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The draft EA/IS fails to comprehensively describe or analyze the species, its baseline condition (that should at a minimum start with the CalFed ROD's approval in 2000), movements, habitat requirements, critical habitat, or recovery plan. Is the GGS part of any draft of final HCPs or NCCPs? The Agencies' *Environmental Commitments* are described on pages 2-12 to 2-14 (repeated verbatim in Appendix A) and seem to be the extent of what the Agencies' deem to be their responsibilities under NEPA and CEQA.

We would like to remind the Agencies that flooded rice fields and irrigation canals in the Sacramento Valley can be used by the giant garter snake for foraging, cover and dispersal purposes. The snake gives birth from July to September, months that the Project would be implemented. The Agencies must explain to decision-makers and the public just how the multiple strains of past and Project fallowing and groundwater substitution transfers, cuts in CVP and SWP deliveries, and recently past and existing dry conditions in the area of origin could significantly increase the potential impact to GGS habitat and the species itself. GGS depend on more than only rice fields in the Sacramento Valley. 20 "The giant garter snake inhabits marshes, sloughs, ponds, small lakes, low gradient streams, other waterways and agricultural wetlands such as irrigation and drainage canals and rice fields, and the adjacent uplands. Essential habitat components consist of: (1) adequate water during the snake's active period, (early spring through mid-fall) to provide a prey base and cover; (2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat..." (Id at p. 3) What analysis has occurred that removes GGS from consideration for potential significant impacts? How will the Project affect streams, wetlands, and emergent, herbaceous wetland vegetation? How will it be monitored? Crafting an Environmental Commitment to provide Reclamation with "[a]ccess to the land to verify how the water transfer is being made available and to verify that the actions to protect the GGS are being implemented," doesn't pass the blush test (2-13). As AquAlliance has stated repeatedly in previous water transfer comments, an independent, third-party monitor, with no financial ties to the Agencies, DWR, or any buyers and sellers is the only acceptable and credible monitor. See AquAlliance comments for the 2010/2011 Water Transfer Program and the Bureau's 2013 Water Transfer Program.

## Hydrology and Water Quality (IX)

The draft EA does not provide sufficient evidence to support its conclusion that the Project will not have significant hydrological impacts.

a) The EA/IS lacks detailed information, such as the most basic conditions in the local and regional environment in the area of origin, which has also experienced multi-year dry conditions and significantly lower precipitation. This essential background description is found neither in the *Background* section of Chapter 1 or in this section of Chapter 3, *Hydrology and Water Quality*. Without disclosing current site specific, local, and

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Programmatic Consultation with the U.S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter and Yolo Counties, California

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regional conditions, it is impossible to evaluate the potential environmental impacts that should be made available to decision-makers and the public before the Bureau reaches a conclusion. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

- b) Item "a" considers if the Project will "Violate any water quality standards or waste discharge requirements?" and concludes that there will be a *Less than Significant Impact*.
  - Proposed Action. 1) The EA/IS fails to disclose historic and ongoing degradation of water quality that has been caused by the CVP in the Delta and the SLDMWA import area. 2122 232) It also fails to consider that groundwater extractions may mobilize PCE, TCE, and nitrate plumes under the City of Chico<sup>24</sup> (p.4) or in other Sacramento Valley communities and the potential risks to human health and the environment. The EA/IS fails to even *disclose* the existence of all the hazardous waste plumes in the area of origin where groundwater substitution may occur. These are just more examples of the issues that should be considered and evaluated in an EIS/EIR.
- c) Item "b" discussed on pages 3-27 3-42 is considered a *Less than Significant Impact*. There are significant faults with the finding and the material that supports it in the EA/IS.
  - No Action Alternative. Why do Figures 3-1, 3-2, and all the hydrographs in Appendix F end at 2002? Extending the timeline and using actual well monitoring data, not simply modeling, would provide valuable information for the Agencies, decision-makers, and the public. Figures 3-1, and 3-2 provide "[b]aseline modeling trends," but present only a picture of possible groundwater responses when there is genuine historical and current data<sup>25</sup> that are ignored. The exercise in modeling actually obfuscates the demonstrable responses that have occurred during all measure of hydrologic conditions.
  - No Action Alternative. "In the Sacramento Valley, reductions in supply have historically resulted in increased groundwater pumping and decreased groundwater levels; however, the water levels have rebounded quickly after the dry period." This conclusory statement fails to provide the decision-makers and the public with important factual data. For example, a summary of conditions in the Durham area of Butte County find that while water levels may recover after dry periods with intense use, wells aren't returning to previous levels, but moving

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<sup>&</sup>lt;sup>21</sup> SWRCB D-1641, "The source of much of the saline discharge to the San Joaquin River is from lands on the west side of the San Joaquin Valley which are irrigated with water provided from the Delta by the CVP, primarily through the Delta-Mendota Canal and the San Luis Unit." "The USBR, through its activities associated with the in the San Joaquin River Basin, is responsible for significant deterioration of water quality in the Southern Delta." <sup>22</sup> Drainage Problem area in 1990 was 450,000 acres. If no resolution, problem area will be 950,000 acres in 2040 (Rainbow Report)

<sup>&</sup>lt;sup>23</sup> If no more irrigation of the western San Joaquin Valley were to occur and the San Luis Drain were completed, it would still take 63-300 years to drain the accumulated Se from the aquifer at a rate of 43,500 lbs./year. (USGS Open File Report 00-416)

<sup>&</sup>lt;sup>24</sup> 2005. California GAMA Program: Groundwater Ambient Monitoring and Assessment Results for the Sacramento Valley and Volcanic Provinces of Northern California

<sup>&</sup>lt;sup>25</sup> http://www.water.ca.gov/waterdatalibrary/

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> steadily in a downward trajectory. 26 Additionally, even the Yuba River area, often touted by state and federal agencies as a successful conjunctive use program, takes 3-4 years to recover from groundwater substitution in the south sub-basin<sup>27</sup> although the Yuba County Water Agency analysis fails to determine how much river water is sacrificed to achieve the multi-year recharge rate. (pp. 21, 22). More examples of what the EA/IS fails to provide are found in the most current DWR maps listed above in our comments regarding Chapter 2 that demonstrate the

serious condition of the groundwater basins in the Sacramento Valley. No Action Alternative "Figures 3-1 and 3-2 show baseline groundwater trends (in addition to modeling results for the Proposed Action) at the groundwater table and

in the deep aquifer, respectively, in the Sacramento Valley near Sycamore Mutual Water Company." There is a noticeable absence of information north of Chico on either side of the Sacramento River (recall that Figures 3-3 and 3-4 stop before the northern Butte County line); south and east of Chico east of the Sacramento River in general; and west of Interstate 5. There may not be planned groundwater substitution transfers in some of this area, but that is no reason not to provide tangible data for this part of the common Tuscan groundwater basin. For examples of existing conditions see Table 1 below that is based on data provided by DWR. In addition, grave concern was expressed in the minutes of a December 2013 Glenn County Water Advisory Committee: "The report emphasized that despite the small upward trend in water levels observed on an annual basis in some areas, there is a general decline observable in the long term data across the majority of the region, particularly in the Northwestern portion of Glenn County."

# Table 1. Example of wells of concern in Butte and Tehama counties

3 yrs data multi completion. ~1 mile west of Butte Creek Country Club, declining trend http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr hydro.cfm?CFGRIDKEY=24664 http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr hydro.cfm?CFGRIDKEY=24665 http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr hydro.cfm?CFGRIDKEY=24440

3 yrs data multi, ~6miles SW of Chico, declining trend http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr hydro.cfm?CFGRIDKEY=48992 http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr\_hydro.cfm?CFGRIDKEY=48990 http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr hydro.cfm?CFGRIDKEY=48991

4yr data multi, ~6miles WSW of chico, declining http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr\_hydro.cfm?CFGRIDKEY=38214 http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr hydro.cfm?CFGRIDKEY=24975 http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr hydro.cfm?CFGRIDKEY=24974

<sup>26</sup> Buck, Christina 2014. Groundwater Conditions in Butte County.

<sup>&</sup>lt;sup>27</sup> 2012. The Yuba Accord, GW Substitutions and the Yuba Basin. Presentation to the Accord Technical Committee.

11 yrs, irrigation, ~8 miles NW of Chico, declining trend

http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr hydro.cfm?CFGRIDKEY=25770

12 yrs, cana-pine creek, -10'

http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr hydro.cfm?CFGRIDKEY=25770

>40 yr data Near 99 and ~6miles E of Corning, dipping below 60' shallow aquifer (valley oak depth) http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr hydro.cfm?CFGRIDKEY=19988

Near Deer Creek ~10miles NE of Corning, 14 years, declining trend, monitoring well multi http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr\_hydro.cfm?CFGRIDKEY=19993 http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr\_hydro.cfm?CFGRIDKEY=34741

Multi comp monitoring well, ~10miles NE Corning, 14 years, declining below valley oak roots, near deer creek

http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr\_hydro.cfm?CFGRIDKEY=19047 http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr\_hydro.cfm?CFGRIDKEY=19046 http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr\_hydro.cfm?CFGRIDKEY=19045

Multi comp monitoring, 13 yrs, ~8miles SE of Durham, Declining toward valley oak limits if trend continues <a href="http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr\_hydro.cfm?CFGRIDKEY=35608">http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr\_hydro.cfm?CFGRIDKEY=17160</a>
<a href="http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr\_hydro.cfm?CFGRIDKEY=17161">http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr\_hydro.cfm?CFGRIDKEY=17161</a>

~2.5 miles NW of Thermal to Forebay, 14 yrs, 10-20' decline http://www.water.ca.gov/waterdatalibrary/groundwater/hydrographs/brr hydro.cfm?CFGRIDKEY=16799

• No Action Alternative. "Appendix F, Groundwater Modeling Results, contains hydrographs at additional locations throughout the valley." As noted above, presenting only modeling when historic records exist, conceals factual material and presents a false picture. The Agencies must produce the data from decades of well monitoring to provide a genuine look at the groundwater basins, both the Sacramento and Redding, More discussion was presented above.

• No Action Alternative. "The groundwater basin is likely to experience groundwater level declines similar to those that occurred during historic droughts (such as 1976-1977 and 1987-1992), caused by increased pumping to address reduced surface water supplies. In the San Joaquin Valley, reductions in supply would also lead to increased groundwater pumping, but the groundwater historically has not recovered during subsequent dry years." (p. 3-27). The EA/IS fails to provide any scientific research and analysis that leads to its conclusory

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assertion that conditions in the Sacramento Valley groundwater basins will perform as they did during droughts between 38 and 22 years ago. As in much of California, the population has increased in the Sacramento Valley and the amount of irrigated agricultural has as well, placing greater demands on the groundwater basins. As noted above, the San Joaquin Valley groundwater basins are a casualty of very flawed state and federal policy combined with exuberance to place profit over human health, safety, and the environment.

- Proposed Action. The environmental checklist for Hydrology impacts, at section IX.b, finds that the Project impact to "Substantially deplete groundwater supplies ... such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level" is 'less-than-significant."
- This conclusion is, however, the result of failing to proceed in the manner required by law: (1) in assessing the significance of this impact, (2) in developing specific mitigation measures to reduce this impact; (3) in assessing the effectiveness of such mitigation measures; and (4) in adopting such mitigation measures. This conclusion is also unsupported by substantial evidence in the record. In addition, there is substantial evidence that this impact is significant. Therefore, CEQA requires preparation and certification of an EIR and NEPA requires preparation and certification of an EIS before Project approval.
- The EA/IS fails to discharge the lead agencies' duty to find out and disclose all that they reasonably can. (14 CCR § 14144.)

With respect to Sacramento Valley groundwater, the EA/IS states: "In the Sacramento Valley, reductions in supply have historically resulted in increased groundwater pumping and decreased groundwater levels; however, the water levels have rebounded quickly after the dry period." (Page 3-27.) The EA/IS makes this assertion based on modeling results, while ignoring contrary empirical information. For example, a summary of conditions in the Durham area of Butte County find that while water levels may recover after dry periods with intense use, wells aren't returning to previous levels, but moving steadily in a downward trajectory. Significantly more material is found in our comments on the 2013 Water Transfer Program.

In another example, even the Yuba River area, often touted by state and federal agencies as a successful conjunctive use program, takes 3-4 years to recover from groundwater substitution in the south sub-basin.<sup>29</sup> The Yuba River analysis, however, fails to determine how much river water is sacrificed to achieve the groundwater recharge rate mentioned (pp. 21, 22). It is highly likely that the Yuba River becomes a losing stream due to excess use of the groundwater. More examples of what the EA/IS fails to provide are found in the most current DWR

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<sup>&</sup>lt;sup>28</sup> Buck, Christina 2014. Groundwater Conditions in Butte County.

<sup>&</sup>lt;sup>29</sup> 2012. The Yuba Accord, GW Substitutions and the Yuba Basin. Presentation to the Accord Technical Committee.

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maps listed above in our comments regarding Chapter 2 that demonstrate the serious condition of the groundwater basins in the Sacramento Valley.

• In short, the EA/ IS fails to disclose all that it reasonably can. "If the local agency has failed to study an area of possible environmental impact, a fair argument may be based on the limited facts in the record. Deficiencies in the record may actually enlarge the scope of fair argument by lending a logical plausibility to a wider range of inferences." Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296, 311.

# • There is substantial evidence that this impact is significant.

The EA/IS concedes the Project may cause impacts to the groundwater basin from groundwater substitution transfers, including (1) increased groundwater pumping costs due to increased pumping depth; (2) decreased yield from groundwater wells due to reduction in the saturated thickness of the aquifer; (3) decrease of the groundwater table to a level below the vegetative root zone, which could result in environmental effects; and 4) third-party impacts to neighboring wells. (P. 3-29.) But the EA/ IS deems these impacts less-than-significant. In a confusing twist, however, the EA/ IS concedes there are uncertainties surrounding how this Project will affect specific locations, stating: "uncertainty of how groundwater levels could change, especially during a very dry year," in the Redding basin (p. 3-30) and "[t]he model results may not reflect all specific local conditions throughout the Sacramento Valley" (p. 3-37); and that, as a result, mitigation measures will be employed, stating: "Therefore, minimization measures described below would include development of monitoring and mitigation plans to monitor and address potential groundwater level changes that could affect third parties or biological resources." (P. 3-37.)

- This is confusing because the agencies cannot require mitigation measures unless impacts are deemed significant. (See e.g., 14 CCR § 15041(a).) This gives rise to an inference that the Project may cause these impacts to be significant, thus requiring an EIS/EIR.
- Further, the EA/IS unlawfully defers the development of specific mitigation
  measures until after project approval because there is no basis for assuming they
  will be effective, there are no objective criteria to judge whether they are
  successful in avoiding significant impacts, and nothing about them is definitive
  enough to be enforceable. In short, there is no reason to assume the "minimization
  measures" and the mitigation and monitoring plans that the EA/IS references will
  reduce these impacts to "less-than-significant"
- Proposed Action. The Redding Groundwater Basin discussed on pages 3-29 to 3-30 is not included in Figures 3-3 and 3-4. SacFEM modeling may not have been done for the Redding Groundwater Basin, but it would have been beneficial for readers to have the entire area of origin depicted in the only maps provided for the Project.

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• Proposed Action. In addition, the Anderson Cottonwood Irrigation District ("ACID") that is located in the Redding Groundwater Basin is going at the groundwater substitution transfers somewhat blind. It has not benefited from any modeling, but has instead, "[t]ested operation of these wells in the past at similar production rates and has observed no substantial impacts on groundwater levels or groundwater supplies (Anderson-Cottonwood ID 2013)." In attempting to review the reference from p. 5-1 for the: *Initial Study and Proposed Negative Declaration for Anderson-Cottonwood Irrigation District's 2013 Water Transfer Program. Available at:* 

http://www.andersoncottonwoodirrigationdistrict.org/library.html or at:
http://www.usbr.gov/mp/nepa/nepa projdetails.cfm? Project ID=13310, we
found that the only environmental documents at the ACID web site relate to a
2011 Bureau EA/FONSI for the Anderson-Cottonwood Irrigation District
Integrated Regional Water Management Program – Groundwater Production
Element Project and the Bureau's web site is for the EA/FONSI for the 2013
Water Transfer Program. The public has been obstructed from reviewing the
referenced material to evaluate the efficacy of the findings in the
Bureau/SLDMWA EA/IS that, "[g]roundwater substitution transfers are unlikely
to have significant effects on groundwater levels." (p. 3-30).

 Proposed Action. Table 3-8 fails to include ACID and Tule Basin Farms in the table. The last three listed *Potential Sellers* are not listed in alphabetical order with the other possible sellers.

Proposed Action. Groundwater/Surface Water Interaction. The EA/IS acknowledges the potential for impacts and assumes a "[1]2 percent depletion factor to prevent any adverse impacts associated with surface water-groundwater interaction..." (p.3-39) This number is not supported with any documentation or analysis and runs counter to modeling done by CH2M HILL in a memo to DWR in 2010. "The effect of groundwater substitution transfer pumping on stream flow, when considered as a percent of the groundwater pumped for the program, is significant. The impacts were shown to vary as the hydrology of the periods following the transfer program varied. The three scenarios presented here estimated effects of transfer pumping on stream flow when dry, normal, and wet conditions followed transfer pumping. Estimated stream flow losses in the fiveyear period following each scenario were 44, 39, and 19 percent of the amount of groundwater pumped during the four month transfer period."30 Even with this modeling information in hand since 2010, the Agencies and DWR continue to use a 12 percent deduction for stream flow. The results of the model run are the best predictions available to date and suggests caution above all else, even though they are preliminary and the model subject to modification.<sup>31</sup> By adhering to a 12 percent loss for stream flow, it is clear that the Bureau, SLDMWA, and DWR are

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<sup>&</sup>lt;sup>30</sup> Lawson 2010. Groundwater Substitution Transfer Impact Analysis, Sacramento Valley.

<sup>&</sup>lt;sup>31</sup> WRIME 2011. Peer review of Sacramento valley Finite Element Groundwater Model (SacFEM)

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not erring on the side of caution and may be causing considerable legal injury to other users and the environment.

- The base map for Figures 3-3 and 3-4 lacks clarity. It is difficult to discern the approximate locations of wells # 1 through 6, 9, 15, 16, 19, 20, 21, 22, 28, and 30
- This Project is part of serial, so-called "temporary" water transfers<sup>32</sup> and is also part of a much larger Program that was introduced by the Agencies on page 1-4, Long Term Water Transfers. As noted above, the Project and the Long Term Water Transfers reach back much further and are components of the following programs, plans, and studies:
  - i. CalFed Bay-Delta Program, Record of Decision (August 2000)
  - ii. Sacramento Valley Water Management Agreement (Phase 8), (October 2001)
  - iii. Sacramento Valley Integrated Regional Water Management Plan (2006)
  - iv. Sacramento Valley Regional Water Management Plan (January 2006)
  - v. Stony Creek Fan Conjunctive Water Management Program
  - vi. Draft Initial Study for 2008-2009 Glenn-Colusa Irrigation District Landowner Groundwater Well Program
  - vii. Regional Integration of the Lower Tuscan Groundwater Formation into the Sacramento Valley Surface Water System Through Conjunctive Water Management (June 2005) (funded by the Bureau)
  - viii. Stony Creek Fan Aquifer Performance Testing Plan for 2008-09
    - ix. Annual forbearance agreements (2008 had an estimated 160,000 acre feet proposed).
    - x. The Delta Stewardship Council's Plan and EIR approved in 2013.
  - xi. The Bay Delta Conservation Plan and EIS/EIR currently out for public review and comment.
- Proposed Action. Land Subsidence. The first paragraph on subsidence on page 3-39 is actually a useful summary of the hazards presented by the Project. The subsequent material also highlights the potential significant, adverse impacts, such as:
  - i. "Land subsidence has not been monitored in the Redding Groundwater Basin. However, there would be potential for subsidence in some areas of the basin if groundwater levels were substantially lowered. The groundwater basin west of the Sacramento River is composed of the Tehama Formation; this formation has exhibited subsidence in Yolo County and the similar hydrogeologic characteristics in the Redding Groundwater Basin could allow subsidence."

<sup>32</sup> AquAlliance 2014. Past Water Transfers from the Sacramento Valley Through the Delta.

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ii. Most areas of the Sacramento Valley Groundwater Basin have not experienced land subsidence that has caused impacts to the overlying land. However, portions of Colusa and Yolo counties have experienced subsidence; historically land subsidence occurred in the eastern portion of Yolo County and the southern portion of Colusa County, owing to groundwater extraction and geology. As much as four feet of land subsidence due to groundwater withdrawal has occurred east of Zamora over the last several decades.

The EA/IS then concludes that there will be a Less Than Significant Impact by using the "guidance" set forth in the DRAFT Technical Information for Preparing Water Transfer Proposals (Bureau and DWR 2013) and Addendum (Bureau and DWR 2014) to, "[m]inimize potential effects to other legal users of water; to provide a process for review and response to reported third party effects; and to assure that a local mitigation strategy is in place prior to the groundwater transfer." In addition, "Reclamation's transfer approval process and groundwater minimization measures set forth a framework that is designed to avoid and minimize adverse groundwater effects. Reclamation will verify that sellers adopt these minimization measures to minimize the potential for adverse effects related to groundwater extraction."

Even if minimizing subsidence is possible in the Sacramento Valley where groundwater substitution is planned, which we will argue it is not (see below), minimizing an impact is not avoiding an impact. The mere acknowledgment that minimizing will be necessary to avoid potentially adverse impacts, points once again to the need for an EIS/EIR. The EA/IS, the Draft Technical Information for Water Transfers in 2013, and the 2014 Addendum don't appear to weigh the significance of avoidance of impacts, pre-Project mitigation, during-Project mitigation, or post-Project mitigation. This fails to create objective standards and merely defers responsibility to the "willing sellers," a broadly unsuspecting public, and a voiceless environment.

# There is substantial evidence that this impact is significant.

As noted above, the EA/IS concedes the Project may cause land subsidence impacts in both the Redding Groundwater Basin, where it says previous subsidence has not been a problem (p. 3-39), and the Sacramento Groundwater Basin (p. 3-40), where it says previous subsidence from groundwater pumping has been a problem.

Regardless of these different histories, both are purportedly required to develop socalled mitigation and monitoring plans to deal with the assessment of whether pumping will cause significant subsidence and to develop mitigation measures to reduce this impact.

Again, because agencies cannot require mitigation measures unless impacts are deemed significant, this requirement indicates the Project may cause significant subsidence impacts, thereby requiring an EIS/EIR.

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Further, the EA/IS unlawfully defers the assessment of whether pumping will cause significant subsidence. The EA/IS unlawfully defers the development of mitigation measures to reduce this impact until after project approval, but there is no basis for assuming they will be effective, there are no objective criteria to judge whether they are successful in avoiding significant impacts, and nothing about them is definitive enough to be enforceable. In short, there is no reason to assume the "minimization measures" and the mitigation and monitoring plans that the EA/IS references will reduce this impact to "less-than-significant"

The following evidence, however, demonstrates that the Project's subsidence impacts may be significant. AquAlliance has provided expert opinion on the issue of subsidence monitoring repeatedly during past water transfer environmental review. Despite its credibility, the findings of Dr. Kyran Mish, Presidential Professor, School of Civil Engineering and Environmental Science at the University of Oklahoma, have been ignored. Dr. Mish relates: "It is important to understand that all pumping operations have the potential to produce such settlement, and when it occurs with a settlement magnitude sufficient enough for us to notice at the surface, we call it subsidence, and we recognize that it is a serious problem (since such settlements can wreak havoc on roads, rivers, canals, pipelines, and other critical infrastructure)."33 Dr. Mish further explains that "[b]ecause the clay soils that tend to contribute the most to ground settlement are highly impermeable, their subsidence behavior can continue well into the future, as the rate at which they settle is governed by their low permeability." Id. "Thus simple real-time monitoring of ground settlement can be viewed as an *unconservative* measure of the potential for subsidence, as it will generally tend to underestimate the long-term settlement of the ground surface." Id. (emphasis added).

• Proposed Action. The environmental checklist for Hydrology impacts, at section IX.d, finds "No Impact" with respect to, "Substantially alter the existing drainage pattern of the site or area" is "Not Significant." But the text of the EA/IS contradicts this check box, and finds that Project could have land subsidence impacts that could " alter drainage patterns" (pp. 3-39-3-40.). By sowing confusion rather than clarity, the EA/IS fails to inform.

This conclusion is, however, the result of failing to proceed in the manner required by law: (1) in assessing the significance of this impact, (2) in developing specific mitigation measures to reduce this impact; (3) in assessing the effectiveness of such mitigation measures; and (4) in adopting such mitigation measures. This conclusion is also unsupported by substantial evidence in the record. In addition, there is substantial

33 Mish, Kyran 2008. Commentary on Ken Loy GCID Memorandum. White Paper. University of Oklahoma.

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evidence that this impact is significant.

Therefore, CEQA requires preparation and certification of an EIR and NEPA requires preparation and certification of an EIS before Project approval.

Minimization Measures (pp. 3-40, 3-41)

The Draft Technical Information for Water Transfers in 2013 and the 2014 Addendum contain minimal objectives and requirements elements of the monitoring and mitigation component of the Project. "Water transfer proponents transferring water via groundwater substitution transfers must establish a monitoring program capable of identifying any adverse transfer related effects before they become significant." However, the reader (and possibly the sellers) are left wondering what exactly is "a monitoring program capable of identifying any adverse transfer related effects before they become significant," since there are no standards or particular guidance to manage and analyze the very complex hydrologic relationships internal to groundwater and the connection to surface waters.

Certainly the public has no idea or ability to comment, which fails the full-disclosure mandate in NEPA and CEQA. Page 38 of the *Draft Technical Information for Water Transfers* in 2013 briefly lists "Potentially significant impacts identified in a water transfer proposals [that] must be avoided or mitigated for a proposed water transfer to continue, including:

- Contribution to long-term conditions of overdraft;
- Dewatering or substantially reducing water levels in nonparticipating wells;
- Degradation of groundwater quality that substantially impairs beneficial uses or violates water quality standards; and
- Affecting the hydrologic regime of wetlands and/or streams to the extent that ecological integrity is impaired.

The Draft Technical Information for Water Transfers in 2013 continues with suggestions to curtail pumping from lower bowls and pay higher energy costs to ease the impacts to owners of third-party wells (p. 38-39). While this bone thrown at mitigation is appreciated, the glaring omissions are notable. The Draft Technical Information for Water Transfers in 2013 completely fails to mention, even at a very general level, how individual well owners who may be harmed by the Project, will determine and prove where the impacts to their wells are coming from and that water quality and health could become a significant impact for impacted wells, users, and streams. The onus for coping with and disclosing potential impacts is deflected onto the nonparticipating public, species, and environment. How does this meet the requirements of NEPA and CEQA? Since wetlands and streams would require human observation or adequate monitoring to report an impact, how will, "Affecting the hydrologic regime of wetlands or streams to the extent that ecological health is impaired," be avoided or mitigated without standards and requirements from the Bureau and DWR? (Draft Technical Information for Water Transfers p. 38) There also appears to be no consideration for species monitoring, just "practices" or "conservation measures" to "minimize impacts to terrestrial wildlife and waterfowl," (*Id* pp. 16, 20, 22-24).

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Another example of the inadequacy of the proposed monitoring is that the draft EA/IS fails to include any coordinated, programmatic plan to monitor stream flow of creeks and rivers located in proximity to the "willing sellers" that will evacuate more groundwater than has been used historically. The potential for immediate impacts would be very close to water sellers' wells, but the long term impacts could be more subtle and geographically diverse. What precautions has the Bureau and DWR made for the cumulative impacts that come not only from this one-year Project, but in combination with the water sales from the last dozen years and those that are planned by the Bureau into the future (see list in g, iv below)? Bureau and DWR water transfers are not just one- or two-year transfers, but many serial actions in multiple years by the agencies, sellers, and buyers without the benefit of comprehensive environmental analysis under NEPA and CEQA.

3/43

As discussed above, adequate monitoring is vital to limit the significant risks posed by the Project to the health of the region's groundwater, streams, and fisheries (more discussion below). Moreover, to the extent this Project is conceived as an ongoing hardship program that will provide knowledge for future groundwater extraction and fallowing, its failure to include adequate monitoring protocols is even more disturbing and creates the risk of significant long-term, perhaps irreversible impacts from the Project.

One glaring omission in the EA/IS is the failure to disclose that the Project, when implemented under the State Water Resources Control Board's ("SWRCB") Temporary Urgency Change Petition Order(s), will exacerbate impacts in the area of origin, which is already suffering from dry conditions. Mismanaging storage in Shasta and Oroville dams, either intentionally or incompetently in the past three years (see above), created a scenario where the federal and state agencies plead hardship to some of the most senior water rights holders in California. Potentially cutting senior SWP contractors to 50 percent and senior CVP contractors to 40 percent allocations (EA/IS p. 2-2), portends dire consequences for local and regional groundwater that would not have been necessary without failures by the federal agency circulating this EA/IS and the 'hidden' state agency that should be the lead agency for the Project: DWR.<sup>34</sup>

2-44

## Mandatory Findings of Significance (XVIII)

The EA/IS fails to disclose that the Project is likely to have a cumulatively significant impact on the environment (p. 3-53). In assessing the significance of a project's impact, the Bureau must consider "[c]umulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement." 40 C.F.R. §1508.25(a)(2). A "cumulative impact" includes "the impact on the environment which results from the incremental impact of the action when added to *other past*, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." Id. §1508.7. The regulations warn that "[s]ignificance cannot be avoided by terming an action temporary or by breaking it down into small component parts." Id. §1508.27(b)(7).

<sup>34</sup> http://calsport.org/news/wp-content/uploads/St-Bd-Drought-Wkshp.pdf

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An environmental impact statement should also consider "[c]onnected actions." *Id.* §1508.25(a)(1). Actions are connected where they "[a]re interdependent parts of a larger action and depend on the larger action for their justification." *Id.* §1508.25(a)(1)(iii). Further, an environmental impact statement should consider "[s]imilar actions, which when viewed together with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography." *Id.* §1508.25(a)(3).

3-45

Here, as detailed below, instead of assessing the cumulative impacts of the proposed action as part of the larger program that even the Bureau has at least twice recognized should be subject to a programmatic EIS (but for which no programmatic EIS has been completed), the Bureau again attempts to breaks this program into component parts and approve it through an inadequate EA and has joined with the improper CEQA lead agency to play lip service to CEQA. Further, the Bureau has failed to take into account the cumulative effects of other groundwater and surface water projects in the region, the development of "conjunctive" water systems, and the planned integration of Sacramento Valley groundwater into the state water system.<sup>35</sup>

The draft EA/IS briefly mentions that the Project is part of the Long-Term Water Transfers (p. 1-4). However, it fails to adequately describe that Program and how the Project relates to the Program, and further fails to describe the numerous other programs of which this Project is a small component part (see list of programs, plans, and studies above in section VI). It is clear that that this Project is an "interdependent part of a larger action," and that it "depend[s] on the larger action for [its] justification." 40 C.F.R. §1508.25(a)(1)(iii). This is exactly the sort of segmentation that NEPA prohibits. Instead, NEPA requires that "[p]roposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement." 40 C.F.R. §1502.4.

3-46

• Item "a" asserts that the proposed Project would have a Less Than Significant impact to all species within the region and local areas of water transfer is without any apparent scientific basis. (EA/IS p. 3-54). This conclusory assertion certainly does not constitute sufficient analysis of the potential impact of the Project on endangered, threatened, or special status species as described above. At a minimum, such conclusions rely on an improperly segmented and overly narrow view of the proposed action, which does not consider the larger project (p. 1-4) as described above or the cumulative impacts as also described above.

<sup>&</sup>lt;sup>35</sup> U.S. Bureau of Reclamation September 2006. Grant Assistance Agreement with Glenn Colusa Irrigation District. "GCID shall define three hypothetical water delivery systems from the State Water Project (Oroville), the Central Valley Project (Shasta) and the Orland Project reservoirs sufficient to provide full and reliable surface water delivery to parties now pumping from the Lower Tuscan Formation. The purpose of this activity is to describe and compare the performance of three alternative ways of furnishing a substitute surface water supply to the current Lower Tuscan Formation groundwater users to eliminate the risks to them of more aggressive pumping from the Formation and to optimize conjunctive management of the Sacramento Valley water resources."

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### VII Conclusion

The 2014 water transfer Project clearly has the potential to affect the human and natural environments, both within the Sacramento Valley as well as in the areas of conveyance and delivery. It is entirely likely that injuries to other legal users of water will occur, including those entirely dependent on groundwater in the Sacramento Valley, if this project is approved. Groundwater, groundwater basins, and aquatic and terrestrial habitat that are essential for fishery and wildlife resources are also likely to suffer great harm. And the economic effects of the proposed Project are at best poorly disclosed and will reverberate through the communities in the Sacramento Valley.

Taken together, the Bureau, SLDMWA, and DWR treat these serious issues carelessly in the EA/IS, the *Draft Technical Information for Water Transfers in 2013*, the 2014 Addendum, and in DWR's specious avoidance of acting as the CEQA lead agency. In so doing, the Agencies and DWR deprive decision makers and the public of their ability to evaluate the potential environmental effects of this Project and violate the full-disclosure purposes and methods of both the National Environmental Policy Act and the California Environmental Quality Act.

Sincerely,

B. Vlames

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#### References

Anderson Cottonwood Irrigation District 2014. Web page copy from April 1, 2014.

Anderson, Michael. 2009. Future California Droughts in a Climate Change World.

AquAlliance 2014. Table of impacted wells in Butte and Tehama counties.

AquAlliance 2014. Past Water Transfers from the Sacramento Valley Through the Delta, 2001-2013.

AquAlliance, California Sportfishing Protection Alliance, and California Water Impact Network Testimony on Water Availability Analysis for Trinity, Sacramento, and San Joaquin River Basins Tributary to the Bay-Delta Estuary. 2012.

AquAlliance 2011. Comments on the Draft Environmental Assessment/Initial Study and Finding of No Significant Impact/Mitigated Negative Declaration for the Anderson-Cottonwood Irrigation District Integrated Regional Water Management Program – Groundwater Production Element Project.

AquAlliance 2011. Scoping comments for the 10-Year Water Transfer Plan.

AquAlliance et. al 2010. Comments on the 2010/2011 Water Transfer Program.

Bacher, Dan. 2013. *Bay-Delta salmon population just one fifth of mandated goal*. <a href="http://www.indybay.org/newsitems/2013/05/15/18736849.php">http://www.indybay.org/newsitems/2013/05/15/18736849.php</a>

Buck, Christina 2014. Groundwater Conditions in Butte County.

Bureau of Reclamation. 1993. Interim Guidelines for Implementation of the Water Transfer Provisions of the Central Valley Project Improvement Act (Title XXXIV of Public Law 102-575).

Bureau of Reclamation, et al. 2003. Environmental Water Account, Draft EIS/EIR.

Bureau of Reclamation 2006. Sacramento Valley Regional Water Management Plan. p. 5-8 to 5-10.

Bureau of Reclamation 2009. Drought Water Bank Environmental Assessment.

Bureau of Reclamation 2013. Water Year Handout.

Butte Basin Water Users Association 2007. 2007 Butte Basin Groundwater Status Report p. 23 and 30.

Brad Hubbard, US Bureau of Reclamation Comments on 2014 Water Transfer Program Environmental Review April 2, 2014 Page 28 of 31

Butte Basin Water Users Association 2008. 2008 Butte Basin Groundwater Status Report

Butte County 2007. Summary of Spring 07 Levels.

Butte County Department of Water and Resource Conservation 2003. *Urban Water Demand Forecast*.

Butte County DWRC June 2007. Tuscan Aquifer Monitoring, Recharge, and Data Management Project, Draft.

Butte County DWRC 2013. Groundwater Status Report, 2012 Water Year.

- a) Esquon Subinventory Unit report
- b) Pentz Subinventory Unit report
- c) Vina Subinventory Unit

California State Water Resources Control Board 2009. GAMA Domestic Well Project, Tehama County Focus Area.

California Water Impact Network, et al 2011. Complaint for Declaratory and Injunctive Relief.

Cannon, Thomas 2013. SUMMER 2013: The demise of Delta smelt under D-1641 Delta Water Quality Standards.

CH2Mhill 2006, Sacramento Valley Regional Water Management Plan, Figure 1-4.

Dudley, Toccoy et al. 2005. Seeking an Understanding of the Groundwater Aquifer Systems in the Northern Sacramento Valley: An Update.

Dudley, Toccoy 2007. Letter to Lester Snow as presented to the Butte County Board of Supervisors as part of agenda item 4.05.

DWR 2008. Addendum to the Environmental Water Account Environmental Impact Statement/Environmental Impact Report

DWR 2009. Addendum to the Environmental Water Account Environmental Impact Statement/Environmental Impact Report.

DWR 2009. E-mail correspondence regarding the 2009 Drought Water Bank.

Fleckenstein, Jan; Anderson, Michael; Fogg, Graham; and Mount, Jeffrey 2004. *Managing Surface Water-Groundwater to Restore Fall Flows in the Cosumnes River*, Journal of Water Resources Planning and management, opening page of article.

Brad Hubbard, US Bureau of Reclamation Comments on 2014 Water Transfer Program Environmental Review April 2, 2014 Page 29 of 31

Friend, Scott 2008. City of Chico General Plan Update Existing Conditions Report; Pacific Municiple Consulting.

Gallo, David circa 2000. Estimating Third Party Impacts From Water Transfers Through Riceland Fallowing: A Suggested Approach.

Glenn County. Board of Supervisors. 2001. California Ordinance No. 1115, Ordinance Amending the County Code, Adding Chapter 20.03, Groundwater Management.

Glenn County. Management Plan: Development of a Locally Driven Groundwater Management Plan Ordinance #1115 amended by ordinance 1237 (2912). Accessed May 15, 2013 at: <a href="http://www.glenncountywater.org/management\_plan.aspx">http://www.glenncountywater.org/management\_plan.aspx</a>.

Glenn County Water Advisory Committee 2013. Minutes from December 2013.

Glenn-Colusa Irrigation District 2008-2009. *Initial Study And Proposed Negative Declaration Landowner Groundwater Well Program*.

Governor's Advisory Drought Planning Panel 2000. Critical Water Shortage Contingency Plan.

Hennigan, Barbara 2007. Testimony, Monterey Agreement hearing in Quincy, California. (<a href="http://www.water.ca.gov/environmentalservices/docs/mntry\_plus/comments/Quincy.txt">http://www.water.ca.gov/environmentalservices/docs/mntry\_plus/comments/Quincy.txt</a>). Hennigan, Robert 2010. Personal communication with Barbara Vlamis on January 17, 2010.

Hoover, Karin A. 2008. Concerns Regarding the Plan for Aquifer Performance Testing of Geologic Formations Underlying Glenn-Colusa Irrigation District, Orland Artois Water District, and Orland Unit Water Users Association Service Areas, Glenn County, California. White Paper. California State University, Chico.

Lawson, Peter 2010. Groundwater Substitution Transfer Impact Analysis, Sacramento ValleyI.

Lippe, Gaffney, Wagner LLP. 2009. Letter to DWR regarding the Drought Water Bank Addendum.

Maslin, Paul E., et. al, 1996. Intermittent Streams as Rearing Habitat for Sacramento River Chinook Salmon: 1996 Update.

Mish, Kyran 2008. Commentary on Ken Loy GCID Memorandum. White Paper. University of Oklahoma.

Msangi, Siwa and Howit, Richard E. 2006. Third Party Effects and Asymmetric Externalities in Groundwater Extraction: The Case of Cherokee Strip in Butte County, California. International Association of Agricultural Economists Conference, Gold Coast, Australia.

Brad Hubbard, US Bureau of Reclamation Comments on 2014 Water Transfer Program Environmental Review April 2, 2014 Page 30 of 31

Natural Resources Defense Council and Golden Gate Salmon Association. 2012. *Salmon Doubling Index: Natural Production of Sacramento-San Joaquin Basin Chinook Salmon, Expressed as Percentage of the CVPIA Salmon Doubling Goal, from 1992 to 2011*. <a href="http://goldengatesalmonassociation.com/wp-content/uploads/2012/06/Salmon-Graph-11-12-12.jpg">http://goldengatesalmonassociation.com/wp-content/uploads/2012/06/Salmon-Graph-11-12-12.jpg</a>

Sacramento County Water Agency. 2011. Ground Water Management Plan.

Scalmanini, Joseph C. 1995. *VWPA Substatiation of Damages*. Memo. Luhdorff and Scalmanini Consulting Engineers.

Shasta County Water Agency. 2007. Redding Basin Water Resources Management Plan Environmental Impact Report.

Shutes, Chris et al. 2009. *Draft Environmental Assessment DeSabla – Centerville Project (FERC No. 803)*. Comments. California Sportfishing Protection Alliance.

Spangler, Deborah L. 2002. The Characterization of the Butte Basin Aquifer System, Butte County, California. Thesis submitted to California State University, Chico.

State Water Resources Control Board. 2005. California GAMA Program: Groundwater Ambient Monitoring and Assessment Results for the Sacramento Valley and Volcanic Provinces of Northern California.

State Water Resources Control Board. 2008. *Hydrogeologically Vulnerable Areas*. http://www.waterboards.ca.gov/gama/docs/hva map table.pdf

Staton, Kelly 2007. Glenn-Colusa Irrigation District Aquifer Performance Testing Glenn County, California. California Department of Water Resources.

The Bay Institute. 2012. Fresh Water Flows in the Central Valley A primer on their importance, status, and projected changes under the BDCP.

The Natural Heritage Institute, et al. 2012 Feasibility Investigation of Re-Operation of Shasta and Oroville Reservoirs in Conjunction with Sacramento Valley Groundwater Systems to Augment Water Supply and Environmental Flows in the Sacramento and Feather Rivers.

USFWS 1999. Draft Recovery Plan for the Giant Garter Snake.

USFWS 2006. Giant Garter Snake Five Year Review: Summary and Evaluation.

USFWS 2008 Biological Opinion for Conway Ranch.

USFWS 2009 Biological Opinion for the Drought Water Bank.

Brad Hubbard, US Bureau of Reclamation Comments on 2014 Water Transfer Program Environmental Review April 2, 2014 Page 31 of 31

Vlamis, Barbara 2006. Comments on the Supplemental Environmental Water Account EIR/EIR.

Vlamis, Barbara 2009. Letter to DWR regarding the Drought Water Bank Addendum from Lippe Gaffney Wagner LLP, 2009.

Vlamis, Barbara 2009. Letter to DWR regarding the 2009 Drought Water Bank Addendum.

Vlamis, Barbara, et al 2008. Letter to DWR regarding the 2009 Drought Water Bank Addendum.

WRIME 2011. Peer review of Sacramento valley Finite Element Groundwater Model (SacFEM).

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April 2, 2014

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Subject: COMMENTS ON THE DRAFT ENVIRONMENTAL ASSESSMENT/INITIAL STUDY (2014 DRAFT EA/IS) AND MITIGATED NEGATIVE DECLARATION (MND) FOR THE 2014 SAN LUIS & DELTA MENDOTA WATER AUTHORITY WATER TRANSFERS

Dear Mr. Hubbard:

As trustee for California's fish and wildlife resources, the California Department of Fish and Wildlife (Department) has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (FGC §1802). The Department has reviewed the 2014 Draft EA/IS and MND prepared by the Bureau of Reclamation (Reclamation) and San Luis & Delta Mendota Water Authority (SLDMWA) for the 2014 SLDMWA Water Transfers and provides the following comments in our role as both a trustee agency and a CEQA responsible agency.

The 2014 Draft EA/IS analyzes environmental impacts of proposed water transfers (Proposed Action) of up to of up to 91,313 acre feet (AF) under the current hydrologic condition and up to a total of 195,126 AF if hydrologic conditions improve. This water would be transferred at times when the Delta is in balanced conditions from 18 entities north of the Delta to 24 entities in the San Joaquin and Santa Clara Valleys. The transfers included in the 2014 Draft EA/IS are only those involving Central Valley Project (CVP) Base Supply, Project Water or CVP facilities. Water will be made available through either groundwater substitution or cropland idling/crop shifting. No other types of water transfers are covered by the evaluation in the 2014 Draft EA/IS.

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The Department concurs with your findings that the proposed project will have less than significant impact on biological resources (p. 3-11 and 3-12). The Draft EA/IS includes a list of fish species of management concern found in upstream rivers and tributaries of the sellers' area and the Delta region (p. 2-17) and concludes that these species would not be affected by the Proposed Action beyond those impacts considered in the existing biological opinions for the state and federal water projects operated by the Department of Water Resources and Reclamation, nor affected by current consultations with the National Marine Fisheries Service and U.S. Fish and Wildlife Service (p. 3-13). Changes in river flows (between 230 cfs and 450 cfs) downstream from Shasta Dam are described as being a fairly small percentage of the overall river flows. While there are ample data and figures in the document showing simulated groundwater table elevations, we could not locate modeling outputs that describe simulated changes in surface flows and surface water elevations in reservoirs and streams (p. 3-16). Changes in reservoir releases and altered flows on the Sacramento and Feather River would be a concern of ours to the extent that changes in these parameters exceed critical thresholds for fish.

4-2

We believe the Draft EA/IS has appropriately focused on terrestrial species, in particular, species that use seasonally flooded rice fields that may be impacted by cropland idling transfers. Rice fields and irrigation canals provide important habitat for species including giant garter snake, greater sandhill crane, black tern and western pond turtle. Suitable habitat for these species occurs in the project area. We also concur that the project would not significantly reduce the habitat for fish and wildlife species, result in fish or wildlife populations below a self-sustaining level, or reduce the number or restrict the range of special status species as described in the draft mandatory findings of significance.

4-3

Our concurrence with your draft findings is predicated on the full implementation of environmental commitments and minimization measures described in Appendix A and adoption of a program for reporting on or monitoring the changes which the lead agency has either required in the project or made a condition of approval to mitigate or avoid significant environmental effects.

Please consider the following specific comments as recommendations to improve the SLDMWA water transfers process in 2014 to ensure successful implementation of the proposed project.

We request that DFW be consulted, along with U.S. Fish and Wildlife Service, to
evaluate suitability of giant garter snake habitat (and other wetland dependent
species) and to participate in implementation of the water transfer program
overall. We suggest collaboratively developing a process to define how sellers
that have lands with priority suitable habitat for giant garter snakes would be
evaluated for participation in the water transfers program.

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> We recommend that terms used in the Environmental Commitments, such as "adequate water," "drains," "canals," "conveyance infrastructure," and "major irrigation and drainage canals" be better defined so that it is abundantly clear what the sellers' responsibilities are under the water transfers program.

4-5

 Implementation of monitoring and mitigation plans for cropland idling and groundwater substitution transfers should be tailored to local conditions so that impacts to aquatic habitats and sensitive species will be avoided, minimized and mitigated. Monitoring and mitigation programs are also needed to ensure cumulative impacts are less than significant.

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Thank you for the opportunity to provide comments on the 2014 Draft EA/IS and MND. The Department looks forward to working with Reclamation and SLDMWA to ensure that public trust resources are adequately protected as the 2014 water transfers are implemented. James Rosauer, Environmental Scientist, is available to further discuss any of our comments. He can be reached at (916) 445-8360 or <a href="mailto:james.Rosauer@wildlife.ca.gov">james.Rosauer@wildlife.ca.gov</a>.

Sincerely,

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