgrade the State Water Project in order to secure our supply of imported water from the north. We support the BDCP, and specifically Alternative #4, as the best solution to meet California's long-term water reliability goals.

Sincerely,

Cynthia J. Kurtz
President & CEO

SAN GABRIEL VALLEY ECONOMIC PARTNERSHIP
4900 Rivergrade Road, Suite B130, Irwindale, CA 91706 | Phone (626) 856-3400 Fax (626) 856-5115 | www.valleyconnect.com

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Saturday, May 10, 2014 9:55 AM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS
Attachments: 20140502 - Upper San Gabriel Valley Municipal Water District.pdf; 20140507 - CCA - Central City Association Los Angeles.pdf; 20140507 - DEMBA - Downtown El Monte Busines Association.pdf; 20140508 - San Gabriel Valley Economic Partnership.pdf; 20140509 - APSARA - Asian Pacific Self-Development & Residential Association.pdf; 20140509 - Sheldon Moore of Lincoln, CA.pdf

---------- Forwarded message ----------
From: **Anita Deguzman - NOAA Affiliate** <anita.deguzman@noaa.gov>
Date: Fri, May 9, 2014 at 3:10 PM
Subject: BDCP COMMENTS
To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

I have attached comments from the following:

Upper San Gabriel Valley Municipal Water District
CCA | Central City Association (Los Angeles)
DEMBA | Downtown El Monte Business Association
San Gabriel Valley Economic Partnership
APSARA | Asian Pacific Self-Development & Residential Association
Mr. Sheldon Moore of Lincoln, CA

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--

Anita deGuzman
Administrative Assistant
NOAA Fisheries * West Coast Region
U.S. Department of Commerce
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814
916-930-3600 - main
916-930-3629 - fax
Anita.deGuzman@noaa.gov

L # BDCP582

- ✓ Unused
- ☐ Duplicate of _____
- ☐ Out of Scope
- ☐ Other: _____

(replace original)

BDCP583.

D.E.M.B.A.
DOWNTOWN EL MONTE BUSINESS ASSOCIATION

May 2, 2014

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

Re: Support BDCP EIR/EIS Alternative No. 4

Dear Mr. Wulff,

The Downtown El Monte Business Association (DEMBA) supports the Bay Delta Conservation Plan (BDCP) and specifically Alternative No. 4 as outlined in the Draft EIR/EIS.

Following the passage of California's comprehensive water package in 2009, DEMBA has closely watched the BDCP process. We are encouraged by the release of the public draft of the plan and environmental documents. The outcome of this multi-year effort reflects collaboration of public water agencies, state and federal fish and wildlife agencies, business and agricultural stakeholders, local governments and the public.

It is our opinion that Alt. No. 4, which provides for three northern intakes along the Sacramento River, a 9,000 cfs twin-tunnel system conveying water to the existing aqueduct, coupled with a comprehensive habitat conservation plan, is the best option to meet California's co-equal goals of reliability and ecosystem restoration. This proposed tunnel system will protect public water supplies from seismic risk and subsequent saltwater intrusion from San Francisco Bay. The intakes will reduce conflicts between water systems and migrating fish species. Habitat improvements will provide native species with the healthy ecosystem they need to survive.

The Downtown El Monte Business Association supports the Bay Delta Conservation Plan and specifically Alternative No. 4, as a workable draft proposal leading to a final successful plan of action offering protection from seismic risk while restoring the Delta's ecosystem.

Sincerely,

Ken Rausch

Ken Rausch
Executive Director

cc: Federal and State Officeholders within the organization's jurisdiction

10505 Valley Blvd., Suite 212, El Monte, CA 91731
P.O. Box 5866, El Monte, CA 91734
Phone: 626.443.0180 Fax: 626.443.0463 www.demba.org

BDCP583

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Saturday, May 10, 2014 9:55 AM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS
Attachments: 20140502 - Upper San Gabriel Valley Municipal Water District.pdf; 20140507 - CCA - Central City Association Los Angeles.pdf; 20140507 - DEMBA - Downtown El Monte Busines Association.pdf; 20140508 - San Gabriel Valley Economic Partnership.pdf; 20140509 - APSARA - Asian Pacific Self-Development & Residential Association.pdf; 20140509 - Sheldon Moore of Lincoln, CA.pdf

---------- Forwarded message ----------
From: **Anita Deguzman - NOAA Affiliate** <anita.deguzman@noaa.gov>
Date: Fri, May 9, 2014 at 3:10 PM
Subject: BDCP COMMENTS
To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

I have attached comments from the following:

Upper San Gabriel Valley Municipal Water District
CCA | Central City Association (Los Angeles)
DEMBA | Downtown El Monte Business Association
San Gabriel Valley Economic Partnership
APSARA | Asian Pacific Self-Development & Residential Association
Mr. Sheldon Moore of Lincoln, CA

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--

Anita deGuzman
Administrative Assistant
NOAA Fisheries * West Coast Region
U.S. Department of Commerce
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814
916-930-3600 - main
916-930-3629 - fax
Anita.deGuzman@noaa.gov

L # BDCP584

- ✓ Unused
- ☐ Duplicate of _____
- ☐ Out of Scope
- ☐ Other: _____

(replace original)

BDCP585.

OLIVENHAIN
Municipal Water District

May 12, 2014

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

VIA EMAIL: BDCP.Comments@noaa.gov

Dear Mr. Wulff,

Olivenhain Municipal Water District is a public agency in northern San Diego County that provides 80,000 customers with water, wastewater, recycled water, hydroelectric, and recreational services. OMWD currently purchases all of its potable water supply from the San Diego County Water Authority, which in turn is a member agency of Metropolitan Water District of Southern California, a State Water Contractor.

We are thankful for the opportunity to comment on the Public Review Draft of the Bay Delta Conservation Plan and the associated Public Review Draft Environmental Impact Report/Environmental Impact Statement. On OMWD's behalf, I am writing to express support for the Bay Delta Conservation Plan, and specifically Alternative 4 as identified in the EIR/EIS.

The Sacramento-San Joaquin Bay-Delta represents a critically important portion of water supply for both the State of California and San Diego County. Its future as a source of potable water, however, is far from secure, which is especially troubling given the ongoing severity of California's statewide drought. Significant near-term action is required to achieve the co-equal goals of water reliability and environmental restoration.

State and federal officials have positively responded, carrying out a thorough planning process, with a clear vision of the future. OMWD has supported the planning process and applauds the diligent work that has been completed to date that will assist in completing solutions to delta-related challenges. Our review of the draft BDCP and EIR/EIS has confirmed for OMWD that the project's preferred alternative, Alternative 4, represents the framework for a well-founded and viable solution to these challenges.

Of course, it remains essential to complete the public review and environmental processes to more accurately define the ultimate project. The culmination of these processes will be achievement of a final EIR/EIS, record of decision, and the division of costs between participants. While we look forward to the issuance of a detailed financing plan for the BDCP, we

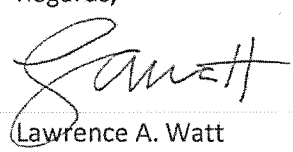
understand that the documents under review are environmental in nature and do not represent a financing plan; the planning process should thus not be held up until such time as each dollar has been secured.

OMWD would like to point out that water users in San Diego County—one of the state's most populous urban areas—will be expected to make significant financial contributions to the BDCP. It is our understanding that, though cost allocation discussions are underway with State Water Contractors, the only representation in these discussions for subcontractors like the San Diego County Water Authority are through their respective contractor. This is troublesome in San Diego's case given that, as you may be aware, SDCWA is currently engaged in litigation with Metropolitan Water District of Southern California over the latter's rate structure. Similarly, there are considerable concerns on the part of SDCWA over how the BDCP's costs will be allocated among Metropolitan's member agencies. Therefore, OMWD strongly suggests that it would be appropriate for SDCWA to be afforded the opportunity to engage state officials on this matter via more direct channels so that its voice can be more effectively represented.

Thank you for consideration of these comments. If you or your staff should need any additional information regarding our assessment of the Bay Delta Conservation Plan, please contact me or OMWD's General Manager, Kimberly Thorner, at 760-753-6466.

We look forward to the completion of the BDCP planning process and, ultimately, its implementation, ensuring greater water supply reliability throughout California for generations to come.

Regards,



Lawrence A. Watt
President, Board of Directors

CC: Olivenhain Municipal Water District Board of Directors
Maureen Stapleton, San Diego County Water Authority
Boards of Directors, all San Diego County Water Authority member agencies
Assemblywoman Marie Waldron
Assemblyman Rocky Chavez
Assemblyman Brian Maienschein
Assemblywoman Toni Atkins
Senator Mark Wyland
Senator Marty Block
Board of Supervisors, County of San Diego
City Council, City of Encinitas
City Council, City of Carlsbad
City Council, City of San Diego
City Council, City of San Marcos
City Council, City of Solana Beach

BDCP585

From: Naomi Sabino <nsabino@olivenhain.com>
Sent: Monday, May 12, 2014 11:14 AM
To: bdcp.comments@noaa.gov
Cc: John Carnegie
Subject: Letter to Ryan Wulff from Olivenhain Municipal Water District
Attachments: 051214 ltr re BDCP Comments from L Watt.pdf

Dear Mr. Wulff,

Please see the attached letter. Thank you.

Regards,

Naomi Sabino
Board Secretary and Executive Secretary to
Kimberly Thorner, General Manager
Olivenhain Municipal Water District
1966 Olivenhain Road, Encinitas, CA 92024
nsabino@olivenhain.com
www.omwd.com

BDCP586.

Draft Bay Delta Conse
Associated Draft Environmental Impact Report/
Environmental Impact Statement

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name_____ Organization _____ Date _____

Address _____ City_____ State_____ Zip_____

No mention of what impacts of the Upper Sacramento River would be with the increase of diversion. Although there should be no increased pressure on the Upper Sacramento there is no mention of what I've reviewed about if and how operations of Shasta Dam would change.

There are numerous human pressures, such as, agriculture and population growth. However, there has been no political pressure of thought to re-evaluate the ag industry, CVP policies and water contractors.

One of the alternatives that should have been considered is how to achieve results without building the twin tunnels.

The is increasing pressure for California to allow fracking. I did not see any comments on seismic activity through fracking may impact the project. Additionally how would water quality be impacted if fracking occurs close to the Delta

BDCP
BAY DELTA CONSERVATION PLAN

BDCP587.

Draft Bay Delta Conservation Plan and Associated Draft Environmental Impact Report/ Environmental Impact Statement

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

original J.A. 1838
Last mohekins & Taylors Too!! Sanguinetties

Name JERRY ANTHONY GARCIA Organization Service, Tabacco CO. Date 1-20-2014
Address 7025 alexandria Place City STOCKTON State Ca Zip 95207

In July 21-2009 I was Illegaly Evicted from my House as sole heir to Garcia Taylor, Mahaffys, Perez! as oldest son to John Bruno Garcia & Charlotte Vivian Garcia any and all settlement checks from all Banks from The National Morgage settlement claims are mine as sole heir to my any & all Property in countries Internationally & abroad Galacticly as Starwars Projects Ect. & Private Sector of Nasa as Ran out of Funds supplied By Private Sector of Comunities all around Earth International & abroad. I was supposed To Be on Planning & Board Directors as one of First Founding Father of This and all cities in the U.S.A.!

1988 Sept 8 I Married Michelle Mitra & Lived w/her 4 4yrs was separated in 3rd mo. Months. Service Tabacco Closed & STC. DIST was closing I was Cigarette Buyer & Grocery Buy also In Food 4-Less at same Time 1983-1988 as Recit DRIVER I M was also Done By Food 4Less & after 1988 DRIVER was my Brother in Law & cashier at Food 4 Less Jimmy Bolko my Broski & Inlaw after STC Dist Released me do to Politics Between my Father. STC Dist. as my Father was President of STC & CEO of MTC DIST. Bottom Line my seat on Downtown Stocktons Board directors as Founding Fathers as head Board I am The only one who can Have That Job. Jerry Anthony Garcia
1-20-2014 call More For More at (209) 292-1858

BDCP588.

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name Elva Lara Organization FWA Date 01/21/14
Address 5631 Rhode Island St City Stockton State CA Zip 95205

I am against of this proyect, because it is going to affect our economy Just because the father away our farmlands are, the cost of escentials productos are going to go up, and We as the consumers are the ones That are going to suffer the Consecuencias.

Plese STOP THIS PROYECT

BDCP
BAY DELTA CONSERVATION PLAN

BDCP589.

Draft Bay Delta Conse
Associated Draft Environmental Impact Report/
Environmental Impact Statement

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name Roy Hoggard Organization Friends of the Calaveras Date 1-21-14

Address 1353 E Fulton City Stockton State CA Zip 95205

The existing pumps for CEMENT ditches Ground up a million fish, when started in the spring of 2013, How many EACH day? Will these new pumps be any better.

Do the tunnels SEVEN AQUAFERS?

If it TAKES 10 YEARS to build will you be pumping SALTWATER BRINE TO YOU

BDCP
BAY DELTA CONSERVATION PLAN

BDCP590.

Draft Bay Delta Conse
Associated Draft Environmental Impact Report/
Environmental Impact Statement

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name Anon Organization _____ Date _____

Address _____ City _____ State _____ Zip _____

I am worried that in order to push this plan through negative impacts are not being adequately investigated or presented

Sending more water to farmers will only encourage them to plant more acres. They cannot help themselves. This will create more problems when they demand more waters for new acres.

If an area needs to be left out of production for periodic times it is not the end of the world. I don't need or want more almonds. The salmon industry has been devasted by loss of habitat etc. Salmon is a big business also not just farms

Money better spent elsewhere - Just another water grab.

People in Southern Calif who make up a large proportion of voters feel they are entitled to ask much water as they want 70% of it is used for outdoor purposes like lawns, washing cars, swimming pools

BDCP
BAY DELTA CONSERVATION PLAN

BDCP 590

Draft Bay Delta Conservation Plan and Associated Draft Environmental Impact Report/ Environmental Impact Statement

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name Anon. (cont) Organization _____ Date _____

Address _____ City _____ State _____ Zip _____

People in CA and beyond have to alter their grass culture lawns etc and stop wasting water. Lawns are non native to Calif but are pushed by corporations who sell pesticides herbicides fertilizer etc, all harmful to the environment

I am very skeptical about how ~~that is~~ this will truly benefit Bay Delta aquatic life. My background is in aquatic chemistry and biology. I can see safeguards going by the wayside during hard economic times. Have seen too many mitigation restorations and remediations abandoned when the money ran out

I am not trusted of the stock marketing for this project Bay Bridge went from initial estimate of 2 billion dollars to 6.5 Billion dollars. I see the same thing happening w. the tunnels

Safeguards don't always work

BDCP
BAY DELTA CONSERVATION PLAN

Draft Bay Delta Conservation Plan and
Associated Draft Environmental
Environmental Impact Statement

BDCP591.

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

2096886824

Name Clyde Livingston Organization Clyox Co. LLC Date 1/21/2014

Address 620 Misty Meadow ST City Stockton State CA Zip 95210

Permit Need Oversight Studies: Please introduce the process to aquire those permits

1. Program Manager
2. Implementation Support entity

CL

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name C. J. Kerr Organization retired teacher Date 1/21/14
Address 4990 Bay View Circle City Stockton State CA Zip 95219

- Since this project has been in the works for some years (as evinced by detailed maps, environmental studies, etc), Why has Gov. Brown's plan NEVER appeared on any ballot to assess voter approval? Tax dollars should be spent if a majority of citizens agree with the Bay Delta "Conservation" Plan!

- I learned that there are some benefits to No. & Central Valley farmers, CA 1 but much loss of control to naturalists who appreciate the beauty of the Delta.

Bay Delta Conservation Plan January 21, 2014

To Whom It May Concern:

My name is Richard J. Brewer II, and I live at 1229 N. Madison Street in Stockton, CA. I have lived in the Delta region for more than 40 years, and I have benefitted from this cultural, historic and agricultural region throughout that time. I am opposed to the twin tunnel system for diverting Delta water to Central and Southern California.

The Delta has been culturally significant in the areas of boating, fishing, waterskiing, wake-boarding and other sporting opportunities. It is a sports tourism mecca with millions of dollars being pumped into several local economies (and by extension the state of California itself through taxation) as people purchase boats, fill their boats, RVs, and personal watercraft with gas, buy groceries and meals in the stores, taverns and restaurants that line its 1,100 miles of shoreline, and stay in the hotels and motels in and around the region. Plus, there is simply a coolness vibe that belongs to the Delta that I have not found elsewhere in the state. It may not be quantifiable, but it is there and it is important. I'm afraid much of that will be lost once the water levels drop significantly.

The Delta has been historically significant in the development of a way of life for thousands of people over the past 150 or so years – frankly, all the way back to the founding of California itself when paddlewheels stormed in from San Francisco Bay and brought thousands of men and women to the area during the Gold Rush. The Delta waterways are one main reason why Sacramento was chosen as the state's capital so long ago. The people with influence, as well as the gold, were here, and not in San Francisco or Los Angeles, even though they were bigger cities by far. In addition, as an historic geological formation, the Sacramento-San Joaquin Delta is one of the furthest inland deltas in the world – rivaling only the Pearl River Delta in China. Messing with it, messes with history and geography.

But the Delta is and always will be an agriculturally significant region unlike any other throughout the United States and elsewhere. Crops that feed people, millions of people, are grown here. This freshwater soil may be the finest in the world, and the $2 billion in agricultural production per year – in San Joaquin County alone – make the Delta region worth preserving as it is. Numerous crops are grown in this region, and Delta farmers and agribusinesses have helped shape this region for nearly six generations now. In the past two decades, the Delta region has also become a player in the wine industry with agritourism adding significantly to the area's economic success. Again, that also extends back to the state through taxation in various places.

The Delta already gives enough of its water away. Approximately 70% of its annual freshwater allotment is delivered to the people of Central and Southern California. Less than 1/3 actually stays in the local area. Giving away more water will ultimately give away the most fertile growing region in the country. Salt water from San Francisco Bay will continue to force its way into the Delta estuary, with not enough push back from the Sacramento and San Joaquin rivers to keep the Delta fresh. Soon, more than 800 square

miles of the best soil in California will be lost, unable to support the crops people need to survive.

Believe me, I understand that Angelinos and other Southern Californians need water; millions of people live there in an arid climate. And there are farming concerns throughout California that are hurting for water that we currently have available (this year's drought the exception, not the rule). But for the most part, the farming concerns south of the Delta – especially in Kern County – do not feed people. Pistachios and other water-hogging trees are simply not crops that keep people alive (like corn, wheat, sugar beets, alfalfa, tomatoes, asparagus, safflower, potatoes, fruits and other vegetables of the Delta region do); they are simply high-priced extras. Taking away water from crops that sustain people and giving it to those who produce extravagancies such as pistachios does not make economic or moral sense.

Indeed, not enough of the Bay Delta Conservation Plan has been devoted to any other viable solution to the water woes of central- and southern-Californians, such as reclaiming or restoring water throughout those regions. Replenishing the water supplies in huge and available aquifers with treated water for public consumption must be a part of the overall plan before tapping more Delta water. I find your science and your solution to be biased against the Delta and lacking foundation.

Finally, I have a personal reason to oppose the twin tunnels. My father, Richard J. Brewer Sr., has worked hard all his life to purchase a tract of land on the Delta. His small farm in the town of Hood is located adjacent to the Sacramento River. In fact his property includes a portion of the Sacramento River levee. The maps that we have seen would destroy the town of Hood and my father's property. One map has even showed the entrance of the tunnels to be where his property is located. I understand that the decision to destroy one man's or one family's homestead does not compare to the needs of millions of people, but when it is your homestead it does mean something.

Count one more Californian against this expensive, scientifically biased and "rob Peter to pay Paul" solution to the water needs of our state.

Sincerely,

Richard J. Brewer II
Stockton, CA

BDCP
BAY DELTA CONSERVATION PLAN

Draft Bay Delta Conser BDCP594.
Associated Draft Environmental Impact Report/
Environmental Impact Statement

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name GREG ROBINSON Organization self Date 22JAN2014

Address 817 Borden Rae Ct. City San Jose State CA Zip 95117

(see attached)

BDCP5994

BDCP response

I'm still reading the Bay Delta Conservation Plan. Most of it is a very thorough analysis of flora and fauna habitats throughout the Delta. The Plan describes how the Conservation Measures can effect these habitats and how much permanent loss and fragmentation may be expected. It then sets limits on maximum losses allowable before remedial action must take place. But who gets to say if these are the right limits? Shouldn't the voters get to choose how much of this environment we allow to be reduced? Or should we leave it to the experts? If so, what experts?? Who has jurisdiction in this area ??? Is environmental protection a state or federal issue ????

The Plan talks about budget, but only what it will take to get this project started. It establishes monitoring and sets decision trees to evaluate adverse effects. The Plan also states unresolved contingencies are expected and cannot be estimated at this time. What is not mentioned in the budget is if the maximum habitat losses are exceeded, what the remedial action will be and how much that will cost. Not only will we have to pay to build the project, we also have to pay to monitor this environment, and then pay for any necessary corrective actions. Since any realized damage cannot be known ahead of time, the budget is inherently open ended and can be unpredictable.

With this environmental impact and unlimited budget, it will be tough to get support. To get the public to support and approve budget for this project, I recommend you should promote the significant advantages. For example; the modelled scenarios in the Bay Delta Conservation Plan show Conservation Measure 1, or the "Tunnels" project, will increase water flows enough to mobilize, or pick up methyl-mercury deposited by Sierra mining. So the Tunnels will pick up mercury from the delta sediment and pump it out the aqueduct. I am sure Northern Californian citizens would be in favor of that ! You should tell the public of these significant advantages, so you can get their support for this project !!

BDCP
BAY DELTA CONSERVATION PLAN

Draft Bay Delta Conser BDCP595.
Associated Draft Environmental Impact Report/
Environmental Impact Statement

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name Thomas Herzog Organization RD 813 Date 1-29-2014
Address 12350 Herzog Rd City Courtland State CA Zip 95615

Please extend the comment period to at least 360 days as 120 days is far to short of time for a document that took over that time to develop

Thanks

BDCP
BAY DELTA CONSERVATION PLAN

Draft Bay Delta Conser BDCP596.
Associated Draft Environmental Impact Report/
Environmental Impact Statement

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name Phoebe Storey Organization None Date 1-29-14
Address 5081 Eadwell Circle City Stockton State CA Zip 95207

Most voters are overwhelmed by the BDCP, including me. We need the equivalent of Cliff Notes

Your website info about these meetings seemed great but was too tiny to be legible. I couldn't figure out how to zoom in.

I doubt that most voters/citizens would read more than a five page summary. Don't roll your eyes. It's true

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name Roberto Lovato Organization Occupy Stockton Date 1/29/2014
Address 1618 Woodland Dr. City Stockton State Ca Zip 95207

1) Extend the comment time to 365 days

2) allow voters to vote for or the project

BDCP
BAY DELTA CONSERVATION PLAN

Draft Bay Delta Conse BDCP598.
Associated Draft Environmental ...pact Report/
Environmental Impact Statement

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name BRIAN GALLAGHER Organization ECOTONICS Inc Date 1/15/2014
Address 7428 HOLLYWOOD Blvd #408 City LOS ANGELES State CA Zip 90046

Congratulations to the entire BDCP team for a superb job on a very difficult issues of preserving and restoring an extremely important ecosystem while trying to assure the integrity and reliability of a precious water resource for millions of Californians. The scope, magnitude and complexity of the underlying factors affecting the desired outcome are huge and yet the BDCP plan and draft EIS/EIR appear to be scientifically and socio-culturally sound which will lead to a success. The economics are difficult and remain to be precisely measured but the initial work seems impressive and on track. I have over 40 years experience as a water resources engineer and environmental scientist that has worked on major water projects all over the world but I have never encompassed or could imagine the scope of this project. I only hope the public can be adequately informed in order to make good decisions on economic and political choices that will lead to a truly successful BDCP with the necessary environmental safeguards and mitigating projects as required. I wish the BDCP project and people the very best.

Brian Gallagher

BDCP599.

January 15, 2014

Bay Delta Conservation Plan
C/O Fresno Convention and Entertainment Center
848 M St
Fresno California

Dear Sir/Madam:

We definitely believe something needs to be accomplished in order to meet the every growing demand for water in California. However, we are completely against the plan to build the two large water tunnels in the Delta. We believe it is an expensive and a bad idea therefore we have some suggestions on alternative solutions.

First, we believe the water going to Southern California should be cut in half. The other half of the water should be used for farming in the Central Valley. If the farmers in the valley don't receive enough water, how will they crow the food we eat? For the sake of our health and the economic health of our state, we do not want to eat food which has been shipped from a foreign country. That idea seems ridiculous when we have the capability to grow tasty, safe food right here at home.

Second, all Californians should be restricted on their water use. If it was a State mandate, everyone would be treated equally. We know we wouldn't like giving up our longer showers, but if we know everyone was facing the same restrictions, then it would help ease our sacrifice.

Third, what will happen if California continues to suffer drought and there isn't enough water in Northern California to ship south? All the money spent on the two tunnels would be wasted.

Finally, instead of spending $25 billion on the two tunnels in the Delta that seem to us to be a poor idea, spend that money on the first of many desalination plants along the coast. We have an unlimited supply of water right off our coast, so why not use it? We believe the best idea would be to have each major coastal city have a desalination plant. The added bonus would be the level of the ocean might drop a tiny bit which would help counter-balance the threat we keep hearing of global warming causing the oceans to rise.

Please consider other plans instead of approving the illconceived Delta tunnels.

Sincerely,

Mark F. Kalchik

Laura P. Kalchik

Mr. Mark F. Kalchik
Mrs. Laura P. Kalchik
5648 N. Millbrook
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BDCP
BAY DELTA CONSERVATION PLAN

Draft Bay Delta Conse BDCP600. Associated Draft Environmental Impact Report/ Environmental Impact Statement

Public review and comment period is
December 13, 2013 through April 14, 2014

COMMENT CARD

Name DAVID TOMACHOFF Organization AGRI Date

Address 7299 N. WALLER City FRES State CA Zip 9374

BDCD does not address agriculture

South of the DELTA SWP CWP are OVERLOOKED OVERLOOKED

"PURPOSELY"

"COMMIES RUN THE LEFT"