L # BDCP651

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

(replace original)

BDCP652.

From: Marjorie Koldinger <kolding@pacbell.net>
Sent: Friday, May 16, 2014 3:31 PM
To: BDCP.Comments@noaa.gov
Subject: Water quality/creeping salinity

Please oppose the Delta Tunnels. I don't live in the Delta region but I attended one of the presentations by the state here in Sacramento. I understand that there is a better solution in a proposal by Robert Pyke to take Delta water at Sherman Island instead of the Peripheral Canals.

Actually all the proposals seem pretty bad. Davis will be taking more water out of the Sacramento. EBMUD has started drawing water out around Freeport or someplace nearby. Dickinson's A.B.134 has committed to giving Sou. Cal and the various water merchants in the Central Valley more water rights in exchange for their helping pay for an improved sewage plant in Sacramento....so that developers can get cheaper permits in Sacramento.

Meanwhile salinization is getting worse and worse in the Delta. No one has identified how much water will go to fracking out the oil in the Moneterey Shale since the oil mining companies can probably outbid the farmers.

If the Delta Tunnels go ahead, salinization will just get worse and worse. Water depth and quality will get worse and worse for salmon. The only reason the central valley and Sou. Cal. wants these is because the water is getting pretty salty where it is currently being pulled out....not because they want to save the smelt.

Marjorie Koldinger
1339 44th St
Sacramento, California 95819

BDCP653.

From: Rosemary Hartman <rosehartman@gmail.com>
Sent: Friday, May 16, 2014 3:29 PM
To: BDCP.comments@noaa.gov
Subject: Comment from the Davis Chapter of the Society for Conservation Biology
Attachments: UCdavis-BDCPletter.doc

Please see attached comment on the Bay Delta Conservation Plant from the Davis Chapter of the Society for Conservation Biology.

Thank you
Rosemary Hartman
Policy Committee Chair
SCB-Davis

Society for Conservation Biology
A global community of conservation professionals

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

Society for Conservation Biology, Davis Chapter, Public Comment on the Bay Delta Conservation Plan (BDCP)

The Society for Conservation Biology, Davis Chapter, would like to endorse the planned restoration in the Bay Delta Conservation Plan (BDCP) (BDCP Chapter 3), but recommends the plan as a whole increase its capacity to respond to the uncertainties inherent in restoration activities. We would also like to see restoration of a more natural hydrograph and prioritization of the most highly degraded areas. We identified 4 main areas needing improvement and include science-based recommendations to better ensure restoration will achieve desired outcomes for the area's aquatic biodiversity and imperiled species.

I. Uncertainty in Restoration

While the BDCP proposes expansive restoration (BDCP Chapter 3), it is overly optimistic about its ability to accurately predict the initial and long-term consequences of restoration (BDCP 3.1.3.3). Ecosystem restoration does not always proceed along a predictable "trajectory" (Zedler and Callaway 1999). Temporal variation can often influence the outcome of restoration work, making the results of any one study difficult to generalize (Vaughn and Young 2010). The BDCP should do more to acknowledge this uncertainty inherent in all restoration work.

As a specific example, the BDCP assumes that restoring tidal marsh will produce food inputs to open waters where the delta and long-fin smelts reside (BDCP 3.4.4). However, whether food originating in the tidal marsh will adequately supplement open water resources remains an unanswered question. Other organisms in the tidal marsh, such as native microzooplankton and clams, may eat much of the additional food (e.g., Lopez et al. 2006). The BDCP in fact acknowledges that invasive clams may eat phytoplankton in the tidal marshes, but then does not discuss how this will affect restoration results. While such uncertainties do not guarantee that the proposed restoration will not benefit the smelts and other species, these unanswered questions do demonstrate unequivocally that the BDCP should better prepare for unexpected restoration outcomes. The BDCP needs to more thoroughly incorporate both

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uncertainty and the best available scientific information into its restoration programs. In its development of an adaptive management plan, the BDCP has recognized some uncertainty in its restoration practices (BDCP 3.1.3). However, further steps can be taken to increase the flexibility of the adaptive management plan and mitigate the potential for failing to reach restoration goals by including back-up restoration plans from the beginning.

II. Needed improvements to adaptive management plan

While we applaud inclusion of adaptive management in the BDCP (BDCP 3.1.3, 7.1.6), adaptive management is seldom used effectively due to poor understanding of the uncertainty involved, leadership problems, bureaucratic hurdles, and lack of resources (Walters 2007). In the Delta, the multitude of agencies with overlapping jurisdictions, strict control of water flows, and slow processes involved in enacting change (Mount et al 2013) mean that appropriate responses to adaptive management experiments may be impossible. No management action should be undertaken without scientific support. However, lengthy studies are often extended simply because they are cheaper and more politically feasible than action (Lund 2012). The planned Adaptive Management Team should have greater power to act independently with the same level of authority as the Authorized Entity Group (BDCP 7.1.3). It should also coordinate the sharing of existing resources and scientific data between agencies.

Adaptive management is generally a mechanism for dealing with uncertainty in management outcomes. However, in Chapter 6.4 of BDCP, the plan specifies that in the event of unforeseen circumstances USFWS and NMFS cannot place any new restrictions on land or water use. While the "no surprises rule" and associated financial assurances are understandable incentives for stakeholder agreement (BDCP 6.4.1), water restrictions may be the only mechanism to protect endangered species in the event of extreme drought (Moyle et al 2012). To maximize the chances that the plan meets its restoration goals, a mechanism will be needed to re-negotiate water contracts should unforeseen circumstances jeopardize success.

III. Restoration of the Natural Hydrograph and Flow

Flow regime is considered the primary determinant of the structure and function of aquatic ecosystems (Bun and Arthington 2002, Poff et al 2010). While the BDCP discusses the difference between the historical and current hydrograph (see BDCP 2.2.1 and 2.3.3.3), it does not focus on the restoration of the natural hydrograph or increasing outflows from the Delta (see BDCP 5.3.1). Delta water exports and diversions have increased dramatically since the 1950s and 1960s when export facilities were constructed (Healey et al. 2008). A north Delta pumping

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station will reduce the flow reversal and saltwater intrusion caused by the south Delta station location (BDCP 5C.5.3.8). Currently, in times of low flow, saltwater from the estuary gets pulled back towards the south Delta pumps due to proximity and lack of freshwater outflow. Despite this benefit of a north station, the BDCP has not addressed the potential issue that a north Delta station could reduce the outflow of water entering the central Delta from the Sacramento River (see discussion of Delta Outflow requirements in BDCP 5C.A.4.1.2, North Delta Intake Diversions in 5C.A.4.4, Simulated North Delta Intake Diversions in 5C.A.6.3.1, and Delta Outflow and X2 in 5C.A.4.16). The south Delta pumping station allows for all-of-the Sacramento River outflow to enter and pass through the Delta. Sufficient outflows are necessary to maintain water quality and to prevent saltwater intrusion (Herbold and Moyle 1989). Native fish communities are also associated with high river flows in the Delta, while nonnative species are more likely to thrive in low flow and warm water conditions (Feyrer and Healey 2003). A north Delta station will reduce Sacramento River outflows into the central Delta and potentially affect Delta water quality and fish communities.

In the Delta, the natural flow regime varies dramatically intra- and inter-annually. Increased outflow during the winter flooding and spring snowmelt pulse is an especially important cue for migratory fishes (del Rosario et al. 2013), which the BDCP minimally addresses in sections 5.5.4.2.2 and 5.5.3.2.1-2. Alteration of pulse flows will affect the outmigration ability of salmon smolts and the homing ability of spawning adult migrants. The BDCP addresses the issue of the location of the export diversions affecting migratory cues, but it does not address the overall reduction of spring pulses. By storing water upstream from winter rains and spring snowmelt and releasing it throughout the summer and early fall, the natural annual pattern of variation in flow, temperature, and salinity throughout the system is disrupted (Herbold and Moyle 1989). Mimicking the natural flow regime through changing timing of dam releases, even with a minimal increase in water export, has been shown to dramatically improve conditions for native species in California (Marchetti and Moyle 2001), and the same principle could be applied here. The BDCP does not sufficiently address the need to manage upstream dam releases to follow a natural hydrograph.

IV. Restoration priorities - the salt marsh harvest mouse

The BDCP claims that ecosystem enhancement actions will contribute to the recovery of state and federally protected species in the region (i.e. BDCP Executive Summary pp. 10, 36; 3.3-39; 3.3-58; 3.3-60). However, restoration and enhancement activities that benefit some species may have neutral, or even negative effects on others. For example, planned tidal restoration in the Suisun Marsh will most certainly benefit fish, but may or may not benefit the

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state and federally endangered salt marsh harvest mouse (*Reithrodontomys raviventris*) as stated in the BDCP. While they are listed under "community" headings, many of the goals in the BDCP come down to "creating acres," with little specification as to how that links to the community (i.e. Conservation Measures 3 and 11; .3.3-9). With a "if you build it, they will come" outlook, the BDCP requires that adaptive management takes place during implementation, but does not outline alternatives to restoring tidal wetlands if this restoration does not have the desired effect. Furthermore, almost 50% of the tidal restoration proposed within the plan is slated to occur in Suisun Marsh. Most of the Suisun Marsh is already serving as suitable habitat for many species, so resources might be better used to improve poor quality habitat (Sustaita et al. 2011). A more logical conservation strategy for salt marsh harvest mice is to restore poor quality habitat such as old salt ponds, where there are clearly no mice present, than to restore diked wetlands that already support large populations of mice.

The BDCP proposes about 150,000 acres of habitat restoration and enhancement. Approximately 6,968 acres, 23% of all remaining potential salt marsh harvest mouse habitat, will be affected (Josselyn 1983, BDCP Executive Summary pp. 64). The BDCP acknowledges that restored tidal wetlands "could take decades" to mature and become suitable habitat for salt marsh harvest mice (BDCP 3.3-218). This means that almost 1/4 of the salt marsh harvest mouse habitat could be unusable by mice for dozens of generations. Additionally, almost 1,000 acres, more than 3% of remaining salt marsh harvest mouse habitat, will become subtidal and will be lost completely (BDCP Executive Summary pp. 64). Despite these drastic effects on salt marsh harvest mouse habitat, the monitoring requirements on salt marsh harvest mice are weak. The BDCP stipulates that monitoring take place within 6 months of enhancement actions (i.e. BDCP 3.D-23, -31). Six months could be up to 6 generations of mice or other species with short generation times (i.e. ADW 2014). If monitoring does not occur directly following activities it may be unclear whether negative effects, such as population bottlenecks, are taking place. Additionally, there is no pre-monitoring required, so there is no baseline to compare post-restoration monitoring to determine efficacy of restoration. Small mammal monitoring is time intensive, and it is important that is it undertaken correctly to evaluate the restoration and enhancement goals of the BDCP.

Finally, much of the BDCP, as it relates to the salt marsh harvest mouse, is based on untested assumptions. For instance, 6,100 acres of good quality diked wetlands are to be restored, with the assumption that tidal marshes are superior habitat for the salt marsh harvest mouse than diked wetlands. There are currently no data supporting this assumption. In the Species Account section of the plan the BDCP cites published data showing that salt marsh harvest mouse populations in diked wetlands can exceed those in tidal wetlands in the Suisun Marsh, yet claims that tidal restoration in Suisun will "substantially increase suitable habitat" in

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the Conservation Strategy section (BDCP 2A.14-2, 3.3-60; Sustaita et al. 2011). There are also more cost efficient and less risky options for tidal enhancement that are not explored in the plan, such as allowing muted tidal marshes to accrete without breaching levees, by simply leaving control gates open. Though it is not the fault of the writers of this plan that data on the salt marsh harvest mouse is lacking, putting this much emphasis on tidal restoration in the Suisun Marsh is a potentially dangerous gamble for the species.

While it cannot be denied that habitat enhancement will likely improve the ecosystem, it is clear that when it comes to the salt marsh harvest mouse, the literature used in the BDCP seems to have been cited selectively to build support for the mitigation goals that will allow water diversion plans to proceed. BDCP claims plan actions will benefit the salt marsh harvest mouse (i.e. BDCP Executive Summary pp. 10, 36; 3.3-39; 3.3-58; 3.3-60). However, those claims are based on untested assumptions. Before implementing costly restoration actions that may or may not benefit mice, numerous pilot studies need to be conducted, which the BDCP initially acknowledges, but does not develop in any detail. It should be understood that while the salt marsh harvest mouse may benefit from ecosystem improvement efforts outline in the BDCP, this is by no means guaranteed and it is unmerited to use the species as a flagship beneficiary.

Conclusion

Based on our review of the BDCP and the shortcomings identified herein, we recommend:

- Increased realization of the uncertainties in restoration practices (Chapter 3.1.3)
- A more structured and independent adaptive management team (Chapter 7.1.6)
- Consideration of timing and magnitude of flood events for restoration of a natural hydrograph
- The implementation of a more strategic restoration priorities with regards to the salt marsh harvest mouse (BDCP 2A.14-2, 3.3-60)
- A realization of the historical failures of habitat restoration and the incorporation of better management practices into the BDCP. (BDCP 6.4)

We offer our endorsement of the BDCP provided that the steps needed to ameliorate the above issues are met.

Sincerely

Society for Conservation Biology Davis Chapter

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From: Diana Bachelor <diana.bachelor@gmail.com>
Sent: Friday, May 16, 2014 9:06 AM
To: BDCP.Comments@noaa.gov
Cc: cdell@sacbee.com; jterhaar@sacbee.com
Subject: Comment against the twin tunnels

We are writing to express our opposition to the construction of the two water diversion tunnels in the Delta.

Our first concern is that it will destroy a jewel of an area by taking out of production farmland and replacing it with beaucoup acres of muck.

It seems heartless to put families who have farmed for generations out of their homes and livelihood.

This emphasis on tunnels does not include other provisions i.e. reservoirs, dams and real water use and conservation .

It is ironic that the final part of the proposed plan is to restore the Delta. We would like to see what the term "habitat restoration" means for the Delta.

Also how ironic is it to destroy agriculture in one area to save it in another?

Diana and Ernie Bachelor

From: Pylman@aol.com
Sent: Sunday, May 18, 2014 8:33 AM
To: BDCP.comments@noaa.gov
Subject: Comments on Tunnels EIR
Attachments: BDCP comments-mlp.docx

Below and attached please find my letter of comments on the proposed water transfer project.
BDCP.comments@noaa.gov

Response to EIR/EIS

The property on which I have lived for my entire life and the farm I have stewarded for over 50 years have been in my family over 130 years since 1882. I believe that by right and by experience my comments should present realistic concerns about the disruptions to both my personal, economic, and business enterprises.

Chapters 6 on "surface water, Chapter 7 on "ground water" and Chapter 8 on Water Quality:

All these discussions point out the potential for degradation of current river, slough, and underground water sources. My concern is that the unavoidable lowering of the river level near the intake stations would make irrigation pumps unusable without major replacement, realignment, or repair.

Our pre-1914 riparian claims to natural river flows are being dismissed in the event that cubic feet of water needed to fulfill downriver contracts should require that our allotment be curtailed.

We now pay over $2.00 an acre for testing to insure that irrigation discharges do not exceed state levels for harmful chemicals when put in the river. If the river flow is lowered the parts-per-million dissolution ratio would be adversely affected.

As ground water is tapped for the construction and maintenance of the tunnels, the aquifer which supplies our domestic wells will unavoidably be degraded in volume and quality.

Chapter 23 on "noise and vibration level"

During construction it is planned to use pile drivers to secure the foundation during 6 days a week, up to 14 hours a day. The resonance of every impact will send shock waves through our buildings—shop, garage, barn, and house—and especially the reclamation district #150 levees protecting Merritt Island. There seems to be no avenue established to claim payment for damages (including even levee failure or breach) inflicted by this process.

We cannot be protected from the construction sounds, nor from the eventually roar of pumps diverting the river flow. It should be noted that such dangerous sound levels exceed the county general plan restrictions on agricultural equipment and activity.

Chapter 28 on "environmental justice"

If our ranch becomes economically untenable irrigators, tractor drivers, and other farm workers will lose their jobs and, in many cases, their houses.

Please do not destroy our century old agricultural heritage in favor of others who covet our resources.

Marshall L. Pylman
A & M Pylman Farms
38368 South River Road
Clarksburg, CA 95612

BDCP6655
(attachment to email

BDCP.comments@noaa.gov

Response to EIR/EIS

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Please do not destroy our century old agricultural heritage in favor of others who covet our resources.

Marshall L. Pylman
A & M Pylman Farms
38368 South River Road
Clarksburg, CA 95612

BDCP656.

From: JOHN RYAN <xemeritus@hotmail.com>
Sent: Sunday, May 18, 2014 8:56 AM
To: BDCP.Comments@NOAA.gov
Subject: Delta Tunnels

This is an incredibly deceptive special interest project. Save the Delta by draining all the water out of it? Anyone who has driven on U.S. 395 along what used to be the lush Owens Valley knows exactly the results of the twin tunnels. With a thousand miles of coastline and rising sea levels due to global climate change, there is simply no excuse for California to be taking water from ANY river or delta. Spend the $25,000,000,000 on desalinization plants, return our rivers to their normal state, and return some semblance of sanity!

John Ryan
xemeritus@hotmail.com

From: Josef Mayr <josefmayr@mail.com>
Sent: Saturday, May 17, 2014 2:05 PM
To: bdcp.comments@noaa.gov
Cc: Matthias Emberger
Subject: Delta Tunnels
Attachments: Attachment: California San Joaquin Delta Tunnel Water Diversion Project.docx

California San Joaquin Delta Tunnel Water Diversion Project

Comment by Josef Mayr, Sacramento, CA. Saturday, May 17, 2014

https://www.facebook.com/josef.mayr.923

josefmayr@mail.com

Figure 1 General Map (Google)

Short of being able to muster the ambition to dig through over 30,000 pages of material describing the project proposal (http://www.kcet.org/news/redefine/rewild/fish/delta-tunnels-could-wipe-out-salmon-group-says.html), I took an alternate approach to investigate the project's merits. Upon visiting the river several times a week and at different times of day, the primary impression is that, with its generally rather slow current, the Sacramento River actually resembles more a lake than a river, or, even more precisely, a fjord. This is manifested by the water body's obvious responsiveness to tidal status in the San Francisco Bay. Recently, it was even observable that, even during a moonless night, the current actually flows northerly, which commonly would be upstream. The absence of a moon signifies that the tide is unlikely at its maximum. The explanation for this flow reversal is the tide pushing at a stronger force land inwards than the meager freshwater supply pushes outwards. It is only during the day that sufficient water is being drained from Folsom Lake to create the impression of substantial amounts of water passing Sacramento unused; Folsom Lake, at current, stands at a meager 17 percent of its capacity and is rapidly declining. (http://www.dailymail.co.uk/news/article-2567911/NASA-turns-research-California-drought.html). Although Folsom Lake is manmade, it faces the same fate as Tulare Lake before it, and the subterranean water aquifers, which are also being rapidly drained. (http://www.indybay.org/newsitems/2009/07/11/18607139.php) The lake is not being replenished because only 20-40 percent of the average amount of snow has fallen in the Sierra mountain range, west of the Central Valley. (http://cdec.water.ca.gov/cdecapp/snowapp/sweq.action).

Figure 2 http://www.dailymail.co.uk/news/article-2567911/NASA-turns-research-California-drought.html

Once Folsom Lake is drained, there will be hardly any water flowing into the river, and the only wet we are going to see in the river bed is perhaps brackish salt water at high tide.

The resulting question is: How are these dubious tunnels going to fix the drought? I suspect that the project's true objective is to deliver freshwater to the vast monoculture farmlands south of the delta. Such a diversion would of course not safe the delta at all, as it would be first to suffer over-salination from the incoming ocean water.

Is it not obvious that human activity is shamelessly depleting California's natural resources for the pursuit of monetary profit? We are taking more than is being replenished, and Mother Nature will come after us for that. Perhaps we should look at options to change our habits and our value system instead of seeking to force maintenance of the status quo via money injections. Money can do many things, but it cannot create water!
Josef Mayr

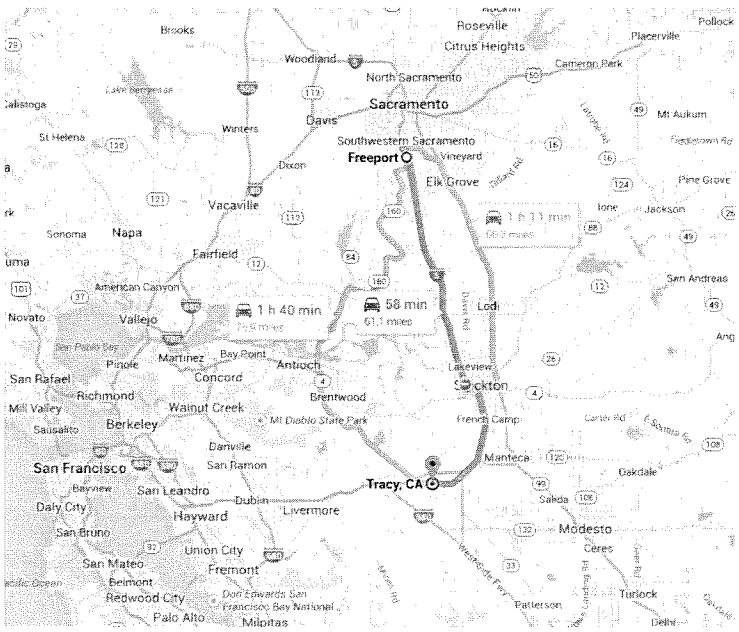
BDCP657

California San Joaquin Delta Tunnel Water Diversion Project

Comment by Josef Mayr, Sacramento, CA. Saturday, May 17, 2014

https://www.facebook.com/josef.mayr.923

josefmayr@mail.com



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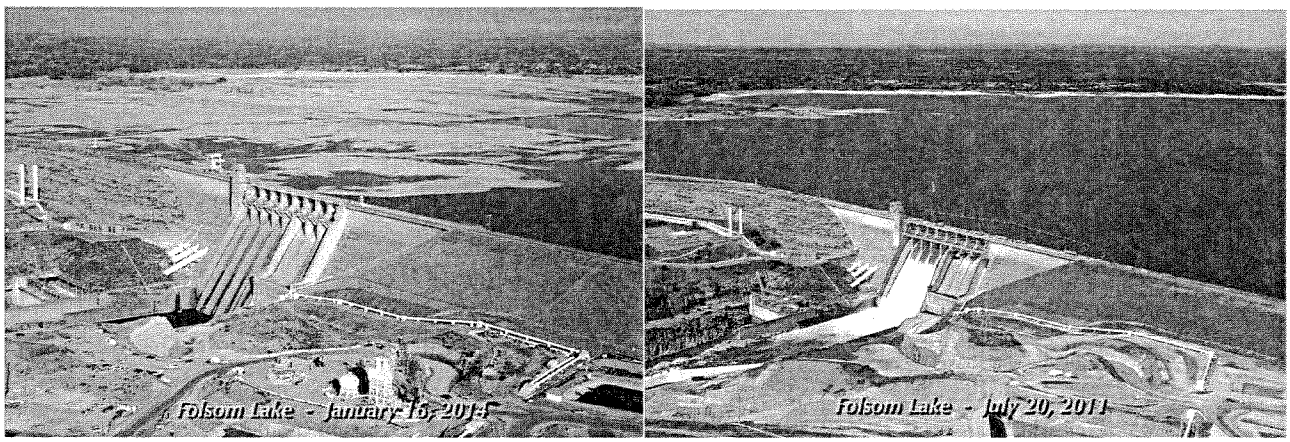


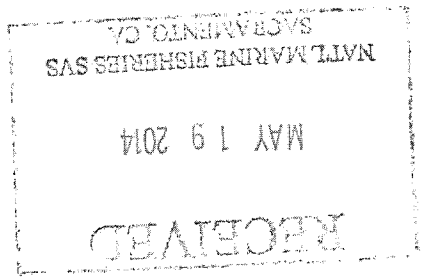
Figure 2 http://www.dailymail.co.uk/news/article-2567911/NASA-turns-research-California-drought.html

Once Folsom Lake is drained, there will be hardly any water flowing into the river, and the only wet we are going to see in the river bed is perhaps brackish salt water at high tide.

The resulting question is: How are these dubious tunnels going to fix the drought? I suspect that the project's true objective is to deliver freshwater to the vast monoculture farmlands south of the delta. Such a diversion would of course not safe the delta at all, as it would be first to suffer over-salination from the incoming ocean water.

Is it not obvious that human activity is shamelessly depleting California's natural resources for the pursuit of monetary profit? We are taking more than is being replenished, and Mother Nature will come after us for that. Perhaps we should look at options to change our habits and our value system instead of seeking to force maintenance of the status quo via money injections. Money can do many things, but it cannot create water! Josef Mayr

BDCP658.



David F. Scatena

2226 Segarini Way

Stockton, Ca. 95209

May 13, 2014

Ryan Wulff, N.M.F.S.

650 Capitol Mall Suite 5-100

Sacramento, Ca. 95814

Dear Mr. Wulff:

First, thank you for the opportunity to submit comments for your consideration re: Bay Delta Conservation Plan [B.D.C.P.] After, reviewing several "chapters" of the 40,000 pages; I submit for your consideration issues that appear to be deficits in the plan.

1. Page 4-90: This section of the plan fails to specify the maximum amount of water to be exported from the Delta during normal rainfall years and/or drought years. As noted during this drought year excessive amounts of water have been authorized to be exported from the Delta in direct violation of current laws and regulations. Therefore the absence of specific maximums is cause for great concern in regards to future exports.

The effect of the increased exports of Delta water since 1960 has resulted in a continued reduction of naturally produced Chinook salmon. The Sacramento River Winter Run is listed as endangered. The spring run of Chinook salmon is threatened under Federal and State Endangered Species Acts. Simultaneously the Striped Bass population has diminished during this same period. The California Fish and Wildlife Department has established that a healthy population of striped bass should be 3,000,000. The last statistics estimate current population at 750,000.

BDCP 1553

2. I question the validity of the habitat restoration plan. We are being asked to comment on the plan without a specific agreement to fund and implement the plan. The B.D.C.P. specifies that the funding and implementation plan will be identified 60 days after the end of the public comment period. So we do not know what is being planned or who is going to pay for the implementation of habitat restoration. The result is no comments on the plan, seems all too convenient.

3. The 2009 Delta Reform Legislation requires meeting the coequal goals of water supply reliability and ecosystem restoration while protecting the Delta as an evolving place. Water Code Section 85020[b] "protect and enhance the unique cultural, recreational and agricultural values of the California Delta as an evolving place". If there is no plan and no funding identified how is this to become a reality?

4. It will be difficult to protect fish and the Delta Farmland with the Adaptive Management Team comprised of four [4] members representing water export interests and only three [3] representing fisheries. It would seem that if both issues are coequal then there would then be equal representation for fisheries.

I submit these concerns for your consideration as you review and digest the impact of the 40,000 page B.D.C.P Report on the Delta and its fisheries.

Respectfully Submitted

David F. Scatena

David F. Scatena

Memberships: Cal Trout, California Sportfishing Protection Assoc., Sierra Club, California Striped Bass Association, Friends of the Calaveras River, Keep America Fishing, Water 4 Fish.

BDCP6558

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Monday, May 19, 2014 3:20 PM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS
Attachments: 20140514 - American Friends Service Commitee (Spanish).pdf; 20140508 - Torrance Area Chamber of Commerce.pdf; 20140513 - Mr. David F. Scatena, Stockton CA.pdf; 20140514 - LAX Coastal Chamber of Commerce.pdf; 20140515 - Mr. Bill Pease, Discovery Bay CA.pdf; 20140517 - S. R. Benbow, Weimar CA.pdf; 20140518 - Mr. Dave Wagner, Stockton CA.pdf

---------- Forwarded message ----------
From: **Anita Deguzman - NOAA Affiliate** <anita.deguzman@noaa.gov>
Date: Mon, May 19, 2014 at 3:15 PM
Subject: BDCP COMMENTS
To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

I have attached comments from the following:

American Friends Service Committee (Spanish)
Torrance Area Chamber of Commerce
Mr. David F. Scatena, Stockton CA
LAX Coastal Chamber of Commerce
Mr. Bill Pease, Discovery Bay CA
S.R. Benbow, Weimar CA
Mr. Dave Wagner, Stockton 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

BDCP659.

S. R. Benbow
PO Box 958
Weimar, CA 95736-0958

May 17, 2014

BDCP PLAN
650 Capitol Mall
Sacramento, Calif.

Gentlmen;

The BDCP)Tunnel) is a classic case of the tail wagging the dog! The Plan does not allow a single dollar for the conservation of Delta Habitat. There is also no improvement in the water supply to the 25M souls in the GLAD (Greater L.A. Desert) Basin, as promised. The Plan contains no funding nor proposals for same. It says the cost will be $25B, but where are these $$?! The Plan has cleverly schemed to allow that "Users" will pay. Thus it is not a "Tax"! The Plan is subtely described as a Dept. of Water "Project". The $25B is, itself, a 'blue sky' "WAG" (wild-a-- guess). If previous projects are any guage (the Bay Bridge comes to mind) the cost will be at least $100B!

In addition to the 25M desert dwellers in GLAD, two San Juaquin Valley irrigation districts have tenuously "signed on". But they know that $25B is a POLITICAL number, and has no connection to REAL COSTS!

In view of all the above HUGE flaws, with the Plan hierarchy making no attempts to recincile any of them, all the reviewers must know that the PLan is neither a Water Plan nor a Conservation Plan, but a POLITICIAN'S statement of scheming and prejudice!

Finally, wouldn't it be a blessing if all of the "Power Brokers" could come to grips with LOGIC? If the $100B were spent on several giant Salt Water Conversion plants on the GLAD Coast, 25M Desert Dwellers would finally have their self-owned water supply! After 100 years of deceitfully pilfering water owned by others (remember the Owens Valley plundering) L.A. Water, aka MWD, could hold its head high by actually building its own water system! The good Governor could even shut down, dismantle, and donate the monstrous, power hungry Grapevine pumps to the self-owned GLAD Water System!

Hopefully,
S.R.Benbow

cc: Sen. Feinstein
" Boxer
Rep. Matsui
" McClintock
" LaMalfa
Sac. Bee
S.F. Chronicle

BDCP1659

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Monday, May 19, 2014 3:20 PM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS
Attachments: 20140514 - American Friends Service Commitee (Spanish).pdf; 20140508 - Torrance Area Chamber of Commerce.pdf; 20140513 - Mr. David F. Scatena, Stockton CA.pdf; 20140514 - LAX Coastal Chamber of Commerce.pdf; 20140515 - Mr. Bill Pease, Discovery Bay CA.pdf; 20140517 - S. R. Benbow, Weimar CA.pdf; 20140518 - Mr. Dave Wagner, Stockton CA.pdf

---------- Forwarded message ----------
From: **Anita Deguzman - NOAA Affiliate** <anita.deguzman@noaa.gov>
Date: Mon, May 19, 2014 at 3:15 PM
Subject: BDCP COMMENTS
To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

I have attached comments from the following:

American Friends Service Committee (Spanish)
Torrance Area Chamber of Commerce
Mr. David F. Scatena, Stockton CA
LAX Coastal Chamber of Commerce
Mr. Bill Pease, Discovery Bay CA
S.R. Benbow, Weimar CA
Mr. Dave Wagner, Stockton 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

BDCP660.

From: Nancy Miller <miller@motlaw.com>
Sent: Monday, May 19, 2014 1:16 PM
To: BDCP.comments@noaa.gov
Subject: request a dvd

I would like to request a dvd of the DRAFT EIR. Please mail to address below. I will pay fee.

Sincerely,

Nancy C. Miller

MILLER & OWEN
A Professional Corporation

428 J Street, Suite 400
Sacramento, CA 95814
(916) 447-7933
(916) 447-5195 fax
Email: miller@motlaw.com

BDCP661.

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

May 15, 2014

Thank you for taking my comments.

(1 I have a concern about recreation mitigation in Chapter 15. I own Rivers End Marina, the only impacted marina in Alameda County. The EIR has analyzed various marinas and the associated impacts inall the other counties, however our marina was not analyzed. Why? We are 1/4 mile from the Tracy Fish Collection Facility outside of Byron. There is no analysis of the financial impacts the Alternative #4 project will have on our marina during and after construction. There is no analysis of the impacts our customers will encounter during construction of alternative #4. Please explain how the project will mitigate the loss of revenue and loss of customers this project #4 will bring to our business. I ask for a full analysis of these and the other associated impacts this project #4 will have on our business and the proposed mitigation of these impacts.

(2 In Chapter 8 on funding. How does the lack of an implementing agreement insure complete funding will be secured prior to the approval of this EIR/EIS when only 10% of the proposed project design has been completed? An implementing agreement is supposed to be completed prior to the approval of the EIR. How can the EIR be released for review without the implementing agreement in place?

(3 Unavoidable Impacts in Chapter 13 table 31 - 1. With over 50 unavoidable impacts and no acceptable mitigation solutions how does this Proposed project #4 meet the CEQA requirements of an environmentally sound solution for protecting the Delta as an Evolving Place that is discussed in the 2009 Delta protection Act? (paragraph # 85020)

(4 Adaptive Management Team Chapter 7 table 7-1 With four representatives from the water contractors side and only three representatives from the fisheries group how does this mix of representatives meet the Co-Equal goals as discussed in the chapter? With the exports interests who want water with 4 votes and the Eco System interests with 3 votes it appears the 4 votes win. Please explain how this would be a co equal team.

Please include my comments in the EIR

Bill Pease
5531 Beaver Lane
Discovery Bay, Ca. 94505

BDCP 1401

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Monday, May 19, 2014 3:20 PM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS
Attachments: 20140514 - American Friends Service Commitee (Spanish).pdf; 20140508 - Torrance Area Chamber of Commerce.pdf; 20140513 - Mr. David F. Scatena, Stockton CA.pdf; 20140514 - LAX Coastal Chamber of Commerce.pdf; 20140515 - Mr. Bill Pease, Discovery Bay CA.pdf; 20140517 - S. R. Benbow, Weimar CA.pdf; 20140518 - Mr. Dave Wagner, Stockton CA.pdf

---------- Forwarded message ----------
From: **Anita Deguzman - NOAA Affiliate** <anita.deguzman@noaa.gov>
Date: Mon, May 19, 2014 at 3:15 PM
Subject: BDCP COMMENTS
To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

I have attached comments from the following:

American Friends Service Committee (Spanish)
Torrance Area Chamber of Commerce
Mr. David F. Scatena, Stockton CA
LAX Coastal Chamber of Commerce
Mr. Bill Pease, Discovery Bay CA
S.R. Benbow, Weimar CA
Mr. Dave Wagner, Stockton 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
~~~~~~~~~~~~~~~~~~~~~~~~~

BDCP662.

May 18, 2014

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

Dear Mr. Wulff:

Thank you for the opportunity to comment on the Bay Delta Conservation Plan (BDCP).

1. I am concerned that the BDCP twin tunnels plan does not adequately address the reduced flow through the Delta and its adverse effects on Winter and Spring Run Chinook salmon. According to data from Chapter 5, Effects Analysis of the November 2013 Draft BDCP, operation of the Twin Tunnels project will reduce winter run and spring Chinook salmon smolt survival by 2.9% and 4% respectively. Mitigation through improving riparian and subtidal habitat to create an aquatic food supply for the Delta does nothing to increase the much needed flow necessary for prevention of increased salinity and pollution with its adverse effects on fish and other significant aquatic organisms so necessary to a healthy estuary.

A much more cost-effective plan would be:

- Strengthen existing Delta levees through widening.
- Update storm water facilities.
- Facilitate ground water recharge and storage projects.
- Initiate projects for restoring storage capacity of existing reservoirs.
- Recycled water storage projects.

Sincerely,

Dave Wagner

Dave Wagner, 659 W. Mariposa Ave., Stockton, CA 95204

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Monday, May 19, 2014 3:20 PM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS
Attachments: 20140514 - American Friends Service Commitee (Spanish).pdf; 20140508 - Torrance Area Chamber of Commerce.pdf; 20140513 - Mr. David F. Scatena, Stockton CA.pdf; 20140514 - LAX Coastal Chamber of Commerce.pdf; 20140515 - Mr. Bill Pease, Discovery Bay CA.pdf; 20140517 - S. R. Benbow, Weimar CA.pdf; 20140518 - Mr. Dave Wagner, Stockton CA.pdf

---------- Forwarded message ----------
From: **Anita Deguzman - NOAA Affiliate** <anita.deguzman@noaa.gov>
Date: Mon, May 19, 2014 at 3:15 PM
Subject: BDCP COMMENTS
To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

I have attached comments from the following:

American Friends Service Committee (Spanish)
Torrance Area Chamber of Commerce
Mr. David F. Scatena, Stockton CA
LAX Coastal Chamber of Commerce
Mr. Bill Pease, Discovery Bay CA
S.R. Benbow, Weimar CA
Mr. Dave Wagner, Stockton 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 # BDCP663

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

(replace original)

L # BDCP664

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

(replace original)

BDCP665.

American Friends Service Committee
PROYECTO VOZ
211 E. March Lane, Suite D, Stockton, CA 95207
Phone (209) 474-3599 Fax (209) 474-8399.
www.afsc.org

BDCP Comments
Ryan Wulff, NMFS
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814
9 de mayo, 2014

Sr. Wulff:

Hace poco aprendí del Plan de Conservación del Delta de la Bahía gracias a un amigo. Lo que me sorprendió es que no pude encontrar mucha información sobre el BDCP y su efecto en el ecosistema regional en español. Aparentemente hubo conferencias cerca de mí donde hablaron de los impactos del plan pero fueron en inglés y no fueron anunciadas por las noticias locales ni otras organizaciones hispanas.

Probablemente lo más alarmante es que la naturaleza de estos túneles gemelos va a afectar el estilo de vida de muchas familias, incluyendo la mía, en la región del Delta y me gustaría saber más detalles. El periodo de comentarios, según esto, termina este junio y no tengo acceso a la información necesaria para que pueda dar un mejor comentario y leer con más precaución.

No es muy justo que impongan este plan tan masivo sin informar a la comunidad latina que tiene una historia muy larga con el Delta. Además, cómo va el dicho, el diablo esta en los detalles.

Si me pueden mandar más información, lo apreciaría.

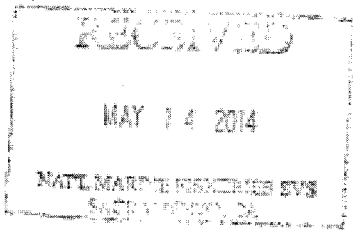
Luis Magaña

Luis Magaña
Coordinador
AFSC Proyecto Voz
211 E. March Lane, Ste. D,
Stockton, CA 95207
(209) 474-3599

BDCP665.

American Friends Service Committee
PROYECTO VOZ
211 E. March Lane, Suite D, Stockton, CA 95207
Phone (209) 474-3599 Fax (209) 474-8399.
www.afsc.org

(AFSC PROJECT VOICE)



BDCP Comments
Ryan Wulff, NMFS
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814
May 9, 2014

Mr. Wulff,

I recently learned about the Bay Delta Conservation Plan thanks to a friend of mine. What surprised me, however, is that I couldn't find much information about the BDCP and its effect on the regional ecosystem in Spanish. Apparently, there were conferences in my area, where they spoke about the impacts of the plan, but they were conducted in English, and they were not announced by the local news or other Hispanic organizations.

Perhaps the most alarming part of this is that the nature of these twin tunnels will affect the lifestyle of many families, including my own, in the Delta region, and I would like to know more details [about them]. The period for comments, according to this, ends this June, but I don't have access to the necessary information in order to give more substantive comments and to read more carefully.

It isn't fair that a plan of such a large scale [such as this] be imposed without informing the Latino community, which has a very long history in the Delta. Furthermore, as the saying goes, the Devil is in the details.

If you could send me more information, I would appreciate it.

/Illegible signature/

Luis Magaña
Coordinator
AFSC Proyecto Voz (AFSC Project Voice)
211 E. March Lane, Ste. D,
Stockton, CA 95207
(209) 474-3599

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Monday, May 19, 2014 3:20 PM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS
Attachments: 20140514 - American Friends Service Commitee (Spanish).pdf; 20140508 - Torrance Area Chamber of Commerce.pdf; 20140513 - Mr. David F. Scatena, Stockton CA.pdf; 20140514 - LAX Coastal Chamber of Commerce.pdf; 20140515 - Mr. Bill Pease, Discovery Bay CA.pdf; 20140517 - S. R. Benbow, Weimar CA.pdf; 20140518 - Mr. Dave Wagner, Stockton CA.pdf

---------- Forwarded message ----------
From: **Anita Deguzman - NOAA Affiliate** <anita.deguzman@noaa.gov>
Date: Mon, May 19, 2014 at 3:15 PM
Subject: BDCP COMMENTS
To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

I have attached comments from the following:

American Friends Service Committee (Spanish)
Torrance Area Chamber of Commerce
Mr. David F. Scatena, Stockton CA
LAX Coastal Chamber of Commerce
Mr. Bill Pease, Discovery Bay CA
S.R. Benbow, Weimar CA
Mr. Dave Wagner, Stockton 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

BDCP666.

From: Claudia Ling <lingclaudia@hotmail.com>
Sent: Monday, May 19, 2014 8:04 PM
To: BDCP.comments@noaa.gov
Subject: Delta Tunnel plan

I do not support the Delta Tunnel plan. We cannot afford to divert our fresh water away from the Delta. Any proposal this big and this expensive should have been brought before the voters. The Peripheral Canal project was defeated and this would probably also be rejected.

Claudia Ling

Sent from my iPad

BDCP667.

From: Mike Hodge <michaelhodge2000@comcast.net>
Sent: Monday, May 19, 2014 3:41 PM
To: BDCP.Comments@noaa.gov
Cc: barbara@restorethedelta.org
Subject: BDCP Comments

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

Dear Mr. Wulff

The BDCP is really a massive water grab. Also, technically, the Habitat Conservation Plan (HCP) Will allow a "take" of threatened or endangered species under Section 10 of the federal Endangered Species Act (ESA), and a Natural Communities Conservation Plan (NCCP) required for the same purpose by the California Department of Fish and Wildlife. The BDCP is really inadequate as a basis for issuing these permits.

Several alternatives to assisting with water conveyance and habitat conservation have been put forward. The Restore the Delta group and many other concerned citizens, such as Dr. Pike have offered to work with any and every agency to come up with a plan that makes sense for the Delta, the people of the State, and those businesses and people needing water in the central valley and southern part of the State. Yet, the Governor, certain water contractors and the DWR continue to ignore these alternatives. The Governor wants to leave a legacy, but I don't think this expensive debacle is really what California needs.

Water contractors have spent $250 million on preparing these documents and selling the idea to each other and to people in other parts of California who know nothing about the Delta. The bridge that is now becoming a major problem in terms of safety is an example of the government moving forward with a project that really is not in the best interest of the people.

I urge you to give this dissenting email and all letters and emails disagreeing with the BDCP a chance to be heard, reviewed and considered. You have an opportunity to help develop a water plan and habitat conservation plan that will truly protect the valuable resources of the State. If the BDCP is carried out the Delta as we know it today and the eco-system it supports will forever be harmed.

Mike Hodge, **Principal Consultant**
Organizational Development Services Plus
info@odsplus.us
(916) 300-2416

From: BRANICH, CATHLEEN M <cb1587@att.com>
Sent: Tuesday, May 20, 2014 8:09 AM
To: BDCP.comments@noaa.gov
Subject: Oppose The Tunnels

As a citizen and taxpayer of California I adamantly oppose The Tunnel project. Please halt all plans on this project!
Cathleen Branich 2117 3rd St Sac. CA 95818

From: Tom Stokely <tstokely@att.net>
Sent: Tuesday, May 20, 2014 2:10 PM
To: BDCP.comments@noaa.gov
Subject: Can't find DEIS/R Appendix 3E figures

To Whom it may concern:

Appendix 3E's figures are not showing up in the documents list. Please tell me where they are or send it to me!

Tom Stokely
Water Policy Analyst/Media Contact
California Water Impact Network
V/FAX 530-926-9727
Cell 530-524-0315
tstokely@att.net
http://www.c-win.org

From: Kaushlendra Das <kdas@maccaferri-usa.com>
Sent: Wednesday, May 21, 2014 8:53 AM
To: BDCP.comments@noaa.gov
Subject: Regarding BDCP Tunnel #2 Project

Hi There,

This is Kaushal Das, Design Engineer with Maccaferri, Inc. Our head office is located in Williamsport, MD.
Regarding the **BDCP Tunnel #2** Project, would you mind to tell us when the project will bid and also is there any way I can get the contact information of the best person to talk about the project please.
We are the manufacturer of fiber and some tunnel products. We also provide technical assistance using our products.
I appreciate your help regarding this.

Thanks a lot!

Kind Regards,
Kaushal

Kaushlendra Das, E.I.T.
Design Engineer
Maccaferri, Inc.

Tel: (301) 223-6910
Fax: (301) 223-4356
www.maccaferri-usa.com

MACCAFERRI

From: Fred Lopez <lopeznoctober@gmail.com>
Sent: Wednesday, May 21, 2014 8:46 PM
To: BDCP.comments@noaa.gov
Subject: Public Comment

I will make this brief. From an ecological prospective, the plan will reduce the available medium depth water in the delta thus reducing the available water and shore lone for large mouth bass. This is a critical negative aspect to this plan. There is no possible way that increasing flows of water to southern California will support this plan or the delta. Scientifically speaking, less water in the delta equals less habitat and target results in the delta. It doesn't require thousands of pages in study to prove that. The absolute worst thing humanity can do in this state is to not learn the lessons of generations past, politically and ecologically. The owens valley and the colorado river is a prime example of the extreme detriments to the ecology of the valley when water is diverted to southern California. Politically we only create an incentive to allow politics and absolute power to continue surface and subsurface water to be diverted to so Cal it feeds ignorance and a repeat of history, in this case bad history. Build de salinanization plants in so cal and put this nonsense to history. These comments need to be recognized and put into the EIR as you scientists know exactly that what I say is accurate.

Fred Lopez

From: Maggie Chui <MChui@rcrcnet.org>
Sent: Tuesday, May 20, 2014 12:02 PM
To: 'BDCP.comments@noaa.gov'
Subject: RCRC - BDCP Extension Request
Attachments: BDCP_Extension_Request_Ltr_05202014.pdf

Good Afternoon,

Attached please find a copy of RCRC letter regarding BDCP Extension Request. If you have any questions, please contact Kathy Mannion at kmannion@rcrcnet.org.

Warmest Regards,

Maggie Chui
Regional Council of Rural Counties (RCRC)
1215 K Street, Suite 1650
Sacramento, CA 95814
Phone: (916) 447-4806
mchui@rcrcnet.org

BDCP 672

Alpine Amador Butte Calaveras Colusa Del Norte
El Dorado Glenn Humboldt Imperial Inyo Lake
Lassen Madera Mariposa Mendocino

RCRC

Merced Modoc Mono Napa Nevada Placer
Plumas San Benito Shasta Sierra Siskiyou Sutter
Tehama Trinity Tulare Tuolumne Yolo Yuba

May 20, 2014

Secretary John Laird
California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Regional Director Ren Lohoefener
U.S. Fish and Wildlife Service
2800 Cottage Way
Sacramento, CA 95825

Regional Director David Murrillo
U.S. Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825

Regional Director Will Stelle
National Marine Fisheries Service
7600 Sand Point Way, NE
Seattle, WA 98115

Transmit via Email: BDCP.comments@noaa.gov

RE: BDCP Public Comment Period Extension Request

Dear Secretary Laird and Regional Directors Murrillo, Lohoefener and Stelle:

On behalf of the Rural County Representatives of California (RCRC), I am writing to request a minimum extension of 60 days for responding to the draft Bay Delta Conservation Plan (BDCP) and draft Environmental Impact Report (EIR/EIS), which would extend the deadline to mid-August 2014. RCRC is an association of thirty-four rural California counties and the RCRC Board of Directors is comprised of elected supervisors from those member counties.

The Implementation Agreement (IA) is a critical element for review of the BDCP and as you know, the IA has not yet been released. The IA is woven into virtually every aspect of the BDCP, and RCRC therefore believes that the BDCP is not complete without the IA.

Additionally, the BDCP is certainly one of the most complex HCP/NCCP permit applications that has been attempted. For these reasons, RCRC respectfully requests an extension in order to adequately review and comment on the combined documents.

Sincerely,

Kathy Mannion

KATHY MANNION
Legislative Advocate

cc: Director Mark Cowin, California Department of Water Resources
Director Chuck Bonham, California Department of Fish and Wildlife

From: Joshua Horowitz <JMH@bkslawfirm.com>
Sent: Wednesday, May 21, 2014 6:08 PM
To: BDCP.comments@noaa.gov
Subject: Farmland Reserve, Inc. Letter Commenting on the Draft BDCP Documents
Attachments: L0521214jmh FRI BDCP Comments Signed Final.pdf

Mr. Wulff:

Attached are the comments of Farmland Reserve, Inc. on the draft public review Bay Delta Conservation Plan and associated EIR/EIS. Please post this letter with other public comments received by the BDCP and forward the letter to the appropriate BDCP representatives for their consideration.

Please contact me if you have any comments or questions.

Thank you,

Joshua M. Horowitz
Bartkiewicz, Kronick & Shanahan
1011 Twenty-Second Street
Sacramento, CA 95816-4907
Telephone: (916) 446-4254
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Farmland Reserve, Inc.
79 South Main Street, Suite 1000
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May 21, 2014

VIA U.S. MAIL

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

Re: Comments on Public Review Draft of Bay Delta Conservation Plan EIR

Dear Mr. Wulff:

Thank you for the opportunity to comment on the public review draft of the Bay Delta Conservation Plan ("BDCP") and its related EIR/EIS. This letter presents Farmland Reserve, Inc.'s ("FRI") preliminary comments on the BDCP.

FRI owns Byron Ranch, an agricultural property comprising approximately 3,440 acres in southeastern Contra Costa County. The southeastern edge of the ranch is immediately north of Italian Slough and northwest of Clifton Court Forebay. The northern edge of the ranch is near Discovery Bay. Byron Ranch puts approximately 3,300 acres to productive use for growing feed crops and pasture.

Because BDCP would site the proposed conveyance facilities' final segment on Byron Ranch, including the twin tunnels' exit shaft and appurtenant facilities and significant construction-related facilities, FRI is potentially one of the most impacted private landowners from the proposed conveyance facilities. While FRI believes that the BDCP project as proposed will cause significant permanent and long-term impacts to Byron Ranch (which likely would require the BDCP to compensate FRI for acquisition of Byron Ranch property interests), there is insufficient detail about the plan's facilities and analysis of their impacts for FRI to determine the full extent of how those facilities would affect FRI's operation of Byron Ranch and impacts to its value.

A. Summary of Proposed BDCP Impacts to Byron Ranch

The public draft of BDCP proposes significant impacts to Byron Ranch if the preferred BDCP alternative, referred to as Alternative 4 or the Modified Pipeline/Tunnel Alignment, were implemented. Those impacts would include:

- permanent siting of the shaft terminus of the two large tunnels that would be built under the Delta;
- permanent siting of a siphon to move water from the shaft terminus into the northern cell of Clifton Court Forebay;
- permanent siting of an access road across Byron Ranch to the shaft terminus and related structures;
- stacking of excavated tunnel muck, or reusable tunnel material ("RTM"), on Byron Ranch for dewatering, treatment, and storage, including possible long-term or permanent storage;
- construction of a 40-acre concrete batch station near the proposed shaft terminus during construction of the new conveyance facilities;
- construction of a 2-acre temporary fueling station during construction of the new conveyance facilities; and,
- construction of temporary barge unloading facilities on Byron Ranch, which presumably would involve the transport and delivery of a variety of hazardous materials.
- In total, BDCP plan elements would impact approximately 963 acres of Byron Ranch, or 28 percent of ranch lands.

B. Insufficient Information on Potential Project Impacts

Alternative 4's modified pipeline and tunnel alignment would divert water through three intakes near Clarksburg and move it south to Clifton Court Forebay through a series of tunnels and pipelines. (See BDCP EIR, Figure M3-4.) BDCP would site the permanent shaft terminus and related structures on the southeastern corner of Byron Ranch to the northwest of the existing Clifton Court Forebay. (See BDCP EIR, Figure M3-4, Sheet 11.) However, the public draft of BDCP lacks a detailed description or analysis of the shaft terminus and related structures, including their likely footprint. Without a more-specific description of the plan elements that would be sited on Byron Ranch, there is no way for FRI to determine what the scope of the direct and indirect impacts to the ranch would be and if those impacts have been properly analyzed and mitigated.

Byron Ranch diverts and uses surface water from points of diversion on Old River, Italian Slough, and Dredger Cut pursuant to a riparian right and two water right permits. The siting of permanent structures in the southeastern corner of Byron Ranch could affect FRI's ability to use its existing facilities to divert and use surface water from Italian Slough, which runs along the southern boundary of the ranch. The BDCP EIR does not provide sufficient information on the extent to which the project would impact these water supplies.

The public draft of BDCP also proposes to control the amount of water in Old River to prevent blowout of the embankments around Clifton Court Forebay. (BDCP EIR 3C-41.) Without more information, however, FRI cannot evaluate whether those actions would interfere with FRI's diversion of water from Old River for use on Byron Ranch.

C. Insufficient Information on Potential Project Construction Impacts

The public draft proposes RTM generated by tunnel boring would be stored on an undetermined number of acres on Byron Ranch. (BDCP EIR Figure M3-4, Sheets 12 and 13.) Based on the available maps, it appears that approximately 930 acres of the ranch would be affected. In addition, leachate would drain from the RTM areas into a leachate collection system, which would then be pumped to leachate ponds for possible additional treatment. (BDCP EIR 3C-55.) There is not sufficient information in the BDCP EIR to determine how DWR would ensure that RTM leachate will not leak and contaminate Byron Ranch over the 10-year timeline for construction of the conveyance facilities. The BDCP also states that it is possible RTM cannot be treated or transported, and therefore might be permanently sited on Byron Ranch and covered by stored topsoil. (BDCP EIR 24-143 to 144.) The BDCP EIR does not provide sufficient information on the impacts of permanent storage of hazardous RTM on Byron Ranch.

BDCP also proposes to site a 40-acre concrete batch plant and a 2-acre fuel station near the shaft terminus on Byron Ranch. (See BDCP EIR 3-30 and BDCP EIR Figure M13-4.) Bulk fuel would be stored and would potentially pose the risk of contaminating Byron Ranch land and groundwater from spills and leakage. (BDCP EIR 24-137.) There is insufficient information in the BDCP EIR on potential impacts from spills and leaks. (BDCP EIR 24-138 to 24-140.)

In addition, BDCP proposes to construct a temporary barge unloading facility on Byron Ranch. (BDCP EIR 3-115 and Figure M13-4, Sheet 6.) BDCP assumes that barge activities would take place on levees using a ramp barge in conjunction with a crane/excavator barge or a crane or excavator positioned on or near the levee. (See BDCP EIR 3-115.) There is no information in BDCP concerning the number of barges or frequency of unloading at Byron Ranch. Presumably, this activity would be related to delivery of supplies for the concrete batch plant, fuel for the fuel station, and possibly RTM. One or more of these activities would involve the transportation and unloading of hazardous materials on Byron Ranch, which increases the potential risk of releases of hazardous materials on the ranch. There is insufficient information and analysis about the scope of the barge-related activities and the risk of those activities for FRI to determine what impacts would occur at Byron Ranch and if those impacts would be properly mitigated to a level of insignificance.

D. Conclusion

The preferred BDCP alternative would create potentially significant permanent and temporary impacts on Byron Ranch. However, the public drafts of the BDCP and EIR/EIS do

not provide sufficient information for FRI to be informed as to the full extent of direct and indirect impacts and proposed mitigation measures. As noted, it appears that DWR will need to acquire significant property interests from FRI to implement the proposed project. Additional information on project impacts and mitigation measures is necessary for FRI to evaluate the extent of Byron Ranch property interests that might be impacted (and consequently acquired or compensated for) by the proposed project.

FRI appreciates your attention to these comments and looks forward to your response.

Sincerely,

Merrill N. Dibble

Merrill N. Dibble
Vice President, California Operations

MD:

cc: Mark W. Cowin, Director, DWR
James Mizell, III, DWR, Office of Chief Counsel

From: Bob Wright <BWright@friendsoftheriver.org>
Sent: Wednesday, May 21, 2014 10:12 AM
To: BDCP.Comments@noaa.gov
Subject: BDCP comment letter attached with two attachments
Attachments: 5 21 14 BDCP cmt ltr.pdf; 5 13 EWC Resp exports plan.pdf; 12 12 EWC Reduced Export Plan.pdf

Dear NOAA BDCP comments:

Please confirm by reply that you have received our attached comment letter dated May 21, 2014 and also its two attachments, the May 2013 EWC Responsible Exports Plan and the December 2012 EWC Reduced Exports Plan. These three documents are comments on the BDCP Draft Plan and Draft EIR/EIS.

Thank you,

Bob Wright
Senior Counsel
Friends of the River
Sacramento, CA
(916) 442-3155 x207

BDCP674

To protect and restore California Rivers by influencing public policy and inspiring citizen action.

FRIENDS OF THE RIVER

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May 21, 2014

BDCP.Comments@noaa.gov (via email)

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Additional Addressees at end of letter

Re: Comment Letter re Failure of BDCP Draft Plan and Draft EIR/EIS to Include a Range of Reasonable Alternatives Including the Responsible Exports Plan Submitted by the Environmental Water Caucus

Dear Federal and California Agencies, Officers, and Staff Members Carrying out the BDCP:

Fundamental threshold violations of the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), and the Endangered Species Act (ESA) are being carried out right now by the Bay Delta Conservation Plan (BDCP) process. The lead federal and State agencies have failed to develop a range of reasonable alternatives to new upstream conveyance such as the massive BDCP Water Tunnels. The Water Tunnels would increase rather than decrease the capacity for exports from the San Francisco Bay-Delta by

diverting enormous quantities of freshwater from the lower Sacramento River upstream from the Delta near Clarksburg.

Failure to Develop any Alternatives Increasing Flows by Reducing Exports

Of the 15 "action alternatives" evaluated in the Draft EIR/EIS, all save one alternative, alternative 9--Through-Delta--would construct, and then operate for decades new upstream conveyance ranging from a diversion capacity of 3000 cubic feet per second (cfs) to 15,000 cfs. (Draft EIR/EIS, Executive Summary, Table ES-5, pp. ES 28-30). Nine of the so-called "alternatives" have a North Delta diversion capacity of 15,000 cfs. (*Id.*). The Preferred Alternative 4 is claimed to have a capacity of 9000 cfs but as we have pointed out previously, that claim is false as the Water Tunnels have the capacity of 15,000 cfs or greater and it would be relatively easy to add two new intakes down the road to use the full capacity of the Tunnels. (Friends of the River (FOR) August 13, 2013 BDCP comment letter, Attachment 2 to FOR January 14, 2014 BDCP comment letter).

The BDCP process also claims to have considered 11 "alternatives" as "take" alternatives pursuant to the ESA. (BDCP Plan, Chapter 9, Alternatives to Take, table 9-7, p. 9-20). Of the 11 "take alternatives" all save one, alternative F, Through Delta, would construct, and then operate for decades new upstream conveyance by way of Water Tunnels similar to the descriptions of the "alternatives" contained in the Draft EIR/EIS. The Preferred Alternative 4 from the Draft EIR/EIS is referred to as the BDCP Proposed Action in Chapter 9 of the Plan.

To be clear, 14 of the so-called 15 "alternatives" in the Draft EIR/EIS and 10 of the so-called 11 "take alternatives" are not true alternatives at all. They are all peas out of the same pod that would create new upstream conveyance to divert enormous quantities of freshwater away from the lower Sacramento River, sloughs, and San Francisco Bay-Delta for export south. There is nothing new in this blinding of the BDCP process to development or at least consideration of a range of reasonable alternatives to construction and operation of new upstream conveyance. Three years ago the National Academy of Sciences declared in reviewing the then-current version of the draft BDCP that: "[c]hoosing the alternative project before evaluating alternative ways to reach a preferred outcome would be post hoc rationalization--in other words, putting the cart before the horse. Scientific reasons for not considering alternative actions are not presented in the plan." (National Academy of Sciences, Report in Brief at p. 2, May 5, 2011).

Failure to Consider Alternatives Developed for the Agencies

In addition to failing to develop a range of reasonable alternatives, the BDCP lead agencies have also failed to even consider reasonable alternatives handed to the State on a silver platter. Friends of the River is a California nonprofit public interest organization devoted to river protection, conservation and restoration. Friends of the River is also a member of the California Environmental Water Caucus (EWC). The EWC is a coalition of over 30 nonprofit environmental and community organizations and California Indian Tribes. In our November 18, 2013 comment letter we urged those carrying out the BDCP to review the "Responsible Exports Plan" proposed by the EWC:

> as an alternative to the preferred tunnel project. This Plan calls for reducing exports from the Delta, implementing stringent conservation measures but no new upstream conveyance. This Plan additionally prioritizes the need for a water availability analysis and protection of public trust resources rather than a mere continuation of the status quo that has led the Delta into these dire circumstances. Only that alternative is consistent with the EPA statements indicating that more outflow is needed to protect aquatic resources and fish populations. The EWC Responsible Exports Plan is feasible and accomplishes project objectives and therefore should be fully analyzed in a Draft EIS/EIR."(FOR November 18, 2013 comment letter at p. 3, Attachment 4 to FOR January 14, 2014 comment letter).

We specifically pointed out (at p. 3, fn. 1) that the plan was online at http://www.ewccalifornia.org/reports/resonsibleexpltsplanmay2013.pdf . The failure in the BDCP process to consider the Responsible Exports Plan alternative is inexplicable given that a similar, earlier version of the plan, EWC's "Reduced Exports Plan" of December 2012 was presented by Nick Di Croce, Co-Facilitator of the EWC to former California Resources Agency Deputy Secretary Jerry Meral and other BDCP agency officers in December 2012 and presented to Deputy Secretary Meral again in person on February 20, 2013 in his office in the Resources Agency building. The Reduced Exports Plan had previously been presented in May of 2012 at the Federal/State/NGO meeting in San Francisco. As stated by Co-Facilitator Di Croce in his December 2012 message to Deputy Secretary Meral:

> Now that the project is nearing its EIR/EIS stage, we feel it is important to formally present it [Responsible Exports Plan] to you and request that you get it on the record as an alternative to be evaluated. We have done this with the Delta Stewardship Council and it is included as one of the Delta Plan alternatives being evaluated. As you know, CEQA and NEPA both require a full range of reasonable alternatives to be evaluated. And as far as we know, there are no alternatives being evaluated that do not include new

> conveyance, except for the No Action alternative; this is certainly not a No Action alternative. (December 15, 2012 email Di Croce to Meral).

We ***attach*** (for BDCP.Comments@noaa.gov) and incorporate by this reference a copy of the 39 page "Responsible Exports Plan" of May 2013 (as well as a copy of the "Reduced Exports Plan" of December 2012) to this comment letter as setting forth a feasible alternative that must be considered in the BDCP process.

By way of brief summary, actions called for by the Responsible Exports Plan alternative include no development of new upstream conveyance; reducing exports to no more than 3,000,000 acre-feet in all years in keeping with State Water Resources Control Board (SWRCB) flow criteria; water efficiency and demand reduction programs including urban and agricultural water conservation, recycling, storm water recapture and reuse; reinforced levees above PL 84-99 standards; installation of improved fish screens at existing Delta pumps; elimination of irrigation water on drainage-impaired farmlands south of the Bay-Delta; return the Kern Water Bank to State control; restore Article 18 urban preference; restore the original intent of Article 21 surplus water in SWP contracts; conduct feasibility study for Tulare Basin water storage; provide fish passage above and below Central Valley rim dams for species of concern; and retain cold water for fish in reservoirs.

The Responsible Exports Plan alternative calls for a statewide benefit-cost analysis to determine economic desirability of any plan or alternative; water availability analysis to align water needs with availability; protecting the Delta ecosystem pursuant to public trust obligations; and meeting NCCP recovery standards for listed fish species. Other obvious alternatives would include actions ranging from meeting ESA recovery standards for listed fish species to halting the planting of almond orchards that cannot be fallowed in dry years on desert lands receiving export waters to consideration of the development of desalinated water supplies as is being done in the San Diego County Water Authority. (BDCP Plan Chapter 9, p. 9-43).

Instead of enthusiastically embracing the duties mandated by our environmental laws to develop and consider a range of reasonable alternatives the BDCP proponents have concealed or misrepresented reasonable alternatives presented to them. The EWC Responsible Exports Plan has simply been concealed and ignored. It is invisible in the alternatives chapters in the BDCP Plan and Draft EIR/EIS.

In addition to the EWC alternative, the Natural Resources Defense Council (NRDC) and several other environmental organizations and public agencies presented and requested consideration of the conceptual "Portfolio" alternative in December 2012. Like the EWC Plan, the Portfolio alternative emphasizes investment in such modern measures as:

> local water supply tools including conservation, water recycling, and other approaches, [that] can provide reliable, sustainable and plentiful new sources of supply that will also be cost-effective over the long run. These sources can also be provided rapidly through additional investments. There is approximately as much new water available from these new water supply sources as is currently exported from the Delta." (Portfolio alternative).

Unlike the EWC Plan, the Portfolio alternative also includes new 3,000 cfs upstream conveyance. The California Resources Agency began disparaging the Portfolio alternative almost immediately on its website. Then, after the release of the 40,000 pages of BDCP documents in December 2013, the government agencies running the BDCP website stopped posting any correspondence or comments from the public. The overt hostility of the State BDCP agencies to any evaluation and explanation of alternatives to the Water Tunnels is revealed by the spectacle of the February 19, 2014 letter and its attachment from Resources Secretary John Laird to NRDC Litigation Director Kate Poole disparaging the Portfolio alternative. What is ludicrous about this is that the Resources Agency posted its anti—Portfolio advocacy on its website without also posting the Portfolio alternative itself that the Resources Agency complains about.

Like the EWC Responsible Exports Plan alternative, the Portfolio alternative is hidden from public view in the Draft BDCP Plan and Draft EIR/EIS. The logical conclusion is that the BDCP Water Tunnels proponents are afraid of the appeal of the Responsible Exports Plan alternative and the Portfolio alternative if these alternatives are fairly and openly presented in the BDCP documents out for public review and comment.

Crashing Fish Populations Cry Out for Evaluation of Alternatives Increasing Flows

There should be a range of alternatives in the BDCP Draft EIR/EIS starting with the Responsible Exports Plan and related variants of that alternative. As pointed out in our previous comment letters (March 6, 2014 letter, January 14, 2014 letter and its four attachments) several listed fish species are already in catastrophic decline in the subject area. The reaches of the Sacramento River, sloughs, and the Delta that would lose significant quantities of freshwater and freshwater flows through operation of the proposed BDCP Water Tunnels are designated critical

habitats for listed endangered and threatened fish species including Winter-Run Chinook Salmon, Central Valley Spring-Run Chinook Salmon, Central Valley Steelhead, Southern Distinct Population Segment of North American Green Sturgeon, and Delta Smelt.

As explained last year by the U.S. Fish and Wildlife Service (USFWS) "There is clear evidence that most of the covered fish species have been trending downward." (USFWS Staff BDCP Progress assessment, Section 1.2, p. 4, April 3, 2013). The National Marine Fisheries Service (NMFS) has pointed out that the Water Tunnels threaten the "potential extirpation of mainstem Sacramento River Populations of winter-run and spring-run Chinook salmon over the term of the permit. . ." (NMFS Progress Assessment, Section 1.17, 12, April 4, 2013). As explained by EPA in its 2013 letter to the SWRCB, "The State Board. . . has recognized that increasing freshwater flows is essential for protecting resident and migratory fish populations." (EPA letter to SWRCB re: EPA's comments on the Bay-Delta Water Quality Control Plan; Phase 1; SED, pp. 1-2, March 28, 2013). The EPA has also explained with respect to Administrative Drafts of the BDCP documents that "many of these scenarios of the Preferred Alternative 'range' appear to decrease Delta outflow (p. 5-52), despite the fact that several key scientific evaluations by federal and State agencies indicate that more outflow is necessary to protect aquatic resources and fish populations." (EPA Comments on Administrative Draft EIR/EIS, III Aquatic Species and Scientific Uncertainty, Federal Agency Release, July 18, 2013).

The Delta Reform Act requires that:

> For the purpose of informing planning decisions for the Delta Plan and the Bay Delta Conservation Plan, the board [SWRCB] shall, pursuant to its public trust obligations, develop flow criteria for the Delta ecosystem necessary to protect public trust resources. In carrying out this section, the board shall review existing water quality objectives and use the best available scientific information. The flow criteria for the Delta ecosystem shall include the volume, quality, and timing of water necessary for the Delta ecosystem under different conditions. California Water Code § 85086(c)(1).

The SWRCB did develop flow criteria, published at:
www.swrcb.ca.gov/waterrights/water_issues/bay_delta/flow on August 3, 2010, p. 5. The criteria include:

75% of unimpaired Delta outflow from January through June;

75% of unimpaired Sacramento River inflow from November through June; and

60% of unimpaired San Joaquin River inflow from February through June.

These recommendations have not been the basis for the BDCP Water Tunnels preferred project and would preclude development of the preferred alternative making that alternative infeasible pursuant to water quantity and quality considerations. In contrast, EWC's Responsible Exports Plan alternative reduces exports to increase flows and is designed to comply with SWRCB flow criteria. On the one hand, the BDCP Draft EIR/EIS does not use the SWRCB flow criteria to evaluate alternatives. And on the other hand, the BDCP process does not await completion of pending SWRCB proceedings to update flow objectives.

The basic, flawed BDCP premise that taking water away from the fish and their habitats will be good for them is both nonsensical and contrary to science. As the EPA has noted, "[t]he benefits of increasing freshwater flows can be realized quickly and help struggling fish populations recover." (EPA comments on the Bay-Delta Water Quality Control Plan; Phase 1; SED, March 28, 2013 at 1). But in any event, it is necessary that the BDCP process develop and consider a range of reasonable alternatives that instead of decreasing Delta outflow, increase Delta outflow. Fair evaluation and consideration of a range of alternatives reducing exports would be a required first step in that process.

Alternatives reducing exports are consistent with the claimed project purpose of "Reducing the adverse effects on certain listed species due to diverting water." (BDCP Draft EIR/EIS, Executive Summary, p. ES-10). Such alternatives are also consistent with findings that "the Delta is now widely perceived to be in crisis. There is an urgent need to improve the conditions for threatened and endangered fish species within the Delta." (*Id.*). On the other hand, the stated purpose to "restore and protect the ability of the SWP and CVP to deliver up to full contract amounts" (*Id.*) is contrary to the prevalence of "paper water" reflected by "information indicating that quantities totaling several times the average unimpaired flows in the Delta watershed could be available to water users based on the face value of water permits already issued." (p. ES-11). Alternatives such as the Responsible Exports Plan alternative are 21st century alternatives focused on efficient, cost-effective measures to establish a more reliable water supply such as conservation and recycling as opposed to costly huge new delivery projects further depleting our rivers and the San Francisco Bay-Delta.

Alternative 9, through-Delta, is ***not*** the Responsible Exports Plan alternative. Alternative 9 comes from the BDCP Steering Committee back in 2010. (BDCP Draft EIR/EIS Executive Summary, p. ES -30; Chapter 3, p. 3-6). Without new upstream conveyance, Chapter 9 of the

BDCP Plan discussing Alternatives to Take does concede that Take alternative F (similar to Draft EIR/EIS alternative 9) would result in measurably less take over the decades of project operations than the BDCP Proposed Action— the Water Tunnels— of Central Valley fall and late fall-run Chinook Salmon (p. 9-90); Central Valley Steelhead (p. 9-98); Sacramento Splittail (p. 9-104); White and Green Sturgeon (p. 9-112); and Pacific and River Lamprey (p. 9-121). The appendix to Chapter 9 also concedes that the through-Delta alternative would result in greater net economic benefits to the water exporters than would result from development of the Water Tunnels. (Chapter 9, appendix A, Table 9.A-2 at p. 9.A-4). The BDCP proponents, however, load up their so-called through-Delta alternative with construction features not included in the Responsible Exports Plan and then label the through-Delta alternative as resulting in greater take than the BDCP Proposed Action during construction.

Likewise, Draft EIR/EIS alternative 5 which includes a 3000 cfs Tunnel is not the Portfolio alternative. Alternative 5 (Take alternative D) comes from the BDCP Steering Committee back in 2010. (BDCP Draft EIR/EIS Executive Summary, p. ES-29).

None of the positive water supply availability action measures in the Responsible Exports Plan alternative or the Portfolio alternative have been included as alternatives or portions of alternatives in the BDCP Draft EIR/EIS currently out for public review and comment. The Water Tunnels proponents have "tunnel vision" confined to the sole alternative of developing new upstream conveyance. Moreover, there is no consideration of the opportunity cost that would result from construction and operation of the Water Tunnels costing many billions of dollars. Those billions of dollars would be lost to developing such modern water supply measures as conservation and recycling.

The Absence of a Range of Reasonable Alternatives Violates CEQA, NEPA and the ESA

The failure to include a range of reasonable alternatives violates CEQA. An EIR must " describe a range of reasonable alternatives to the project. . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." 14 Code Cal. Regs (CEQA Guidelines) § 15126.6(a). "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." § 15126.6(b). Recirculation of a

new Draft EIR/EIS will be required by CEQA Guidelines section 15088.5(a)(3) because the Responsible Exports Plan alternative and other alternatives that would reduce rather than increase exports have not been previously analyzed but must be analyzed as part of a range of reasonable alternatives.

In addition, EIR conclusions must be supported by substantial evidence. "Argument, speculation, unsubstantiated opinion or narrative" "does not constitute substantial evidence." CEQA guidelines, § 15384. All that the BDCP Draft EIR/EIS contains to support the Preferred Project alternative is argument, speculation, unsubstantiated opinion, narrative and saying "we don't know." For example, the Draft EIR/EIS made "no determination (ND)" findings under NEPA as to whether the Water Tunnels, even after "mitigation," would have adverse impacts on spawning, incubation habitat, and migration conditions for winter-run Chinook salmon (Draft EIR/EIS, Executive Summary p. ES-73) and spring-run Chinook salmon (p. ES-75); and migration conditions for fall-run Chinook salmon (p. ES-77), steelhead (p. ES-79), green Sturgeon (p. ES-81), and white Sturgeon (p. ES-83. A new Draft EIR/EIS must be prepared and recirculated because "the draft EIR[/EIS] was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." CEQA Guidelines § 15088.5(a)(4).

The rules under NEPA are similar. Under the NEPA Regulations, "This [alternatives] section is the heart of the environmental impact statement. The alternatives section should "sharply" define the issues and provide a clear basis for choice among options by the decision-maker and the public. 40 C.F.R. § 1502.14. The EIS alternatives section is to "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." § 1502.14(a). Moreover, if "a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion. The agency shall make every effort to disclose and discuss at appropriate points in the draft statement all major points of view on the environmental impacts of the alternatives including the proposed action." § 1502.9(a).

Instead of discussing all major points of view, lost in the 40,000 pages of BDCP Plan and Draft EIR/EIS advocacy and speculation by the consultants who prepared the documents are any alternatives reducing exports and increasing flows instead of constructing and operating

expensive new upstream diversions with the capacity to increase exports and reduce flows. Under NEPA as well as CEQA, recirculation of a new Draft EIR/EIS will be required because of the extreme deficiencies in the Draft EIR/EIS out for public review at this time. The deficiencies in the Draft EIR/EIS cannot and will not be evaded by responses to comments in a Final EIR/EIS.

With respect to the ESA, we have repeated several times over the past year that the failure of the federal agencies to have prepared the ESA required Biological Assessments and Opinions violates both the ESA Regulations (50 C.F.R. § 402.14(a) "at the earliest possible time" requirement and the NEPA Regulations (40 C.F.R. § 1502.25(a) "concurrently with and integrated with" requirement. (FOR January 14, 2014 comment letter and its four attachments). The missing Biological Assessments and Biological Opinions would be essential to any meaningful public review and comment on a project claimed to be responsive to crashing fish populations.

As conceded by BDCP Chapter 9, Alternatives to Take, the analysis of take alternatives must explain "why the take alternatives [that would cause no incidental take or result in take levels below those anticipated for the proposed actions] were not adopted." (BDCP Plan, Chapter 9, pp. 9-1, 9-2). Here, the lead agencies failed to even develop let alone adopt alternatives reducing exports and increasing flows to eliminate or reduce take. The agencies ignored the Responsible Exports Plan (Reduced Exports Plan version) alternative and the Portfolio alternative that were handed to them on a silver platter a full year ***before*** they issued the Draft Plan and Draft EIR/EIS for public review and comment.

In short, the fundamental flaws in the alternatives sections in the BDCP Draft EIR/EIS and Chapter 9 of the BDCP plan have led to a Draft EIR/EIS and Alternatives to Take analysis "so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded."

CONCLUSION

The most important and fundamental planning decision in the history of the Delta will be whether or not to on the one hand finally begin to reduce exports and increase flows or on the other hand to develop massive, new upstream conveyance from the Delta. An epic choice will be made between those two basic options. The BDCP Plan and Draft EIR/EIS are hopelessly deficient because they fail to illuminate in any way whatsoever the bases for making the epic

choice that will determine many important things including whether five or more endangered and threatened species of fish become extinct. Extinction is forever. Please call the undersigned at (916) 442-3155 ext. 207 with any questions you may have.

Sincerely,

/s/ E. Robert Wright
Senior Counsel
Friends of the River

(Encl. two attachments for Comments@NOAA.gov)

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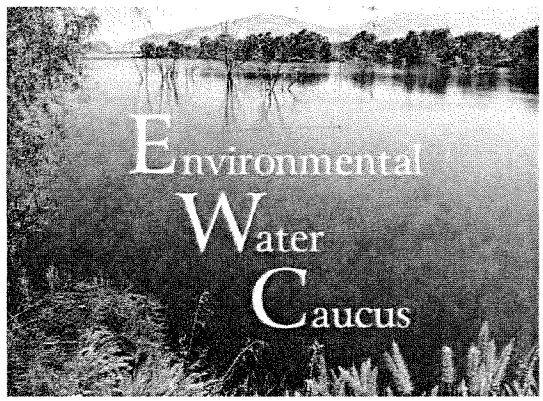
BDCP674



RESPONSIBLE EXPORTS PLAN

Developed by the Environmental Water Caucus
May 2013

CONTENTS

INTRODUCTION

The consensus diagnosis for the Delta estuary is dire. The California Environmental Water Caucus prescribes more river flows and reduced fresh water exports to help the Delta recover. The EWC's plan demonstrates how water supply reliability can be improved while reducing exports from the Bay Delta Estuary. Many of our recommendations have been presented to the Delta Stewardship Council as part of Alternative 2 for the Delta Plan. We have now packaged this series of related actions into a single alternative for evaluation in any future NEPA or CEQA evaluations, or by the State Water Resources Control Board. The actions are largely based on the EWC report *California Water Solutions Now*, (www.ewccalifornia.org), which can be referenced for supporting details. This package of actions ("The RX Plan") represents the EWC alternative to the BDCP.

The RX Plan includes a unique combination of actions that will open the discussion for alternatives to the currently failed policies which continuously attempt to use water as though it were a limitless resource. *The RX Plan is about far more than just reduced exports.* The uniqueness of this Plan is that while it will reduce the quantity of water exported from the Bay Delta Estuary, in order to protect the health of the Estuary's habitat and fisheries with increased inflows and outflows, it also contains actions that will reduce the demand for water and increase supplies for exporters south of the Delta in order to compensate for the reduced south-of-Delta exports. It is the only extant plan that will modernize existing facilities in the Bay-Delta with improved fish screens at the South Delta, levees reinforced above the PL84-99 standard, and significantly increased flows in order to recover habitat and fish stocks, while avoiding the huge infrastructure costs of tunnels under the Delta. It will also provide increased self-reliance for south-of-Delta water users through inter-regional water transfers and south of Delta groundwater storage. The reinforced levees will provide increased reliability of the water supplies through the Delta. And it will accomplish the legislated goals of Estuary restoration and water reliability for billions of dollars less than currently contemplated plans.

California is in the grip of a water crisis of our own making. Like all problems that humans create, we have the potential to use the crisis as an opportunity to make positive and long-lasting changes in water management. The crisis is not a water shortage – California has already developed sufficient water supplies to take us well into this century – the real crisis is that this supply is not used efficiently or equitably for all Californians, nor is it used wisely to sustain the ecosystems that support us.

The opportunity – and the basis for our positive vision – is that economically and technologically feasible measures are readily available to provide the water needed for our future. Our vision includes providing clean water for families to drink, providing water to improve the environmental health of our once-magnificent rivers, recovering our fisheries from the edges of extinction, fostering healthy commercial and recreational fisheries and a thriving agricultural industry, ensuring that all California communities have access to safe and affordable

drinking water, and contributing significantly to the state's largest industries: recreation and tourism. [1] [2]

We need to make significant changes in our water management practices in order to provide the favorable outcomes that we describe in this report. These changes are based on the following Principles for a Comprehensive California Water Policy, developed by the Planning and Conservation League and the Environmental Justice Coalition for Water to guide California water policy reform.[3] They instruct that:

1. California must respect and adjust to meet the natural limits of its waters and waterways, including the limits imposed by climate change.
2. Every Californian has a right to safe, sufficient, affordable, and accessible drinking water.
3. California's ecosystems and the life they support have a right to clean water and to exist and thrive, for their own benefit and the benefit of future generations.
4. California must maximize environmentally sustainable local water self-sufficiency in all areas of the State, especially in the face of climate change.
5. The quality and health of California's water must be protected and enhanced through full implementation and enforcement of existing water quality, environmental, and land use regulations and other actions, and through new or more rigorous regulations and actions as needed.
6. All Californians must have immediate and ready access to information and the decision-making processes for water.
7. California must institute sustainable and equitable funding to ensure cost-effective water reliability and water quality solutions for the state where "cost-effective" includes environmental and social costs.
8. Groundwater and surface water management must be integrated, and water quality and quantity must be addressed on a watershed basis.
9. California's actions on water must respect the needs and interests of California Tribes, including those unrecognized Tribes in the State.
10. California must overhaul its existing, piecemeal water rights policies, which already over-allocate existing water and distribute rights without regard to equity.

A major influencing factor in future California water solutions will be the impact of global climate change. Based on the scientific information available, the natural limits of our water supply will become more obvious, the economics of water policies will change significantly, and our ability to provide sustainable water solutions for all Californians will become more challenging. Unless we manage our water more efficiently and account for the current and future effects of global climate change, the costs of providing reliable water to all users will overwhelm our ability to provide it.

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[1] California's Rivers A Public Trust Report. Prepared for the State Lands Commission. 1993. P. 47. http://www.slc.ca.gov/Reports/CA_Rivers_Rpt.html

[2] California Travel and Tourism Commission. California Travel Impacts by County. 2008 Preliminary State Estimates. Total direct travel spending alone was $96.7 billion in 2008. ES-2. http://tourism.visitcalifornia.com/media/uploads/files/editor/Research/CAImp08pfinal.pdf.

[3] Aquafornia: the California Water News Blog of the Water Education Foundation. http://aquafornia.com/archives/8374.

In addition to the commonly accepted NEPA and CEQA requirements for any Delta Estuary plan, there are five fundamental criteria that any plan for recovering the health of the Bay Delta Estuary and fish species must successfully meet. Those criteria are:

1. A water availability analysis must be conducted to align water needs with availability.
2. A benefit/cost analysis must be conducted to determine economic desirability of any plan.
3. Public trust and sociological values must be balanced against the value of water exports.
4. Existing water quality regulations must be enforced in order to recover the Estuary.
5. The plan must meet the NCCP *recovery* standard for fish species.

All of the current and past plans for the Delta Estuary have failed, partly because the responsible state and federal authorities have refused to apply or to test their projects with these above criteria. The EWC would welcome this Responsible Exports Plan being judged by these pragmatic and acceptable criteria.

PREFACE

There are several overarching issues that run through all our efforts to develop sustainable, effective, and equitable water policies. They are: climate change, periodic drought, environmental justice, the preservation of cultural traditions by Native Americans, the precautionary principle, and population pressures. They are covered in this preface to avoid repetition in each of the individual actions described below.

Climate Change. Climate models indicate that climate change is already affecting our ability to meet all or most of the goals enumerated in this report and must be integrated into the implementation of the recommendations. The main considerations are:

- More precipitation will fall as rain rather than snow and will result in earlier runoff than in the past.[4]
- Less snow will mean that the current springtime melt and runoff will be reduced in volume.
- Overall, average precipitation and river flow are expected to decrease. A recent paper in *Frontiers in Ecology and the Environment* [5] predicts that the average Sacramento River flow will decrease by about 20 percent by the 2050s.
- Precipitation patterns are expected to become more erratic including both prolonged periods of drought and greater risks of flooding.
- Sea level rise will impact flows and operations within the Delta, endanger fragile Delta levees, and increase the salinity concentration of Suisun Bay and the Delta, as well as increase the salinity concentrations of some coastal groundwater aquifers.

These changing conditions could affect all aspects of water resource management, including design and operational assumptions about resource supplies, system demands, performance requirements, and operational constraints. To address these challenges, we must enhance the resiliency of natural systems and improve the reliability and flexibility of the water management systems. Specific recommendations are proposed as part of this document.

Periodic Drought. Drought is a consistent and recurrent part of California's climate. Multiple-year droughts have occurred three times during the last four decades.[6] In creating a statewide drought water "bank," there is a clear need for a long-term version of a drought water bank. California's experience of multiple-year droughts should force state and local water and land use authorities to recognize the recurrence of drought periods and to put more effective uses of water

[4] National Wildlife Federation and the Planning and Conservation League Foundation. On the Edge: Protecting California's Fish and Waterfowl from Global Warming. 10-11. www.pcl.org/projects/globalwarming.html.

[5] Margaret A Palmer, Catherine A Reidy Liermann, Christer Nilsson, Martina Flörke, Joseph Alcamo, P Sam Lake, Nick Bond (2008) Climate change and the world's river basins: anticipating management options. Frontiers in Ecology and the Environment: Vol. 6, No. 2, pp. 81-89.

[6] California Drought Update. May 29, 2009. P.5. http://www.water.ca.gov/drought/docs/drought_update.pdf.

in place permanently. The Governor's current policy on water conservation[7] should be mandatory for all water districts and become a permanent part of water policy, rather than a response to current dry conditions. Only by educating the public, recognizing limits, and learning to use the water we do have more efficiently can Californians expect to handle future drought conditions reasonably.

Environmental Justice. It is imperative that water policies and practices are designed to avoid compounding existing or creating new disproportionately adverse effects on low income Californians and communities of color. Conversely, water policies and practices must anticipate and prepare for anticipated disproportionately adverse effects and to provide equitable benefits to these communities, particularly those afflicted by persistent poverty and which have been neglected historically. For example, water moving south through the California Aqueduct and the Delta Mendota Canal flow past small valley towns that lack adequate or healthy water supplies. We know that under conditions of climate change and drought, catastrophic environmental changes will occur in California. Environmental justice requires that water policies and practices designed to account for climate change and drought include a special focus on preventing catastrophic environmental or economic impacts on environmental justice communities. Other, specific environmental justice water issues include:

- Access to safe, affordable water for basic human needs.
- Access to sufficient wastewater infrastructure that protects water quality and prevents overflows and other public health threats.
- Restoration of water quality so that environmental justice communities can safely feed their families the fish they catch in local waters to supplement their families' diets.
- Equitable access to water resources for recreation.
- Equitable access to statewide planning and funding to ensure that in addition to safe affordable water, and wastewater services, environmental justice communities benefit equitably from improved conservation, water recycling and other future water innovations that improve efficiency and water quality.
- Mitigation of negative impacts from the inevitable reallocation of a portion of the water currently used in agriculture – the state's biggest water use sector – to water for cities and the environment. Reallocation will reduce irrigated acreage, the number of farm-related jobs, and local tax revenues.
- Mitigation of third party impacts, including impacts on farm workers, associated with land conversion.
- Ideally, mitigation will be based on a comprehensive plan to transition local rural economies to new industries such as solar farms and other clean energy business models and provide the necessary job training and policies necessary to enable environmental justice community members to achieve the transition.
- Protection from the impacts of floods and levee breaks, including provisions for emergency and long-term assistance to renters displaced by floodwaters.

[7] 20x2020 Water Conservation Plan DRAFT, April 30, 2009. Executive Summary. http://www.swrcb.ca.gov/water_issues/hot_topics/20x2020/index.shtml.

Native American Traditions. Many of California's Historical Tribes have a deep and intrinsic relationship with California's rivers, lakes, streams and springs. This relationship goes to the very core of their origin, cultural, and spiritual beliefs. Many of the Tribes consider the fish that reside in these waters as gifts from their creator, and the fish are necessary to the continued survival of their people and their cultural and spiritual beliefs. Historically, California's water policy has failed to recognize the importance of the needs of one of its greatest natural and cultural resources - its Historical Tribes - and has only sought to manage water for economic gain. California water policies and practices must change to provide sufficient water to support fisheries and their habitats for both cultural and economic sustainability, and provide for the restoration of and access to those fisheries for its Native Peoples.

The Precautionary Principle. The Precautionary Principle states that: "Where there is scientific evidence that serious harm might result from a proposed action but there is no certainty that it will, the precautionary principle requires that in such situations action be taken to avoid or mitigate the potential harm, even *before* there is scientific proof that it will occur."[8] Numerous actions recommended in this report fit that criteria and the precautionary principle is therefore implicit throughout the report recommendations.

Population Pressures. California's human population is expected to continue to increase from the current population of more than 37 million to 49 million by 2030 and 59 million by 2050.[9] In 2008, 75 percent of the population growth came from natural growth (births) and 25 percent came from immigration, both foreign and interstate. In each of the data sources utilized in this report, population increases have been factored into the conclusions, unless otherwise noted.

[8] A. I. Schafer, S. Beder. Role of the precautionary principle in water recycling. University of Wollongong. 2006. 1.1.

[9] California Department of Finance, Demographic Research Unit. 2009. Table 1. http://www.dof.ca.gov/research/demographic/reports/#projections.

THE EWC RESPONSIBLE EXPORTS PLAN ACTIONS

The main actions included in The Plan are underlined and described below:

1. Reduce Exports To No More Than 3MAF In All Years, In Keeping With SWRCB Flows Criteria.

Numerous scientific and legal investigations have identified Delta export pumping by the state and federal projects as one of the primary causes of the decline of the health of the Delta estuary and its fish. They include the California Fish and Game Commission's 2009 listing of longfin smelt under the Endangered Species Act; the US Fish and Wildlife Service's 2008 Biological Opinion for Delta smelt; the National Marine Service June 4, 2009 Biological Opinion on Central Valley Project (CVP) and State Water Project (SWP) Operations, the State Water Resources Control Board's Bay-Delta Water Quality Control Plan and Water Rights Decision 1641; the CALFED Bay-Delta Program's 2000 Ecosystem Restoration Program Plan; and the Central Valley Project Improvement Act's Anadromous Fish Restoration Program.

The guidelines of the Fish and Wildlife Service's Biological Opinion require reduced pumping in order to minimize reverse flows and the resultant fish kills during times of the year when Delta Smelt are spawning and the young larvae and juveniles are present.

The long-term decline of the Delta smelt coincides with large increases in freshwater exports out of the Delta by the state and federally operated water projects, (Figure 1). CALFED's Ecosystem Restoration Program reminds us that "the more water left in the system (i.e., that which flows through the Delta into Suisun Bay and eventually the ocean), the greater the health of the estuary overall; there is no such thing as 'too much water' for the environment."[10]

The main input to the Delta – the Sacramento River, which provides 70 percent of Delta inflow in average years[11] – does not provide sufficient water for all the present claimants except in wet years, and climate change is expected to decrease flows in the future. The system cannot provide full delivery of water to the most junior CVP and SWP contract holders in most years. Recent court-ordered water export limits that protect endangered fish species, the continuously deteriorating Delta earthen levees and the potential adverse effects of climate change on water supplies combine to make Delta water supply reliability a roll of the dice.

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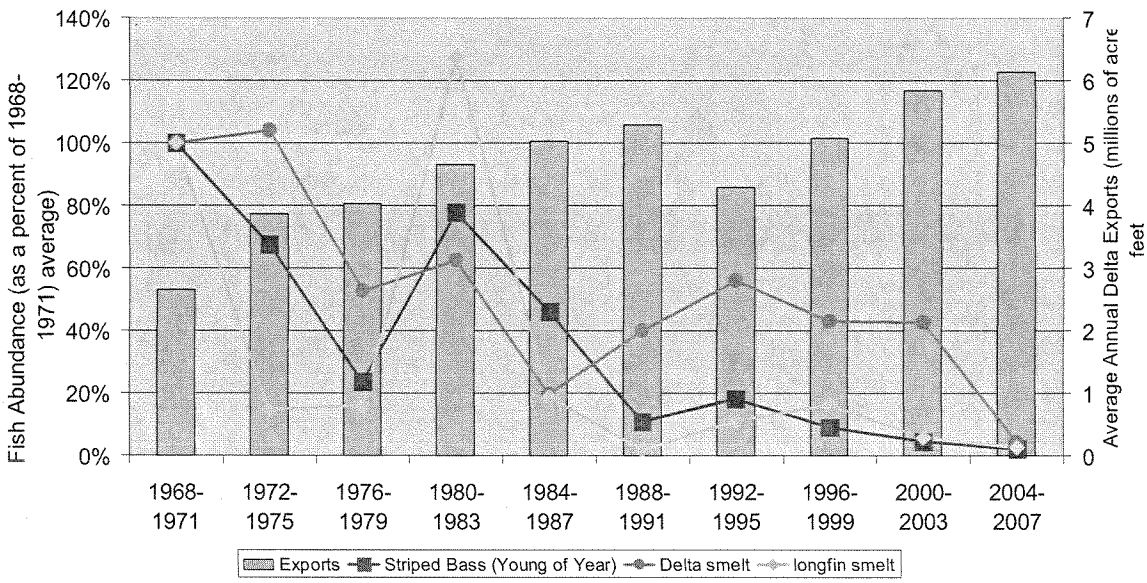
[10] CALFED Ecosystem Restoration Program. 2008. Stage 2 Implementation Draft. P. 23. http://www.delta.dfg.ca.gov/erp/reports_docs.asp

[11] Delta Vision Final Report. 2008. State of California Resources Agency. P. 41. http://deltavision.ca.gov/BlueRibbonTaskForce/FinalVision/Delta_Vision_Final.pdf .

According to the recent National Marine Services Biological Opinion, the proposed actions by the CVP and SWP to increase export levels will exacerbate problems in the Delta.[12] We do not believe that the water exporters' goals of maintaining or increasing Delta exports are attainable; neither are the junior water rights holders' expectations that they should have a full contracted water supply each year, especially in view of the collapse of the Delta's fisheries and the impacts of climate change.

Figure 1

Historic Delta Exports and Estuarine Fish Populations



Source: Environmental Defense Fund.[13] Original source is California Data Exchange Center and California Department of Fish & Game - Midwater Trawl Data

Strategic alternatives to the recent high levels of Delta water exports should now be the highest priority considerations for the state's water planning – especially in tandem with aggressive water use efficiency measures. The two are closely linked.

Over time, annual Delta outflows have been reduced on average by one half,[14] with associated declines in native fish abundance. Export pumping from the Delta is a major cause of reduced outflows, but not the only one. Diversions for CVP contractors upstream of the Delta,

[12] National Marine Fisheries Service, Southwest Region. June 4, 2009. Biological Opinion And Conference Opinion On The Long-Term Operations Of The Central Valley Project And State Water Project. Page 629. http://swr.ucsd.edu/ocap/NMFS_Biological_and_Conference_Opinion_on_the_Long-Term_Operations_of_the_CVP_and_SWP.pdf.

[13] Environmental Defense Fund. 2008. Finding the Balance. P. 3. http://www.edf.org/documents/8093_CA_Finding_Balance_2008.pdf

[14] CALFED Ecosystem Restoration Program. 2008. Stage 2 Implementation Draft. P. 21. http://www.delta.dfg.ca.gov/erp/reports_docs.asp

combined with "non-project" (that is, non-federal, non-state) diversions, account for a significant portion of the reduction in outflow. In fact, 31 percent of upstream water is diverted annually before reaching the Delta.[15] In the 1990s, under the threat of federal intervention, California increased the required outflow to the Bay, but not enough to restore the Delta ecosystem or prevent further declines.

Over the years, a number of processes have identified the need to dramatically improve outflows in order to recover listed species to a sustainable level and restore ecosystems in the Bay-Delta. From 1988, when the State Water Resources Control Board (SWRCB) proposed – but withdrew without public discussion – standards that would have required an average increase in outflow of 1.5 million acre-feet over the lower diversion levels of the period before the late 1980s, to 2009, when the California Legislature adopted a new policy of reducing reliance on the Delta for water supply uses, the need for greater outflow and reduced exports has been acknowledged – but not achieved. In 2010, the State Board is required to develop flow criteria that will fully protect public trust resources in the Delta. In all these years, no information has been developed that would contradict the Board's 1992 draft finding that maximum Delta pumping in wet years should not exceed 2.65 million acre-feet in order to provide the necessary outflows to protect fish and the Bay-Delta ecosystems.[16] The rebuttable presumption, consistent with the evidence of the last two decades and with the new state policy to reduce Delta water supply reliance, is that a total export number of no more than 3 million acre-feet in all water year types is prudent. The EWC organizations believe that a number at or near this level should now be used by the state and federal governments in planning and permitting future Delta export operations – with or without a Peripheral Canal – in order to promote the recovery of the Delta's ecology and its fishery resources and to provide healthy Delta outflows to San Pablo and San Francisco Bays.

The Delta Flows Criteria promulgated by the State Water Resources Control Board (SWRCB) clearly indicates that the state has reached – and exceeded – the amount of water that can responsibly be diverted from the Bay Delta and Estuary. As a result, this plan anticipates future limitations on Delta exports below the level of the 2000-2007 time periods in its plan to meet Delta ecosystem restoration goals. The recent PPIC report reinforces this: "given the extreme environmental degradation of this region, water users must be prepared to take less water from the Delta, at least until endangered fish populations recover."

As indicated in the recent SWRCB report,[17] in order to preserve the attributes of a natural variable system to which native fish species are adapted, many of the criteria developed by the State Water Board are crafted as percentages of natural or unimpaired flows. These criteria include:

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[15] CALFED Ecosystem Restoration Program. 2008. Stage 2 Implementation Draft. P. 20. http://www.delta.dfg.ca.gov/erp/reports_docs.asp

[16] California Department of Fish and Game. 1992. Testimony on the Sacramento-San Joaquin Estuary to SWRCB Hearings on Bay Delta Water Quality Hearings. Page 11.

[17] State Water Resources Control Board and California Environmental Protection Agency. DRAFT Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem. July 2010. Pp. 5.

- 75% of unimpaired Delta outflow from January through June;
- 75% of unimpaired Sacramento River inflow from November through June;
- 60% of unimpaired San Joaquin River inflow from February through June.
-

This compares with the historic flows over the last 18 to 22 years, which have been:

- About 50% on average from April through June for Sacramento River inflows;
- Approximately 30% in drier years to almost 100% of unimpaired flows in wetter years for Delta outflows;
- Approximately 20% in drier years to almost 50% in wetter years for San Joaquin River inflows.

In 2014, the State Board is required to develop flow criteria that will fully protect public trust resources in the Delta and Estuary. In all the years since 1988, no information has been developed that would contradict the Board's 1992 draft finding that maximum Delta pumping in wet years should not exceed 2.65 million acre-feet in order to provide the necessary outflows to protect fish and the Bay-Delta and Estuary ecosystems. The rebuttable presumption, consistent with the evidence of the last two decades and with the new state policy to reduce Delta water supply reliance, is that a total export number of no more than 3 million acre-feet in all water year types, except for drought years, is prudent.

The current approach of managing the Delta for water supply will almost certainly lead to intense pressures to make increased exports the major goal of a Peripheral Canal or tunnel while the health of the Delta and Estuary will be a lower priority. One of the main objectives of this Responsible Exports Plan is to decrease the physical vulnerability and increase the predictability of Delta supplies, not to increase average annual Delta exports. The current fallacy of the BDCP to increase exports while somehow recovering fish species and ecosystems leads directly to a warped scientific program as pointed out by The Bay Institute in their recent Briefing Paper on the BDCP Effects Analysis.[18]

Recent letters from the EPA and the Bureau of Reclamation indicate that the EPA believes that the (BDCP) EIS/EIR will need to include a significant analysis of alternatives reflecting reduced Delta inflow and reduced exports[19] and that a significant increase in exports out of the Delta is inconsistent with recent state legislation (to reduce reliance on the Delta). [20]

Changing the infrastructure will not solve the problem of a shrinking Delta water supply. A vigorous debate is now underway over whether a new isolated conveyance facility to move water around or under the Delta should be constructed – a revised version of the Peripheral Canal. Even those who support a new facility (and dual conveyance) as a solution to improve

[18] The Bay Institute and Defenders of Wildlife. The BDCP Effects Analysis, Briefing Paper. February 2012. http://www.bay.org/assets/BDCP%20EA%20Briefing%20Paper%2022912.pdf

[19] http://www.epa.gov/region9/water/watershed/sfbaydelta/pdf/EPA_Comments_BDCP_3rdNO_051409.pdf

[20] http://www.epa.gov/region9/water/watershed/sfbay-delta/pdf/EpaR9CommentsBdcpPurpStmt6-10-2010.pdf

environmental conditions and water supply reliability, including the Public Policy Institute,[21] the Delta Vision Blue Ribbon Task Force, and some environmental groups, do not believe that constructing this new facility will generate any new water. Whether or not a new conveyance facility is approved and built, the inexorable trend will be for the reliability of north-to-south water transfers through or around the Delta to decline, and for water users who currently rely on Delta exports to seek alternative sources of supply and to increase their conservation and reuse of that supply.

According to the Bay Delta Conservation Plan,[22] the version of the Peripheral Canal now under consideration would have the capacity to export 9,000 to 15,000 cubic feet of water per second (112,000 gallons per second) from a series of three to five massive intake structures on the Sacramento River north of the Delta. This almost exactly matches the existing capacity of the combined state and federal pumps. The current approach of managing the Delta for water supply will almost certainly lead to intense pressures to make increased exports the major goal of a Peripheral Canal while the health of the Delta will be a lower priority.

Reduced dependence on the Delta by south-of-Delta water users would also obviate the need for new conveyance around or under the Delta (a Peripheral Canal or tunnel) and new surface storage reservoirs, avoiding costs of perhaps tens of billions of dollars for taxpayers and the potential for stranded assets resulting from climate change and sea level rise in the Bay-Delta and Estuary. This reorientation will undoubtedly require some south-of-Delta infrastructure enhancements, but not nearly to the magnitude of costs for a Peripheral Canal or tunnels and a new reservoir north of the Delta.

Climate change projections indicate that over the longer term global warming will reduce the total amount of precipitation, including significant reductions in Sacramento River water. There is no indication that this has been factored into present plans, and it is possible that new conveyance for Sacramento River water may become a stranded asset.

Implementation and Funding. Implementation (and funding, if necessary) for the level of reduced exports will depend on the results of the State Water Resources Control Board hearings on Delta flows, which are scheduled to be completed during 2014. Subsequent to those hearings, implementation and funding plans will most likely fall within the purview of the state legislature.

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[21] Public Policy Institute of California. 2008. Comparing Futures for the Sacramento-San Joaquin Delta. P. 123-124. http://www.ppic.org/content/pubs/report/R_708EHR.pdf

[22] Bay Development Conservation Plan. http://www.baydeltaconservationplan.com/CurrentDocumentsLibrary/Chapter_3_Conservation_Strategy_Combined_v2.pdf

2. Expand Statewide Water Efficiency And Demand Reduction Programs Beyond The Current 20/20 Program And Maximize Regional Self-Sufficiency In Accordance With The 2009 Delta Reform Act.

California has developed huge amounts of water for our cities and farms. Urban users consume 8.7 million acre-feet of water, and agriculture uses 34 million acre-feet in a typical year. (An acre-foot of water is the volume of water required to cover one acre of surface area to a depth of one foot, which is 325,900 gallons.) California has 1,400 major reservoirs with a combined storage capacity of 40 million acre-feet, thousands of miles of canals and enormous energy-consuming pumps to move the water around the state.

Despite all this abundance, there are fears of monumental water shortages, amplified by periodic drought conditions and climate change. One-third of water years in California since 1906 are considered "dry or critical" by the California Department of Water Resources; since 1960, dry or critical years have occurred 37 percent of the time, the increased frequency probably reflecting effects of our warming climate.[23] The worst and longest modern droughts have occurred since 1976. Farmers are concerned that they will be driven out of business for lack of water. In response, politicians want to build more major dams and canals to store and move more water at a time when climate change will most likely make less water available. More than 90 percent of our rivers have already been diverted for our use and publicly subsidized farm water has created an insatiable appetite for more. In view of the critical nature of water supply, irrigating water-intensive crops and drainage-impaired lands with huge amounts of water hardly fits a 21st century definition of the "beneficial and reasonable use" criteria called for in state law.

Recommendations made by the Environmental Water Caucus to the Delta Stewardship Council included an aggressive urban water conservation and efficiency program – more aggressive and of longer duration than the 20/20 program – and included both urban and agricultural users as a necessary component for reducing reliance on the Delta and achieving the water supply reliability goals for south-of-Delta users. A more aggressive conservation program also supports the goal of the reduced exports level of this alternative. We intend to continue our advocacy for this type of program with the Delta Stewardship Council.

Overwhelming evidence shows that a suite of aggressive conservation and water efficiency actions will reduce overall demand and provide cost effective increases in available and reliable water supply. These measures will handle California's water needs well into the foreseeable future and will do so at far less financial and environmental cost than constructing more storage dams and reservoirs. This conclusion is reinforced by the current State Water Plan (Bulletin 160-09), by the Bay Institute's "Collateral Damage" report, and by actual experience in urban areas and farms.

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[23] California Data Exchange Center "WSIHIST," Department of Water Resources. http://cdec.water.ca.gov/cgi-progs/iodir/wsihist

Southern California, with its huge urban populations, can provide the major conservation impetus for water savings and demand reduction, as highlighted by the "Where Will We Get the Water?" report produced by the Los Angeles Economic Development Corporation. [24] This report shows a potential savings and demand reduction combination of approximately 1,700,000 million acre feet. These are potential savings that can be achieved through three main measures: urban conservation, recycling, and storm water capture. The potential recycling savings are larger with more investment in recycling facilities and potential future regulations related to outdoor urban usage. Southern California should clearly be the main focus for urban conservation measures.

These water efficiency and water use reduction actions are:

- Urban Water Conservation – including installing low-flow toilets and showerheads, high-efficiency clothes washers, retrofit-on-resale programs, rainwater harvest, weather-based irrigation controllers, reducing water for landscaping via drip and xeriscape, more efficient commercial and industrial cooling equipment, and tiered price structures.[25] According to the 2009 State Water Plan, total urban water demand can be reduced by 2.1 million acre-feet with these measures.[26] The referenced Los Angeles Economic Development Corporation report found that in Los Angeles, Orange, San Bernardino, San Diego, Riverside and Ventura counties, "urban water conservation could have an impact equivalent to adding more than 1 million acre-feet of water to the regional supply" (about 25 percent of current annual use). The same LAEDC report shows that urban conservation is by far the most economical approach, at $210 per acre-foot, and especially compared with new surface storage at $760 to $1,400 per acre-foot.
- Urban Conservation Rate Structures – including the establishment of mandatory rate structures within the Urban Best Management Practices that strongly penalize excessive use and reward low water usage customers with lower rates, with the lowest being a lifeline rate to provide water for low income and low-water-using ratepayers. The savings that result from pricing policies are included in the 2.1 million acre-feet reduction cited above.
- Agricultural Water Conservation – including the continuing trend towards use of drip, micro sprinklers and similar higher technology irrigation, reduced deficit irrigation, transition to less water-intensive crops, reduced overall farmland acreage, elimination of the irrigation of polluted farmland, and tiered price structures. Conservation measures also include the elimination of indirect water subsidies provided to agriculture for Central Valley Project (CVP) water, which will drive some of the efficiencies shown in Figure 1.

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[24] Los Angeles County Economic Development Corporation (LAEDC). 2008. Where Will We Get the Water? Assessing Southern California's Future Water Strategies. P 6. http://www.laedc.org/consulting/projects/2008_SoCalWaterStrategies.pdf.

[25] A detailed treatment of urban water conservation is contained in *Waste Not, Want Not: The Potential for Urban Water Conservation in California*, by the Pacific Institute. http://www.pacinst.org/reports/urban_usage/waste_not_want_not_full_report.pdf.

[26] California Department of Water Resources. Update 2009. California Water Plan Update. Bulletin 160-09. V-2, P3-23. http://www.waterplan.water.ca.gov/docs/cwpu2009/0310final/v2c03_urbwtruse_cwp2009.pdf.

Demand reduction of as much as 5 million acre-feet per year could be achieved by 2030, according to Pacific Institute's *California Water 2030: An Efficient Future* report.[27]

- Recycled Water – including the treatment and reuse of urban wastewater, gray water, and storm water, and achievement of the State Water Resources Board goal of increasing water recycling by at least an additional 2 million acre-feet per year by 2030. The 2009 State Water Plan indicates a figure of 2.25 million acre-feet that could be recovered. The LAEDC report shows recycled water costs $1,000 per acre-foot.
- Groundwater Treatment, Demineralization and Desalination – including the treatment of contaminated groundwater and the use of groundwater desalination. The cost of groundwater desalination ranges from $750 to $1,200 per acre-foot.
- Conjunctive Management – which engages the principles of conjunctive water use (the planned release of surface stored water to recharge groundwater basins), where surface water and groundwater are used in combination to improve water availability and reliability. It also includes important components of groundwater management such as monitoring, evaluation of monitoring data to develop local management objectives, and use of monitoring data to establish and enforce local management policies. Now that the value of maintaining integrated, healthy hydrologic systems for ecological and economic purposes is well known, the use of conjunctive management should give priority to seriously disrupted groundwater basins. Without scientific studies that are needed to support conjunctive water management, or judicial oversight in some cases, many aquifers and surrounding groundwater can be harmed by the biggest users.
- Storm Water Recapture and Reuse – The 2008 Scoping Plan for California's Global Warming Solutions Act of 2006 promotes storm water collection and reuse. The plan finds that up to 333,000 acre-feet of storm water could be captured annually for reuse in urban southern California alone.[28] The LAEDC report also found the potential for "hundreds of thousands of acre-feet" of water from storm water capture and reuse in southern California counties.[29] The Los Angeles and San Gabriel Watershed Council has estimated that if 80 percent of the rainfall that falls on just a quarter of the urban area within the watershed (15 percent of the total watershed) were captured and reused, total runoff would be reduced by about 30 percent. That translates into a new supply of 132,000 acre-feet of water per year or enough to supply 800,000 people for a year.[30]

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[27] Pacific Institute. California Water 2030: An Efficient Future. September 2005. http://www.pacinst.org/reports/california_water_2030/ca_water_2030.pdf

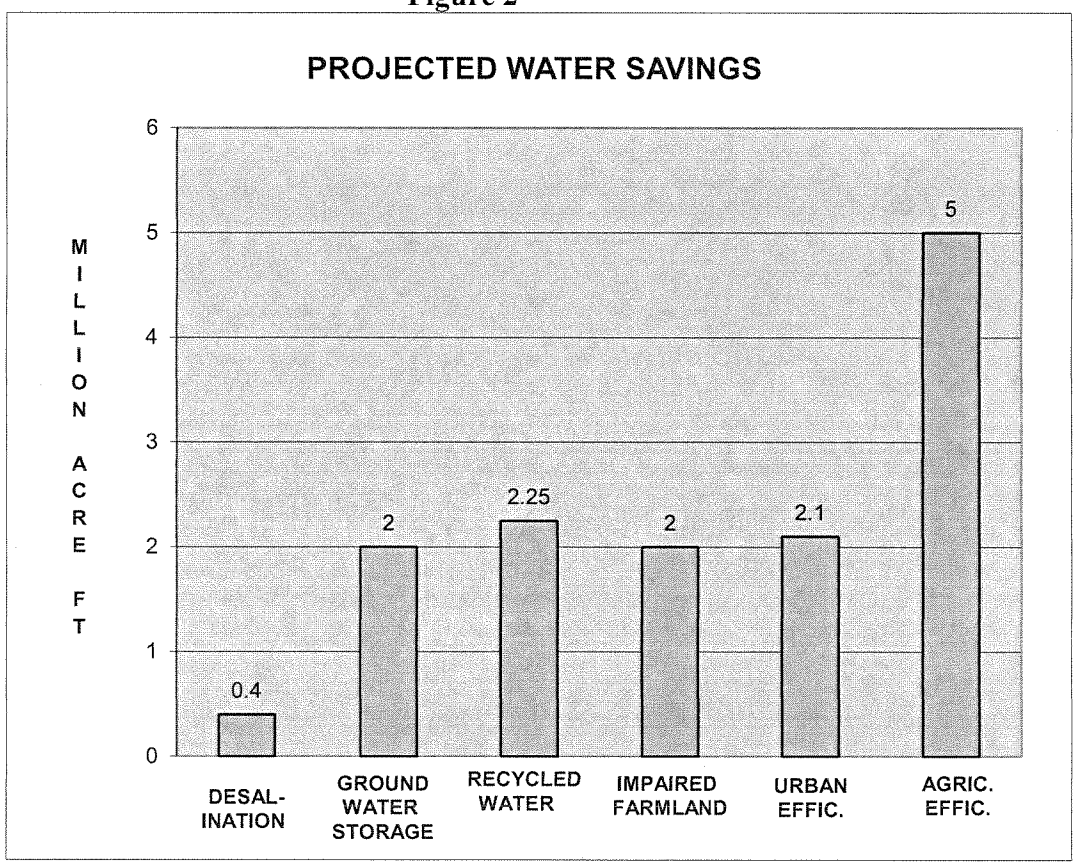
[28] Climate Change Scoping Plan Appendices Volume I. December 2008. Pursuant to AB 32 The California Global Warming Solutions Act of 2006. C-135. http://www.arb.ca.gov/cc/scopingplan/document/appendices_volume1.pdf.

[29] Los Angeles County Economic Development Corporation (LAEDC). 2008. Where Will We Get the Water? Assessing Southern California's Future Water Strategies. P 32-33. http://www.laedc.org/consulting/projects/2008_SoCalWaterStrategies.pdf.

[30] California Department of Water Resources. Update 2005. California Water Plan Update. Bulletin 160-05. P..21-3. http://www.waterplan.water.ca.gov/previous/cwpu2005/index.cfm

Based on data from the State Water Plan (Bulletins 160-05 and 160-09),[31] the Planning and Conservation League (PCL)[32] and the Pacific Institute, [33] the savings that can be achieved from these efficiency scenarios are estimated to be 13 million acre-feet per year (Figure 2). Perhaps the most authoritative report on the subject, the Pacific Institute's *California Water 2030: An Efficient Future* shows that overall statewide water usage can be reduced by 20 percent below 2000 levels – given aggressive efforts to conserve and reduce usage with readily available

Figure 2



technology and no decrease in economic activity. The urban water savings of approximately 5 million acre-feet a year (when including recycled municipal water and part of the groundwater

[31] California Department of Water Resources. Update 2005. California Water Plan Update. Bulletin 160-05. V2 1-5. http://www.waterplan.water.ca.gov/previous/cwpu2005/index.cfm

[32] Planning and Conservation League. 2004. Investment Strategy for California Water. P. 8-11. http://www.pcl.org/projects/investmentstrategy.html

[33] Pacific Institute. 2005. California Water 2030: An Efficient Future. ES-2. http://www.pacinst.org/reports/california_water_2030/ca_water_2030.pdf

storage) shown in Figure 1 is enough water to support a population growth of almost 30,000,000 people. According to the California Water Plan Update 2009, the state's population can be expected to increase by 22,000,000 over the next 40 years if current population trends hold. Clearly, a well-managed future water supply to take us to 2050 is within reach with current supplies and with an aggressive water conservation program.

In order to translate these aggressive efficiency measures into actual demand reductions, we need heightened public awareness of these targets and focused state oversight and coordination of local and statewide actions. Existing success stories from urban communities and on-farm operations reinforce the savings potentials and the need for efficiency-driven policies; they are described in detail in a number of the references cited in this report. The Governor's recent mandate for a 20 percent reduction in per capita urban water use by 2020 is the kind of action that will help this effort, although it may prove insufficient in view of projected population growth. Under the Governor's plan, per capita urban use would be reduced from the current 192 gallons per capita daily to 154 gallons, resulting in an annual savings of 1.74 million acre-feet. The projected water savings shown in Figure 1 are more aggressive than the Governor's plan. A similar mandate should be extended to agriculture, since agriculture uses more than three quarters of the state's developed water supplies. Water savings through efficiency measures can result in direct reductions in the volume of Delta exports since most of the savings would occur in cities and farms south of the Delta. These water savings are necessary to reduce the exports and to restore the stream flows called for in this plan.

The Natural Resources Defense Council's report *Transforming Water Use: A California Water Efficiency Agenda for the 21st Century* cites the state's successes in energy efficiency as a model for water efficiency while noting that the state lags far behind in water efficiency policies, programs, and funding. A key component of the success in energy efficiency has been the development of a priority system called a Loading Order.[34] As applied to water policy, a Loading Order system would require demand reductions through improved water efficiency to be the first priority in addressing water supply, the second priority would be developing alternative sources including water recycling, groundwater clean-up and conjunctive use programs (with priority going to seriously disrupted hydrologic systems or where judicial oversight occurs), and third would be the use of more traditional supply options. A Loading Order approach, if applied to statewide, regional, and local water plans, would shift the emphasis to the more efficient and cost effective approaches advocated in this report. Reducing water use through conservation efficiencies or water recycling also has a favorable impact on energy use, as pointed out by *Energy Down the Drain*, a report produced by the Natural Resources Defense Council and the Pacific Institute.[35] The report makes a strong case for the link between water and energy efficiencies. All of these conservation and efficiency methods are known to produce available water at significantly less cost than constructing new storage dams and reservoirs—the third

[34] Natural Resources Defense Council. 2007. Transforming Water Use: A California Water Efficiency Agenda for the 21st Century. P. 2. www.deltavision.ca.gov/BlueRibbonTaskForce/Feb28_29/Handouts/BRTF_Item_5A_HO2.pdf.

[35] Natural Resources Defense Council and Pacific Institute. 2004. Energy Down the Drain. ES-v. http://www.pacinst.org/reports/energy_and_water/index.htm.

option in the Loading Order. According to the Los Angeles County Economic Development Corporation (LAEDC) report,[36] water produced from the proposed Sites and Temperance Flat Reservoirs would cost $760 to $1,400 per acre-foot, while conserved or recycled water typically costs between $210 and $1,000 per acre-foot. New surface storage is by far the highest cost alternative per acre-foot of water for all the alternatives examined by the Legislative Analysts Office (LAO) report *California Water: An LAO Primer*,[37] while providing less total annual yield than most alternatives. Statewide, the costs of all of these efficiency measures will in all probability not exceed the potential $78 billion price tag for the various Peripheral Canal and new surface storage proposals.[38] For all of these reasons – as well as the historically ecosystem damaging impacts of major dams – EWC member organizations oppose the construction of Sites and Temperance Flat Reservoirs and the raising of Shasta Dam in favor of the more effective efficiency measures described above. Raising Shasta Dam on the Sacramento River would also be illegal because of its impact on the Wild River status of the McCloud River and its damaging impact on Winnemen Wintu sacred areas.

Implementation Considerations. Implementation requires legislative to accomplish the following:

- Establish a statewide oversight unit responsible for the coordination of the level of supply enhancements and demand reductions called for in this report. This measure can be accomplished with little additional cost to the state by utilizing some of the existing DWR staff, supplemented with additional funding to coordinate the water efficiency program targets.
- Pass legislation and provide funding to establish a California water efficiency education and publicity program, similar to other health and safety programs that are sponsored and publicized by the state. The program must ensure the equitable distribution of conservation investments among rural and low income communities.
- Adopt the Natural Resources Defense Council's recommendations to the Delta Vision Commission regarding water efficiency Loading Order. That would include a Loading Order policy through the State Water Control Resources Board, the State Public Utilities Commission and the Legislature that establishes water use efficiency as the top priority as well as a public goods surcharge on every acre-foot of water delivered in California, with the proceeds used to fund or subsidize efficiency programs.

Implementation and Funding for the above actions can come from existing or future bond funds, from Title 16 funding, or through regulatory changes. Additionally, since rate payers will bear the ultimate costs of these and other types of changes, rate payers will have to be given a voice in the choices made. Based on the LAEDC report, estimated costs for a statewide program along

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[36] Los Angeles County Economic Development Corporation (LAEDC). 2008. Where Will We Get the Water? Assessing Southern California's Future Water Strategies. P 32-33. http://www.laedc.org/consulting/projects/2008_SoCalWaterStrategies.pdf.

[37] Legislative Analyst's Office. 2008. California's Water: An LAO Primer. P. 67. http://www.lao.ca.gov/2008/rsrc/water_primer/water_primer_102208.aspx.

[38] Strategic Economic Applications Company. 2009. The Sacramento San Joaquin Delta – 2 0 0 9, An Exploration of Costs, Examination of Assumptions, and Identification of Benefits, Draft.

the lines shown in Figure 2 might range up to $2.7 billion (through 2025), with most of the costs occurring in Southern California urban areas.

3. Provide Public Trust Protections And Thorough Economic And Sociological Analyses Of Reasonable Alternatives To Various Export Levels.

The California Supreme Court, in the Mono Lake decision, explicitly set forth the state's "affirmative duty to take the public trust into account in the planning and allocation of water resources and to protect public trust uses whenever feasible." Planning and allocation of limited and oversubscribed resources imply analysis and balancing of competing demands. So far we find little effort to balance the public trust obligations and resolve competing demands within the current planning processes (BDCP).

One of the significant flaws of previous and unsuccessful Bay-Delta proceedings has been the absence of a comprehensive economic evaluation of the benefits of protecting the estuary and in-Delta beneficial uses compared to the benefits of diverting and exporting water from the estuary. This absence has deprived decision makers and the public of critical information fundamental toreaching informed and difficult decisions on balancing competing demands.

Beyond protecting California's common property right in public trust resources, the balancing of limited water supplies must address the relative economic value of competing interests. For example, what is the societal value in providing Kern County, comprising a fraction of one percent of the state's population and economy, the same quantity of Delta water as the South Coast, with half the state's population and economy? What is the value to society of using public subsidies to irrigate impaired lands to benefit some 600 landowners, and that, by the nature of being irrigated, discharge harmful quantities of toxic waste that impairs other beneficial uses? What is the economic value of using twice the amount of water to irrigate an orchard in the desert than is required elsewhere? What are the costs and benefits of reclamation, reuse, conservation, and development of local sources? The preceding are only examples of the difficult questions that must be addressed in any allocation of limited resources and balancing of the public trust. Economic analysis is crucial to providing the insight and guidance that will enable and Delta plan to meet its mandate. Without such analysis, we do not believe a Delta plan can successfully or legally comply with its legislative and constitutional obligations.

An excellent description of the public trust type of issues caused by the current operations in the Delta and Estuary are contained in the Bay Institute report "Collateral Damage."[39]

Implementation and Funding for a balancing of the public trust values will depend on the results of the State Water Resources Control Board hearings on Delta flows, which are

[39] The Bay Institute. Collateral Damage. March 2012. http://www.bay.org/publications/collateral-damage

scheduled to be completed during 2014. Subsequent to those hearings, implementation and funding plans will most likely fall within the purview of the state legislature.

4. Reinforce Core Levees Above PL84-99 Standards.

This plan accepts and supports the Delta Protection Commission's recommendation in their Economic Sustainability Plan to: "Improve many core Delta Levees beyond the PL 84-99 standard that addresses earthquake and sea-level rise risks, improve flood fighting and emergency response, and allow for vegetation on the water side of levees to improve habitat. Improvement of most core Delta levees to this higher standard would cost between $2 to $4 billion." [40]

There is a plausible public interest in providing public funds to Delta reclamation districts and other Delta interests for levee upgrades since the Delta serves as the water conveyance facility for much of California. Water exporters should be required to identify which levees, if any, ***they want to fund to a higher standard*** (for example more earthquake resistant) to protect their water supply, beyond the current standards. Recommendations should also include assisting Delta counties and communities in meeting FEMA/NFIP programs. The plan should also contain a recommendation to support and increase public funding for permanent continuation of existing and highly successful statutory cost-share formula and funding for Delta (Subventions) Levee
Program. Public safety and flood protection must remain the top priority of the State Plan of Flood Control, including its levees and bypasses. The levees should be vegetated with native species to help stabilize the levees and support endangered species.

Because earthquake risks to the levees are one of the main justifications for a Peripheral Canal or Tunnel in the Delta, and there is evidence that the earthquake risks to the Delta levees may have been exaggerated in previous drafts of the Economic Sustainability Plan, the comparison of costs of the two alternatives ($2 to $4 billion for levee strengthening versus $15-$16 billion for new conveyance) is significant and should be incentive enough to immediately initiate this levee reinforcement program and make catastrophic levee failure a questionable justification for new conveyance.

Implementation and Funding would be in keeping with the Delta Protection Commission's Economic Sustainability Plan, between $2 to $4 billion.

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[40] Draft Executive Summary, Economic Sustainability Plan for the Sacramento-San Joaquin River Delta, March 10, 2011 http://www.delta.ca.gov/res/docs/ESP_ESUM.pdf

5. **Install Improved Fish Screens At Existing Delta Pumps.**

A recent report by Larry Walker Associates indicates that a 1996 report by DWR and DFG concluded that for every salmon salvaged at the fish protection facilities more than three are lost to predators or through fish screens.[41] The same report also indicated that over a 15 year period (1979-1993), 110 million fish were reported to have been salvaged at the Skinner Fish Facility, the fish protection facility at the SWP. In 2000, the CALFED Record of Decision highlighted the need to improve the fish screens at the South Delta pumps. Between 2000 and 2011, more than 130 million fish have been salvaged at the State and Federal Project water export facilities in the South Delta, according to a more recent DFG report.[42] Actual losses are far higher. For example, recent estimates indicate that 5-10 times more fish are lost than are salvaged, largely due to the high predation losses in and around water project facilities.[43] Additionally, the fish screens are unable to physically screen eggs and larval life stages of fish from diversion pumps.[44] The losses of eggs and larval stages of fish, as well as the enormous losses of zooplankton and phytoplankton that comprise the base of the aquatic food chain, go publically unacknowledged and uncounted.

As pointed out in the Walker Associates report, the fish protections at the South Delta pumps, including the fish screens and salvage facilities, remain largely unchanged since they were first engineered more than 40 years ago.[45] Currently only about 11-18% of salmon or steelhead entrained in Clifton Court Forebay survive. Based upon numerous studies by DFG, DWR and academic researchers, 75% of fish entering Clifton Court Forebay are lost to predation, 20-30% of survivors are lost at the salvage facility louvers, 1-12% of salvaged fish are lost during handling and trucking plus an additional 12-32% lost to post-release predation.[46] As related above, losses to other species, such as Delta smelt or the egg and larval stages of pelagic species and salmon fry, are believed to be much higher. For example, some species, like Delta smelt, cannot survive salvage transport, and the losses approach 100%.

According to the draft BDCP Effects Analysis' Summary of Effects of BDCP on Entrainment of Covered Fish Species, South Delta export facilities could potentially increase entrainment of:

- Juvenile steelhead in dry and critical dry years,
- Juvenile Winter-run Chinook salmon in above normal & below normal years,

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[41] Larry Walker Associates. A Review of Delta Fish Population Losses from Pumping Operations in the Sacramento-San Joaquin River Delta. January 2010. http://www.srcsd.com/pdf/dd/fishlosses.pdf. Page

[42] California Department of Fish and Game annual salvage reports for the State Water Project and Central Valley Project's fish facilities, 2000-2011.

[43] Larry Walker Associates. A Review of Delta Fish Population Losses from Pumping Operations in the Sacramento-San Joaquin River Delta. January 2010. P. 2. http://www.srcsd.com/pdf/dd/fishlosses.pdf

[44] DWR. Delta Risk Management Strategy, final Phase 2 Report, Risk Report, Section 15, Building Block 3.3: Install Fish Screens. June 2011. P. 15-18.

[45] Ibid, Larry Walker Associates,

[46] Larry Walker Associates. A Review of Delta Fish Population Losses from Pumping Operations in the Sacramento-San Joaquin River Delta. January 2010. P. 2.

- Juvenile Fall-run Chinook salmon in all below normal & dry years and Fall-run smolts in all years,
- Juvenile late fall-run Chinook salmon in dry and critical dry years,
- Juvenile Longfin smelt in above normal, below normal, and dry years and adults in critical dry years, and
- Juvenile Sacramento splittail in all years.[47]

Because of flow requirements and biological constraints affecting diversions from the Sacramento River, exports from the South Delta pumps will remain a significant percentage of total water exports with BDCP. BDCP currently estimates that 50% of State and Federal Project exports would come from the existing South Delta diversion facilities in average water years and as much as 75-84% in dry and critical water years.[48] In fact, BDCP modeling suggests that exports and fish entrainment from South Delta diversions could potentially increase in certain water year types and for critical life stages of certain species.[49]

The *CALFED Bay-Delta Program Programmatic Record of Decision* and associated Biological Opinions required the construction of new state-of-the-art fish screens at existing South Delta export facilities in 2000.[50] A funding plan was to be completed by early 2003, facilities design completed by the middle of 2004, and operations and performance testing to begin by the middle of 2006.[51] However, the explicit commitment to construct new screens was put on hold in 2003 after the State and Federal Project Contractors indicated that they would not pay for them. New South Delta screens are not included as part of the BDCP. As BDCP will continue to rely on the South Delta pumps for a substantial percentage of project exports, new screens must be required to mitigate for project impacts.

DWR's *Delta Risk Management Strategy (DRMS) Phase 2 Report* found that the South Delta pumping facilities could be successfully screened by multiple in-canal vee-type screens of about 2,500 cfs capacity in each module. These new state-of-the-art South Delta screens, placed

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[47] ICF International. BDCP Effects Analysis, Entrainment, Appendix 5.B, Entrainment, Administrative Draft Bay Delta Conservation Plan. March 2012. PP. B.7-2 – B.7-4.

48 NRDC. A Portfolio-Based BDCP Conceptual Alternative. February 2013. http://switchboard.nrdc.org/blogs/bnelson/Portfolio%20Based%20BDCP%20Conceptual%20Alternative%201-16-13%20V2.pdf

ICF International. BDCP Effects Analysis, Appendix 5.B, Entrainment, Administrative Draft Bay Delta Conservation Plan. March 2012. P. B.0-8. http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/BDCP_Effects_Analysis_-_Appendix_5_B_Entrainment_3-30-2012.sflb.ashx

[49] ICF International. BDCP Effect Analysis, Appendix 5.B, Entrainment, Administrative Draft Bay Delta Conservation Plan. March 2012. PP. B.0-4 – B.0-11.

[50] CalFed. Programmatic Record of Decision. August 2000. P. 49. Including Attachment 6A, U.S. Fish and Wildlife, Programmatic Endangered Species Act Section 7 Biological Opinion, P. 36 and Attachment 6B, National Marine Fisheries Service, Programmatic Endangered Species Act Section 7 Biological Opinion, P. 27. http://www.calwater.ca.gov/content/Documents/ROD.pdf

[51] Larry Walker Associates. A Review of Delta Fish Population Losses from Pumping Operations in the Sacramento-San Joaquin River Delta. January 2010. P. 18.

at the entrance to Clifton Court Forebay, would eliminate the 75% predation in the Forebay and successfully protect fish longer than about 25 mm in length.[52] While new screens would be expensive, still require transport of salvaged fish, not totally resolve debris removal issues or eliminate all fish entrainment, they would dramatically reduce the appalling fish losses that occur at present.[53]

Modernizing the fish screens at the South Delta facilities is an integral part of the EWC's RX Plan in order to reduce fish killing at the pumps. The South Delta pumps will continue to be the primary diversion facilities under this RX Plan.

While experience with the existing fish screens at the South Delta have yielded much data on how to design more effective fish screens, modernizing the fish screening designs and operations would also require hydraulic and physical modeling, dimensional testing of dynamic baffling systems, and consideration of future hydrologic conditions associated with climate change.

The EWC supports the development and implementation of significantly modernized, new fish screening facilities with the best available technology, in keeping with original CALFED plans, and at other existing in-Delta diversions. This would include installation of positive barrier fish screens on all diversions greater than 250 cfs in both the Sacramento and San Joaquin River Basins as well as a significant percentage of smaller and unscreened diversions in these ecosystems.

An alternative possibility is the use of non-physical barriers to deter fish from entering the intake zones of the South Delta pumps. Non-physical barriers include the use of the following methods: electrical barriers; strobe lights; acoustic fish deterrents; bubble currents; velocity barriers; chemical toxicants; pheromones; and magnetic fields. In view of the criticality of recovering fish populations through reduced mortality at the pumps, the feasibility of these types of non-physical barriers should not be overlooked. The Bureau of Reclamation has recorded some research results of the use of non-physical barriers.[54]

Implementation and Funding. Based on unpublished CALFED cost estimates improved fish screen facilities at the Banks Pumps would be more than $1 billion in 2007 dollars; the cost estimate for Tracy would be $290 million.[55]

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[52] DWR. Delta Risk Management Strategy, final Phase 2 Report, Risk Report, Section 15, Building Block 3.3: Install Fish Screens. June 2011. P. 15-18.
http://www.water.ca.gov/floodsafe/fessro/levees/drms/docs/DRMS_Phase2_Report_Section15.pdf

[53] Id. 15.5.2.1 Conclusion at PP. 15-19 & 15-20.

[54] Bureau of Reclamation. Non-Physical Barrier (NPB) for Fish Protection Evaluation: Can an Inexpensive Barrier Be Effective for Threatened Fish? http://www.usbr.gov/research/projects/detail.cfm?id=8740

[55] http://www.water.ca.gov/floodmgmt/dsmo/sab/drmsp/docs/DRMS_Phase2_Report_Section15.pdf

6. Keep Water Transfers Within The Revised Delta Export Limits.

Since the early 1990s, water transfers via market transactions have been used to overcome what some economists and water managers feel is the inflexibility of California water rights priorities—first in time, first in right. Such transfers typically become most visible to the public during drought years, when junior water rights holders like the federal Central Valley Project and the State Water Project face cutbacks as more senior water right holders exert their priority to what water that remains. Junior water rights holders attempt to obtain more surface water supplies by offering to purchase water directly from willing sellers, who are usually holders of senior water rights. With groundwater unregulated in California, these willing sellers are able to make large profits by pumping groundwater to irrigate their crops to substitute for the surface supplies they sold to other users.

This is a recipe for ecological disaster in the Delta and both ecological and economic disaster in the Sacramento Valley. Water transfers are intended to overcome water rights priorities, but they also have the potential to cause falling groundwater elevations, overdraft (pumped supplies outracing the rate of recharge to the aquifer), land subsidence (where the elevation of the land surface actually falls as emptied aquifers collapse and lose storage capacity), and increased stream flow losses (chasing a falling groundwater table). This has been the experience of agricultural regions in the Santa Clara Valley (before it urbanized into Silicon Valley) and the San Joaquin Valley, as well as in urban groundwater basins of the Los Angeles region. These conditions (falling groundwater elevations, overdraft, land subsidence, and stream flow losses) combined to destabilize once healthy hydrologic systems, which created the exploited conditions that make "conjunctive use" water strategies possible. This must not be repeated in the Sacramento Valley.

The State of California during past droughts has operated a "drought water bank" program which arranges the sales of Sacramento Valley region surface water to buyers south of the Delta. Two environmental problems arise from this program: First, the water that is sold must be moved through the Delta to be pumped by the dangerous export pumps of the CVP and SWP. Second, landowners selling their surface water may then pump groundwater to irrigate their crops, which causes groundwater elevations to fall for all users. If these conjunctive use programs continue in the Sacramento Valley, its aquifers are in jeopardy. This Valley's agricultural economy, ecology, and surface waters are highly dependent on its natural groundwater abundance.

No net new water transfers should be exported from north of the Delta beyond those of the most senior water rights of the San Joaquin River Exchange Contractors in the San Joaquin Valley. Their supplies are already imported to the San Joaquin Valley as part of normal export operations of the Central Valley Project from the Delta, and the Exchange Contractors have already begun operating a water transfer program consisting of a maximum of 150,000 acre-feet for sale (about 5 percent of EWC's recommended cap on Delta exports). This policy protects the Delta from new export pumping impacts, but it also protects for the long term the groundwater supplies of the Sacramento Valley. Having such a policy in place is the only way

for the Valley's farmers to avoid having their groundwater usage go the way of the San Joaquin Valley's in the 19th and 20th centuries. There are other senior water rights holders in the San Joaquin River Basin who are also being approached for dry year water supplies, such as San Francisco seeking to purchase water from irrigation districts along the Tuolumne and Stanislaus rivers.

Water transfers through the Sacramento-San Joaquin-San Francisco Delta and Estuary – which include individual water sales transactions, Article 21 State Water Project pumping and the pumping of the Central Valley and the State Water Projects' contracts – play, at times, a significant role in the movement and transfer of water throughout the state and have significant impacts on the ecology of the Estuary. The two latter projects provide the largest percentage of transfers through the Delta while water sales and Article 21 pumping in some years is significant.

A new paradigm is needed in California water policy that would simultaneously reduce the transfer pumping through the Delta to a level that maintains a healthy ecosystem and is consistent with the most senior water rights of the Exchange Contractors while providing more logical and reliable sources of water for south-of-Delta water users. Instead of continuing to export extraordinary amounts of water from the Delta, south-of-Delta water users could obtain significant amounts of water from localized south-of-Delta sources in the San Joaquin Valley region. Such "south-to-south" of Delta trades would avoid the impacts on fish and wildlife species, water quality, ecosystem conditions, flow volumes and directions, and groundwater in the Sacramento Valley that come with excessive Delta export pumping. It would also avoid the groundwater substitution transfers that could ruin the agricultural economy of the Sacramento Valley and the vital streams necessary for already struggling aquatic and terrestrial species. This type of move toward regional self-sufficiency is now state law from passage of the Delta Reform Act of 2009. As of early 2012, however, pending federal legislation would go in the opposite direction and allow more dependence on Delta exports through water sales and "surplus" water pumping.

A more favorable scenario than the present and contemplated heavy north-to-south Delta pumping consists of the following changes in supply orientation:

- San Joaquin Valley water users could be incentivized to voluntarily share resources by providing southern Sierra water to south-of-Delta water users through new interties with existing infrastructure, or by providing for the movement of agricultural water from the east side of the San Joaquin Valley, where water is more abundant, to west side agriculture, where the water supply is more limited. This kind of change can be facilitated with efficiency incentives for east side water users and might result in as much as 500,000 acre-feet of additional water for the west side. Although politically difficult, this is an elegantly simple and effective solution for regional self-dependency for south-of-Delta agriculture users and for all of California. This kind of change would have to consider the required outflows to the Delta Estuary from the San Joaquin River.

- Supplies for the Metropolitan Water District and other south-of- Delta users could be sourced from the natural reservoir that is Tulare Lake by allowing flows from the Kern, Kings, Kaweah, and Tule Rivers to flow into the Tulare basin. This option is being advocated by the San Joaquin Valley Leadership Forum, which has determined that surface storage capacity in the Tulare Lake Basin could be more than 2.5 million acre-feet. This option may require a new Kern-San Joaquin intertie. Reorienting water transfer policies to benefit south-of-Delta water users will require further detailed analysis to confirm its feasibility; however, the potential for these measures to comply with the state requirement to reduce reliance on the Delta to the level recommended above deserves serious consideration.

A Water Transfer Matrix and a set of Water Transfer Principles are included in the referenced EWC report *California Water Solutions Now*.

As called for in the California Water Code, transfers that use State, regional or a local public agency's facilities require that the facility owner determine that the transfers not harm any other legal user of water, not unreasonably affect fish and wildlife, and not unreasonably affect the overall economy of the county from which the water is transferred. Unfortunately, there is no enforcement mechanism except litigation, which is an onerous burden for the public. This is a particular concern in the Sacramento Valley, where existing healthy aquifers could be over drafted by willing sellers in order to supply the same San Joaquin irrigators who caused the existing overdraft conditions in the San Joaquin areas. In addition, the State Water Plan points out that "some stakeholders worry that State laws and oversight of water transfers may not be adequate to protect the environment, third parties, public trust resources, and broader social interests that may be affected by water transfers, ….. and transfers that involve pumping groundwater, crop idling, or crop shifting." The EWC plan would come down on the side of county of origin protections and the "precautionary principle" in order to protect existing healthy groundwater aquifers north of the Delta Estuary.

Implementation and Funding. No estimates available

7. Eliminate Irrigation Water On Drainage-Impaired Farmlands Below The Bay Delta.

Selenium, boron, molybdenum, mercury, arsenic and various other salts and minerals are highly concentrated in the soils of the Delta-Mendota Service Area and the San Luis Units of the CVP, as well as portions in the Kern and Tulare basins served by the SWP. Descriptions of these soils are presented in the 1990 joint federal and state report known as "The Rainbow Report."[56]

[56] U.S. Department of the Interior, California Resources Agency. September 1990. A Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley. P. 2-3. http://www.water.ca.gov/pubs/groundwater/a_management_plan_for_agricultural_subsurface_drainage_and_related_problems_on_the_westside_san_joaquin_valley/rainbowreportintro.pdf

The San Luis Act of 1960 requires a drain system as a condition of approval of the San Luis Unit CVP contracts, which includes the Westlands Water District. Initially, the Bureau of Reclamation planned to build a San Luis Master Drain to the Bay-Delta from these lands, but construction of the drain to the Delta was stopped after 93 miles were completed to the Kesterson Reservoir near Los Banos. The US Geological Survey recently estimated that even if the San Luis Drain were completed, irrigation of the San Luis Unit of the CVP were halted, and 42,500 pounds of selenium a year were discharged into the Delta, it would take 65 to 300 years to eliminate the selenium already built up in valley groundwater.[57]

Since the late 1960s and 1970s, the State Water Project and Central Valley Project have been supplying water to approximately 1.3 million acres of drainage impaired land on the west side of the San Joaquin Valley; this is a clear violation of the State Constitution's prohibition against unreasonable use of the state's water.[58] Eliminating or reducing the irrigation of this land would save up to 2 million acre-feet of water in most years. [59]

Farmers and water districts throughout the Western San Joaquin Valley try to reduce their drainage water. However, retiring these lands from irrigated agriculture remains by far the most cost-effective and reliable method to eliminate harmful drainage discharges to water bodies and aquifers. The Westlands Water District has already retired 100,000 acres; a recent federal report discusses an option to retire 300,000 acres of drainage-impaired lands. [60] Any long-term solution to the west side's drainage problem must be centered on larger-scale land retirement, complemented by selective groundwater pumping, improved irrigation practices, and application of new technologies where appropriate. Any approach that is not founded on land retirement will ultimately continue to store and concentrate selenium and salts in the shallow aquifers, where they may be mobilized by flood events or groundwater transport.

Taking much of these "badlands" out of production would reduce demand for Delta water diversions and significantly improve water quality in the San Joaquin River. A planned program of land retirement and other drainage volume reduction actions should also provide for mitigation for impacts to the farm labor community. Even if irrigation deliveries continue, these lands will ultimately go out of production because of drainage impairment, as pointed out in the federal "Rainbow Report." A far better use of these impaired farmlands would be to provide state or federal incentives for the production of solar energy farms.

Implementation and Funding. No current estimates available.

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[57] Presser, Theresa S. and Samuel N. Luoma. 2007. Forecasting selenium discharges to the San Francisco Bay-Delta Estuary: Ecological effects of a proposed San Luis Drain Extension.The US Geological Survey,Professional Paper 1646. Abstract P. 1. http://pubs.usgs.gov/pp/p1646/

[58] California Constitution. Article 10, Section 2. http://www.leginfo.ca.gov/.const/.article_10.

[59] Pacific Institute. 2008. More with Less: Agricultural Water Conservation and Efficiency in California. P.7. http://www.pacinst.org/reports/more_with_less_delta/index.htm

[60] U.S. Geological Survey. 2008. Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, California

8. Restore Delta Estuary and Riverine Habitats and Integrate FloodplainsWith Rivers.

In keeping with the Legislature which has expressly declared that *permanent protection* of the Delta's natural and scenic resources is the *paramount* concern to present and future residents of the state and nation, habitat restoration projects should be aimed at public lands as a first priority. Habitat restoration projects must consider connectivity between areas to be restored and existing habitat areas needed for the full life cycle of species targeted to benefit from the restoration project. Where feasible, restoration should be accomplished along with levee reinforcement and where possible, restoration projects should emphasize the potential for water quality improvement. Restoration projects should also incorporate input from effected Delta landowners.

Priorities for restoration should include the following areas, since they would meet most of the criteria described above:

- Cache Slough Complex
- Cosumnes River–Mokelumne River Confluence
- Cosumnes River ground water basin depletion
- Lower San Joaquin River Floodplain
- Suisun Marsh
- Yolo Bypass

Although the EWC has not estimated the amount of acreage that would be involved in the priority areas, our priorities would go to the 50,000 acres of public lands, and our estimate would be well below the more than 100,000 acres called for in the BDCP plan. That plan is impractical from the viewpoint of costs and from the opposition it will engender among residents and landowners in the Delta. Any resulting plans would need to heavily involve residents of the Delta, something that has not been accomplished to date.

Floodplains benefit the people and ecology of California in numerous ways. Floodplains are extremely productive ecosystems that support high levels of biodiversity and provide valuable ecosystem services.[61] The floodplain of a river is a relatively level area on both sides of the stream channel that carries excess waters the channel cannot handle at various times. During a flood, the floodplain becomes the additional part of the stream to do the extra work for the stream channel. The floodplain allows flood waters to spread out, thus reducing the flood water's potential energy. As a result, less damage occurs downstream. If the flood plain is not allowed to work properly and the channel is narrowed, dredged, or rip wrapped the stream is forced to handle more of the flow and damage occurs. Channelization and dredging have caused the disappearance of the river's healthy sandbars and islands. Flood plains contain wetlands which function to slow and filter flood water, thus improving water quality. Wetlands also provide habitat for a diversity of wildlife. Floodplains, therefore, are extremely productive ecosystems

[61] Postel, Sandra. Richter, Brian. 2003. Rivers for Life. Island Press. P 20-21. http://islandpress.org/bookstore/details.php?sku=1-55963-444-8.

that support high levels of biodiversity and provide valuable ecosystem services. Studies have shown that healthy floodplains can have an extremely high monetary value due to these ecosystem services, which also include flood attenuation, fisheries habitat, groundwater recharge, water filtration, and recreation.

To function properly, floodplains must, by definition, periodically flood. Floodplains store floodwaters that recharge groundwater supplies, maintain proper instream flows, prevent bed-bank scour, are a source of organic carbon, and support a healthy population of aquatic species essential to both ecosystems and our economy. (See photo.[62]) The extent of functional floodplains in California has been dramatically reduced from historical conditions because levees, dams, flood control projects, and development have reduced or eliminated connectivity between rivers and floodplains. To reverse these losses, numerous agencies and organizations have spent significant resources to restore floodplains while simultaneously minimizing future flood risk.

With climate change, we can expect to have less snowpack, quicker spring snow melts, and increased flood pressures. Establishing natural floodplains connected with our rivers and avoiding development in floodplains will become more critical to community sustainability in the future.

The current restoration plans for the Yolo Bypass, including more frequent use of the Yolo Bypass, and similar conservation actions are encouraged as a part of this plan.

The following actions need to be included with any planned floodplain restoration:

- Where possible, remove or at least set levees back from riverbanks to allow for floodwaters to expand into the floodplain.
- Where it is not possible to remove levees, they should at least be vegetated with native riparian vegetation to provide the maximum achievable ecosystems functions.
- Make the purchase of floodplains or flowage easements a top priority for flood

During an experiment comparing the growth of juvenile Chinook in floodplain and river habitats of the Cosumnes River, fish reared in the floodplain (right) grew faster than those reared in the river (left) T.R. Sommer et al. 2001.

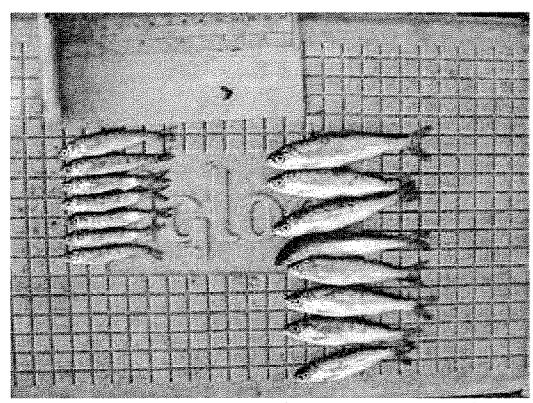

Photo by Jeff Opperman; from Cosumnes River field study by Carson Jeffres

[62] Sommer T.R., Nobriga M. L., Harrell B., Batham W., Kimmerer W. J. 2001. Floodplain rearing of juvenile chinook salmon: evidence of enhanced growth and survival. Canadian Journal of Fisheries and Aquatic Sciences. P. 325-333. http://iep.water.ca.gov/AES/Sommer_et_al_2001.pdf

control agencies and prevent new levees from being constructed and development in floodplains.
- Ensure that low-income communities impacted by floodplain restoration are involved in the development of restoration plans, and that any impacts of restoration are fully mitigated.

Implementation and Funding. Costs might be approximately $1.6 billion, based on half of the comparable restoration costs of BDCP from 2010 documentation.[63]

9. Return The Kern Water Bank To State Control, Restore Article 18 Urban Preference, And Restore The Original Intent Of Article 21 Surplus Water In SWP Contracts.

The Monterey Amendments changed significant provisions of the original State Water Project and, as an unintended consequence, increased pressure for exports from the Delta and increased pumping beyond healthy limits. The changes that caused these conditions were: the elimination of Article 18a, the "Urban Preference;" the elimination of Article 18b, the "Paper Water" safeguard; the change of orientation for Article 21 "surplus water;" and the privatization of the Kern Water Bank.

As a part of this plan, the following changes should be made in order to reduce reliance on the Delta, to assure Public Trust protections for a public resource, and to provide greater reliance for urban water users in the state's largest population centers.

- The "urban preference," that was eliminated as a component of State Water Project contracts due to the Monterey Amendments, must be reinstated. California should return to its original plan of giving priority to the water needs of its bourgeoning population rather than giving farm water equal priority, per the Monterey Amendments changes.
- The contracted amounts of water for CVP and SWP Table A users are unrealistically high and must be brought in line with historic "firm yield" experience, as required in the contracts. The overall water supply reductions forecasted with global climate change adds to the urgency to bring these contracted amounts in line with current realities and for future planning.
- The pumping of "Article 21" (so-called surplus) water is unnecessary and has proven to be damaging to the fisheries and ecology of the estuary, especially the pumping of this "surplus" water in dry years, which should never be permitted. In reviewing the different types of water transfers that can occur throughout the state, some are more logical and favorable from an ecosystem and cost viewpoint, while others are clearly damaging by the same two criteria.
- The Kern Water Bank – initially a public asset – has been inappropriately turned over to private interests as a part of the Monterey Amendments and must be reestablished as a

[63] Highlights of the BDCP, pamphlet published December 2010

state entity under the ownership and operational control of the Department of Water Resources (DWR) for the benefit of all Californians, as it was when DWR purchased the land for the bank in the 1980s. When combined with the reinstatement of the urban preference in the State Water Project, this change would enhance water supply reliability for urban southern California users and would eliminate profiteering from the public's water by private corporate interests.

Implementation and Funding. No cost estimates available.

10. Conduct Feasibility Study For Tulare Basin Water Storage.

Supplies for south-of- Delta users and the Metropolitan Water District could be sourced from the natural reservoir that is Tulare Lake by allowing flows from the Kern, Kings, Kaweah, and Tule Rivers to flow into the Tulare basin. This option is being advocated by the San Joaquin Valley Leadership Forum, which has determined that surface storage capacity in the Tulare Lake Basin could be more than 2.5 million acre-feet.[64] The concept would require bi-directional conveyance with both the Kern Canal and the California Aqueduct.

The restoration of the Tulare Lake basin in the San Joaquin Valley is a unique opportunity to provide for the quality, quantity, and reliable regional sourcing and use of water for agricultural, economic development and environmental needs on a self-sufficiency basis. At one time, Tulare Lake was the largest freshwater body west of the Mississippi River storing up to 25 million acre feet. The concept proposal put forth by the San Joaquin Valley Leadership Forum is based upon technical, financial, and environmental analysis which is superior to the only other storage proposal currently under study within the San Joaquin Valley – known as Temperance Flat on the Upper San Joaquin River above Millerton Lake/Friant Dam. As an example, the restoration of just 10% of the historic Tulare Lake would be nearly twice the surface storage capacity of Temperance Flat – let alone the fact that the Tulare Lake basin provides ground water storage capabilities as well – and Temperance does not. Another important distinction between Temperance Flat versus Tulare Lake is the fact that the Tulare Lake basin can support the collection and management of flood waters from at a minimum of four south Sierra river systems – Kings, Kaweah, Tule, and Kern – as well as the upper San Joaquin. Temperance Flat would only support the flood waters of the upper San Joaquin River.

There is a possibility of ground contaminants in the basin that may be at harmful levels. The feasibility study would need to examine this potential issue closely. California does not need another set of impaired lands similar to what already exists in the west side of the San Joaquin.

Implementation. This proposed concept should be evaluated as part of this "Responsible Exports" plan. The preliminary concept described by the San Joaquin Valley Leadership Forum is estimated to cost $800 million.

[64] San Joaquin Valley Leadership Forum, www.sjvwlf.org

Implementation and Funding. According to the San Joaquin Valley Leadership Forum plan, under $1 billion.

11. Enforce Water Quality Standards In The Estuary And In Impaired Rivers.

California's Porter-Cologne Act of 1969 and the 1972 federal Clean Water Act both were enacted with the goal of restoring the quality of our water resources. These resources have been seriously degraded by over a century of heavy industry and agriculture, the indiscriminate extraction of natural resources, and the continued discharge of inadequately treated sewage. Progress in reversing this degradation has been slow. While upgrades to wastewater treatment and discharge requirements for industrial polluters have improved water quality in many areas, the fact remains that almost 700 reaches of California waterways are still unable to support beneficial uses, including providing potable water supply and supporting ecosystem health.

These problems have contributed to ecosystem crashes in San Joaquin Valley rivers and the Delta, severe groundwater depletion and contamination in the San Joaquin Valley[65] and Central Coast that impacts low-income rural communities, and ocean pollution. Though state and federal laws already give regulators ample powers to improve water quality, this authority has not been exercised sufficiently to protect the health of the state's waterways or its residents. The continuing acceptance of agricultural waivers by Regional Water Quality Control Boards is a major contributor to the state's impaired waterways.

Diverting Sacramento River flows for export without significantly protecting existing groundwater basins and increasing the amount of fresh water flow dedicated to reaching San Francisco Bay, as currently planned for BDCP, will only degrade water quality and habitat conditions and aggravate the negative impact on Delta aquatic and terrestrial species. On the other hand, a future scenario that places less emphasis on the Delta as a water supplier and allows more water to be left instream, can dramatically reduce the environmental and water quality effects of exporting water – whether through or around the Delta. Although increasing flows, as described in this "Responsible Exports" alternative, will improve many aspects of Delta water quality, this plan must continue to pursue specific and targeted water quality actions in order to contribute to restoring the health of the Delta.

Implementation and Funding. Implementation will depend on the results of the State Water Resources Control Board hearings on Delta water quality and flows, which are scheduled to be completed during 2014.

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[65] National Marine Fisheries Service. 2009. Endangered Species Act Section 7 Consultation Biological Opinion Environmental Protection Agency Registration of Pesticides Containing Carbaryl, Carbofuran, and Methomyl. P. 481-483. http://www.epa.gov/espp/litstatus/effects/comments-2nd-draft.pdf.

12. Monitor And Report Statewide Groundwater Usage.

Environmental organizations are generally disappointed with the groundwater monitoring features that were built into the Delta Reform Act of 2009. Earlier drafts of the 2009 legislation required groundwater monitoring and reporting throughout the state, while the final legislation was weakened to make groundwater reporting a voluntary effort. Since groundwater represents 30% of California's water supply in most years, the state must face this politically difficult situation with actions for mandatory groundwater reporting throughout the state.

This action needs to include a discussion of the Water Code's requirement for additional South-of-Delta underground storage, and the ability to meet that requirement through public control and expansion of the Kern Water Bank. The impacts of the additional capacity for Delta exports as provided by a public Kern Water Bank should be considered here. Given its location, size, and relative cost of development compared to surface storage, the Kern Water Bank is a facility which could greatly assist balanced export controls for the Delta and could be the single greatest improvement to overall state-wide water supply reliability. This plan strongly advocates for the return of the Kern Water Bank to state control as a water management conservation measure.

Implementation and Funding. No estimates available.

13. Provide Fish Passage Above And Below Central Valley Rim Dams For Species Of Concern.

Dams have made California a well-watered paradise for most of its human inhabitants. Dams are also killers of river habitats. Although California's vast system of water storage, hydropower and flood control dams has provided enormous economic benefits, it is not without downsides. Dams have been a major factor - in many cases the major factor - in the decline and extinction of numerous fish species, especially anadromous fishes that migrate to and from the ocean and must have access to the more favorable upper reaches of rivers to spawn and rear the next generation[66]. Every salmon and steelhead run in Central Valley rivers is either extinct, endangered, or in decline due to the overall habitat destruction and degradation caused by dams.[67] A 1985 California Department of Fish and Game study has indicated that the economic losses due to the declines of salmon, steelhead and striped bass which spawn in the Central Valley tributaries at $116,000,000 per year.[68]

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[66] National Marine Fisheries Service, Southwest Region. June 4, 2009. Biological Opinion And Conference Opinion On The Long-Term Operations Of The Central Valley Project And State Water Project. Page 660. http://swr.ucsd.edu/ocap/NMFS_Biological_and_Conference_Opinion_on_the_Long-Term_Operations_of_the_CVP_and_SWP.pdf.

[67] Friends of the River. 1999. Rivers Reborn: Removing Dams and Restoring Rivers. P 4-16. http://www.friendsoftheriver.org/site/DocServer/RiversReborn.pdf?docID=224&AddInterest=1004.

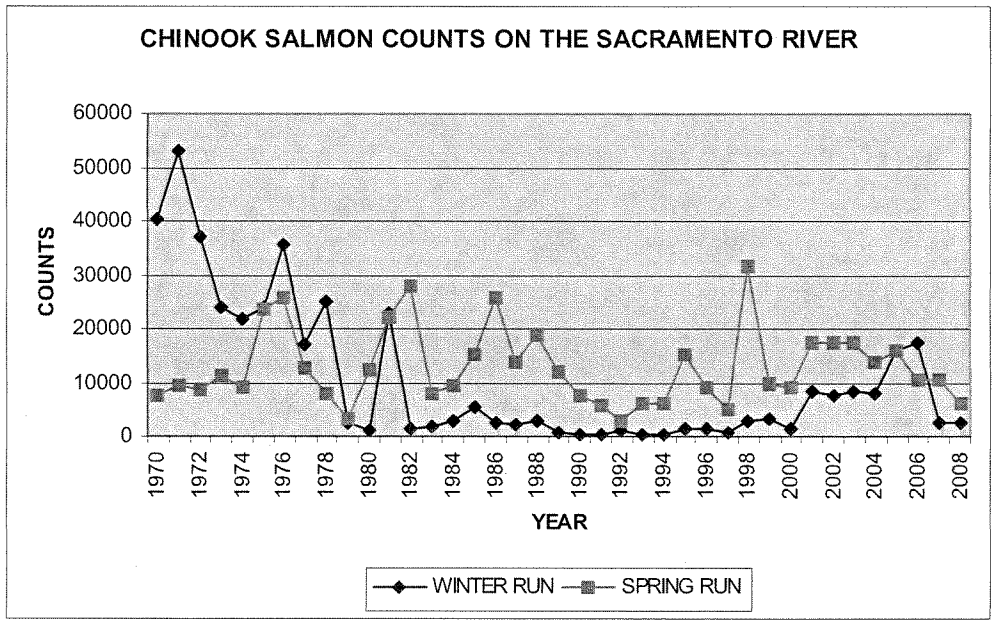
[68] California Department of Fish and Game. 1985. Administrative Report 85-03. http://deltavision.ca.gov/docs/externalvisions/EV8_Allied_Fishing_Group_Vision.pdf

The most serious fishery problem caused by major dams is the blockage of migratory fish passage. Over 95 percent of the historic salmon and steelhead spawning habitat in Central Valley river systems has been eliminated by the construction of large dams on every major river. Fish passage was not a serious consideration in the early part of the last century when most of the major dams were built; there were no Endangered Species Act or National Environmental Policy Act considerations at the time. California Fish and Game Code Section 5937, which mandates that dam operators keep fish in good condition below dams has largely been ignored outside the Mono Basin. The construction of Friant Dam on the San Joaquin River resulted in the extinction of the largest spring-run chinook population in the state. The dam blocked upstream spawning grounds that were known to be the best of the Central Valley rivers. Figure 3 shows the long-term downward trend for Chinook salmon in the Central Valley.

There are numerous solutions available that can provide fish passage around dams. They include construction of fish ladders or upstream fish channels, fish elevators, trap and truck operations, downstream bypasses, removal of smaller fish barriers, and dam removal. All of these techniques have been used at multiple locations with varying success rates. Some of the larger dams on the Columbia River system have been operating fish ladders for many years. While the costs of many of the techniques are substantial, the economics of industries and recreational activities that depend on healthy rivers and fish stocks can justify the investment. The appropriate comparison by which to measure such costs is the sum of agricultural, industrial, and municipal benefits that accrue via the diversion of tens of millions of acre-feet of water annually. Tourism and recreation is now California's largest industry at more than $96 billion annually, and river recreation is a large part of that industry. Recreational fishing generates $1.5 billion annually in retail sales and provides thousands of jobs.[69]

[69] Restore the Delta. April 7, 2009. Press Release. http://archive.constantcontact.com/fs062/1102037578231/archive/1102546423830.html .

Figure 3
Central Valley Chinook Salmon Population[70]



An important aspect of fish passage above dams is the benefits to Native American Tribes in gaining access to historic cultural resources. These would include: the Winnemen Wintu on the Upper Sacramento, McCloud, and Pit Rivers; the Karuk Tribe on the Klamath; and the California Valley Miwok and Maidu on the American and Feather Rivers.

This plan supports, as a conservation measure, the National Marine Fisheries Service Biological Opinion on CVP and SWP operations that recommends fish passage pilot program plans and analysis for dams connected to the Delta, such as the Sacramento, American and Stanislaus rivers. This plan also encourages the State Water Board to direct the controlling agency of each Central Valley rim dam connected to the Delta to study the feasibility of fish passage for each dam that blocks the passage of listed salmonid species, similar to the NMFS Biological Opinion. [71] Costs should be borne by the dam operators since they are the main beneficiaries of the water storage operations.

Implementation and Funding. No estimates available.

[70] California Department of Fish & Game, Native Anadromous Fish & Watershed Branch. GRANDTAB Data Sets. http://www.calfish.org/IndependentDatasets/CDFGFisheriesBranch/tabid/157/Default.aspx

[71] National Marine Fisheries Service, Southwest Region. June 4, 2009. Biological Opinion And Conference Opinion On The Long-Term Operations Of The Central Valley Project And State Water Project. Page 660. http://swr.ucsd.edu/ocap/NMFS_Biological_and_Conference_Opinion_on_the_Long-Term_Operations_of_the_CVP_and_SWP.pdf

14. **Retain Cold Water For Fish In Reservoirs**.

Salmon, steelhead, and trout need cold water for their existence. As California has grown in size, the dams that have been built on virtually every major river have significantly changed both upstream and downstream river flows; high downstream water temperatures are one of the damaging results. Temperatures of 57-67 degrees Fahrenheit (F) are typically ideal for upstream fish migration and 42-56 degrees (F) are ideal for spawning. Water temperatures over 70 degrees (F) can be lethal to anadromous fish but are common on major rivers in the summer. Some fish populations have been able to adapt and carry on spawning and rearing below these major barriers, though in much smaller numbers than previously. Because farms need the most water in the summer, water behind reservoirs is low by the fall when many of the remaining populations of migrating fish return to the rivers. At that point the lack of cold water is a clear threat to their survival. Many of these fish species are now listed under the federal Endangered Species Act (ESA), and maintaining water temperatures suitable for survival has become a critical part of the actions required under the ESA.

This plan supports, as a conservation measure, the NMFS Biological Opinion recommendations for cold water releases on rivers connected to the Delta, such as the Sacramento, American, and Stanislaus rivers, [72] as well as supporting regulations and legislation to retain sufficient water in other major reservoirs to support fish populations in Delta-connected rivers below dams. The latter would include the Trinity River, so long as the current management plan protections for the Trinity are complied with.

Implementation and Funding. No estimates available.

15. **Fund Agencies With User Fees**.

Agencies that benefit from any new or existing conveyance facilities should pay the full cost of the facilities, including mitigation costs.

Costs of fixing the Delta and Estuary that are related to existing and planned water delivery systems, including related costs of environmental mitigation and restoration, should be financed by the agencies that deliver water and ultimately should be passed on to their retail customers.

Cost responsibilities for land acquisition and restoration of river and Delta floodplains should be distributed 75 percent through a broad-based water use fee (applied to all agencies whose supplies are diverted from a river or the Delta watershed.) and 25 percent through public funds.

[72] National Marine Fisheries Service, Southwest Region. June 4, 2009. Biological Opinion And Conference Opinion On The Long-Term Operations Of The Central Valley Project And State Water Project. Pages 590-620. http://swr.ucsd.edu/ocap/NMFS_Biological_and_Conference_Opinion_on_the_Long-Term_Operations_of_the_CVP_and_SWP.pdf.

Agencies that divert water from the Delta should pay their fair share of maintaining and replacing the Delta levees on which they depend and for protecting water conveyance facilities. The share of Delta levee repair costs assigned to these agencies should reflect the extent to which the levee repairs are essential to ensuring uninterrupted diversions.

In developing funding sources, special care should be taken that low income communities not be impacted by new fees and second, that appropriate set-asides be created to ensure that these communities can access funding needed to comply with new regulations and policies.

Implementation and Funding. No estimates available.

IN CONCLUSION

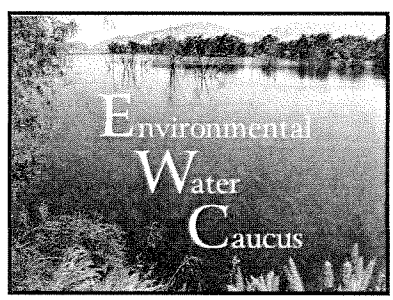
California is at an historic point in the evolution of our water usage. With the onset of global climate change, the natural limits of our water supply have become more obvious and the economics of our solutions are changing drastically. No longer will policy makers be able to advocate for multi-billion dollar bonds that saddle Californians with decades of tax burdens. And no longer will they be able to sell the public on monumental changes to our rivers and bays in the guise of restoring our ecosystems or providing subsidized water to corporate agriculture. The results of decades of those kinds of decisions are now in full view and we know that more effective solutions are available. Intergenerational equity demands better solutions than those of the last century.

Unless we manage our water more efficiently and account for the current and future effects of global climate change, the costs of water to all urban, agricultural, and industrial water users will exceed our ability to provide Californians with reliable, affordable water. The needs of communities of color and the Native American Tribal claims will remain unmet.

The water efficiency and sustainability solutions that are proposed in this report have already proved to be more economical than overtaxing our rivers and bays with more dams and canals. The combination of water efficiency solutions and reduced reliance on the Delta that are recommended in this report obviate the need for increased surface storage and increased conveyance through the Delta. We have shown that water efficiency actions can provide California with the largest increment of future water supply that is currently available to us; the solutions will also provide ample water supplies for population growth, agricultural and industrial growth, and for improving the conditions of our natural landscapes.

The EWC consists of the following member organizations:

AquAlliance
The Bay Institute
Butte Environmental Council
California Coastkeeper Alliance
California Save Our Streams Council
California Sportfishing Protection Alliance
California Striped Bass Association
California Water Impact Network
California Water Research Associates
Citizens Water Watch
Clean Water Action
Desal Response Group
Earth Law Center
Environmental Justice Coalition for Water
Environmental Protection Information Center
Friends of the River
Foothill Conservancy
Food and Water Watch
The Karuk Tribe
Klamath Riverkeeper
Natural Resources Defense Council
Northern California Council Federation of Fly Fishers
Pacific Coast Federation of Fishermen's Associations
Planning and Conservation League
Restore the Delta
Sacramento River Preservation Trust
Save the Bay
Sierra Club California
Sierra Nevada Alliance
Southern California Watershed Alliance
Winnemen Wintu Tribe



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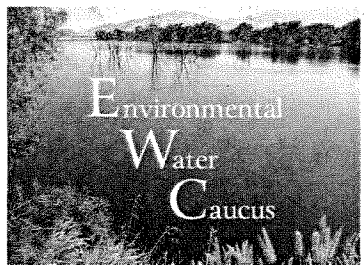

REDUCED EXPORTS PLAN

Developed by the Environmental Water Caucus
December 2012

The following summarizes the main actions supported by the Environmental Water Caucus in relation to the Sacramento-San Joaquin-San Francisco Bay Delta and Estuary. **This plan demonstrates how water supply reliability can be improved while reducing exports from the Bay Delta Estuary.** Many of these recommendations have been presented to the Delta Stewardship Council as part of Alternative 2 for the Delta Plan. We have now packaged this series of related actions into a single alternative for evaluation in any future NEPA or CEQA evaluations, or by the State Water Resources Control Board. The actions are largely based on the EWC report *California Water Solutions Now*, (ewccalifornia.org)_ which can be referenced for supporting details. This package of actions ("The Plan") represents the EWC alternative to the BDCP.

This Plan includes a unique combination of actions that will open the discussion for alternatives to the currently failed policies which continuously attempt to use water as though it were a limitless resource. *The Plan is about far more than just reduced exports*. The uniqueness of this Plan is that while it will reduce the quantity of water exported from the Bay Delta Estuary, in order to protect the health of the Estuary's habitat and fisheries with increased inflows and outflows, it also contains actions that will reduce the demand for water and increase supplies for exporters south of the Delta in order to compensate for the reduced south-of Delta exports. It will also provide increased self-reliance for south-of-Delta water users through inter-regional water transfers and south of Delta water storage, and it will provide increased reliability of the water supplies through the Delta by strengthening Delta conveyance levees beyond current plans. And it will accomplish the legislated goals of Estuary restoration and water reliability for billions of dollars less costs than currently contemplated plans.

In addition to the commonly accepted NEPA and CEQA requirements for any Delta Estuary plan, there are five fundamental criteria that any plan for recovering the health of the Bay Delta Estuary and fish species must successfully meet. Those criteria are:

1. A water availability analysis must be conducted to align water needs with availability.
2. A cost/benefits analysis must be conducted to determine economic desirability of any plan.

3. Public trust and sociological values must be balanced against the value of water exports.
4. Existing water quality regulations must be enforced in order to recover the Estuary.
5. The plan must meet the NCCP *recovery* standard for fish species.

All of the current and past plans for the Delta Estuary have failed, partly because the responsible state and federal authorities have refused to apply or to test their projects with these criteria. The EWC would welcome this Reduced Exports Plan being judged by these pragmatic and acceptable criteria.

PREFACE

There are several overarching issues that run through all our efforts to develop sustainable, effective, and equitable water policies. They are: climate change, periodic drought, environmental justice, the preservation of cultural traditions by Native Americans, the precautionary principle, and population pressures. They are covered in this preface to avoid repetition in each of the individual actions described below.

Climate Change. Climate models indicate that climate change is already affecting our ability to meet all or most of the goals enumerated in this report and must be integrated into the implementation of the recommendations. The main considerations are:

- More precipitation will fall as rain rather than snow and will result in earlier runoff than in the past.[1]
- Less snow will mean that the current springtime melt and runoff will be reduced in volume.
- Overall, average precipitation and river flow are expected to decrease. A recent paper in *Frontiers in Ecology and the Environment* [2] predicts that the average Sacramento River flow will decrease by about 20 percent by the 2050s.
- Precipitation patterns are expected to become more erratic including both prolonged periods of drought and greater risks of flooding.
- Sea level rise will impact flows and operations within the Delta, endanger fragile Delta levees, and increase the salinity concentration of Suisun Bay and the Delta, as well as increase the salinity concentrations of some coastal groundwater aquifers.

These changing conditions could affect all aspects of water resource management, including design and operational assumptions about resource supplies, system demands, performance requirements, and operational constraints. To address these challenges, we must enhance the resiliency of natural systems and improve the reliability and flexibility of the water management systems. Specific recommendations are proposed as part of this document.

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[1] National Wildlife Federation and the Planning and Conservation League Foundation. On the Edge: Protecting California's Fish and Waterfowl from Global Warming. 10-11. www.pcl.org/projects/globalwarming.html.

[2] Margaret A Palmer, Catherine A Reidy Liermann, Christer Nilsson, Martina Flörke, Joseph Alcamo, P Sam Lake, Nick Bond (2008) Climate change and the world's river basins: anticipating management options. Frontiers in Ecology and the Environment: Vol. 6, No. 2, pp. 81-89.

Periodic Drought. Drought is a consistent and recurrent part of California's climate. Multiple-year droughts have occurred three times during the last four decades.[3] In creating a statewide drought water "bank," there is a clear need for a long-term version of a drought water bank. California's experience of multiple-year droughts should force state and local water and land use authorities to recognize the recurrence of drought periods and to put more effective uses of water in place permanently. The Governor's current policy on water conservation[4] should be mandatory for all water districts and become a permanent part of water policy, rather than a response to current dry conditions. Only by educating the public, recognizing limits, and learning to use the water we do have more efficiently can Californians expect to handle future drought conditions reasonably.

Environmental Justice. It is imperative that water policies and practices are designed to avoid compounding existing or creating new disproportionately adverse effects on low income Californians and communities of color. Conversely, water policies and practices must anticipate and prepare for anticipated disproportionately adverse effects and to provide equitable benefits to these communities, particularly those afflicted by persistent poverty and which have been neglected historically. For example, water moving south through the California Aqueduct and the Delta Mendota Canal flow past small valley towns that lack adequate or healthy water supplies. We know that under conditions of climate change and drought, catastrophic environmental changes will occur in California. Environmental justice requires that water policies and practices designed to account for climate change and drought include a special focus on preventing catastrophic environmental or economic impacts on environmental justice communities. Other, specific environmental justice water issues include:

- Access to safe, affordable water for basic human needs.
- Access to sufficient wastewater infrastructure that protects water quality and prevents overflows and other public health threats.
- Restoration of water quality so that environmental justice communities can safely feed their families the fish they catch in local waters to supplement their families' diets.
- Equitable access to water resources for recreation.
- Equitable access to statewide planning and funding to ensure that in addition to safe affordable water, and wastewater services, environmental justice communities benefit equitably from improved conservation, water recycling and other future water innovations that improve efficiency and water quality.
- Mitigation of negative impacts from the inevitable reallocation of a portion of the water currently used in agriculture – the state's biggest water use sector – to water for cities and the environment. Reallocation will reduce irrigated acreage, the number of farm-related jobs, and local tax revenues.
- Mitigation of third party impacts, including impacts on farm workers, associated with land conversion.
- Ideally, mitigation will be based on a comprehensive plan to transition local rural economies to new industries such as solar farms and other clean energy business models

[3] California Drought Update. May 29, 2009. P.5. http://www.water.ca.gov/drought/docs/drought_update.pdf.

[4] 20x2020 Water Conservation Plan DRAFT, April 30, 2009. Executive Summary. http://www.swrcb.ca.gov/water_issues/hot_topics/20x2020/index.shtml.

and provide the necessary job training and policies necessary to enable environmental justice community members to achieve the transition.

- Protection from the impacts of floods and levee breaks, including provisions for emergency and long-term assistance to renters displaced by floodwaters.

Native American Traditions. Many of California's Historical Tribes have a deep and intrinsic relationship with California's rivers, lakes, streams and springs. This relationship goes to the very core of their origin, cultural, and spiritual beliefs. Many of the Tribes consider the fish that reside in these waters as gifts from their creator, and the fish are necessary to the continued survival of their people and their cultural and spiritual beliefs. Historically, California's water policy has failed to recognize the importance of the needs of one of its greatest natural and cultural resources - its Historical Tribes - and has only sought to manage water for economic gain. California water policies and practices must change to provide sufficient water to support fisheries and their habitats for both cultural and economic sustainability, and provide for the restoration of and access to those fisheries for its Native Peoples.

The Precautionary Principle. The Precautionary Principle states that: "Where there is scientific evidence that serious harm might result from a proposed action but there is no certainty that it will, the precautionary principle requires that in such situations action be taken to avoid or mitigate the potential harm, even *before* there is scientific proof that it will occur."[5] Numerous actions recommended in this report fit that criteria and the precautionary principle is therefore implicit throughout the report recommendations.

Population Pressures. California's human population is expected to continue to increase from the current population of more than 37 million to 49 million by 2030 and 59 million by 2050.[6] In 2008, 75 percent of the population growth came from natural growth (births) and 25 percent came from immigration, both foreign and interstate. In each of the data sources utilized in this report, population increases have been factored into the conclusions, unless otherwise noted.

THE EWC REDUCED EXPORTS PLAN ACTIONS

The main actions included in The Plan are underlined and described below:

1. Reduce Exports To No More Than 3MAF In All Years, In Keeping With SWRCB Flows Criteria.

The Delta Flows Criteria promulgated by the State Water Resources Control Board (SWRCB) clearly indicates that the state has reached – and exceeded – the amount of water that can responsibly be diverted from the Bay Delta and Estuary. As a result, this plan anticipates future limitations on Delta exports below the level of the 2000-2007 time periods in its plan to meet Delta ecosystem restoration goals. The recent PPIC report reinforces this: "given the extreme

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[5] A. I. Schafer, S. Beder. Role of the precautionary principle in water recycling. University of Wollongong. 2006. 1.1.

[6] California Department of Finance, Demographic Research Unit. 2009. Table 1. http://www.dof.ca.gov/research/demographic/reports/#projections.

environmental degradation of this region, water users must be prepared to take less water from the Delta, at least until endangered fish populations recover."

Over the years, a number of processes have identified the need to dramatically improve outflows in order to recover listed species to a sustainable level and restore ecosystems in the Bay-Delta and Estuary. During the last three decades both the SWRCB and the state legislature have recognized and acknowledged the need for greater outflow and reduced exports, which have not been achieved. That recognition started in 1988 with the SWRCB's proposed standards that would have required an average increase in outflow of 1.5 million acre-feet over the lower diversion levels of the period before the late 1980's; that proposal was withdrawn without public comment. Similarly, as recently as 2009 the California legislature adopted a new policy of reducing reliance on the Delta for water supply uses.

As indicated in the recent SWRCB report,[7] in order to preserve the attributes of a natural variable system to which native fish species are adapted, many of the criteria developed by the State Water Board are crafted as percentages of natural or unimpaired flows. These criteria include:

- 75% of unimpaired Delta outflow from January through June;
- 75% of unimpaired Sacramento River inflow from November through June, compared with
- 60% of unimpaired San Joaquin River inflow from February through June.

This compares with the historic flows over the last 18 to 22 years, which have been:

- About 50% on average from April through June for Sacramento River inflows;
- Approximately 30% in drier years to almost 100% of unimpaired flows in wetter years for Delta outflows;
- Approximately 20% in drier years to almost 50% in wetter years for San Joaquin River inflows.

In 2014, the State Board is required to develop flow criteria that will fully protect public trust resources in the Delta and Estuary. In all the years since 1988, no information has been developed that would contradict the Board's 1992 draft finding that maximum Delta pumping in wet years should not exceed 2.65 million acre-feet in order to provide the necessary outflows to protect fish and the Bay-Delta and Estuary ecosystems. The rebuttable presumption, consistent with the evidence of the last two decades and with the new state policy to reduce Delta water supply reliance, is that a total export number of no more than 3 million acre-feet in all water year types, except for drought years, is prudent.

The current approach of managing the Delta for water supply will almost certainly lead to intense pressures to make increased exports the major goal of a Peripheral Canal or tunnel while the health of the Delta and Estuary will be a lower priority. One of the main objectives of this Reduced Exports Plan is to decrease the physical vulnerability and increase the predictability of Delta supplies, not to increase average annual Delta exports. The current fallacy of the BDCP to increase exports while somehow recovering fish species and ecosystems leads directly to a

[7] State Water Resources Control Board and California Environmental Protection Agency. DRAFT Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem. July 2010. Pp. 5.

warped scientific program as pointed out by The Bay Institute in their recent Briefing Paper on the BDCP Effects Analysis.[8]

Recent letters from the EPA and the Bureau of Reclamation indicate that the EPA believes that the (BDCP) EIS/EIR will need to include a significant analysis of alternatives reflecting reduced Delta inflow and reduced exports[9] and that a significant increase in exports out of the Delta is inconsistent with recent state legislation (to reduce reliance on the Delta). [10]

Reduced dependence on the Delta by south-of-Delta water users would also obviate the need for new conveyance around or through the Delta (a Peripheral Canal or tunnel) and new surface storage reservoirs, avoiding costs of perhaps tens of billions of dollars for taxpayers and the potential for stranded assets resulting from climate change and sea level rise in the Bay-Delta and Estuary. This reorientation will undoubtedly require some south-of-Delta infrastructure enhancements, but not nearly to the magnitude of costs for a Peripheral Canal or Tunnels and a new reservoir north of the Delta.

Climate change projections indicate that over the longer term global warming will reduce the total amount of precipitation, including significant reductions in Sacramento River water. There is no indication that this has been factored into present plans, and it is possible that new conveyance for Sacramento River water may become a stranded asset.

Implementation and Funding. Implementation (and funding, if necessary) for the level of reduced exports will depend on the results of the State Water Resources Control Board hearings on Delta flows, which are scheduled to be completed during 2014. Subsequent to those hearings, implementation and funding plans will most likely fall within the purview of the state legislature.

2. Expand Statewide Water Efficiency And Demand Reduction Programs Beyond The Current 20/20 Program And Maximize Regional Self-Sufficiency In Accordance With The 2009 Delta Reform Act.

Recommendations to the Delta Stewardship Council included an aggressive urban water conservation and efficiency program – more aggressive and of longer duration than the 20/20 program – and included both urban and agricultural users as a necessary component for reducing reliance on the Delta and achieving the water supply reliability goals for south-of-Delta users. A more aggressive conservation program also supports the goal of the reduced exports level of this alternative. We intend to continue our advocacy for this type of program with the Delta Stewardship Council.

Overwhelming evidence shows that a suite of aggressive conservation and water efficiency actions will reduce overall demand and provide cost effective increases in available and reliable water supply. These measures will handle California's water needs well into the foreseeable

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[8] The Bay Institute and Defenders of Wildlife. The BDCP Effects Analysis, Briefing Paper. February 2012. http://www.bay.org/assets/BDCP%20EA%20Briefing%20Paper%2022912.pdf

[9] http://www.epa.gov/region9/water/watershed/sfbaydelta/pdf/EPA_Comments_BDCP_3rdNO_051409.pdf

[10] http://www.epa.gov/region9/water/watershed/sfbay-delta/pdf/EpaR9CommentsBdcpPurpStmt6-10-2010.pdf

future and will do so at far less financial and environmental cost than constructing more storage dams and reservoirs. This conclusion is reinforced by the current State Water Plan (Bulletin 160-09), by the Bay Institute's "Collateral Damage" report, and by actual experience in urban areas and farms.

These water efficiency and water use reduction actions are:

- Urban Water Conservation – including installing low-flow toilets and showerheads, high-efficiency clothes washers, retrofit-on-resale programs, rainwater harvest, weather-based irrigation controllers, reducing water for landscaping via drip and xeriscape, more efficient commercial and industrial cooling equipment, and tiered price structures.[11] According to the 2009 State Water Plan, total urban water demand can be reduced by 2.1 million acre-feet with these measures.[12] A Los Angeles Economic Development Corporation report found that in Los Angeles, Orange, San Bernardino, San Diego, Riverside and Ventura counties, "urban water conservation could have an impact equivalent to adding more than 1 million acre-feet of water to the regional supply" (about 25 percent of current annual use).[13] The same LAEDC report shows that urban conservation is by far the most economical approach, at $210 per acre-foot, and especially compared with new surface storage at $760 to $1,400 per acre-foot.
- Urban Conservation Rate Structures – including the establishment of mandatory rate structures within the Urban Best Management Practices that strongly penalize excessive use and reward low water usage customers with lower rates, with the lowest being a lifeline rate to provide water for low income and low-water-using ratepayers. The savings that result from pricing policies are included in the 2.1 million acre-feet reduction cited above.
- Agricultural Water Conservation – including the continuing trend towards use of drip, micro sprinklers and similar higher technology irrigation, reduced deficit irrigation, transition to less water-intensive crops, reduced overall farmland acreage, elimination of the irrigation of polluted farmland, and tiered price structures. Conservation measures also include the elimination of indirect water subsidies provided to agriculture for Central Valley Project (CVP) water, which will drive some of the efficiencies shown in Figure 1. Demand reduction of as much as 5 million acre-feet per year could be achieved by 2030, according to Pacific Institute's *California Water 2030: An Efficient Future* report.[14]
- Recycled Water – including the treatment and reuse of urban wastewater, gray water, and storm water, and achievement of the State Water Resources Board goal of increasing water recycling by at least an additional 2 million acre-feet per year by 2030. The 2009 State Water Plan indicates a figure of 2.25 million acre-feet that could be recovered. The LAEDC report shows recycled water costs $1,000 per acre-foot.

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[11] A detailed treatment of urban water conservation is contained in *Waste Not, Want Not: The Potential for Urban Water Conservation in California*, by the Pacific Institute. http://www.pacinst.org/reports/urban_usage/waste_not_want_not_full_report.pdf.

[12] California Department of Water Resources. Update 2009. California Water Plan Update. Bulletin 160-09. V-2, P3-23. http://www.waterplan.water.ca.gov/docs/cwpu2009/0310final/v2c03_urbwtruse_cwp2009.pdf.

[13] Los Angeles County Economic Development Corporation (LAEDC). 2008. Where Will We Get the Water? Assessing Southern California's Future Water Strategies. P 6. http://www.laedc.org/consulting/projects/2008_SoCalWaterStrategies.pdf.

[14] Pacific Institute. California Water 2030: An Efficient Future. September 2005. http://www.pacinst.org/reports/california_water_2030/ca_water_2030.pdf

- Groundwater Treatment, Demineralization and Desalination – including the treatment of contaminated groundwater and the use of groundwater desalination. The cost of groundwater desalination ranges from $750 to $1,200 per acre-foot.
- Conjunctive Management – which engages the principles of conjunctive water use (the planned release of surface stored water to recharge groundwater basins), where surface water and groundwater are used in combination to improve water availability and reliability. It also includes important components of groundwater management such as monitoring, evaluation of monitoring data to develop local management objectives, and use of monitoring data to establish and enforce local management policies. Without scientific studies that are needed to support conjunctive water management many aquifers and surrounding groundwater can be harmed by the biggest users. While conjunctive management does not reduce water demand, it does reduce the need for costly new surface storage.
- Storm Water Recapture and Reuse – The 2008 Scoping Plan for California's Global Warming Solutions Act of 2006 promotes storm water collection and reuse. The plan finds that up to 333,000 acre-feet of storm water could be captured annually for reuse in urban southern California alone.[15] The LAEDC report also found the potential for "hundreds of thousands of acre-feet" of water from storm water capture and reuse in southern California counties.[16] The Los Angeles and San Gabriel Watershed Council has estimated that if 80 percent of the rainfall that falls on just a quarter of the urban area within the watershed (15 percent of the total watershed) were captured and reused, total runoff would be reduced by about 30 percent. That translates into a new supply of 132,000 acre-feet of water per year or enough to supply 800,000 people for a year.[17]

Based on data from the State Water Plan (Bulletins 160-05 and 160-09),[18] the Planning and Conservation League (PCL)[19] and the Pacific Institute, [20] the savings that can be achieved from these efficiency scenarios are estimated to be 13 million acre-feet per year (Figure 1). Perhaps the most authoritative report on the subject, the Pacific Institute's *California Water 2030: An Efficient Future* shows that overall statewide water usage can be reduced by 20 percent below 2000 levels – given aggressive efforts to conserve and reduce usage with readily available technology and no decrease in economic activity. The urban water savings of approximately 5 million acre-feet a year (when including recycled municipal water and part of the groundwater storage) shown in Figure 1 is enough water to support a population growth of almost 30,000,000 people. According to the California Water Plan Update 2009, the state's population can be

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15 Climate Change Scoping Plan Appendices Volume I. December 2008. Pursuant to AB 32 The California Global Warming Solutions Act of 2006. C-135.
http://www.arb.ca.gov/cc/scopingplan/document/appendices_volume1.pdf.

16 Los Angeles County Economic Development Corporation (LAEDC). 2008. Where Will We Get the Water? Assessing Southern California's Future Water Strategies. P 32-33.
http://www.laedc.org/consulting/projects/2008_SoCalWaterStrategies.pdf.

17 California Department of Water Resources. Update 2005. California Water Plan Update. Bulletin 160-05. P..21-3.
http://www.waterplan.water.ca.gov/previous/cwpu2005/index.cfm

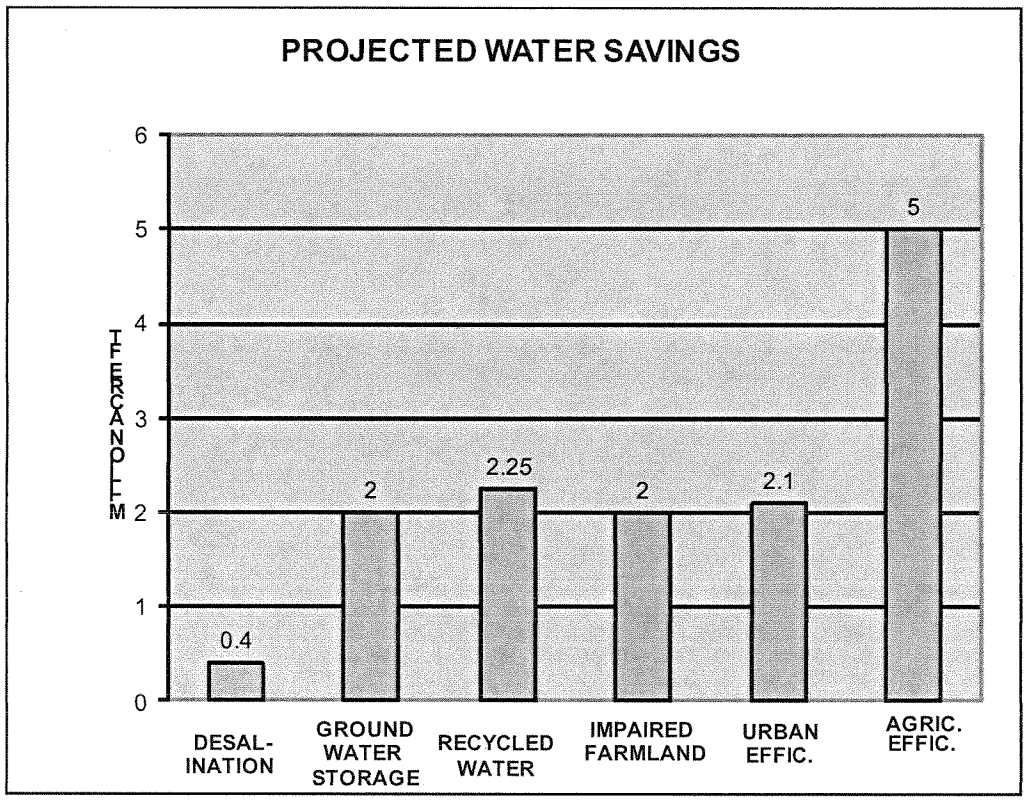
18 California Department of Water Resources. Update 2005. California Water Plan Update. Bulletin 160-05. V2 1-5.
http://www.waterplan.water.ca.gov/previous/cwpu2005/index.cfm

19 Planning and Conservation League. 2004. Investment Strategy for California Water. P. 8-11.
http://www.pcl.org/projects/investmentstrategy.html

20 Pacific Institute. 2005. California Water 2030: An Efficient Future. ES-2.
http://www.pacinst.org/reports/california_water_2030/ca_water_2030.pdf

expected to increase by 22,000,000 over the next 40 years if current population trends hold. Clearly, a well-managed future water supply to take us to 2050 is within reach with current supplies and with an aggressive water conservation program.

Figure 1



In order to translate these aggressive efficiency measures into actual demand reductions, we need heightened public awareness of these targets and focused state oversight and coordination of local and statewide actions. Existing success stories from urban communities and on-farm operations reinforce the savings potentials and the need for efficiency-driven policies; they are described in detail in a number of the references cited in this report. The Governor's recent mandate for a 20 percent reduction in per capita urban water use by 2020 is the kind of action that will help this effort, although it may prove insufficient in view of projected population growth. Under the Governor's plan, per capita urban use would be reduced from the current 192 gallons per capita daily to 154 gallons, resulting in an annual savings of 1.74 million acre-feet. The projected water savings shown in Figure 1 are more aggressive than the Governor's plan. A similar mandate should be extended to agriculture, since agriculture uses more than three quarters of the state's developed water supplies. Water savings through efficiency measures can result in direct reductions in the volume of Delta exports since most of the savings would occur in cities and farms south of the Delta. These water savings are necessary to reduce the exports and to restore the stream flows called for in this plan.

The Natural Resources Defense Council's report *Transforming Water Use: A California Water Efficiency Agenda for the 21st Century* cites the state's successes in energy efficiency as a model for water efficiency while noting that the state lags far behind in water efficiency policies, programs, and funding. A key component of the success in energy efficiency has been the development of a priority system called a Loading Order.[21] As applied to water policy, a Loading Order system would require demand reductions through improved water efficiency to be the first priority in addressing water supply, the second priority would be developing alternative sources including water recycling, groundwater clean-up and conjunctive use programs, and third would be the use of more traditional supply options. A Loading Order approach, if applied to statewide, regional, and local water plans, would shift the emphasis to the more efficient and cost effective approaches advocated in this report. Reducing water use through conservation efficiencies or water recycling also has a favorable impact on energy use, as pointed out by *Energy Down the Drain*, a report produced by the Natural Resources Defense Council and the Pacific Institute.[22] The report makes a strong case for the link between water and energy efficiencies. All of these conservation and efficiency methods are known to produce available water at significantly less cost than constructing new storage dams and reservoirs—the third option in the Loading Order. According to the Los Angeles County Economic Development Corporation (LAEDC) report,[23] water produced from the proposed Sites and Temperance Flat Reservoirs would cost $760 to $1,400 per acre-foot, while conserved or recycled water typically costs between $210 and $1,000 per acre-foot. New surface storage is by far the highest cost alternative per acre-foot of water for all the alternatives examined by the Legislative Analysts Office (LAO) report *California Water: An LAO Primer*,[24] while providing less total annual yield than most alternatives. Statewide, the costs of all of these efficiency measures will in all probability not exceed the potential $78 billion price tag for the various Peripheral Canal and new surface storage proposals.[25] For all of these reasons – as well as the historically ecosystem damaging impacts of major dams – EWC member organizations oppose the construction of Sites and Temperance Flat Reservoirs and the raising of Shasta Dam in favor of the more effective efficiency measures described above. Raising Shasta Dam on the Sacramento River would also be illegal because of its impact on the Wild River status of the McCloud River and its damaging impact on Winnemen Wintu sacred areas.

Implementation and Funding. Implementation requires legislative to accomplish the following:

- Establish a statewide oversight unit responsible for the coordination of the level of supply enhancements and demand reductions called for in this report. This measure can be accomplished with little additional cost to the state by utilizing some of the existing DWR staff, supplemented with additional funding to coordinate the water efficiency program targets.

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21 Natural Resources Defense Council. 2007. Transforming Water Use: A California Water Efficiency Agenda for the 21st Century. P. 2. www.deltavision.ca.gov/BlueRibbonTaskForce/Feb28_29/Handouts/BRTF_Item_5A_HO2.pdf.

22 Natural Resources Defense Council and Pacific Institute. 2004. Energy Down the Drain. ES-v. http://www.pacinst.org/reports/energy_and_water/index.htm.

23 Los Angeles County Economic Development Corporation (LAEDC). 2008. Where Will We Get the Water? Assessing Southern California's Future Water Strategies. P 32-33. http://www.laedc.org/consulting/projects/2008_SoCalWaterStrategies.pdf.

24 Legislative Analyst's Office. 2008. California's Water: An LAO Primer. P. 67. http://www.lao.ca.gov/2008/rsrc/water_primer/water_primer_102208.aspx.

25 Strategic Economic Applications Company. 2009. The Sacramento San Joaquin Delta – 2 0 0 9, An Exploration of Costs, Examination of Assumptions, and Identification of Benefits, Draft.

- Pass legislation and provide funding to establish a California water efficiency education and publicity program, similar to other health and safety programs that are sponsored and publicized by the state. The program must ensure the equitable distribution of conservation investments among rural and low income communities.
- Adopt the Natural Resources Defense Council's recommendations to the Delta Vision Commission regarding water efficiency Loading Order. That would include a Loading Order policy through the State Water Control Resources Board, the State Public Utilities Commission and the Legislature that establishes water use efficiency as the top priority as well as a public goods surcharge on every acre-foot of water delivered in California, with the proceeds used to fund or subsidize efficiency programs.

Funding for the above actions can come from existing or future bond funds, from Title 16 funding, or through regulatory changes. Additionally, since rate payers will bear the ultimate costs of these and other types of changes, rate payers will have to be given a voice in the choices made.

3. Provide Public Trust Protections And Thorough Economic And Sociological Analyses Of Reasonable Alternatives To Various Export Levels.

The California Supreme Court, in the Mono Lake decision, explicitly set forth the state's "affirmative duty to take the public trust into account in the planning and allocation of water resources and to protect public trust uses whenever feasible." Planning and allocation of limited and oversubscribed resources imply analysis and balancing of competing demands. So far we find little effort to balance the public trust obligations and resolve competing demands within the current planning processes (BDCP).

One of the significant flaws of previous and unsuccessful Bay-Delta proceedings has been the absence of a comprehensive economic evaluation of the benefits of protecting the estuary and in-Delta beneficial uses compared to the benefits of diverting and exporting water from the estuary. This absence has deprived decision makers and the public of critical information fundamental to reaching informed and difficult decisions on balancing competing demands.

Beyond protecting California's common property right in public trust resources, the balancing of limited water supplies must address the relative economic value of competing interests. For example, what is the societal value in providing Kern County, comprising a fraction of one percent of the state's population and economy, the same quantity of Delta water as the South Coast, with half the state's population and economy? What is the value to society of using public subsidies to irrigate impaired lands to benefit some 600 landowners, and that, by the nature of being irrigated, discharge harmful quantities of toxic waste that impairs other beneficial uses? What is the economic value of using twice the amount of water to irrigate an orchard in the desert than is required elsewhere? What are the costs and benefits of reclamation, reuse, conservation, and development of local sources? The preceding are only examples of the difficult questions that must be addressed in any allocation of limited resources and balancing of the public trust. Economic analysis is crucial to providing the insight and guidance that will

enable and Delta plan to meet its mandate. Without such analysis, we do not believe a Delta plan can successfully or legally comply with its legislative and constitutional obligations.

An excellent description of the public trust type of issues caused by the current operations in the Delta and Estuary are contained in the Bay Institute report "Collateral Damage."[26]

Implementation and Funding for a balancing of the public trust values will depend on the results of the State Water Resources Control Board hearings on Delta flows, which are scheduled to be completed during 2014. Subsequent to those hearings, implementation and funding plans will most likely fall within the purview of the state legislature.

4. Reinforce Core Levees Above PL84-99 Standards.

This plan accepts and supports the Delta Protection Commission's recommendation in their Economic Sustainability Plan to: "Improve many core Delta Levees beyond the PL 84-99 standard that addresses earthquake and sea-level rise risks, improve flood fighting and emergency response, and allow for vegetation on the water side of levees to improve habitat. Improvement of most core Delta levees to this higher standard would cost between $2 to $4 billion." [27]

There is a plausible public interest in providing public funds to Delta reclamation districts and other Delta interests for levee upgrades since the Delta serves as the water conveyance facility for much of California. Water exporters should be required to identify which levees, if any, ***they want to fund to a higher standard*** (for example more earthquake resistant) to protect their water supply, beyond the current standards. Recommendations should also include assisting Delta counties and communities in meeting FEMA/NFIP programs. The plan should also contain a recommendation to support and increase public funding for permanent continuation of existing and highly successful statutory cost-share formula and funding for Delta (Subventions) Levee Program. Public safety and flood protection must remain the top priority of the State Plan of Flood Control, including its levees and bypasses. The levees should be vegetated with native species to help stabilize the levees and support endangered species.

Because earthquake risks to the levees are one of the main justifications for a Peripheral Canal or Tunnel in the Delta, and there is evidence that the earthquake risks to the Delta levees may have been exaggerated in previous drafts of the Economic Sustainability Plan, the comparison of costs of the two alternatives ($2 to $4 billion for levee strengthening versus $15-$16 billion for new conveyance) is significant and should be incentive enough to immediately initiate this levee reinforcement program and make catastrophic levee failure a questionable justification for new conveyance.

Implementation and Funding would be in keeping with the Delta Protection Commission's Economic Sustainability Plan.

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[26] The Bay Institute. Collateral Damage. March 2012. http://www.bay.org/publications/collateral-damage

[27] Draft Executive Summary, Economic Sustainability Plan for the Sacramento-San Joaquin River Delta, March 10, 2011 http://www.delta.ca.gov/res/docs/ESP_ESUM.pdf

5. **Install Improved Fish Screens At Existing Delta Pumps.**

The EWC supports the development and implementation of significantly improved fish screens with the best available technology at the existing Delta Estuary export pumps, in keeping with original CALFED plans, and at other existing in-Delta diversions. This would include installation of positive barrier fish screens on all diversions greater than 250 cfs in both the Sacramento and San Joaquin River Basins as well as a significant percentage of smaller and unscreened diversions in these ecosystems.

6. **Keep Water Transfers Within The Revised Delta Export Limits.**

Water transfers through the Sacramento-San Joaquin-San Francisco Delta and Estuary – which include individual water sales transactions, Article 21 State Water Project pumping and the pumping of the Central Valley and the State Water Projects' contracts – play a significant role in the movement and transfer of water throughout the state and have significant impacts on the ecology of the Estuary. The two latter projects provide the largest percentage of transfers through the Delta while water sales and Article 21 pumping in some years is significant.

A new paradigm is required that would simultaneously reduce the transfer pumping through the Delta to a level that maintains a healthy ecosystem while providing more logical and reliable sources of water for south-of-Delta water users. Instead of continuing to export extraordinary amounts of water from the Delta – with the impacts on fish and wildlife species, water quality, ecosystem conditions, flow volumes and directions, and the condition of groundwater aquifers in the Sacramento Valley – south-of-Delta water users could obtain significant amounts of water from localized south-of-Delta sources in the San Joaquin Valley region. This type of move toward regional self-sufficiency has been a large component of the two most recent State Water Plans (Bulletin 160). As of early 2012, however, pending federal legislation would go in the opposite direction and allow more dependence on Delta exports through water sales and "surplus" water pumping.

A more favorable scenario than the present and contemplated heavy north-to-south Delta pumping consists of the following changes in supply orientation:

- San Joaquin Valley water users could be incentivized to voluntarily share resources by providing southern Sierra water to south-of-Delta water users through new interties with existing infrastructure, or by providing for the movement of agricultural water from the east side of the San Joaquin Valley, where water is more abundant, to west side agriculture, where the water supply is more limited. This kind of change can be facilitated with efficiency incentives for east side water users and might result in as much as 500,000 acre-feet of additional water for the west side. Although politically difficult, this is an elegantly simple and effective solution for regional self-dependency for south-

of-Delta agriculture users and for all of California. This kind of change would have to consider the required outflows to the Delta Estuary from the San Joaquin River.

- Supplies for the Metropolitan Water District and other south-of- Delta users could be sourced from the natural reservoir that is Tulare Lake by allowing flows from the Kern, Kings, Kaweah, and Tule Rivers to flow into the Tulare basin. This option is being advocated by the San Joaquin Valley Leadership Forum, which has determined that surface storage capacity in the Tulare Lake Basin could be more than 2.5 million acre-feet. This option may require a new Kern-San Joaquin intertie. Reorienting water transfer policies to benefit south-of-Delta water users will require further detailed analysis to confirm its feasibility; however, the potential for these measures to comply with the state requirement to reduce reliance on the Delta to the level recommended above deserves serious consideration.

A Water Transfer Matrix and a set of Water Transfer Principles are included in the referenced EWC report *California Water Solutions Now.*

As called for in the California Water Code, transfers that use State, regional or a local public agency's facilities require that the facility owner determine that the transfers not harm any other legal user of water, not unreasonably affect fish and wildlife, and not unreasonably affect the overall economy of the county from which the water is transferred. Unfortunately, there is no enforcement mechanism except litigation, which is an onerous burden for the public. This is a particular concern in the Sacramento Valley, where existing healthy aquifers could be over drafted by willing sellers in order to supply the same San Joaquin irrigators who caused the existing overdraft conditions in the San Joaquin areas. In addition, the State Water Plan points out that "some stakeholders worry that State laws and oversight of water transfers may not be adequate to protect the environment, third parties, public trust resources, and broader social interests that may be affected by water transfers, ... and transfers that involve pumping groundwater, crop idling, or crop shifting." The EWC plan would come down on the side county of origin protections and the "precautionary principle" in order to protect existing healthy groundwater aquifers north of the Delta Estuary.

7. Eliminate Irrigation Water On Drainage-Impaired Farmlands Below The Bay Delta.

Since the late 1960s and 1970s, the State Water Project and Central Valley Project have been supplying water to approximately 1.3 million acres of drainage impaired land on the west side of the San Joaquin Valley; this is a clear violation of the State Constitution's prohibition against unreasonable use of the state's water. Eliminating or reducing the irrigation of this land would save up to 2 million acre-feet of water in most years.

Farmers and water districts throughout the Western San Joaquin Valley try to reduce their drainage water. However, retiring these lands from irrigated agriculture remains by far the most cost-effective and reliable method to eliminate harmful drainage discharges to water bodies and aquifers. The Westlands Water District has already retired 100,000 acres; a recent federal report discusses an option to retire 300,000 acres of drainage-impaired lands. Any long-term solution to the west side's drainage problem must be centered on larger-scale land retirement,

complemented by selective groundwater pumping, improved irrigation practices, and application of new technologies where appropriate. Any approach that is not founded on land retirement will ultimately continue to store and concentrate selenium and salts in the shallow aquifers, where they may be mobilized by flood events or groundwater transport.

Taking much of these "badlands" out of production would reduce demand for Delta water diversions and significantly improve water quality in the San Joaquin River. A planned program of land retirement and other drainage volume reduction actions should also provide for mitigation for impacts to the farm labor community. Even if irrigation deliveries continue, these lands will ultimately go out of production because of drainage impairment, as pointed out in the federal "Rainbow Report." A far better use of these impaired farmlands would be to provide state or federal incentives for the production of solar energy farms.

8. Restore Delta Estuary and Riverine Habitats and Integrate FloodplainsWith Rivers.

In keeping with the Legislature which has expressly declared that *permanent protection* of the Delta's natural and scenic resources is the *paramount* concern to present and future residents of the state and nation, habitat restoration projects should be aimed at public lands as a first priority. Habitat restoration projects must consider connectivity between areas to be restored and existing habitat areas needed for the full life cycle of species targeted to benefit from the restoration project. Where feasible, restoration should be accomplished along with levee reinforcement and where possible, restoration projects should emphasize the potential for water quality improvement. Restoration projects should also incorporate input from effected Delta landowners.

Priorities for restoration should include the following areas, since they would meet most of the criteria described above:

- Cache Slough Complex
- Cosumnes River–Mokelumne River Confluence
- Cosumnes River ground water basin depletion
- Lower San Joaquin River Floodplain
- Suisun Marsh
- Yolo Bypass

Although the EWC has not estimated the amount of acreage that would be involved in the priority areas, our priorities would go to the 50,000 acres of public lands, and our estimate would be well below the more than 100,000 acres called for in the BDCP plan. That plan is impractical from the viewpoint of costs and from the opposition it will engender among residents and landowners in the Delta. Any resulting plans would need to heavily involve residents of the Delta, something that has not been accomplished to date.

Floodplains benefit the people and ecology of California in numerous ways. The flood plain of a river is a relatively level area on both sides of the stream channel that carries excess waters the channel cannot handle at various times. During a flood, the floodplain becomes the additional

part of the stream to do the extra work for the stream channel. The floodplain allows flood waters to spread out, thus reducing the flood water's potential energy. As a result, less damage occurs downstream. If the flood plain is not allowed to work properly and the channel is narrowed, dredged, or rip wrapped the stream is forced to handle more of the flow and damage occurs. Channelization and dredging have caused the disappearance of the river's healthy sandbars and islands. Flood plains contain wetlands which function to slow and filter flood water, thus improving water quality. Wetlands also provide habitat for a diversity of wildlife. Floodplains, therefore, are extremely productive ecosystems that support high levels of biodiversity and provide valuable ecosystem services. Studies have shown that healthy floodplains can have an extremely high monetary value due to these ecosystem services, which also include flood attenuation, fisheries habitat, groundwater recharge, water filtration, and recreation.

To function properly, floodplains must, by definition, periodically flood. The extent of functional floodplains in California has been dramatically reduced from historical conditions because levees, dams, flood control projects, and development have reduced or eliminated connectivity between rivers and floodplains. To reverse these losses, numerous agencies and organizations have spent significant resources to restore floodplains while simultaneously minimizing future flood risk.

With climate change, we can expect to have less snowpack, quicker spring snow melts, and increased flood pressures. Establishing natural floodplains connected with our rivers and avoiding development in floodplains will become more critical to community sustainability in the future.

The current restoration plans for the Yolo Bypass, including more frequent use of the Yolo Bypass, and similar conservation actions are encouraged as a part of this plan.

The following actions need to be included with any planned floodplain restoration:

- Where possible, remove or at least set levees back from riverbanks to allow for floodwaters to expand into the floodplain.
- Where it is not possible to remove levees, they should at least be vegetated with native riparian vegetation to provide the maximum achievable ecosystems functions.
- Make the purchase of floodplains or flowage easements a top priority for flood control agencies and prevent new levees from being constructed and development in floodplains.
- Ensure that low-income communities impacted by floodplain restoration are involved in the development of restoration plans, and that any impacts of restoration are fully mitigated.

9. <u>Return The Kern Water Bank To State Control, Restore Article 18 Urban Preference, And Restore The Original Intent Of Article 21 Surplus Water In SWP Contracts.</u>

The Monterey Amendments changed significant provisions of the original State Water Project and, as an unintended consequence, increased pressure for exports from the Delta and increased pumping beyond healthy limits. The changes that caused these conditions were: the elimination of Article 18a, the "Urban Preference;" the elimination of Article 18b, the "Paper Water" safeguard; the change of orientation for Article 21 "surplus water;" and the privatization of the Kern Water Bank.

As a part of this plan, the following changes should be made in order to reduce reliance on the Delta, to assure Public Trust protections for a public resource, and to provide greater reliance for urban water users in the state's largest population centers.

- The "urban preference," that was eliminated as a component of State Water Project contracts due to the Monterey Amendments, must be reinstated. California should return to its original plan of giving priority to the water needs of its bourgeoning population rather than giving farm water equal priority, per the Monterey Amendments changes.
- The contracted amounts of water for CVP and SWP Table A users are unrealistically high and must be brought in line with historic "firm yield" experience, as required in the contracts. The overall water supply reductions forecasted with global climate change adds to the urgency to bring these contracted amounts in line with current realities and for future planning.
- The pumping of "Article 21" (so-called surplus) water is unnecessary and has proven to be damaging to the fisheries and ecology of the estuary, especially the pumping of this "surplus" water in dry years, which should never be permitted. In reviewing the different types of water transfers that can occur throughout the state, some are more logical and favorable from an ecosystem and cost viewpoint, while others are clearly damaging by the same two criteria.
- The Kern Water Bank – initially a public asset – has been inappropriately turned over to private interests as a part of the Monterey Amendments and must be reestablished as a state entity under the ownership and operational control of the Department of Water Resources (DWR) for the benefit of all Californians, as it was when DWR purchased the land for the bank in the 1980s. When combined with the reinstatement of the urban preference in the State Water Project, this change would enhance water supply reliability for urban southern California users and would eliminate profiteering from the public's water by private corporate interests.

10. Conduct Feasibility Study For Tulare Basin Water Storage.

Supplies for south-of- Delta users and the Metropolitan Water District could be sourced from the natural reservoir that is Tulare Lake by allowing flows from the Kern, Kings, Kaweah, and Tule Rivers to flow into the Tulare basin. This option is being advocated by the San Joaquin Valley Leadership Forum, which has determined that surface storage capacity in the Tulare Lake Basin could be more than 2.5 million acre-feet.[28] The concept would require bi-directional conveyance with both the Kern Canal and the California Aqueduct.

[28] San Joaquin Valley Leadership Forum, www.sjvwlf.org

The restoration of the Tulare Lake basin in the San Joaquin Valley is a unique opportunity to provide for the quality, quantity, and reliable regional sourcing and use of water for agricultural, economic development and environmental needs on a self-sufficiency basis. At one time, Tulare Lake was the largest freshwater body west of the Mississippi River storing up to 25 million acre feet. The concept proposal put forth by the San Joaquin Valley Leadership Forum is based upon technical, financial, and environmental analysis which is superior to the only other storage proposal currently under study within the San Joaquin Valley – known as Temperance Flat on the Upper San Joaquin River above Millerton Lake/Friant Dam. As an example, the restoration of just 10% of the historic Tulare Lake would be nearly twice the surface storage capacity of Temperance Flat – let alone the fact that the Tulare Lake basin provides ground water storage capabilities as well – and Temperance does not. Another important distinction between Temperance Flat versus Tulare Lake is the fact that the Tulare Lake basin can support the collection and management of flood waters from at a minimum of four south Sierra river systems – Kings, Kaweah, Tule, and Kern – as well as the upper San Joaquin. Temperance Flat would only support the flood waters of the upper San Joaquin River.

There is a possibility of ground contaminants in the basin that may be at harmful levels. The feasibility study would need to examine this potential issue closely. California does not need another set of impaired lands similar to what already exists in the west side of the San Joaquin.

Implementation. This proposed concept should be evaluated as part of this "Reduced Exports" plan. The preliminary concept described by the San Joaquin Valley Leadership Forum is estimated to cost $800 million.

11. Enforce Water Quality Standards In The Estuary And In Impaired Rivers.

California's Porter-Cologne Act of 1969 and the 1972 federal Clean Water Act both were enacted with the goal of restoring the quality of our water resources. These resources have been seriously degraded by over a century of heavy industry and agriculture, the indiscriminate extraction of natural resources, and the continued discharge of inadequately treated sewage. Progress in reversing this degradation has been slow. While upgrades to wastewater treatment and discharge requirements for industrial polluters have improved water quality in many areas, the fact remains that almost 700 reaches of California waterways are still unable to support beneficial uses, including providing potable water supply and supporting ecosystem health.

These problems have contributed to ecosystem crashes in San Joaquin Valley rivers and the Delta, severe groundwater depletion and contamination in the San Joaquin Valley and Central Coast that impacts low-income rural communities, and ocean pollution. Though state and federal laws already give regulators ample powers to improve water quality, this authority has not been exercised sufficiently to protect the health of the state's waterways or its residents. The continuing acceptance of agricultural wavers by Regional Water Quality Control Boards is a major contributor to the state's impaired waterways.

Diverting Sacramento River flows for export without significantly protecting existing groundwater basins and increasing the amount of fresh water flow dedicated to reaching San Francisco Bay, as currently planned for BDCP, will only degrade water quality and habitat conditions and aggravate the negative impact on Delta aquatic and terrestrial species. On the other hand, a future scenario that places less emphasis on the Delta as a water supplier and allows more water to be left instream, can dramatically reduce the environmental and water quality effects of exporting water – whether through or around the Delta. Although increasing flows, as described in this "Reduced Exports" alternative, will improve many aspects of Delta water quality, this plan must continue to pursue specific and targeted water quality actions in order to contribute to restoring the health of the Delta.

12. Monitor And Report Statewide Groundwater Usage.

Environmental organizations are generally disappointed with the groundwater monitoring features that were built into the Delta Reform Act of 2009. Earlier drafts of the 2009 legislation required groundwater monitoring and reporting throughout the state, while the final legislation was weakened to make groundwater reporting a voluntary effort. Since groundwater represents 30% of California's water supply in most years, the state must face this politically difficult situation with actions for mandatory groundwater reporting throughout the state.

This action needs to include a discussion of the Water Code's requirement for additional South-of-Delta underground storage, and the ability to meet that requirement through public control and expansion of the Kern Water Bank. The impacts of the additional capacity for Delta exports as provided by a public Kern Water Bank should be considered here. Given its location, size, and relative cost of development compared to surface storage, the Kern Water Bank is a facility which could greatly assist balanced export controls for the Delta and could be the single greatest improvement to overall state-wide water supply reliability. This plan strongly advocates for the return of the Kern Water Bank to state control as a water management conservation measure.

13. Provide Fish Passage Above And Below Central Valley Rim Dams For Species Of Concern.

Dams have made California a well-watered paradise for most of its human inhabitants. Dams are also killers of river habitats. Although California's vast system of water storage, hydropower and flood control dams has provided enormous economic benefits, it is not without downsides. Dams have been a major factor - in many cases the major factor - in the decline and extinction of numerous fish species, especially anadromous fishes that migrate to and from the ocean and must have access to the more favorable upper reaches of rivers to spawn and rear the next generation. Every salmon and steelhead run in Central Valley rivers is either extinct, endangered, or in decline due to the overall habitat destruction and degradation caused by dams. A 1985 California Department of Fish and Game study has indicated that the economic losses due to the

declines of salmon, steelhead and striped bass which spawn in the Central Valley tributaries at $116,000,000 per year.

The most serious fishery problem caused by major dams is the blockage of migratory fish passage. Over 95 percent of the historic salmon and steelhead spawning habitat in Central Valley river systems has been eliminated by the construction of large dams on every major river. Fish passage was not a serious consideration in the early part of the last century when most of the major dams were built; there were no Endangered Species Act or National Environmental Policy Act considerations at the time. California Fish and Game Code Section 5937, which mandates that dam operators keep fish in good condition below dams has largely been ignored outside the Mono Basin. The construction of Friant Dam on the San Joaquin River resulted in the extinction of the largest spring-run chinook population in the state. The dam blocked upstream spawning grounds that were known to be the best of the Central Valley rivers.

There are numerous solutions available that can provide fish passage around dams. They include construction of fish ladders or upstream fish channels, fish elevators, trap and truck operations, downstream bypasses, removal of smaller fish barriers, and dam removal. All of these techniques have been used at multiple locations with varying success rates. Some of the larger dams on the Columbia River system have been operating fish ladders for many years. While the costs of many of the techniques are substantial, the economics of industries and recreational activities that depend on healthy rivers and fish stocks can justify the investment. The appropriate comparison by which to measure such costs is the sum of agricultural, industrial, and municipal benefits that accrue via the diversion of tens of millions of acre-feet of water annually. Tourism and recreation is now California's largest industry at more than $96 billion annually, and river recreation is a large part of that industry. Recreational fishing generates $1.5 billion annually in retail sales and provides thousands of jobs.

An important aspect of fish passage above dams is the benefits to Native American Tribes in gaining access to historic cultural resources. These would include: the Winnemen Wintu on the Upper Sacramento, McCloud, and Pit Rivers; the Karuk Tribe on the Klamath; and the California Valley Miwok and Maidu on the American and Feather Rivers.

This plan supports, as a conservation measure, the National Marine Fisheries Service Biological Opinion on CVP and SWP operations that recommends fish passage pilot program plans and analysis for dams connected to the Delta, such as the Sacramento, American and Stanislaus rivers. This plan also encourages the State Water Board to direct the controlling agency of each Central Valley rim dam connected to the Delta to study the feasibility of fish passage for each dam that blocks the passage of listed salmonid species, similar to the NMFS Biological Opinion. Costs should be borne by the dam operators since they are the main beneficiaries of the water storage operations.

14. **Retain Cold Water For Fish In Reservoirs**.

Salmon, steelhead, and trout need cold water for their existence. As California has grown in size, the dams that have been built on virtually every major river have significantly changed both

upstream and downstream river flows; high downstream water temperatures are one of the damaging results. Temperatures of 57-67 degrees Fahrenheit (F) are typically ideal for upstream fish migration and 42-56 degrees (F) are ideal for spawning. Water temperatures over 70 degrees (F) can be lethal to anadromous fish but are common on major rivers in the summer. Some fish populations have been able to adapt and carry on spawning and rearing below these major barriers, though in much smaller numbers than previously. Because farms need the most water in the summer, water behind reservoirs is low by the fall when many of the remaining populations of migrating fish return to the rivers. At that point the lack of cold water is a clear threat to their survival. Many of these fish species are now listed under the federal Endangered Species Act (ESA), and maintaining water temperatures suitable for survival has become a critical part of the actions required under the ESA.

This plan supports, as a conservation measure, the NMFS Biological Opinion recommendations for cold water releases on rivers connected to the Delta, such as the Sacramento, American, and Stanislaus rivers, as well as supporting regulations and legislation to retain sufficient water in other major reservoirs to support fish populations in Delta-connected rivers below dams. The latter would include the Trinity River, so long as the current management plan protections for the Trinity are complied with.

15. **Fund Agencies With User Fees**.

Agencies that benefit from any new or existing conveyance facilities should pay the full cost of the facilities, including mitigation costs.

Costs of fixing the Delta and Estuary that are related to existing and planned water delivery systems, including related costs of environmental mitigation and restoration, should be financed by the agencies that deliver water and ultimately should be passed on to their retail customers.

Cost responsibilities for land acquisition and restoration of river and Delta floodplains should be distributed 75 percent through a broad-based water use fee (applied to all agencies whose supplies are diverted from a river or the Delta watershed.) and 25 percent through public funds.

Agencies that divert water from the Delta should pay their fair share of maintaining and replacing the Delta levees on which they depend and for protecting water conveyance facilities. The share of Delta levee repair costs assigned to these agencies should reflect the extent to which the levee repairs are essential to ensuring uninterrupted diversions.

In developing funding sources, special care should be taken that low income communities not be impacted by new fees and second, that appropriate set-asides be created to ensure that these communities can access funding needed to comply with new regulations and policies.

BDCP675

From: Phillazier@aol.com
Sent: Thursday, May 22, 2014 1:09 PM
To: BDCP.comments@noaa.gov
Subject: Columbia River

Forget pipes from the Delta to L.A. Especially with Global Warming getting ready to flood the Delta with salt water.

Instead built pipes to bring water from the Columbia River to Shasta Lake. I have witnessed huge amounts of clean water exiting the river, unused, into the ocean. Let's use it!

Phil LaZier
Sacramento, CA
phillazier@aol.com
(916)362-7224

BDCP676

From: Liz Haemmel <lhaemmel@yahoo.com>
Sent: Thursday, May 22, 2014 8:52 PM
To: bdcp.comments@noaa.gov
Subject: Water tunnels are a terrible idea

Hello,

The water tunnels are a terrible ideas. The new water forebay near Byron,CA would require a fleet of heavy machinery that would operate for a decade. This would cause noise pollution and potentially fill the region's air with diesel particulates. This could result in terrible air quality that would pose a cancer risk to children, elderly and anyone with existing health problems.

It is going to destroy families businesses such as the pear farm run by a man on Sutter Island. Some of his trees are 100 years old. Plus the Delta ecosystem is very fragile already from the massive removal of fresh water that's being sent south. Southern California will have to figure out something else as to where their water will come from.

No thank you Gov. Brown and anyone else who thinks this benefits us.

Sincerely

Liz Haemmel

L # 677

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BDCP678

From: Susan Timm <stimm@solanowireless.com>
Sent: Friday, May 23, 2014 12:52 PM
To: BDCP.comments@noaa.gov
Subject: DVD of BDCP

Please send a DVD of the BDCP to Susan Timm, PO Box 1000, Dixon, CA 95620

BDCP678

From: Susan Timm <stimm@solanowireless.com>
Sent: Friday, May 23, 2014 1:02 PM
To: 'bdcp comments - NOAA Service Account'
Subject: RE: Comment on the Draft BDCP and Draft EIR/EIS Re: DVD of BDCP

I sent a request for the DVD of the Draft BDCP and draft EIR/EIS.

From: bdcp comments - NOAA Service Account [mailto:bdcp.comments@noaa.gov]
Sent: Friday, May 23, 2014 12:53 PM
To: stimm@solanowireless.com
Subject: Comment on the Draft BDCP and Draft EIR/EIS Re: DVD of BDCP

Thank you for submitting a formal comment on the Draft BDCP and Draft EIR/EIS. All comments received on the Draft EIR/EIS will be considered in the Final EIR/EIS and decision-making process. For more information, assistance in locating the documents or if you have special needs, contact 866-924-9955. Additional information can be found at www.baydeltaconservationplan.com

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BDCP683

From: Bob Lundin <lundin.bob@gmail.com>
Sent: Friday, May 23, 2014 4:32 PM
To: BDCP.Comments@noaa.gov
Cc: district3@pcwa.net
Subject: BDCP project & EIR comments

As a lifelong resident of California, I am well aware of the water issues facing our state. I also agree we need a long term plan for a scarce resource. That plan must address the problem of drought years for all of California which should be conservation or reducing supplies.

Below are my comments regarding the BDCP EIR/EIS:

1. From reading the EIR for the BDCP and related documents, it is clear that the purpose of diverting water around the delta is to provide water to water contractors to the south (of Sacramento). The alternatives only listed methods to route water around the delta – and nothing else.
I would suggest there are other alternatives to this plan that are not listed – including conservation. Also, it is not clear how much water will be allocated for agriculture and how much for personal use in both the central valley and Southern California.

For reference, an excerpt from the Executive Summary:
"The current and projected future inability of the SWP and CVP to deliver water to meet the demands of certain south-of-Delta SWP and CVP water contractors—in all water year types and considering ecosystem and species requirements—is a very real concern. More specifically, there is an overall declining ability to meet defined water supply delivery volumes and water quality criteria to support water users' needs for human consumption, manufacturing uses, recreation, and crop irrigation."

2. Throughout the EIR/EIS are statements "improving water supply reliability in the state of California".

It is unclear how the BDCP will improve water supply reliability for us in Placer County and those counties to the north? This generic statement needs to be revised through-out the EIR/EIS

3. Funding – how much will each alternative cost and who will pay? Those who benefit from any project like this should pay ALL the costs.

4. It is not clear how Folsom Dam or San Juan Water or Placer County Water Agency will be affected by the BDCP. This needs to be made crystal clear (with 100+ year contracts) before proceeding.

Bob Lundin
PO Box 1345
Loomis CA. 95650
Lundin.bob@gmail.com
(916) 652-4169

L # BDCP684

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BDCP685

From: PHBASE@aol.com
Sent: Saturday, May 24, 2014 5:08 PM
To: BDCP.comments@noaa.gov
Cc: vonwind@yahoo.com
Subject: Twin Tunnels comments, opinion

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

Dear Mr. Wulff,
I am writing you with great hopes that you will do what you can to prevent the construction of the twin tunnels in the Sacramento and Solano Area Delta. I live in Solano County which will be severely affected by the redirection of fresh water from our rivers into these tunnels.

I have been aware of this proposal for some time, have attended panels where speakers have introduced both sides of the issue and have come to the conclusion that this proposal will be extremely detrimental to our very important delta region for the following domino- effect reasons:

- Ground water and flowing water salinity levels will be changed and detrimentally affect the ecosystem.
- Salinity levels will then affect water tables, available well water, and surrounding soil.
- The citizens of Solano County depend on this water as a partial source of our consumable water.
- Contamination of soil will affect invaluable Solano (and other) County agriculture.
- Delta flora and fauna will certainly be affected by this change in their ecosystem.

The Delta is an unusual and invaluable natural resource. Please join our efforts to see that these twin tunnels are either denied or at least postponed until more thorough studies are made that will determine the cause/effect relationships to the above and other concerns that have been expressed by concerned citizens of Solano County and other counties in California.

Sincerely,

Patricia Harrington

Patricia Harrington
124 Banbury Way
Benicia, CA 94510

BDCP686

From: Pat Ziobro Ray Warthen <rwarthenpziobro@sprintmail.com>
Sent: Sunday, May 25, 2014 3:49 PM
To: tunnel comments
Cc: rwarthenpziobro@sprintmail.com
Subject: BDCP Tunnels Proposal

For the record:
We, hereby, wish to express our opinion about the proposed tunnels. We DO NOT WANT the tunnels built. The plan is a disaster for the Delta, for the state of California, and for the U.S. and state taxpayers. BDCP itself is a misnomer - Bay Delta Conservation Plan - is NOT a conservation plan. We are Delta residents and scientists. We agree with the Indpendent Science Board review and conclusions that the plan makes no sense scientifically. We believe the Plan is not only scientifically flawed, but dangerous to the health of the Delta and its wildlife, and most importantly, our water supply. And, the fiscal ramifications are a complete unknown, despite the already outrageous "estimated" $60 billion price tag. We do not need to redistribute our decreasing water supplies. We need to put our money toward a readily available supply of water - the ocean - and build desalinization plants, as is being done, successfully, world-wide. Today's technology is scientifically sound and more economic than in the past. The tunnel proposal must be stopped, without spending one more penny on a politically-driven proposal that would be a scientific and fiscal disaster.

Patricia C. Ziobro
Ray G. Warthen
PO Box 789
1900 Taylor Road
Bethel Island CA 94511-0789
May 25, 2014

From: Herman P Miller III <hermanp563@gmail.com> BDCP687
Sent: Sunday, May 25, 2014 9:52 PM
To: BDCP.Comments@noaa.gov
Subject: BDCP Comments

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

It is not possible to comment adequately to the current BDCP in a few hundred words. It is best just to say that it is a very bad plan. It lacks vision and the basic consideration of certain laws of nature, laws as simple as "water runs down hill" and "all species evolve".

The BDCP could not begin to solve a problem when the problem has never been properly defined or stated. Simply put we are trying to enhance the availability of a water environment to a given set of the human species at the least negative effect upon the total set of all species, wherein the in particular given species is a subset of the human species called "Southern Californians" (SoCal), and the principal subset of all other species include but are not limited to the human species called "Northern Californians"NorCal).

Principally we are concerned with the efficient use of a given quantity of water that is continually recycled through the atmosphere and is returned to the State of California through precipitation and other waters that are returned by boarder states that may drain into California 70% of which is currently being wasted by being returned to the Pacific Ocean by California's river system and we have determined NorCEal has more water than it needs except in drought years in which water becomes a problem for NorCal as well as SoCal.

Some years ago a periphery canal was built to carry water from NoCal to SoCal but this rather massive structure runs very dry most of the year. Obviously NoCal has not sufficient water to make use of this canal in the manner of which it was designed.

I see nothing in subject plan that considers the effect of Global Warming which our scientists tell us is causing ocean water levels to rise at even high exponential than we had surmised just one short year ago. This phenomena left unattended will very soon turn the entire Bay Area and the Delta into a salt water lake and will deprive millions of people of their homes and livelihood, exacerbated by the draining of the Delta by the BDCP.

This fact makes it apparent our concern should primarily be focused on keeping the large quantity of fresh water from going to sea by way of our river systems and converting our wastewater treatment plants to recycle pure water. Converting WWTP's to recycle potable water is the first and easiest move and something that SoCal can implement immediately to alleviate its water supply problems (www.ediwwtp.com) while NoCal gets busy keeping that 70% of fresh water from going to sea thus saving a few million of the human species from loosing their homes and businesses.

Simultaneously hundreds and probably thousands of lakes and holding pound sites must be defined an constructed, prioritizing their construction to provide the greatest number of acre foot capacity per dollars expended and doing these first. This action will provide backup for SoCal, Bay and Delta fresh water in dry years.

Returning the Bay and Delta to a fresh water habitat will most certainly eliminate certain species while enhancing the habitat of other species. Overall the "restore" people will se their precious species of the 1800's increase dramatically and a certain amount of evolvement will take place among some species, which is normal and to be expected.

I should not have to point out that as sources of fresh water are developed and acre feet and other characteristics are known of them, that all water sources in the sate must be monitored and controlled by a master computer system.

Long range planning in water is not a quick fix as put forward in the current BDCP, it requires a long range plan in the order of several hundred years. It is obvious to any person concerned with the long range welfare of all life species that this BDCP in its current form will only lead to another boondoggle of the States resources as was the peripheral canal before it. This is not a condemnation of the members of the comity, it is a condemnation of the short sightedness of the State's leadership in their lack of vision. They plan not to be around after the plan is put into practice so what do they care what happens to California when they are out of office. To this I can only say: 'SHAME ON YOU". This plan should not be a political issue.

I thank you for the opportunity to express in some small measure my concerns, which are many and can hardly begin to be numerated herein, with regard to the BDCP.

Sincerely,

Herman P Miller III, PE, MASCE
HPMiller3D@aol.com

BDCP688

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Tuesday, May 27, 2014 8:26 AM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS | Week ending 05.23.2014
Attachments: 20140520 Lao Family Community Empowerment.pdf; 20140521 League of Women Voters of California.pdf; 20140521 Mr. Don Hauser, Camarillo.pdf; 20140521 Mr. Stephen Askey.pdf; 20140521 Ms. Lynn A. Miller, Stockton.pdf; 20140522 Mr. Jay Sorenson, Stockton.pdf; 20140522 Mr. Rogene & William Reynolds, Stockton.pdf; 20140522 Susy's Fine Mexican Food - Rodolfo Padilla (Spanish).pdf; 20140523 Foothill Municipal Water District.pdf; 20140523 Friends of the River.pdf

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From: **Anita Deguzman - NOAA Affiliate** <anita.deguzman@noaa.gov>
Date: Fri, May 23, 2014 at 3:13 PM
Subject: BDCP COMMENTS | Week ending 05.23.2014
To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

I have attached the following (10) comments for your review:

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

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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
~~~~~~~~~~~~~~~~~~~~~~~~~~

LAO FAMILY COMMUNITY EMPOWERMENT, INC.
A Community Benefit Organization
ອົງການສະມາຄົມຄອບຄົວລາວ

BDCP688

BDCP Comments

Ryan Wulff, NMFS

650 Capitol Mall, Suite 5-100

Sacramento, CA 95814

RECEIVED
MAY 20 2014
NAT'L MARINE FISHER...
SACRAMENTO, ...

Dear Mr. Wulff,

Our organization, Lao Family Community Empowerment, is writing to you to request information about the Bay Delta Conservation Plan in the Hmong language. We have not received any informational materials about the Bay Delta Conservation Plan in Hmong 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 Hmong 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 Hmong constituents. Please send our organization informational materials on the Bay Delta Conservation Plan translated in Hmong. Thank you for your time.

Sincerely,

Sallee Her

Program Supervisor/Health Ed.

8338 N. West Lane, Suite 105 | Stockton, California 95210 | Tel: (209) 466-0721 | Fax: (209) 466-6567
1075 Dixieanne Avenue | Sacramento, California 95815 | Tel: (916) 921-8247 | Fax: (916) 921-9784
Website: lfcempowerment.org | Email: info@lfcempowerment.org

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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

May 19, 2014
1917 N Dwight Av
Camarillo, CA 93010
805-482-5282

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

Re: Alternative Bay Delta Conservation Plan

Mr. Wulff;

Mother Nature raised mountains surrounding San Joaquin Valley. I am confident this effort involved multiple earth quakes. There is no evidence that salty sea water invaded the Delta. This is because the Delta's waterways and "islands" were full of fresh water. That is until man changed Nature's handiwork.

Man began agricultural operations decades ago by clearing the "islands." This allowed the peat soil to dry and strong winds blew away surface materials. To protect agricultural activities soil was heaped along water courses. Oxidation of the peat material and wind continued to remove the detritus. Today the interior of "protected islands" is 10 to 25 feet below sea level, thus inviting salty sea water to inundate these man-made depressions.

Today's efforts should be to restore the Delta to Nature's plan:

Step 1. Public ownership of all "islands."

Step 2. Breach the "levees." Returning the Delta to capacity with fresh water would negate any threat of salty sea water intrusion. It would also remove all costs of strengthening 1,100 miles of existing "levees."

Step 3. Lavish praise upon the efficiency of existing fish screens.

Step 4. "Fish Out" the Bass. Bass eat small fish, i.e., Delta Smelt.

Step 5. To serve federal and state pumps, allow thru Delta flow. This would negate any call for a peripheral canal or tunnels.

Thanks

Don Hauser, CE

Don Hauser

cc: Gov. J. Brown State Capitol Bld, Sac, CA, 95814
Rep. Dist. 37 D. Williams St Cap Rm 4005 PO Box 942849 Sac. CA 94249
Rep. Dist. 44 J. Gorell St Cap Rm 6031 PO Box 942849 Sac CA 94249

BDCP690

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
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To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

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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

May 19, 2014

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

My comments are directed at Chapter 14 Agricultural Resources 14.1.1.2 South Delta Restoration Opportunity Area. (Conservation Strategy, CM4, Section 3.4.4.3.1)

Approximately 5,000 acres are targeted to become freshwater tidal habitat. I have lived in the Delta all my life. My family began farming here in 1871 and my farm is located on upper Roberts Island within that 5,000 acres. It does not make sense to me how this can be considered "tidal habitat" because most of the acreage in this area is 9'-12' above sea level and we do not have 12' tides. It would be necessary to pump water up and out of the San Joaquin River to make this freshwater habitat. What entity will be paying for that? Technically I don't believe that this 5,000 acres can be considered a Habitat Conservation project.

The majority of the 5,000 acres is considered prime farmland. This "restoration" will take highly productive land out of production in order to allow water to be shipped south to irrigate marginal farmland. This does not protect the agricultural value of the Delta under the coequal goals required by the Delta Reform Act.

I am unable to ascertain where the funding will come from for all of the eminent domain payouts that will be required since there is little indication that there are willing sellers. The Habitat Conservation Plan is required to identify funding for its implementation. This information should have been set forth in an Implementing Agreement 60 days prior to the final draft but that has not been done.

There are mistakes and inaccuracies in this EIR/EIS and there is no financial commitment to date that has been recorded, so I believe that it should be rejected. Thank you for the opportunity to comment.

Most Sincerely,

Lynn A. Miller
1277 Undine Rd.
Stockton, CA 95206

BDCP691

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Tuesday, May 27, 2014 8:26 AM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS | Week ending 05.23.2014
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To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

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4444 West Undine Road
Stockton, CA 95206

May 20, 2014

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

RE: Public Comment
Bay Delta Conservation Plan (BDCP)

Dear Mr. Wulff,

The following comments are based upon our reading of the Bay Delta Conservation Plan and its EIR/EIS released for public review and dated November 2013. We have found the documents deficient because, despite their volume, they are incomplete, and their provisions violate CEQA and NEPA requirements.

1) The Draft EIR/EIS, while voluminous, lacks summaries and reference guides that would make the document understandable to ordinary readers. Throughout the documents, complicated, redundant, and disconnected analysis, coupled with a lack of clear comparison tables, make well-informed decisions about the alternatives impossible. The law is clear: "Environmental impact statements shall be written…so that decision makers and the public can readily understand them" (Council on Environmental Quality 1502.8). The BDCP Plan and EIR/EIS are in violation of environmental law regarding document content.

2) Comparisons of the many alternatives (including alternatives discarded in the screening process) are incomplete relative to their "unavoidable impacts". Analysis of the CEQA preferred alternative (Alternative 4 – North Delta Diversion - and mitigation actions 2-22) includes a "Summary of Significant and Unavoidable Adverse Impacts" (BDCP EIR/EIS pp 31-9). A similar in-depth analysis of unavoidable impacts should be clearly charted for all other alternatives to allow for accurate comparison. Without such clear disclosure of impacts, the choice of the preferred Alternative 4 cannot be proved to be anything but an arbitrary decision.

3) There is no clear funding mechanism set forth. This violates the Endangered Species Act requirement that habitat conservation plans specify that the applicant "ensure that adequate funding will be provided" to implement conservation actions that minimize and mitigate effects on covered species (USC 1539(a)(2)(A). This further violates the Natural Community Conservation Planning Act which requires that the natural community conservation plans contain

"provisions that ensure adequate funding to carry out the conservation actions identified in the Plan" (Fish & Game Code 2820(a)(10)). Funding for mitigation measures 2-22 includes a combination of future California State Water Bonds and Federal Funding which has not been approved. Both funding sources are out of the control of BDCP planners, and as such cannot be construed as "adequate".

Section 8.4.2 (p8-122) of the BDCP Public Draft (Actions Required in the Event of a Shortfall in State or Federal Funding) states: "Actions to be considered to address such shortfalls include adjusting the scope of the Plan in proportion to the public funding shortfall." Since the "shortfall" could be in the billions of dollars in funding, to rely upon anticipated "adjusting" does not meet the letter of the NEPA or CEQA requirements.

Further, no Implementation Agreement has been signed by project proponents, stipulating exact project funding commitments. Public comments have been solicited on a plan for which there is no financing commitment. Clearly this is in violation of CEQA/NEPA requirements.

4) With the choice of Alternative 4 (North Delta Diversion) and Mitigation Measures 2-22 the BDCP violates a provision of the 2009 Delta Reform Act, calling for meeting the coequal goals of water supply reliability and ecosystem restoration while protecting the Delta as an evolving place. This provision is set forth in the Water Code Section 85020(b): "protect and enhance the unique cultural, recreational, and agricultural values of the California Delta as an evolving place." With over 50 Significant and Unavoidable and Adverse Impacts (listed in Table 31-1 pp 31-9 to 31-13 of Chapter 31 of the Draft EIR/EIS) BDCP violates the intent of the 2009 Delta Reform legislation to protect the Delta as a place.

This set of documents presents a host of further areas of concern; these are but a few of the most important.

Rogene Reynolds

William H. Reynolds

PH: (209) 464-8054
Em: sail240@clearwire.net

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Tuesday, May 27, 2014 8:26 AM
To: bdcp comments - NOAA Service Account
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Date: Fri, May 23, 2014 at 3:13 PM
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To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

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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

FOOTHILL MUNICIPAL WATER DISTRICT
ALTADENA • La CAÑADA FLINTRIDGE • La CRESCENTA

May 21, 2014

Bay Delta Conservation Plan Comments
Ryan Wulff, National Marine Fisheries Service
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814

Dear Mr. Wulff:

On behalf of the Foothill Municipal Water District, I would like to provide the following comments on the draft Bay Delta Conservation Plan (BDCP) and its environmental impact statement/report as released on December 13, 2013.

The State Water Project is a vital component of Southern California's water system, providing roughly 30 percent of the region's water needs. As the Southland expands its conservation and local supply efforts, state project water will remain an essential source to replenish groundwater basins and reservoirs and enhance water quality in the region.

In recent years, both state and federal project deliveries have been repeatedly interrupted and reduced due to operational conflicts with threatened and endangered Delta species. Additionally, both projects risk complete failure given the vulnerability of the Delta levee system to catastrophic earthquake and flood events -- threatening water supplies for Southern California, the Bay Area, the Central Coast and the Central Valley for up to three years. These risks are unacceptable, and conditions are expected to worsen with climate change unless steps are taken now to mitigate these concerns. The proposed BDCP, being developed under provisions of the State and federal endangered species protection laws, is the most promising plan developed to date to solve these challenges and resolve decades of conflicts between agricultural, urban and environmental water users with a comprehensive solution that achieves California's Co-Equal goals of a reliable water supply and a restored Delta ecosystem for the benefit of all water users.

The release of the public draft BDCP represents an important milestone in this eight-year stakeholder process. In exhaustive detail, the draft BDCP illustrates the complexity of the problems and the need for a comprehensive approach to resolve conflicts in the Delta through a multi-species habitat conservation plan that protects the state's water resources and infrastructure.

We are supportive of the BDCP's proposed twin-tunnel conveyance system that isolates and protects drinking water supplies and helps restore natural flow patterns in the Delta for the benefit of native species, as well as the complementary habitat restoration, water quality and predator control measures outlined in the BDCP. We also support the plan's recognition that changing conditions in the Delta will require ongoing scientific review

and real-time monitoring so the plan can effectively adapt over time to emerging science and the evolving ecosystem. The draft plan also provides an important framework for a range of operational outcomes and level of certainty necessary for a final plan to merit investment by participating public water agencies and by the state and federal governments.

Key decisions remain relating to specifics on cost allocations, operations, outflow range, financing and other issues; however, the current draft details a workable solution to the challenges facing California's water resources and the Delta.

The Metropolitan Water District of Southern California, of which we are a member, has established six benchmarks for a comprehensive Delta solution, providing the following basis to analyze the draft BDCP.

- *Provide Water Supply Reliability. Conveyance options need to provide water supply reliability consistent with DWR's most recent State Water Project Reliability Report (2005).* Comment: BDCP has the potential to regain State Water Project supplies and meet this benchmark. BDCP potential water supplies are within the range of recent 20-year averages. For the participating public water agencies, reliable and adequate supplies are necessary to make this project financeable.

- *Improve Export Quality. Conveyance options should reduce bromide and dissolved organic carbon concentrations. Existing in-Delta intakes cause direct conflict between the need to reduce organic carbon to meet stricter urban drinking water standards, and the need to increase carbon to promote a healthy food web for fish.* Comment: Existing in-Delta supplies are in the range of 300 milligrams per liter salinity. Upstream supplies on the Sacramento River are in the range of 100 milligrams per liter salinity. The construction of intakes in the northern Delta, and BDCP's dual conveyance water operations strategy, would improve and protect export water quality.

- *Allow Flexible Pumping Operations in a Dynamic Fishery Environment. Water supply conveyance options should allow the greatest flexibility in meeting water demands by taking water where and when it is least harmful to migrating salmon and in-Delta fish species. All options should reduce the inherent conflict between fisheries and water conveyance.* Comment: The new screened intakes proposed by BDCP in the northern Delta would eliminate reverse flow conditions when water is diverted in the north and lead to a far more natural flow pattern in the estuary.

- *Enhance Delta Ecosystem. Conveyance options should provide the ability to restore fishery habitat throughout the entire Delta and minimize disruption to tidal food web processes, and provide for fluctuating salinity levels.* Comment: The modernization of the Delta conveyance system as proposed by BDCP is essential in order for the proposed habitat restoration to have its intended effect.

- *Reduce Seismic Risks. Conveyance options should provide significant reductions in risks to export water supplies from seismic-induced levee failure and flooding.* Comment: The twin tunnels to transport northern Delta supplies would protect this critical supply from future disasters. The twin-tunnel subsurface design provides important operational redundancy and reduces risks associated with surface movement -- such as levee failure and liquefaction-- during earthquakes, allowing for the isolation of repairs if needed to specific tunnel segments, rather than compromising the entire Delta water supply with saline ocean water, should there be a multiple island failure. Seismic preparedness is crucial for this vulnerable segment of the statewide water delivery system.

- *Reduce Climate Change Risks. Conveyance options should reduce long-term risks from salinity intrusion associated with rising sea levels. Intake locations should be able to withstand an estimated 1- to 3-foot sea-level rise in the next 100 years.* Comment: The proposed intakes in the northern Delta are upstream of predicted long-term salinity intrusion due to climate change. The future water system must be sized sufficiently to capture water when available in the face of climate change.

In addition to the Metropolitan 2007 Delta Benchmarks, the draft BDCP raises other issues that merit public comment, including:

- *Governance Comment:* The final BDCP governance structure must provide for public water agencies to be full participants in the implementation process in a manner that maintains the existing authorities of the state and federal wildlife agencies. Metropolitan must be among the project permittees in order to assure its active participation in BDCP.

- *Assurances Comment:* As a Habitat Conservation Plan under Section 10 of the federal Endangered Species Act and a Natural Community Conservation Plan pursuant to Fish and Game Code Section 2800 et seq BDCP offers a path of regulatory stability for both the public water agencies and the wildlife agencies. It is important to better define and describe this regulatory stability so that the final BDCP offers a clearer choice between this approach and today's ineffective species-by-species approach to regulation and ESA enforcement.

- *Co-Equal Goals Comment:* The Delta Reform Act of 2009 passed by the California Legislature established the co-equal goals of a reliable water supply for California and ecosystem restoration for the Delta. The BDCP must be implemented in a manner consistent with the co-equal goals.

- *In-Delta Impacts Comment:* We are encouraged by recent changes in the proposed intake/tunnel project that will reduce by 50 percent the overall footprint of the project. While the hydrological simulation model in the BDCP analysis suggests that Delta salinity objectives may be exceeded in some instances, the DEIR/S explains that this is due to modeling anomalies. In any event, the Project would be operated to meet all

Delta Salinity Standards thus it is not expected to have a significant impact to local agriculture.

- Habitat restoration, meanwhile, is expected to lead to a net increase of 50,000 local Delta-area jobs. Continued efforts to reduce in-Delta impacts and increase in-Delta benefits of BDCP will improve the final project.

Metropolitan and its member agencies, retail agencies and ratepayers have been investing in the State Water Project for more than four decades, and have additionally invested in regional storage and conveyance to allow Southern California to capture water when it is plentiful and reduce demands on imported supplies during dry and critically dry years. These investments are effectively stranded, if water deliveries from the project continue to degrade.

The state project provides essential water supply and water quality benefits to Southern California and helps the region achieve other water resource development objectives. When blended with the Southland's more saline water resources, its high quality improves regional water quality. State project water also facilitates water recycling and groundwater replenishment. Recycling might otherwise be prohibited since Colorado River water is significantly higher in salinity level and recycling concentrates salts to levels that can exceed protective groundwater basin standards. Similarly, recharge of imported water to groundwater basins would have similar challenges in meeting basin plan standards without sufficient State project supplies.

The proposed BDCP is the most comprehensive effort ever undertaken to address the chronic water challenges facing the state and federal water projects in a manner that is protective of the Delta environment. We urge the state to move forward with the draft plan and focus on resolving those remaining issues needed to provide assurances that the plan will achieve California's co-equal goals of water supply reliability and ecosystem restoration in a cost-effective manner.

Thank you for the opportunity to comment on this historic draft plan.

Sincerely,

Nina Jazmadarian
General Manager

BDCP693

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Tuesday, May 27, 2014 8:26 AM
To: bdcp comments - NOAA Service Account
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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

LEAGUE OF WOMEN VOTERS® OF CALIFORNIA

May 15, 2014

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

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

Dear Mr. Wulff:

The League of Women Voters of California (LWVC) appreciates the opportunity to comment on the Bay Delta Conservation Plan (BDCP, or plan) and its draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS). We have analyzed the BDCP from the perspective of our state and national League consensus positions on water resources, agriculture, energy, and land use. Our positions are the result of League studies and long-time member involvement in these issues.

Although we acknowledge the considerable financial and technical resources expended on the draft EIR/EIS, we believe the draft EIR/EIS is inadequate because it has resulted in a preferred alternative that is unlikely to meet the coequal goals of ecosystem restoration and water supply reliability. We ask that you not certify the draft EIR/EIS because of the likelihood that the plan will fail to meet both coequal goals, and because of inadequate disclosure of impacts arising from critical issues identified below.

Over-allocation of Waters—Water rights within the watersheds feeding into the Delta, plus the maximum contracted flows planned for export to contractors, exceed the long-term hydrologic capacity of this water resource, and the BDCP compounds these mistakes.

We find the stated project objective of meeting the full contract amounts of the State Water Project and Central Valley Project unrealistic, given the hydrologic history of California:

> Restore and protect the ability of the SWP and CVP to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water, consistent with the requirements of State and federal law and the terms and conditions of water delivery contracts and other existing applicable agreements. (Public draft BDCP EIR-EIS, Chapter 2, p. 3).

So long as this remains a stated objective, reducing reliance on the Delta will not be achieved.

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The statement from the Executive Summary of the plan, "The geographic scope of the Plan Area encompasses the Sacramento–San Joaquin Delta, as defined in California Water Code Section 12220 . . .," implies that this plan is designed to ignore the actual watersheds of the Sacramento River. The assumption that there will always be water to move through the tunnels is problematic, considering the DWR climate change models that project the greatest loss of the snowpack will occur in the watershed of the Feather River, source of the water stored behind Oroville Dam.

Failure to Meet the *Delta Vision Strategic Plan* and the Delta Reform Act of 2009—The BDCP is not consistent with the "coequal goals" of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem.

The *Delta Vision Strategic Plan*[1] calls for the state to "Legally acknowledge the co-equal goals of restoring the Delta ecosystem and creating a more reliable water supply for California" and sets forth the following strategy and actions, among others:

> ***Strategy 1.1:*** *Make the co-equal goals the foundation of Delta and water policy making.*
> ***Action 1.1.1:*** *Write the co-equal goals into the California Constitution or into statute.*
> ***Action 1.1.2:*** *Incorporate the co-equal goals into the mandated duties and responsibilities of all state agencies with significant involvement in the Delta.*
> ***Action 1.1.3:*** *Require the achievement or advancement of the co-equal goals in all water, environmental, and other bonds, and operational agreements and water contracts or water rights permits, that directly or indirectly fund activities in the Delta.*

The subsequent Delta Reform Act of 2009[2] defines "coequal goals"[3] as:

> *"two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."*

The Delta Reform Act of 2009 also calls for reduced reliance on the Delta through investments in improved regional supplies, conservation, and water use efficiency.[4] We

---

[1] "*Delta Vision Strategic Plan*," prepared by the Blue Ribbon Task Force created by Governor Schwarzenegger's Executive Order S-17-06, and released by the State of California Resources Agency, October 2008.
[2] Added by Stats. 2009, 7th Ex. Sess., Ch. 5, Sec. 39. Effective February 3, 2010, as codified in the California Water Code (CWC), Division 35, starting at section 85000.
[3] CWC, section 85054.
[4] CWC, sections 85021 and 85004(b).

believe that large public investments in interbasin water transfers must be informed by a recognition that California's water resources have been over-allocated (see above) by as much as five times. Additional options for water supply reliability should include groundwater management, watershed and forest management for water capture, conjunctive use of surface and groundwater, and more conservation and improved water use efficiencies.

We believe that the BDCP is not consistent with the *Delta Vision Strategic Plan* and the Delta Reform Act of 2009, in that it is not a realistic plan that will meet the coequal goal of restoring the Delta ecosystem. In addition to their relying on unrealistic flows of water, we believe that the plan and associated draft EIR/EIS are inadequate for the reasons given in the subsequent sections:

> Ecosystem Restoration—The plan is missing updated flow objectives, a key factor in the success of habitat restoration.
>
> Water Supply Reliability—More encouragement is needed for the state, local governments, and urban and agricultural end-users to conserve and improve efficiencies before resorting to dual tunnels under the Delta.
>
> Finances—The BDCP does not demonstrate that funding all elements—in particular, habitat restoration—will be realistically achieved.
>
> Governance—Agencies and advocates for natural resources need to be elevated in the proposed governance structure to ensure that ecosystem restoration actually has coequal status under the BDCP.

Ecosystem Restoration—The plan is missing updated flow objectives, a key factor in the success of habitat restoration.

The current proposal is to begin construction of a facility with a 9,000 cubic feet per second capacity before an updated determination is made of flows necessary to protect fisheries. The Delta Reform Act mandated completion some years ago of the new flow criteria. While recognizing that these flow criteria may not be considered pre-decisional with regard to consideration of permits, we stress that without them certain important decisions would be left to permittees—permittees whose primary goal is to deliver up to full contract amounts of export water, not to operate the facility to benefit habitat. (See our comments below on Governance.)

As long-time advocates of placing limits on water that is exported through and around the Delta, we believe that proceeding with the preferred alternative before updated flow objectives are established and implemented will not protect the Bay-Delta ecosystem.

Water Supply Reliability—More encouragement is needed for the state, local governments, and urban and agricultural end-users to conserve and improve efficiencies before resorting to dual tunnels under the Delta.

We are concerned that construction of the dual tunnels, which represents a substantial investment by beneficiaries, will drastically reduce incentives for urban, agricultural, and other users to do all they can—through conservation, recycling, and development of regional water sources—to reduce reliance on the Bay-Delta freshwater flows. We acknowledge that both urban and agricultural districts have made strides in these areas. However, as long as it is easy to move water under the Delta, we see no discernible incentive for the permittees to put the same financial resources into conservation and recycling that they have invested in the BDCP preferred alternative.

In acknowledging progress over the past two decades by the urban sector to recycle treated wastewaters, we understand that government leadership—including financial support from the federal, state and local levels—has been important in realizing accomplishments such as the Edward C. Little Water Recycling Facility in the south bay of Los Angeles County. We believe that there is significant additional potential to conserve water and improve water use efficiencies, and that state and local governments must take more action to achieve this potential. For example, in the urban sector, ramped-up efforts to establish a new landscape norm can significantly cut consumption.

To reiterate, should efforts be concentrated on the large structural twin tunnels in the preferred alternative, we expect that valuable incentives to maximize conservation and opportunities to develop integrated regional water management planning for efficient water use will be lost.

Finances—The BDCP does not demonstrate that funding all elements—in particular, habitat restoration—will be realistically achieved.

We have concerns about the proposed funding for ecosystem restoration over the 50-year life of the preferred alternative. A Habitat Conservation Plan (HCP) is required to identify funding for its implementation; funding must be sufficient for all proposed activities, and all financial contributors and planned allocation of funds must be identified. As we prepare these documents, there is no Implementing Agreement specifying these funding matters, and we will not see one in time for adequate public review before the close of the BDCP and draft EIR/EIS comment period.

> Initial state funding will largely come from two new water bonds, the first proposed for the 2014 statewide ballot. Federal funding is expected to come mostly from the same sources and authorizations used in the past to support Delta restoration efforts. New federal funding authorizations will also likely be needed to support the BDCP. (BDCP Executive Summary, p. 26)

In raising our concerns regarding inadequate financing, we asked the Department of Water Resources (December 6, 2013) if construction of the preferred alternative could begin if voters do not approve the anticipated water bonds. The answer was that full funding for habitat restoration is not required before the water conveyance facility can be built and operated. Again, we find this aspect of the BCDP to be inadequate to ensure that the required goal of habitat restoration can be met.

Governance—Agencies and advocates for natural resources need to be elevated in the proposed governance structure to ensure that ecosystem restoration actually has coequal status under the BDCP.

Successful governance and the very best science are central to pursuit of the coequal goals of ecosystem restoration and water supply reliability. We believe the proposed governance system needs to be improved. The fishery agencies, other resource agencies, and non-agency parties impacted by the projects need to be elevated so that they have an equal voice in the top tier of the decision makers and the decision-making process regarding how the state and federal projects are operated and how habitat restoration projects are implemented.

The adaptive management strategy needs to be more fully described. Experiments in tidal marsh and in-delta restoration, alternative fish screen designs, and other elements of any BDCP plan should have a proven record of success before any BDCP alternative goes forward.

We do not believe these documents are adequate as a basis for issuing permits. The Endangered Species Act requires that a Habitat Conservation Plan contribute to the recovery of endangered and threatened species, and the California Fish and Game Code requires that a Natural Communities Conservation Plan assist in providing for the conservation of covered species. We are not persuaded that the BDCP can meet those requirements because of problems with the adaptive management strategy and governance.

Conclusion

In summary, the League of Women Voters of California believes that, before construction of any large-scale infrastructure for the Bay-Delta, technical and financial resources must be made available to maximize statewide efforts for conservation, recycling, watershed management, regional water supply development, completion of delta habitat restoration already underway, and for any other measure that will reduce reliance on Bay-Delta exports now and in the future. Further, we recommend that the information generated by the current BDCP planning process be utilized by the Department of Water Resources to develop a Bay-Delta management regime that will fairly balance all the needs and uses of

water resources in the state, without a bias toward the contractors for the State Water Project and the Central Valley Project.

We thank the Department of Water Resources for responses to our several inquiries. Please contact us if you wish additional information about any of our comments.

Sincerely,

Jennifer A. Waggoner
President

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

BDCP694

From: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>
Sent: Tuesday, May 27, 2014 8:26 AM
To: bdcp comments - NOAA Service Account
Subject: Fwd: BDCP COMMENTS | Week ending 05.23.2014
Attachments: 20140520 Lao Family Community Empowerment.pdf; 20140521 League of Women Voters of California.pdf; 20140521 Mr. Don Hauser, Camarillo.pdf; 20140521 Mr. Stephen Askey.pdf; 20140521 Ms. Lynn A. Miller, Stockton.pdf; 20140522 Mr. Jay Sorenson, Stockton.pdf; 20140522 Mr. Rogene & William Reynolds, Stockton.pdf; 20140522 Susy's Fine Mexican Food - Rodolfo Padilla (Spanish).pdf; 20140523 Foothill Municipal Water District.pdf; 20140523 Friends of the River.pdf

---------- Forwarded message ----------
From: **Anita Deguzman - NOAA Affiliate** <anita.deguzman@noaa.gov>
Date: Fri, May 23, 2014 at 3:13 PM
Subject: BDCP COMMENTS | Week ending 05.23.2014
To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

I have attached the following (10) comments for your review:

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

--

Anita deGuzman
Administrative Assistant
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JAY R. SORENSEN
766 ELAINE DRIVE
STOCKTON, CA. 95207

May 20, 2014

RYAN WULFF, N.M.F.S.
650 CAPITOL MALL, SUITE 5-100
SACRAMENTO, CA. 95814

Dear Ryan:

The enclosed comments are directed towards my opposition to the proposed Bay Delta Conservation Plan (BDCP). Re: Twin Tunnel Project.

I will admit at this time I have not completely digested the $254 million 40,000 page document, but it proves one thing, that the consultants who drafted it are being well compensated.

Historically, water diversions from the Sacramento-San Joaquin Delta Region have resulted in salt water intrusion into the system which has affected the economy, especially agribusiness, habitat and the loss of our fisheries.

In 1952 the original water contracts were adopted which stated:

(a) During wet years only excessive water may be conveyed out of the Delta.

(b) During dry years no water may be conveyed out of the Delta.

These contracts are still in force today, but the terms have been violated continously.

Looking back at the construction of Friant Dam whereby the San Joaquin River was completely diverted to the southern part of the state and the destructic it caused on our salmon, steelhead fisheries and the Kesterson Wildlife Refuge Area due to high selenium levels. Now they want to do the same thing by diverting the Sacramento River through two 40' diameter pipelines.

It seems that man would learn from his mistakes, but here we are heading once again in the wrong direction.

Political influence in responsible for this huge water grab whereby southern California water districts will benefit including the Kern County Water District, Westlands Water District and Paramount Farms. This is considered a political payback for their past contributions they have made to elect the past three governors amounting to six figures each. The old Saying, "Money Goes Where Water Flows."

My only hope is that the National Marine Fisheries Service takes into consideration that the Sacramento River draws a vast majority of our remaining andromous fisheries including; green sturgeon, white sturgeon, salmon, steelhead, striped bass and American shad for the propagation of their species. Their is very little spawning activity on the San Joaquin River due to poor water quality.

In conclusion I am 77 years old and have spent my entire life out on the Delta waterways where I have observed over the years the loss of habitat and populations of our fisheries.

The big question is do we continue to put the largest inland estuary in the western hemisphere in jeopardy or do we make the necessary decisons to bring it back to a healthy viable restoration plan for the enjoyment of future generations. We will never achieve this by adopting this "Boon Doggle."

I submit these concerns and comments for your consideration during the review with these thoughts, "If you are not part of the solution you can ceratinly be part of the problem."

Respectfully Sumitted By

Jay R. Sorensen

Jay R. Sorensen

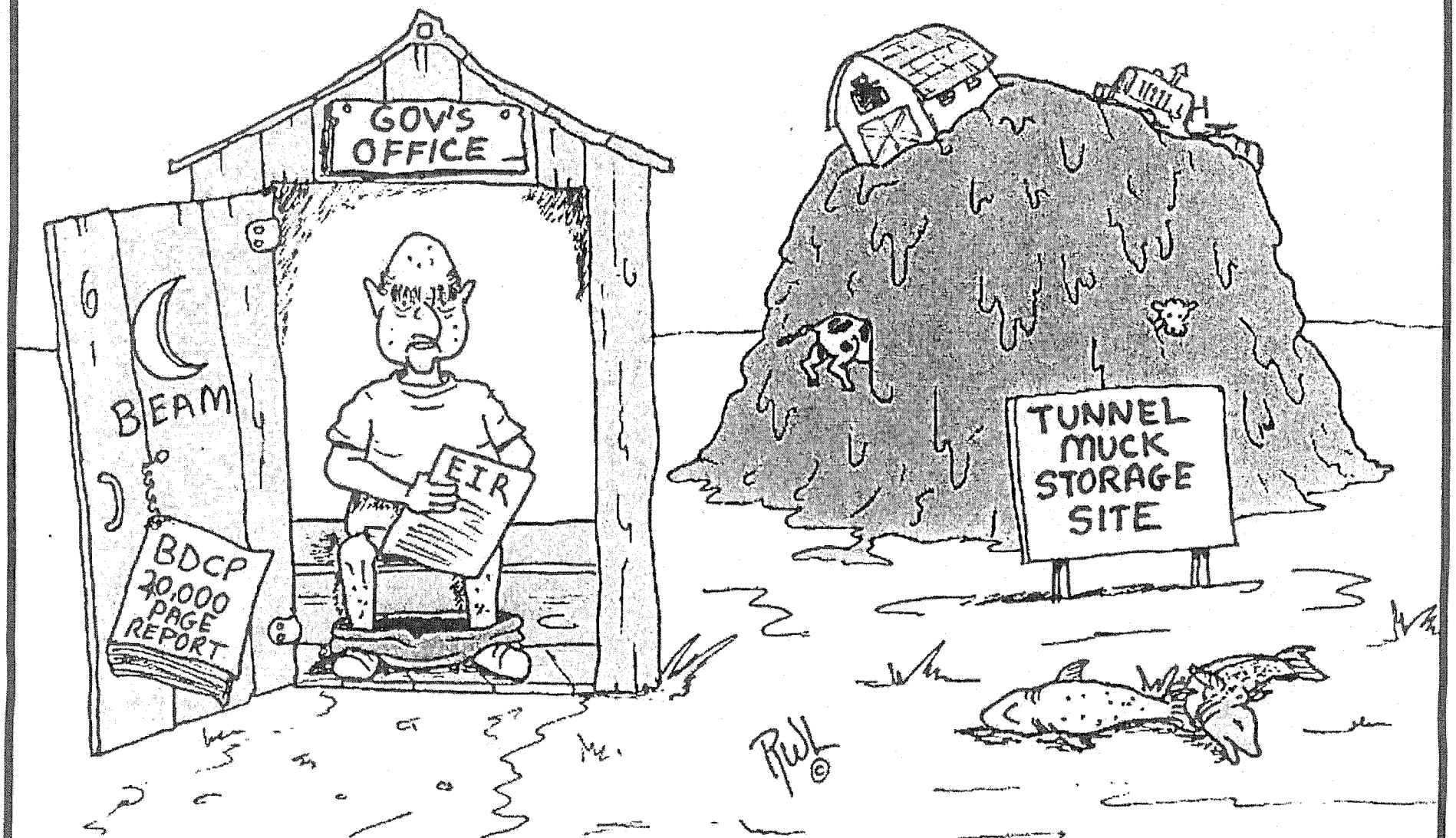
Membership afilliations: Founder, California Striped Bass Association, Member,Board of Director of the Discover the Delta Foundation, Restore the Delta, United Anglers of California, California Sportfishing Protection Alliance, outdoor columnist River News Herald-Isleton Journal and the Linden Herald News.

Enclosure: My personal thoughts about the Twin Tunnel Project.
Enjoy!

RIO LIFE

From an idea by Jay Sorensen

by RWL



"I want to get shit done!" ~ Jerry Brown ~

BDCP695

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To: Ryan Wulff - NOAA Federal <ryan.wulff@noaa.gov>

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Rodolfo Padilla
Head Chef
Susy's Mexican Restaurant
120 W Harding Way, Stockton, CA 95204

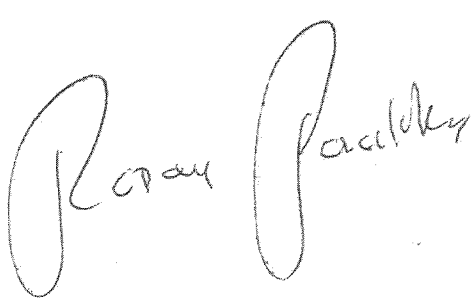
BDCP Comments
Ryan Wulff, NMFS
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814

Sr. Wulff,

El Plan de Conservación del Delta de la Bahía (BDCP) que propene el estado ignora a la comunidad latina. Una de las cosas que más me sorprendió cuando busque información al respecto, es que esperan comentarios públicos del reporte del BDCP en español, pero no existe ninguna traducción. Aparentemente, se realizaron conferencias donde hablaron de los impactos del plan, pero fueron en inglés y no fueron anunciadas a las noticias locales ni otras organizaciones latinas.

Probablemente lo más alarmante es que la naturaleza de estos túneles gemelos van a afectar el estilo de vida de muchas familias, incluyendo la mía, en la región del Delta y me gustaría saber más detalles. El periodo de comentarios, según esto, termina este junio y no tengo acceso a la información necesaria para que pueda dar un mejor comentario y leer con más precaución. No es muy justo que impongan este plan tan masivo sin informar a la comunidad latina que tiene una historia muy larga con el Delta. Nuestro restauran depende de productos frescos y de la comunidad de Stockton, que es la más grande en el Delta. Este plan amenaza nuestro negocio y familia. Necesito más información.

Sinceramente,



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~~~~~~~~~~~~~~~~~~~~~~~~~~

To protect and restore California Rivers by influencing public policy and inspiring citizen action.

FRIENDS OF THE RIVER
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May 15, 2014

BDCP.Comments@noaa.gov (via email)

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California Natural Resources Agency
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Mark Cowin
Director
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Ren Lohoefener
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Chuck Bonham
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California Department of Fish and Wildlife
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Will Stelle
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National Marine Fisheries Service
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Seattle, WA 98115-0070

Additional Addressees at end of letter

Re: COMMENT LETTER and REQUEST for EXTENSION OF TIME and NEW DRAFT PLAN and DRAFT EIR/EIS for PUBLIC REVIEW because of the Government's Failure to Release a Draft Implementing Agreement, Violating NEPA, ESA, CEQA, and NCCPA

Dear Federal and California Agencies, Officers, and Staff Members Carrying out the BDCP:

Despite releasing of the Draft Bay Delta Conservation Plan (BDCP) and its Draft Environmental Impact Report-Environmental Impact Statement (EIR/EIS) in December, 2013, the government has not released a draft Implementing Agreement (IA). The Natural Community Conservation Planning Act requires each conservation plan to include an IA which contains, among other things, "provisions for establishing the long-term protection of any habitat,"

"provisions ensuring implementation of the monitoring program and adaptive management program," and "mechanisms to ensure adequate funding to carry out the conservation actions . . . ." Cal. Fish & G. Code § 2820(b).

For purposes of the BDCP, the IA is a commitment from each party under the BDCP specifying its contribution to the cost, construction, and operation of the proposed project. The IA is an integral and indispensable necessity to the development and function of the BDCP. However, the parties to the BDCP, water contractors who expect to benefit from the BDCP, have failed to enter an IA which establishes each party's contribution to the cost, construction, and operation of the BDCP. Without the draft IA, it is not possible for the public to meaningfully review the draft BDCP and EIR/EIS. Accordingly, the absence of the draft IA has resulted in a violation of the National Environmental Policy Act (NEPA), NEPA regulation 40 C.F.R. § 1502.25, Endangered Species Act (ESA) regulations 50 CFR § 17.22(b)(1)(i); § 222.307(b)(4), the California Environmental Quality Act (CEQA), and the Natural Communities Conservation Planning Act (NCCPA).

Critical information is missing from the review process. For example, the BDCP proponents have been been internally admitting the obvious to the State, that "The cost of the BDCP is high, and there is significant concern that it will increase. Recent experience shows that the cost of large public works projects tends to increase during construction. The cost of the BDCP is so high there is no room for any increase in cost." We ***attach*** a copy of the May 13, 2014 letter to BDCP agency directors from the Natural Resources Defense Council, Defenders of Wildlife, American Rivers, The Nature Conservancy, and The Bay Institute requesting a 60 day extension of time for public comments based on several factors including the absence of the draft Implementation Agreement. That letter includes a one-page ***attachment***, the Critical Issues document, edited by J. Maher (January 27, 2014). These examples including the above are taken from the ***attached*** Critical Issues document.

Another example is that the BDCP proponents seek a level of water supply assurances of "water supply reliability of approximately 75% for both SWP and CVP water service contractors." (Critical Issues document). The water contractors also seek "Strong regulatory assurances [to] increase the willingness of local public agencies to fund the BDCP and construction of the new conveyance facilities [tunnels]." (Critical Issues document). Any commitments like those would significantly worsen the already horrendous impacts on

endangered fish species, the Sacramento River, and the San Francisco Bay-Delta resulting from operations of the massive BDCP Water Tunnels.

It is also not possible for the public to meaningfully review the draft BDCP and EIR/EIS because of the failures, violating both the ESA and NEPA, of the federal agencies to have prepared the Biological Assessments and Biological Opinions required by the ESA. These violations have been pointed out to you previously in our comment letters of June 4, August 13, September 25, and November 18, 2013, our comment letters of January 14, and March 6, 2014, and at our meeting with federal agency representatives in Sacramento on November 7, 2013.

This absence of the critical information for public review and review by the decision-makers that would be found in the missing Implementing Agreement, Biological Assessments, and Biological Opinions makes a mockery of the environmentally informed public and decision-maker review provisions and purposes of NEPA, CEQA, and the ESA. In addition, the absence of the essential information that would be furnished by the draft Implementing Agreement, Biological Assessments, and Biological Opinions unlawfully segments and postpones the review of those documents from the current review of the Draft BDCP Plan and Draft EIR/EIS.

Violation of NEPA

Under NEPA, each EIS must contain a discussion of the "environmental impacts of the proposed action . . . ." 42 U.S.C. § 4332(C)(i). An EIS "shall provide full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts . . . ." 40 C.F.R. § 1502.1.

The Draft BDCP Chapters 6, 7, and 8 frequently refer to the IA as a regulatory force of the BDCP operations, ensuring that the project will operate in accordance with law. Nowhere does the Draft BDCP or EIR/EIS list the terms or specific provisions that the IA will contain. Thus, the IA's terms and requirements are not available for the public or decision makers to review. Because the IA will contain information concerning impacts and mitigation, it is a critically important component of the environmental review mandated by NEPA. Without the IA, it is impossible for the EIS to provide a "full and fair discussion" of the impacts and mitigation measures. Consequently, the EIS is incomplete and insufficient to provide meaningful public review of BDCP impacts and mitigation measures.

Violation of NEPA Regulation 40 C.F.R. § 1502.25

Under NEPA regulations, "To the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with environmental impact analyses and related surveys and studies required by the . . . Endangered Species Act . . . ." 40 C.F.R. § 1502.25. Thus, agencies must prepare environmental impact review documents concurrently.

Because the BDCP is expected to result in the take of endangered and threatened species, the parties must acquire an incidental take permit (ITP) before implementing the BDCP. 16 U.S.C. § 1539(a)(1). A party applying for an ITP must submit a conservation plan that specifies, among other things, "what steps the applicant will take to *minimize and mitigate such impacts*, and the *funding that will be available to implement such steps* . . . ." 16 U.S.C. § 1539(a)(2)(A)(ii) (emphasis added). The Draft BDCP and EIR/EIS lack this information and suggest that it will appear in the IA.

Accordingly, the BDCP is incomplete without the IA because the BDCP does not specify any commitments the parties have made to fund and promote mitigation measures. As an impact analysis, the IA was required to have been prepared concurrently with the EIS. Nevertheless, the parties to the BDCP have failed to produce even a draft IA specifying their individual commitments to ensuring the integrity of the project. This has resulted in the staggered or piecemeal environmental review that NEPA Regulation 40 C.F.R. § 1502.25 prohibits.

Violation of ESA Regulations

The BDCP is the heart of an application for an ITP. All applications for ITPs must include a "complete description of the activity sought to be authorized. . . ." 50 C.F.R. § 17.22(b)(1)(i). Further, all conservation plans must include "steps . . . that will be taken to monitor, minimize, and mitigate [the] impacts, and the funding available to implement such measures . . . ." 50 C.F.R. § 222.307(b)(5)(iii). Before approving a conservation plan, the government must provide notice of the application and an opportunity for the public to review the application. 16 U.S.C. § 1539(c).

The Draft BDCP fails to provide a complete description of the project because it does not specify the steps that will be taken to mitigate impacts and fund such mitigation. Instead, it insists that the IA will clarify details concerning mitigation measures and funding. Consequently,

the Draft BDCP and EIR/EIS lack critical information concerning how the conservation plan will address mitigation and funding requirements, rendering the review period inadequate under ESA Regulations.

Violation of CEQA

Under CEQA, California agencies must make draft EIRs available for public review and comment. 14 CCR § 15087. An EIR "shall include a detailed statement setting forth . . . [a]ll significant effects on the environment of the proposed project" and "[m]itigation measures proposed to minimize significant effects of the environment . . . ." Cal. Pub. Res. Code § 21100(b). Regulations define *project* to mean "the *whole of an action*, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment . . . ." 14 CCR § 15378(a) (italics added). Before approving a proposed project, the "lead agency shall determine whether a project may have a significant effect on the environment based on *substantial evidence* in light of the whole record." Cal. Pub. Res. Code § 21082.2(a) (italics added). *Substantial evidence* does not include "speculation" or "unsubstantiated opinion"; on the contrary, *substantial evidence* includes "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." Cal. Pub. Res. Code § 21082.2(c). Courts applying CEQA have held over and over that:

> An accurate, stable and finite project description is the sine qua non [absolutely indispensable requirement] of an informative and legally sufficient EIR. [Citation]. However, a curtailed, and enigmatic or unstable project description draws a red herring across the path of public input. [citation] Only through an accurate view of the project may the public and interested parties balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives.

San Joaquin Raptor Rescue Center v. County of Merced, 149 Cal.App.4th 645, 672 (2007) (internal citations omitted).

The IA is part of the project but has not even been placed before the public for review during the Draft EIR/EIS public review period. Because the IA will contain critical project information that is not in the Draft EIR/EIS, the Draft EIR-EIS does not describe the *whole of the action*. Consequently, the EIR-EIS fails to provide an "accurate view of the project" and the public is incapable of understanding how the proposed project will operate. Further, this missing information demonstrates that the incomplete EIR/EIS fails to support its conclusions as to the

impacts of the project. Whereas CEQA requires environmentally informed agency decisions, the absence of the IA prevents the agencies from forming valid decisions. Instead, the agencies rely on speculation as to what the terms of the IA might include.

Violation of NCCPA

The NCCPA requires that any draft documents associated with an NCCP are made available for public review and comment. Cal. Fish & G. Code § 2815. As mentioned above, the NCCPA requires the NCCP to include an IA. Cal. Fish & G. Code § 2820(b). The Act further imposes a "requirement to make available in a *reasonable and timely manner* . . . planning documents associated with a natural community conservation plan that are subject to public review." Cal. Fish & G. Code § 2815 (italics added).

Because the impact and mitigation analyses in the EIR/EIS rely on the IA, the government agencies needed to make the draft IA available at the same time as the draft EIR/EIS in order to meet the *reasonable and timely manner* requirement. Releasing the draft IA months after the Draft EIR/EIS is neither reasonable nor timely because the government could have waited for completion of the draft IA before releasing the draft EIR/EIS.

How to Remedy These Violations

The government's plans to hold a 60-day public comment period for the draft IA after the Draft BDCP and Draft EIR/EIS comment period closes will not cure these defects. Staggering the release and comment periods for BDCP documents deprives the public of adequate review opportunities in two ways. First, once the government releases the Draft IA containing specific details concerning BDCP operation, interested parties' understanding of the project will change. It is likely that new information released in the IA will supersede comments received during the Draft BDCP and EIR/EIS comment period, undermining the integrity of the comment period. To ensure that interested parties have an adequate opportunity to review and comment on the project, all documents relating the BDCP need to be available for comment at the same time.

Second, a 60-day comment period is drastically insufficient to provide interested parties enough time to review the IA and its effects on BDCP operations. Interested parties will need to both review the draft IA and determine how it alters 40,000+ pages of BDCP documents. Accomplishing this type of review in a mere 60 days is impossible. Limiting the draft IA

comment period to 60 days will effectively ensure that interested parties are incapable of meaningfully reviewing the totality of the BDCP.

In order to provide meaningful public review, the BDCP federal and State agencies need to hold a new Draft BDCP comment period with *every* BDCP document -- Implementing Agreement, Biological Assessments and Biological Opinions, and Draft BDCP Plan and Draft BDCP EIR/EIS-- available for public review and comment during the same time period. Additionally, the new comment period must remain open for at least four months. NEPA regulation 40 C.F.R. 1502.7 declares that the text of an EIS for "proposals of unusual scope or complexity shall normally be less than 300 pages." Here, there are already 40,214 pages of released documents which represent 20% more pages than the 32 volumes of the last printed edition of the Encyclopedia Britannica. The government's original four month comment period and subsequent two-month extension tacitly conceded that extended public review periods are necessary for a project as massive as the BDCP.

Conclusion

The absence of the Draft IA during the Draft BDCP and Draft EIR/EIS comment period has violated NEPA, CEQA, ESA, and NCCPA. These violations have rendered the comment period inadequate to support meaningful public review and comments. In order to remedy these violations, the government must release the Draft IA and open a new, four-month Draft BDCP comment period with every BDCP document available for public review and comment. Beyond these violations of law, the government must open a new public comment period to restore any public confidence in the integrity of the BDCP. It is absurd to expect the public to trust the BDCP process without full disclosure of the project's impacts, costs, and who will pay those costs.

For these reasons, Friends of the River urges you to open a new public comment period on all BDCP documents, including the IA when it is released, for at least four months. Please call Robert Wright, Senior Counsel, Friends of the River at (916) 442-3155x 207 with any questions you may have.

Sincerely,

/s/ E. Robert Wright
Senior Counsel
Friends of the River

/s/ Patrick Huber
Legal Counsel
Friends of the River

(Encl. two attachments)

Additional Addressees, all via email:

Maria Rea, Assistant Regional Administrator
National Marine Fisheries Service

Michael Tucker, Fishery Biologist
National Marine Fisheries Service

Ryan Wulff, Senior Policy Advisor
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U.S. Army Corps of Engineers

cc:
Congressman John Garamendi
Third District, California

Congresswoman Doris Matsui
Sixth District, California

From: Burt Wilson <burtwilson1933@yahoo.com>
Sent: Friday, May 30, 2014 10:36 AM
To: BDCP.comments@noaa.gov
Subject: Draft Implementing Agreement

Which entities make up the JPA?

Thank you,
Burt Wilson, editor
Public Water News Service

From: Warren Felger <wpfelger@pacbell.net>
Sent: Friday, May 30, 2014 10:50 AM
To: BDCP.comments@noaa.gov
Subject: Bay Delta Conservation Plan

We would like a DVD, as suggested: "If you would like to request a DVD copy of the documents, please send an email request to BDCP.comments@noaa.gov."

Warren Felger

Felger Ag Resources, LLC

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Email: wpfelger@pacbell.net

From: Greg Gisler <gregjgisler@yahoo.com>
Sent: Friday, May 30, 2014 4:11 PM
To: BDCP.Comments@noaa.gov

NOAA,
Comments regarding the Bay Delta Conservation Plan:

First, establish the minimum amount of water necessary from the Sacramento river and other tributaries to maintain the health of San Francisco bay and delta. A baseline of the amount required will then determine how much excess water can be budgeted to other water users, including the proposed new water intake and two tunnels. Determining a water baseline should be the main factor in designing the size of the new water intake and tunnels, as it may be evident the current design could be scaled back. Any amount of water in excess of the baseline would be available to the new plan.

Understanding how much water from the Sacramento river can be budgeted to the water districts paying for the tunnels is paramount in designing the scope of the project. I believe the main water priority is to maintain the health of SF bay and delta, the environment it creates, and the viability of local agriculture. It is the responsibility of our government to see the SF bay and delta are not destroyed because too much water is diverted elsewhere. Can the bay and delta really afford the capability of such a large diversion proposal?

If decisions regarding the scope of the plan and the amount of water desired by the plan supporters is not reconciled with the a baseline water amount, the SF bay and delta and the Sacramento river will be at risk of becoming a lost resource. It is unacceptable to allow the loss of Sacramento river water to the extent that has happened to the former San Joaquin river which no longer flows to the bay due to diversions.

Extremely Concerned,
Greg Gisler

From: Clare M. Spensley <clare@spensleymail.com>
Sent: Saturday, May 31, 2014 9:33 AM
To: BDCP.comments@noaa.gov
Subject: BDCP TWIN TUNNELS DELTA WATER DIVERSON Project

My husband, Dave Spensley and I oppose the BDCP TWIN TUNNELS DELTA WATER DIVERSON Project, our reasons are listed below:

We have been boaters, farmers and residents of the Sac. Delta since 1975 and strongly oppose the water and land grab by the State of CA to benefit the Resnicks, the Metropolitan Water District and Kern County Water Hogs, and would like the State to put a stop to this idiotic plan to destroy the Delta.

The proposed twin 40' diameter tunnels have little to do with habitat restoration, and should be separated from the Habitat Conservation Plan (HCP). The EIR for the tunnels should not be a HCP, and, therefore, should include all economic impacts including the impact of reduced property values and tax revenues in the 5 counties, and the impact on the local economy, both during and following construction.

The Cost / Benefits Analysis (Table 9-32) identifies a net benefit of $4.5 to $5.3 billion, given an incremental cost of $13.5 billion. There are several flaws in this analysis, including not taking into account the cost of bond interest, the cost of mitigation, which is necessary to experimentally offset the additional water take, the economic loss due to poor water quality in the south delta, and the economic loss of taking productive delta farmland out of production. The analysis uses "apples and oranges" e.g. using 60 years for the benefit, and 50 for the operating costs. The project is only 10% designed: a 37% contingency is inadequate - look at the Bay Bridge cost.

The BDCP (Chapter 1B.1) and EIR (Table 3.1) fail to include alternatives that actually produce more water for California: Desalination, storage, and re-use. After correcting the BDCP costs noted above, the cost / acre foot exceeds $1,000, ($1,900 for urban rate payers) which equals the estimated cost of desalination. Given that pumps would no longer be necessary to transport delta water over the Grapevine, the energy differential is even lower.

The Authorized Entity Group, which has jurisdiction over real-time operation of the tunnels, includes the Water Contractors. The BDCP, Chapter 7.1.5.1, has deferred the actual decision-making roles to a later date. possibly to avoid comments. Water Contractors should be non-voting members with regard to the amount of water allowed in the tunnels, and pumped out of Clifton Court Forebay, to avoid "the fox guarding the hen house".

10% of fertile delta cultivated farmland is proposed to be taken (Chapter 3.3.6.13.2) via eminent domain for experimental mitigation efforts, so more desert can be irrigated. This makes no sense given the additional water requirement / acre and delivery expense to irrigate the southern San Joaquin Valley.

The BDCP assumes (as part of its Benefit Analysis, Appendix 9A Sec. 9A.5) massive levee failures over the 50 year life of the Plan (2% probability /

year), yet we have never had a levee failure due to earthquake in recorded history, and UCLA researchers could not cause a levee to fail with a simulated 7.0 earthquake. Levee failures have occurred due to high water runoff, a time when pumping would not be affected. Additionally, the BDCP benefit is not reduced by earthquake risk to the tunnels, which would suffer the same liquefaction. The State would be better served by strengthening the San Luis dam and the Aqueduct over the Grape Vine, both of which actually straddle earthquake faults.
No new water sources are identified as part of the BDCP, which makes it a waste of taxpayer / rate payer money. Instead, the State should require mandatory water conservation and re-use, and invest in new sources of water via new water storage and desalination.
Planting of future permanent crops on desert soil should be denied as part of the BDCP, and when permanent crops are plowed under, only seasonal crops should be allowed.
The impact of the costs to rate payers is not in the BDCP. Once they find out, support for the BDCP will dwindle.
The impact on navigation and safety in the Delta has not been adequately addressed.
Proposed recreation mitigation does not benefit the south Delta (EIR Chapter 15).
Construction of the BDCP may damage the aquifers, subjecting them to foaming agents and other hazardous chemicals.
The BDCP allows the X2 salinity line to move inland, jeopardizing water quality and the ability of communities such as Antioch to use the water for drinking or farming. Fisheries will be impacted.
The giant muck ponds are forever in the Delta, and are too close to communities like Discovery Bay.
Citizens have attended public out-reach meetings such as the one at the Brentwood City Library, where the consultants were unable to answer any of our questions or comments. Promises that they would respond have been ignored, and the only changes made to the BDCP have made recreation near Discovery Bay worse. This is not a transparent process.
The 57 species being covered under the BDCP excludes many species that are at exactly the same level of risk and that live in the Delta. The BDCP Plan Appendix 1-A was not updated to cover the lesser sand hill crane even though the new alignment goes through a sensitive sand hill crane reserve. The BDCP Plan also does not cover the endangered great blue heron, egrets, geese and other waterfowl that live here and could be adversely affected by water quality degradation.
Recreation e.g., waterskiing, wakeboarding, and tubing would be effectively eliminated (EIR Ch. 15 Page 268) on the two primary recreational sloughs near Discovery Bay used for those activities: Short-term due to barges and docks; Long-term because the EIR does not include plans to repair damage done to sloughs from docks and barges (e.g., replanting the center berm(s) and levees along primary recreational channels).
Destroying recreational boating for Discovery Bay residents will seriously impact the marine-based economy that relies on boating.
The BDCP has chosen the wrong alignment and in fact doesn't study the logical alignment. The goal of the Delta Plan was to preserve the scenic beauty of the Delta. A 10 to 15 year construction project through the

heart of the Delta is in direct conflict with the Delta Plan. Instead, the construction should be planned in a route with less impact, such as next to Hwy 5 then across from Stockton near where the East Alignment is shown. That would avoid heavy trucks on the levees, avoid trucks on farm and small roads not adequate for heavy traffic (like Hwy 160 and Hwy 4) and construct year round. That would move the pollution to an area where there is already pollution due to high traffic volumes. Minimize the effect on Delta waterfowl and fish. Reduce the impact to Delta farms and communities. Avoid having to dewater small communities and farmers' wells for long periods of time. The muck could be used to build additional lanes for Hwy 5 in the congested area between Stockton and Sacramento.

The BDCP marketing collateral and press releases announced that the tunnel muck is not harmful after all. Instead, it is now being called "Reusable Tunnel Material" or "RTM". The glossy brochure stated all of the possible benefits and where it could be used (fill in islands to make shallower/better wetlands, improve levees). However, the BDCP Plan Chapter 4 sections about tunnel muck are exactly the same EXCEPT the word "muck" was replaced by "RTM". Yet the write-up still talks about how the RTM needs to be stored in lined ponds so as not to pollute the groundwater and the maps still show large muck ponds.

The EIR grossly understates the impact ten years of construction will have on recreation and the Delta's economy.

The EIR does not adequately capture the economic impact to marinas due to construction. For example, Chapter 15 page 259 states that use of the Bullfrog Landing Marina's boating facilities would not be effected but then goes on to say it is in the construction area and boaters "would be disturbed by noise and visual disruptions and 5 mile/hour zones which could last up to 8 years, resulting in a long-term adverse effect". This shows how the writers of the BDCP know absolutely nothing about boating, fishing, etc. That marina will be affected. Boaters will move their boats to quieter marinas away from the construction zone. The marina will go broke.

The EIR does not even identify a primary anchorage in the South Delta - Mildred Island - nor label it on any map (e.g., Chapter 15 Mapbook Figure M15-4: Sheet 5 of 8, page 31). There are barge sites planned affecting getting there from the north or the south and noise disruption through the summer will make it unusable. Not having access to an anchorage in the South Delta will affect our communities' economy.

Thank you for your consideration.

Clare M. Spensley-- Isleton, CA

Cellular- 209-479-6154