

FRIENDS OF THE RIVER  
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October 26, 2015

Via Email and U.S. Mail

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**Re: Refusal of Lead Agencies to Disclose in BDCP/California Water Fix Drafts Significant Adverse Environmental Impacts on Water Quality and Quantity and Fish and Fish Habitat Renders Drafts Useless for Informing Public about Water Tunnels Project**

Dear Secretary Jewell, Secretary Pritzker, Administrator McCarthy, Secretary Laird, Director Cowin, Regional Director Murillo, and Federal and California Agencies, Officers, and Staff Members Carrying out and Reviewing the BDCP/California Water Fix:

### *Summary*

Friends of the River (FOR) is a nonprofit public interest organization devoted to protecting and restoring our California rivers. Restore the Delta (RTD) is a grassroots campaign committed to saving the San Francisco Bay-Delta estuary for our children and future generations. The Environmental Water Caucus (EWC) is a coalition of over 30 nonprofit environmental and community organizations and California Indian Tribes. We seek compliance with our environmental full disclosure laws, the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) during this ongoing Bay Delta Conservation Plan (BDCP)/California Water Fix process by which the lead agencies, the U.S. Bureau of Reclamation and the California Department of Water Resources (DWR) determine whether to approve the Delta Water Tunnels

The Delta Water Tunnels would divert enormous quantities of freshwater that presently flow through the Sacramento River, sloughs, and the Delta before being diverted for export from the south Delta. Due to the new points of diversion north of the Delta, freshwater flows that presently contribute to water quality, water quantity, fish, fish habitat, and public health by flowing through the Delta would instead flow through massive Tunnels no longer providing benefits within the lower river, sloughs, and the Delta. *This is obvious.*

But the Recirculated Draft Environmental Impact Report (RDEIR)/Supplemental Draft Environmental Impact Statement (SDEIS) actually claims there would be *no* adverse impacts under NEPA or CEQA from the Delta losing all that freshwater flow on water supply or water quality, or on fish and aquatic resources. (RDEIR/SDEIS Table ES-9, pp. ES-41-60; Appendix A, ch. 31, Table 31-1, pp. 31-3 through 31-8).<sup>1</sup> The BDCP/Water Fix Drafts are supposed to be environmental full disclosure documents.<sup>2</sup> Whether from project-consultant bias or orders from above, it is arbitrary and unreasonable to falsely claim that taking significant quantities of freshwater flows away from the Delta does not have significant adverse environmental impacts on Delta water supply, water quality, fish, and fish habitat. The freshwater *is* the water supply for the Delta and *is* the habitat for the endangered and threatened species of salmon and other fish.

As the Environmental Protection Agency (EPA) said in its August 26, 2014, review of the Draft BDCP EIR/EIS:

Data and other information provided in the Draft EIS indicate that all CM1 [Tunnels project] alternatives may contribute to declining populations of Delta smelt, Longfin smelt, green sturgeon, and winter-run, spring-run, fall-run and late-fall run Chinook

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<sup>1</sup> The Drafts do selectively admit some significant adverse environmental impacts on other issues that pose less of a threat to the Water Tunnels even being a lawful, let alone reasonable, alternative.

<sup>2</sup> NEPA and CEQA are both “environmental full disclosure laws.” *Silva v. Lynn*, 482 F.2d 1282, 1284 (1<sup>st</sup> Cir. 1973)(NEPA); *Communities for a Better Environment v. City of Richmond*, 184 Cal.App.4th 70, 88 (2010)(CEQA). Both laws require that an agency “use its best efforts to find out all that it reasonably can” about the subject project and its environmental impacts. *Barnes v. U.S. Dept. of Transp.* 655 F.3d 1124, 1136 (9<sup>th</sup> Cir. 2011)(NEPA); *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 40 Cal. 412, 428 (2007)(CEQA).

salmon. (EPA letter (p. 10). We recommend that the Supplemental Draft EIS consider measures to insure freshwater flow that can meet the needs of those [declining fish] populations and ecosystem as a whole, and is supported by the best available science. We recommend that this analysis recognize the demonstrated significant correlations between freshwater flow and fish species abundance. (*Id.*).

The sole exceptions to the blanket denial of numerous and obvious adverse environmental impacts on water quality from the operation of the preferred Alternative 4A Water Tunnels are WQ-11 “effects on electrical conductivity concentrations resulting from facilities operations and maintenance,” and WQ-32 “effects on Microcystis Bloom Formation Resulting from Facilities Operations and Maintenance.” (RDEIR/SDEIS Appendix A, ch. 31, Table 31-1, pp. 31-3, 31-4). However, in the Executive Summary, even these two water quality impacts are not admitted to be adverse. (RDEIR/SDEIS Table ES-9, pp. ES-44, 45). Two tiny bits of truth survived in the Appendix but were eliminated from the Executive Summary. In any event, the Draft EIR/EIS and RDEIR/SDEIS are completely worthless in terms of providing accurate information and analyses for informed public and decision-maker review.

Denial of the adverse impacts of taking freshwater flows away from the Delta for the Water Tunnels is absurd. *Fish need water.*

***The Draft EIR/EIS and RDEIR/SDEIS are so Inadequate and Conclusory in Nature that Meaningful Public Review and Comment were Precluded***

An interested person or organization, or decision-maker has been furnished 48,000 pages of documents with central features being the false, arbitrary denial instead of honest disclosure of adverse environmental impacts resulting from Water Tunnels operations on Delta water quality, water quantity, fish, and fish habitat. In our previous letters to you we have summarized some of the adverse impacts on these subjects either admitted in other portions of the environmental documents or pointed out by expert public agencies such as the EPA.<sup>3</sup>

CEQA defines “significant effect on the environment” to mean “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, *water* . . . flora, fauna . . . and objects of historic or aesthetic significance.” CEQA Guidelines, 14 Code Cal. Regs §15382 (emphasis added). To anyone but a project booster, taking away substantial freshwater flows from a Delta already in crisis is an adverse change in the physical conditions within the area affected by the project.

Also under CEQA, “substantial evidence” does *not* include: “Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate . . .” 14 Code Cal. Regs § 15384. In addition to the false RDEIR/SDEIS findings being nothing more than conclusory argument, there have also been such findings as the truthful EPA expert

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<sup>3</sup> Our previous letters referenced above include the letters of July 22, 2015 (on absence of a range of reasonable alternatives), September 9, 2015 (on Endangered Species Act violations), and October 6, 2015 (on Clean Water Act violations).

determination that the Water Tunnels “would not protect beneficial uses for aquatic life, thereby violating the Clean Water Act. Total freshwater flows will likely diminish in the years ahead as a result of drought and climate change. Continued exports at today’s prevailing levels would, therefore, result in even lower flows through the Delta in a likely future with less available water.” (EPA Review of Draft BDCP EIS at p. 2, August 26, 2014). There is only conclusory argument, narrative, and inaccurate statements in the RDEIR/SDEIS about these impacts. There is not the supporting *substantial evidence* required by law.

Under CEQA, “Decision-makers must, under the law, be presented with sufficient facts to ‘evaluate the pros and cons of supplying the amount of water that the [project] will need.’” *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 40 Cal.4<sup>th</sup> 412, 432 (2007). Here, in violation of law, the decision-makers and also the public have been provided with claimed pros but virtually none of the cons involved in supplying the enormous amounts of water that would be diverted away from the Sacramento River and Delta.

The NEPA Regulations provide guidance in determining whether an impact “significantly” affects the environment. “Significantly as used in NEPA requires considerations of both context and intensity . . .” 40 C.F.R. § 1508.27. Considerations of context include “the affected region, the affected interests, and the locality.” § 1508.27(a). The Delta is recognized as being threatened by reductions in freshwater flows through the Delta. “[H]igher water exports” are among the factors the RDEIR/SDEIS admits “have stressed the natural system and led to a decline in ecological productivity.” (RDEIR/SDEIS 1-10). Further, “There is an urgent need to improve the conditions for threatened and endangered fish species within the Delta.” (Draft EIR/EIS ES-10; RDEIR/SDEIS ES-6). The RDEIR/SDEIS admits that “the Delta is in a state of crisis” and that “Several threatened and endangered fish species . . . have recently experienced the lowest population numbers in their recorded history.” (RDEIR/SDEIS ES-1).

As just two of many examples of truthful, contrary information in chapter 4 of the RDEIR/SDEIS, the Water Tunnels “would degrade the quantity and quality of rearing habitat for steelhead relative to Existing Conditions” and “would reduce the quantity and quality of rearing habitat for larval and juvenile green sturgeon relative to Existing Conditions.” (ch. 4, 4.3.7-22; 4.3.7-296). As just two of many examples of truthful, contrary information in chapter 5, “Effects Analysis” of the BDCP Draft Plan (December 2013), “Sacramento River attraction flows for migrating adult winter-run Chinook salmon will be lower from operations of the north Delta diversions under the BDCP” and “Plan Area flows have considerable importance for downstream migrating juvenile salmonids and will be affected by the proposed north Delta diversions . . . Because of the north Delta diversions, salmonids migrating down the Sacramento River generally will experience lower migration flows compared to existing conditions . . . As with winter-run Chinook salmon, it was assumed with high certainty that Plan area flows have critical importance for migrating juvenile spring-run Chinook salmon.” (Plan, ch. 5, 5.3-29; 5, 5.4-17).

Considerations of intensity refer to the “severity of impact.” 40 C.F.R. § 1508.27(b). Each of the ten subsections in § 1508.27(b) cry out that the impacts falsely denied by the lead agencies are significant, severe, and adverse. These ten subsections are addressed as follows:

“Impacts that may be both beneficial and adverse . . .” § 1508.27(b)(1). The claim that developing the new northern conveyance would reduce adverse impacts from the existing southern pumps on fish furnishes no excuse to evade disclosing the significant adverse impacts of the new conveyance on water quality, water quantity, and fish habitat throughout the Delta.

“The degree to which the proposed action affects public health or safety.” § 1508.27(b)(2). As shown in our previous Clean Water Act (CWA)/water quality letter, the worsening of CWA violations would adversely affect public health and safety.

“Unique characteristics of the geographic area such as proximity to . . . prime farmlands, wetlands . . . or ecologically critical areas.” § 1508.27(b)(3). The taking away of significant quantities of freshwater flows upstream from the Delta would pull in greater salinity from San Francisco Bay adversely impacting the prime farmlands of the Delta. The Delta consists of designated critical habitats for no fewer than five endangered and threatened fish species. California has determined by law that the Delta is “in crisis . . .” Water Code, § 85001(a).

“The degree to which the effects on the quality of the human environment are likely to be highly controversial.” § 1508.27(b)(4). The Water Tunnels are the most controversial public works project in California history. This project in its previous form as the “peripheral canal” was voted down by a statewide referendum in June 1982. One reason the lead agencies falsely deny obvious adverse environmental impacts, hide alternatives increasing flows by reducing exports, and refuse to post contrary information and views from the public and other public agencies on the BDCP/Water Fix website is *because* this project is so controversial.

“The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.” § 1508.27(b)(5). The experts, for example, of the Delta Independent Science Board have commented on the degree of uncertainty in the environmental documents. (DISB comment letter, September 30, 2015).

“The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.” § 1508.27(b)(6). Whether the Delta Tunnels are approved will in significant part determine future Central Valley Project (CVP) and State Water Project (SWP) operations. The action also represents a decision in principle that flows through the Delta will not be increased by reducing exports. Billions of dollars would not be spent to build the Water Tunnels unless the intent is to use them for the purpose for which they are intended.

“Whether the action is related to other actions with individually insignificant but cumulatively significant impacts . . .” § 1508.27(b)(7). The Water Tunnels impacts must be considered together with impacts resulting from future CVP and SWP operations.

"The degree to which the action . . . may cause loss or destruction of significant scientific . . . resources." § 1508.27(b)(8). Endangered species are addressed in the next paragraph. One does not know ahead of time what species may contain the key to a cure for a disease.

"The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act [ESA] of 1973." § 1508.27(b)(9). In *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 40 Cal. 412, 449 (2007), the California Supreme Court determined that "We do not consider this response [similar to the denials of the obvious here] substantial evidence that the loss of stream flows would have no substantial effect on salmon migration. Especially given the sensitivity and listed status of the resident salmon species, the County's failure to address loss of Cosumnes River stream flows in the Draft EIR 'deprived the public . . . of meaningful participation [citation omitted] in the CEQA discussion.'"<sup>4</sup> The Court required recirculation of the Draft EIR. We have summarized in our earlier ESA and CWA letters some of the impacts Water Tunnels operations would have on at least five endangered or threatened fish species and their designated critical habitats. The conclusions are contradicted by other portions of the BDCP/Water Fix documents as shown above. Of course these impacts are significant adverse impacts. Yet the Executive Summary falsely concludes in all cases that they are not. (RDEIR/SDEIS Table ES-9, pp. ES-47 through 60, Aqua-NAA-1 through 16, Aqua-1 through 217). Until about April 2015, the claim being made in the Draft EIR/EIS had been that while there would be adverse impacts of Water Tunnels operations on the fish and their habitat, some of that would be mitigated by the provision of wetland restoration. Now however, the "65,000 acres of tidal wetland restoration" has been eviscerated down to "59 acres." (RDEIR/SDEIS p. ES-17). Yet impacts previously either determined to be adverse or undetermined are now determined to not be significant or adverse. With the National Marine Fisheries Service and U.S. Fish and Wildlife Service no longer being co-lead agencies, Reclamation and DWR have been freer to evade the law and the truth in the RDEIR/SDEIS.

"Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment." § 1508.27(b)(10). As shown in our previous letters, the action threatens violation of several laws imposed for protection of the environment including the ESA, CWA, and the Delta Reform Act.

We understand that the exporters want to take the water away from the Delta and that their submissive agencies, Reclamation and DWR, want to give them the water. But these desires afford no license to churn out Draft environmental documents under NEPA and CEQA that falsely deny instead of truthfully disclose the numerous adverse impacts that diversion of water for the Water Tunnels would have on Delta water quality, water quantity, endangered and threatened fish species, designated critical habitat, and public health.

The NEPA Regulations require that:

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<sup>4</sup> The Court noted that a "potential substantial impact on endangered, rare or threatened species is per se significant." 40 Cal.4<sup>th</sup> at 449 citing Guidelines section 14 Code Cal. Regs §15065(a).

The draft statement must fulfill and satisfy to the fullest extent possible the requirements established for final statements in section 102(2)(C) of the Act. 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. . .” 40 C.F.R. § 1502.9(a)(emphasis added).

The Draft EIR/EIS and RDEIR/SDEIS with their arbitrary, false denials of numerous adverse environmental impacts resulting from Water Tunnels operations on the Delta are so inadequate as to preclude meaningful analysis. To comply with NEPA the lead agencies must either drop the Water Tunnels project or prepare and circulate a revised, honest Draft of the impacts analysis portions of the documents as well as the alternatives portions.

The CEQA Guidelines require that:

‘Significant new information’ requiring recirculation include, for example, a disclosure showing that:

- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- (2) . . .
- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project’s proponents decline to adopt it.
- (4) The draft EIR was *so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded*. 14 Code Cal. Regs § 15088.5(a)(1), (3), and (4)(emphasis added).

CEQA requires that unless the Water Tunnels project is dropped, a new Draft EIR/EIS sufficient to provide for meaningful public review and comment must be prepared and circulated.

### ***Conclusion***

Extinction is forever. Environmental full disclosure is imperative here. Arbitrary false denials of adverse environmental impacts resulting from new upstream diversion of large quantities of freshwater flows from a Delta already in crisis and from listed fish species and their designated critical habitats are unacceptable. The lead agencies must either drop the Water Tunnels project or provide an informative and honest Draft EIS/EIR that will afford a basis for meaningful public review and comment.

If you have any questions, please contact Robert Wright, Senior Counsel, Friends of the River at (916) 442-3155 ext. 207 or [bwright@friendsoftheriver.org](mailto:bwright@friendsoftheriver.org) .

Sincerely,

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

/s/Conner Everts  
Co-Facilitator  
Environmental Water Caucus

/s/Barbara Barrigan-Parilla  
Executive Director  
Restore the Delta

Additional Addressees, all via email:

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National Marine Fisheries Service

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National Marine Fisheries Service

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**From:** Bob Wright <BWright@friendsoftheriver.org>  
**Sent:** Monday, October 26, 2015 11:01 AM  
**To:** BDCPcomments  
**Subject:** Request for NEPA compliance comments  
**Attachments:** 10 26 15 pdf final adv impacts .pdf

Dear [BDCPComments@icfi.com](mailto:BDCPComments@icfi.com):

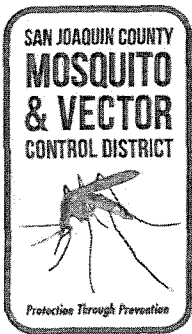
Attached please find our joint comment letter of today, October 26, 2015, requesting compliance with NEPA and CEQA during the BDCP/Water Fix process.

Please call if you have any questions about the matters set forth in our attached comment letter.

Please confirm by reply your receipt for the Record of these comments.

Sincerely,

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



ED LUCCHESI  
MANAGER

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LEGAL ADVISOR  
CHRISTOPHER K. ELEY

The San Joaquin County Mosquito and Vector Control District (District) has reviewed the BDCP as presented. The restoration of the Delta Ecosystem must include implementation of best management practices (BMPs) for mosquito prevention and control. BMPs are necessary to implement during the design phase for these types of proposals. We can provide historical information on mosquito species and mosquito-borne virus prevalence associated with current habitat located in the Delta ecosystem. Our District conducts a comprehensive mosquito control program in the San Joaquin County Delta. This work includes mosquito/virus surveillance, ground and aerial mosquito larvicide treatments and around/aerial adult mosquito control treatments. We prefer a proactive approach to mosquito control; whereby, through proper design and management techniques, mosquito prevention is key.

One way to ensure these factors are part of the design phase is to follow at least two examples of BMPs to ensure mosquito prevention. Two BMPs (attached) that address these types of projects include:

1. **Best Management Practices for Mosquito Control in California-** Recommendations for California Department of Public Health and the Mosquito Vector Control Association of California.
2. **Central Valley Joint Venture Technical Guide to Best Management Practices for Mosquito Control in Managed Wetlands-** (Developed in conjunction with the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service and Mosquito and Vector Control Districts.
3. **Integrated Pest Management Plan for Certain Vectors in San Joaquin County, CA 2008** – Should be added to the list of published guidelines.

San Joaquin County MVCD concerns include the habitat creation adjacent to existing development. The District must ensure any new habitat design, especially one that includes wetland habitat, follows the BMPs in order to prevent mosquito breeding. These winged insects do not remain at their point of origin; rather they will migrate toward a food source. Currently, should the residents of these areas experience a mosquito migration origination from the adjacent agricultural land, the Districts will respond by confirming the mosquito breeding site and abate as necessary in order to relieve the residents from the mosquito activity. This past year, the Districts conducted a number of both ground and aerial adult mosquito control applications to control West Nile virus carrying mosquitoes. We cannot have development of a site (conductive to mosquito breeding), that has

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A significant portion of the Plan is dedicated to restoration of wetland ecosystems and the development of migratory bird habitat. If not properly designed, built, managed and maintained, these types of aquatic features provide extensive mosquito-breeding habitat

that requires responses and resources from the San Joaquin County Mosquito and Vector Control District.

For example, to interrupt mosquito breeding cycles and West Nile virus transmission, the District can sometimes provide short-term control of immature and adult mosquitoes through applications of pesticides. For long term control, the District works with landowners and water managers to modify mosquito-breeding conditions to prevent or reduce the reoccurrence of mosquito development.

The California Health and Safety Code authorizes mosquito control districts to conduct surveillance and control of mosquitoes, prevent the reoccurrence of mosquitoes, and legally abate the production of mosquitoes or public nuisance, defined as "Any activity that supports the development, attraction, or harborage of vectors, or that facilitates the introduction or spread of vectors." Landowners, both public and private, are subject to civil penalties of \$1,000 per day plus cost associated with control of the mosquitoes.

We have updated section 25.1.15 Vectors of the BDCPlan. The updated information provided by the District must be included, since it is more representative of the geographic project site. The comments relative to the individual subsections is attached.

To reduce the impacts to public health and the effects on public services, and to promote cooperative relationships between local government and public and private landowners, the District recommend that property owners implement mosquito prevention best management practices (BMPs) on lands developed for wetlands, ecosystem restoration projects, migratory bird habitat, and other man-made aquatic features.

This District, in conjunction with Contra Costa County MVCD, Sacramento/Yolo MVCD and Solano County MAD worked with the Delta Protection Commission to develop recommendations on mosquito prevention strategies for wetlands and land flooding. The recommendations were developed to reduce mosquito populations, reduce the amount of pesticides applied to the environment, limit landowner liability, and lessen the impact on public services. Policy 10 (P-10) of the Natural Resources Section of DPC's Land Use and Resource Management Plan states:

"Ensure that design, construction, and management of any flooding program to provide seasonal wildlife and aquatic habitat on agricultural lands, duck club lands and additional seasonal and tidal wetlands, shall incorporate "best management practices" to minimize vectors including mosquito-breeding opportunities, and shall be coordinated with local vector control districts, (each of the four vector control districts in the Delta provides specific wetland/mosquito criteria to landowners within their district)."

In conclusion, the San Joaquin County Mosquito and Vector Control District recommends that the EIR include the impacts to public health and the effects on public services we feel will result with the implementation of the plan.

Thank you for the opportunity to provide comment.

A handwritten signature in cursive script, appearing to read "Eddie Lucchesi".

Eddie Lucchesi

Manager

San Joaquin County Mosquito and Vector Control District

(Attachment)

**(Attachment)****General comments:**

The BDCP project is primarily in the Delta region of San Joaquin County, under vector control jurisdiction of San Joaquin County Mosquito & Vector Control District (SJCMVCD). The Delta region is one of the major sources of vector populations and active enzootic West Nile virus transmission. SJCMVCD has all the first-hand data, knowledge, technique and experience in managing vector population and monitoring West Nile virus activities in the Delta.

Unfortunately, these were not mentioned or referenced, and some of the data sources cited are irrelevant to the study area. In addition, some of the facts need to be double checked and corrected accordingly.

**Page 25-7, Line 13-20:**

Please refer to the following document for the latest update of *Aedes aegypti* and *albopictus* detection in California.

<https://www.cdph.ca.gov/HealthInfo/discond/Documents/AedesDistributionMap.pdf>

**Page 25-7, Line 34:**

This is for *Aedes* and *Psorophora* mosquito species. *Culex* or *Culiseta* mosquito species prefer stagnant surface water.

**Page 25-8, Line 1:**

*Anopheles*, *Culex* and *Culiseta* mosquito species lay eggs on water surface. *Aedes* and *Psorophora* mosquitoes lay eggs on soil or substrate that are subject to future inundation.

**Page 25-8, Line 6-7:**

As pointed out in the first paragraph, agricultural practice and landscaping has strong impact on mosquito breeding. In Delta, mosquito abundance is basically determined by agricultural factors. Dry period does not mean reduced mosquito abundance in Delta. This year Delta has much higher vector population although it is very dry year.

**Page 25-8, Line 34-35:**

add ", and mosquito-borne disease activities."

**Page 25-10, Table 25-5:**

In Delta, the most abundant mosquito species are *Aedes melanimon*, *Aedes vexans*, *Culex erythrothorax*, *Culex pipiens*, *Culex tarsalis*, *Culiseta incidens* and *Culiseta inornata*.

*Aedes nigromaculis* and *Aedes sierrensis* are slightly abundant.

*Aedes dorsalis*, *Aedes washinoi*, *Anopheles franciscanus*, *Anopheles freeborni*, *Anopheles punctipennis* and *Culiseta particeps* are present, but very rare.

We never collected *Aedes squamiger* in the past 10 years in Delta. *Aedes squamiger* is a salt marsh mosquito species closely associated with tidal and reclaimed marshes of the Pacific coast. It does not occur in the vicinity of Delta.

**Page 25-12, Table 25-6:**

1. All the information needed in this table can be found in this single document:

<https://www.cdph.ca.gov/certlic/occupations/Documents/ManualBiologyandControlofMosquitoesinCA.pdf>

Diseases and their vectors can be found in page 19-24, mosquito migration distance can be found 33-51.

2. Formal scientific names are recommended for each mosquito species. Common names often create confusion for readers outside of the field.

**Page 25-14, Line 10-14, Table 25-7 and 25-8:**

West Nile virus transmission is dynamic. It has a unique pattern with transmission risk to human fluctuating between normal and epidemic levels. Data from last five years (2011-2015) should be cited in table 25-7 and 25-8 to reflect the actual trend of West Nile virus transmission. As a matter of fact, California experienced the worst WNV outbreak in 2014 since 2005. Similarly, in 2014 we observed the highest WNV infection rate in mosquitoes in Delta area. In Delta counties, there were more than 500 positive birds in 2014. Although the total documented human cases in Delta counties in the last 5 years are not substantial, the undocumented human cases are estimated to be more than documented cases. This has been the trend in the last 5 years because physicians usually do not order WNV testing which is not covered by most insurance. Furthermore, we are still under risk of WNV outbreak in Delta Counties if favorable conditions

meet. This can be exemplified by Orange County and Butte County. Both counties had relatively low human cases in the past 5 years, but Orange County had a major outbreak in 2014 with 263 documented cases, and Butte County is having an outbreak this year with 38 cases so far. WNV is here to stay. It is an existing threat and we are under risk. Therefore, the statement "Therefore, while WNV is a concern and a potential threat to the study area and California, the documented human occurrences have been relatively limited." is inaccurate.

All the data needed for 2011-2015 are available on <http://www.westnile.ca.gov/>



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**From:** Eddie Lucchesi <elucchesi@sjmosquito.org>  
**Sent:** Monday, October 26, 2015 11:36 AM  
**To:** BDCPcomments  
**Subject:** BDCP Comments from SJCMVCD  
**Attachments:** BDCPComments2015.pdf

October 26, 2015

Attached are comments from the San Joaquin County Mosquito and Vector Control District relative to the BDCP project.

Eddie Lucchesi

Manager

San Joaquin County Mosquito and Vector Control District

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