

LL/EM

State of California
State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
Info: (916) 341-5300, FAX: (916) 341-5400, Web: http://www.waterrights.ca.gov

2009 APR 13 AM 11:43
DIVISION OF WATER RIGHTS

PROTEST - (Petitions)

BASED ON ENVIRONMENTAL OR PUBLIC INTEREST CONSIDERATIONS
Protests based on Injury to Vested Rights should be completed on other side of this form

APPLICATION See attached **PERMIT** See attached **LICENSE** See attached

I, (We,) Joshua Basofin
Name of protestant

of Defenders of Wildlife, 1303 J Street, Suite 270, Sacramento, CA 95814 have read carefully
Post Office address of protestant

a notice relative to a petition for change or extension of time.

under APPLICATION Attached of California Department of Water Resources and United States Bureau of Reclamation
State name of petitioner

to appropriate water from Sacramento-San Joaquin Delta
Name of source

It is desired to protest against the approval thereof because to the best of our information and belief:
my or our

the proposed change/extension will

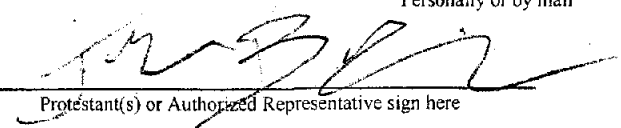
- (1) not be within the State Water Resources Control Board's (SWRCB) jurisdiction
- (2) not best serve the public interest
- (3) be contrary to law
- (4) have an adverse environmental impact

State facts, which support the foregoing allegations See attached.

Under what conditions may this protest be disregarded and dismissed? See attached
State conditions that will relieve protest, or if none, so state

A true copy of this protest has been served upon the petitioner by mail.
Personally or by mail

Date April 13, 2009


Protestant(s) or Authorized Representative sign here

Protests MUST be filed within the time allowed by the SWRCB as stated in the notice relative to the change or such further time as may be allowed.

(NOTE: Attach supplemental sheets as necessary)

Protest of California Department of Water Resources ("DWR") and United States Bureau of Reclamation ("Bureau") Petition to Consolidate Places of Use

Application: 5630, 14443, 17512, 17514A DWR

Permit: 16478, 16479, 16481, 16482, 16483 DWR

U.S. Bureau of Reclamation License and Permits for the Central Valley Project

Application Numbers: 23, 234, 1465, 5638, 13370, 13371, 5628, 15374, 15375, 15376, 16767, 16768, 17374, 17376, 5626, 9363, 9364, 9366, 9367, 9368, 15764, 22316

Permit Number: 273, 11315, 11316, 11885, 11886, 11887, 11967, 11968, 11969, 11970, 11971, 11972, 11973, 12364, 12721, 12723, 12735, 12726, 12727, 12860, 15735

License Number: 1986

2009 APR 13 AM 11:45
LAW OFFICES OF JAMES HANSEN
1000 MARKET STREET, SUITE 1000
SAN FRANCISCO, CA 94102
415.774.1111

State facts, which support the foregoing allegations

DWR and the Bureau have filed a petition to consolidate places of use ("Petition"). This change to the above-referenced outstanding licenses would allow the transfer of water from the Central Valley Project ("CVP") to the State Water Project ("SWP") places of use and vice versa. Such changes will enable full operation of the 2009 Drought Water Bank ("DWB"). DWR and the Bureau filed the petition pursuant to section 1701 of the Water Code, which requires that a petition to change authorized places of use "include all information reasonably available to the petitioner, or that can be obtained from the Department of Fish and Game, concerning the extent, if any, to which fish and wildlife would be affected by the change, and a statement of any measures proposed to be taken for the protection of fish and wildlife in connection with the change." CA Water Code § 1701. The State Water Resources Control Board ("Water Board") also retains independent public trust authority to protect fish and wildlife in its water right permitting duties.

DWR and the Bureau have failed to address the following potential impacts to fish and wildlife in the Petition:

1. The DWB is likely to adversely affect the giant garter snake (*Thamnophis gigas*) ("GGS"), a listed threatened species under the federal Endangered Species Act ("ESA") and California Endangered Species Act ("CESA"). GGS is largely dependent on flooded rice fields in the project area, thousands of acres of which will be fallowed under the DWB. Greg Hansen has conducted GGS surveys for several years. In recent years, he has found approximately 300 individuals in the Sacramento Valley and only 1-3 individuals in the San Joaquin Valley. (Greg Hansen *pers. comm.* 2008). The major distinguishing characteristic between the two geographic regions is that the San Joaquin Valley lacks drainage canals with adjacent flooded rice fields. The abundance of Giant Garter Snakes in areas with this feature suggests that the combination of drainage canals and rice fields provides significant habitat value for the Giant Garter Snake. (Greg

Hansen *pers. comm.* 2008). Continued fallowing of rice fields in the proposed project area will lead to fragmenting of this crucial habitat and a decimation of the Giant Garter Snake population similar to what has been observed in the San Joaquin Valley.

2. The DWB is likely to adversely affect salmonids, including Central Valley Winter-run Chinook and Spring-run Chinook, which are listed as endangered and threatened, respectively, under the ESA. According to a DWR report, groundwater extraction in the Sacramento Valley may reduce stream flow, an essential habitat condition for these fisheries:

Groundwater seepage from the Sacramento Valley into the Sacramento and Feather rivers is a major contributor to in-stream flow. Increases in groundwater extraction without coordinated recharge efforts could reduce or reverse this seepage, causing depletion of in-stream flow.¹

DWB project actions, including groundwater substitution transfers, may affect listed salmonids in the Sacramento River and tributaries through stream flow reduction. Anecdotal evidence indicates that groundwater substitution transfers executed during the 1994 Drought Water Bank resulted in mortality to salmonids in the Sacramento River and tributaries. DWR and the Bureau have not included information in the Petition about impacts to the above-referenced salmonids, nor included proposals to safeguard these species during operation of the DWB.

3. Changes to pumping regimes in the Sacramento-San Joaquin Delta may affect salmonids, Delta smelt, and Longfin smelt. DWR and the Bureau have not included information regarding these changes to project operations and the potential to impact fisheries.

Information regarding the above impacts to fish and wildlife is reasonably and readily available to DWR and the Bureau. The two agencies have consulted with the Department of Fish and Game ("DFG") and the United States Fish and Wildlife Service ("USFWS") regarding potential impacts to GGS and salmonids as a result of DWB operations. Moreover, DWR and the Bureau have undergone NEPA and CEQA compliance for the DWB. This information is also conspicuously absent from the Bureau's Environmental Assessment ("EA") and Finding of No Significant Impact ("FONSI"). See attached comments.

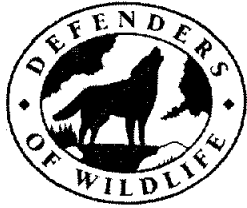
Under what conditions may this protest be disregarded and dismissed?

This protest may be dismissed if the State Water Board places the following conditions upon the permits and licenses affected by the petition:

- 1 Full mitigation, including compensatory mitigation with a land acquisition program, for GGS as a result of crop idling transfers requiring the fallowing of rice fields where GGS are present.

¹ McManus, Dan et al. Sacramento River Basinwide Water Management Plan. California Department of Water Resources' Northern District, January 2003, page 13.

- 2 A comprehensive environmental assessment, including a monitoring program, of potential impacts to salmonids resulting from groundwater pumping in the North Sacramento Valley under the DWB.
- 3 A description of the changes to CVP and SWP operations as a result of the place of use consolidation and DWB implementation, including a proposal for complying with the current Biological Opinion for Smelt and the forthcoming Biological Opinion for Salmon.



California Office

1303 J Street, Suite 270 | Sacramento, CA 95814 | tel 916.313.5800 | fax 916.313.5812
www.defenders.org

2009 APR 13 AM 11:45
SACRAMENTO
SACRAMENTO

By Email and US Mail

March 19, 2009

Ms. Becky Victorine
Bureau of Reclamation
2800 Cottage Way, MP-410
Sacramento, CA 95825
rvictorine@mp.usbr.gov

Re: Comments on Draft EA/FONSI for 2009 Drought Water Bank

Dear Ms. Victorine:

The following comments are submitted by Defenders of Wildlife ("Defenders") pursuant to the public review provisions set forth in the National Environmental Policy Act ("NEPA") and associated regulations. 40 C.F.R. 6.203. Federal agencies are required to involve the public, to the extent practicable, in preparing environmental assessments. 40 C.F.R. 1501.4(b). The Bureau of Reclamation ("BOR"), as lead federal agency for the proposed 2009 Drought Water Bank ("DWB"), is charged with fully considering public comments on the Environmental Assessment ("EA") and Finding of No Significant Impact ("FONSI") for the above-referenced project. Substantial evidence shows that the 2009 Drought Water Bank ("DWB") will have significant environmental impacts if implemented as described in the EA. Therefore, Defenders remains opposed to the DWB until the project is altered or its impacts are fully mitigated.

Defenders is a national, not-for-profit conservation organization with more than 440,000 members, including approximately 75,000 members and supporters who reside in California. Defenders is dedicated to the protection of all native wild animals and plants in their natural communities. Defenders has advocated for heightened protection of aquatic, wetland and riparian habitats along with resident species, including the Giant Garter Snake, Chinook salmon and Steelhead trout. Defenders' 75,000 members residing in California regularly use the wildlife refuges, recreation areas and private lands within the relevant "zone of interest" - the Northern Sacramento Valley - for wildlife viewing. These members will be adversely affected and aggrieved by the proposed project actions because populations of certain wildlife species, namely Giant Garter Snake, Chinook salmon and Steelhead trout, will be reduced. *City of Los Angeles v. National Highway Traffic Safety Admin.*, 912 F.2d 478, 483 (D.C. Cir. 1990).

In summary, the DWB will likely have significant environmental impacts on the Giant Garter Snake (*Thamnophis gigas*), a listed threatened species under the federal Endangered Species Act ("ESA") and California Endangered Species Act ("CESA"). The Giant Garter Snake is largely dependent on flooded rice fields in the project area, thousands of acres of which will be fallowed pursuant to the EA. The DWB will also significantly impact

National Headquarters

1130 17th Street, N.W.
Washington, D.C. 20036-4604
tel 202.682.9400 | fax 202.682.1331

Winter-Run and Spring-Run Chinook salmon, which are listed as endangered and threatened, respectively, under the ESA. Groundwater substitutions will almost certainly reduce streamflow in upper Sacramento River tributaries, such as Deer Creek and Butte Creek, which are hydrologically connected to Sacramento Valley aquifers. Therefore, BOR is required to prepare an environmental impact statement (“EIS”) for the project. 42 USC § 4332(C); 40 C.F.R. 1501.4(a)(1). A FONSI must explain why the proposed project will not have a significant effect on the human environment. 40 C.F.R. 1508.13. Substantial evidence indicates that the proposed transfers will impact the Giant Garter Snake and Chinook salmon through reduction of habitat. Therefore, BOR is required to prepare an EIS.

The EA/FONSI does not contain adequate mitigation measures for Giant Garter Snake

The ESA imposes both substantive and procedural requirements on all federal agencies to carry out programs for the conservation of listed species and to insure that their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. 16 U.S.C. § 1536. *See NRDC v. Houston*, 146 F.3d 1118, 1127 (9th Cir. 1998) (action agencies have an “affirmative duty” to ensure that their actions do not jeopardize listed species and “independent obligations” to ensure that proposed actions are not likely to adversely affect listed species). BOR’s Environmental Assessment and Biological Assessment must determine the baseline status of the Giant Garter Snake in the project area and assess whether the project actions will adversely affect the species. 50 C.F.R. 402.12(a).

The Giant Garter Snake is listed as threatened under the ESA. The life history of the Giant Garter Snake suggests that areas which experience summer flooding and winter drying provide optimal habitat.¹ The most abundant feature in the snake’s range currently exhibiting these characteristics is flooded rice fields. The snake has used flooded rice fields for breeding from July to August when the need for an inundated area with crop cover is highest (Greg Hansen *pers. comm.* 2008). Indeed, flooded rice fields have become such an important alternative habitat that, without them, the species would be at serious risk of extinction (Greg Hansen *pers. comm.* 1994). Habitat degradation and fragmentation continues to compromise existing populations of the Giant Garter Snake.

Wylie and Amarello conducted a study of Giant Garter Snakes in the Colusa Basin Drainage Canal in Reclamation District 108. When they initiated the project in 2003, all adjacent fields on the south bank of the study site were actively growing rice. While many other areas were drained during the summer when snakes were active, rice fields remained flooded during this important time for Giant Garter Snakes. In 2004 and 2006, Wylie and Amarello found that many Giant Garter Snakes captured in the drain eventually migrated to the rice fields. In 2006, most of the fields on the south bank of Colusa Drain were dry or being converted to wetlands and the only remaining rice fields were south of the study area. Wylie

¹ Czech, Brian 2006. Complexities of Conservation: the Giant Garter Snake, *Endangered Species Bulletin*, Vol. XXXI No. 3, p. 33.

and Amarello concluded that the lack of rice fields as suitable summer habitat adjacent to the drain could have accounted for decreased populations of the snake in that area.²

Hansen conducted Giant Garter Snake surveys for several years. In recent years, he has found approximately 300 individuals in the Sacramento Valley and only 1-3 individuals in the San Joaquin Valley. (Greg Hansen *pers. comm.* 2008). The major distinguishing characteristic between the two geographic regions is that the San Joaquin Valley lacks drainage canals with adjacent flooded rice fields. The abundance of Giant Garter Snakes in areas with this feature suggests that the combination of drainage canals and rice fields provides significant habitat value for the Giant Garter Snake. (Greg Hansen *pers. comm.* 2008). Continued fallowing of rice fields in the proposed project area will lead to fragmenting of this crucial habitat and a decimation of the Giant Garter Snake population similar to what has been observed in the San Joaquin Valley.

According to some estimates, Giant Garter Snakes rely on rice fields for approximately 50% of their aquatic habitat needs. Given that approximately 300 Giant Garter Snakes have been found during preceding years in drainage canals and rice fields in the Northern Sacramento Valley, where the project area is located, *any* significant reduction in the area, much less the 67,260 acres of proposed fallowing, can be expected to adversely affect Giant Garter Snakes residing in the project area through reduction of habitat.

BOR should assess these potential impacts and develop a mitigation program to compensate for reduced Giant Garter Snake habitat. BOR has proposed in the 2009 Drought Water Bank Biological Assessment ("BA") to increase the block sizes of idled crop acreage from 160 acres to 320 acres. Page 6-6 of the Environmental Water Account EIR/EIS, upon which the DWB mitigation program is predicated, lists a 160 acre limitation on idled rice parcels as a mitigation measure to protect Giant Garter Snake. The unexplained reversal of this mitigation measure in the BA is arbitrary and not based on sound science. An undated report by Glenn Wylie and Michael Casazza describes the results of a Giant Garter Snake monitoring study which tracked the home range of the species in the Colusa National Wildlife Refuge. According to the report:

Analysis of movements showed home ranges that varied from 1-35 ha with an average of 18 ha... This reduced movement also means snakes were less exposed to mortality factors such as predators and vehicles... One individual... was killed by a predator (likely an otter) shortly after it was released with its radio implant.

The 18 hectare average home range calculates to 44.5 acres, which is substantially smaller than the 320 acre blocks proposed for fallowing. Even the high end of the home range reported in the study, 35 hectares, or 86.5 acres, is markedly smaller. This study presents substantial evidence indicating that the snake's home range is between 40 and 90 acres, and

² Wylie, G. and Amarello, M., 2006, Results of 2006 Monitoring for Giant Garter Snakes (*Thamnophis gigas*) For the Bank Protection Project on the Left Bank of the Colusa Basin Drainage Canal in Reclamation District 108, Sacramento River Bank Protection Project, Phase II, Prepared for Environmental Planning Section, U.S. Army Corps of Engineers, Sacramento District, p. 13.

that forcing it to travel farther than this range may result in mortality. BOR must explain the removal of the block size limitation as a mitigation measure. BOR must also explain why the change in block size will not result in a take of Giant Garter Snake or adversely affect the species pursuant to 16 USC § 1536 and 50 C.F.R. 402.12(a).

The BA does not include a baseline status of the Giant Garter Snake in the project area. As the BA states (section 6), "very little data exists on the distribution and occurrence of the Giant Garter Snake in ricelands." Without a baseline status of the species, BOR is simply shooting in the dark to develop appropriate mitigation measures. The project contemplates fallowing 20 percent of total active rice fields in Butte, Glenn, Colusa, Sutter and Yolo Counties, where Giant Garter Snakes are known to persist. As stated in the BA (section 6), the implementation of 320-acre block sizes will very likely adversely affect the Giant Garter Snake by forcing many individuals "to relocate elsewhere." It is expected that "some will successfully relocate, and that some may be lost to predation or other forms of mortality caused by loss of foraging opportunities, either through competition with other individuals or loss of body condition and failure to thrive, particularly young snakes."

The monitoring program and effects study proposed by BOR in the EA will undoubtedly help determine the baseline status of the Giant Garter Snake in the Sacramento Valley and contribute to overall understanding of the effects of crop idling programs on the species. However, such actions do not fully mitigate the take of Giant Garter Snake that will result if the project is implemented as proposed. The limitation of block sizes to 160 acres must be reinstated. The overall amount of fallowed acreage in the project area must be reduced to significantly less than 20 percent. Finally, a compensatory mitigation program is required to fully mitigate the take and U.S. Fish and Wildlife Service ("USFWS") must determine in a biological opinion the amount of habitat to be acquired.

The EA/FONSI does not contain an adequate cumulative effects analysis

A lead agency must prepare an EIS, rather than an EA/FONSI, for proposed actions for which it is reasonable to anticipate cumulatively significant impacts. 40 C.F.R. 1508.25(c). Cumulative effects result from incremental impacts of a proposed action when coupled with other past, present and foreseeable future actions. Cumulative effects can result from individually minor but collectively significant actions over a period of time. 40 C.F.R. 1508.7. In *Fritiofson v. Alexander*, the 5th Circuit used the following factors to determine whether the Army Corps of Engineers should have included a cumulative impacts assessment in its EA: (1) the area in which the effects are expected to occur, (2) the potential impacts, (3) other actions in the area expected to have impacts, (4) the impacts of these other actions, and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate. 772 F.2d 1225 (5th Cir. 1985). BOR should have conducted this cumulative effects assessment and it must be done to comply with NEPA. The proposed water transfers clearly will have cumulative effects on the Giant Garter Snake, as they will occur in the same area and cumulatively reduce available habitat.

The DWB transfers will have cumulative and aggregate effects on the Giant Garter Snake. As stated in the BA (section 8), “repeated episodes of dewatering may result in reduced survivorship or fecundity...[and] fallowing of rice fields not related to the proposed project may not only temporarily remove suitable habitat, but may adversely affect reproduction, recruitment, and survival long term.” These effects must be assessed through a comprehensive EIS. To determine the scope of an EIS, a federal agency must consider the type of action, alternatives and impacts. Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts, should be discussed in the same impact statement. 40 CFR 1508.25(a)(2). Similar actions, which when viewed 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. 40 CFR 1508.25(a)(3). The proposed water transfers are cumulative in that they will have aggregate impacts on the Giant Garter Snake through land fallowing. They are also similar in that they are proposed for the same geographic area and during the same year.³ Therefore, BOR must draft a programmatic EIS with a comprehensive scope that assesses the cumulative effects of *all* proposed water transfers in the area, regardless of whether the transfer is included in the DWB.

BOR must prepare an EIS for the project

The National Environmental Policy Act (NEPA) requires federal agencies to prepare an EIS for any proposed action “significantly affecting the quality of the human environment.” Whether a proposed action significantly affects the quality of the human environment is determined by considering the *context* and *intensity* of the action and its effects. 40 C.F.R. 1508.27. The term “context” refers to the affected environment in which the proposed action would take place. The significance of a proposed action must be assessed based on the physical situation of the proposed action’s specific location and take into account the entire affected region and society as a whole. 40 C.F.R. 1508.27(a). The term “intensity” refers to the severity of a proposed action’s impact on the environment. In determining an impact’s intensity, the CEQ NEPA Regulations, 40 C.F.R. 1508.27(b), require federal agencies to consider several factors, including the following:

- **Controversy:** Federal agencies should consider “the degree to which effects on the quality of the human environment are likely to be highly controversial” when determining whether impacts are significant. Controversy may take the form of local opposition to the action, environmental protection groups’ interest in the effects on resources, or expert disagreement. In this instance, many environmental protection groups have expressed opposition. Additionally, there is expert disagreement concerning the appropriateness of the 320 acre blocks and the distance Giant Garter Snakes can travel to relocate.
- **Cumulative Effects:** Federal agencies must determine whether a proposed action is related to other actions with individually insignificant but cumulatively significant impacts. As stated above, the cumulative effects analysis in the EA is insufficient because it does not assess potential rice field fallowing outside the DWB.

³ All of the transfers are proposed for the 2009 irrigation season.

- **Endangered Species Effects:** Federal agencies must consider potential adverse impacts to listed species in the project area. The potential for the DWB to adversely affect Giant Garter Snakes *strongly* militates towards preparation of an EIS.

BOR must consult with NMFS on potential adverse affects to salmonids

Central Valley Winter-run Chinook are listed as endangered and Spring-run Chinook are listed as threatened. According to a DWR report, groundwater extraction in the Sacramento Valley may reduce stream flow, an essential habitat condition for these fisheries:

Groundwater seepage from the Sacramento Valley into the Sacramento and Feather rivers is a major contributor to in-stream flow. Increases in groundwater extraction without coordinated recharge efforts could reduce or reverse this seepage, causing depletion of in-stream flow.⁴

DWB project actions, including groundwater substitution transfers, may affect listed salmonids in the Sacramento River and tributaries through stream flow reduction. Anecdotal evidence indicates that groundwater substitution transfers executed during the 1994 Drought Water Bank resulted in mortality to salmonids in the Sacramento River and tributaries. In addition, BOR has not assessed whether SWP/CVP operational changes during the transfer period will affect listed species in the Sacramento/San Joaquin Delta, such as Delta Smelt and Longfin Smelt.

BOR claims that the proposed DWB transfers will be incorporated within the consultation for the Continued Long-term Operations of the CVP/SWP, and no further consultation is required. However, the ESA requires that federal agencies consult on each separate action. 16 U.S.C. § 1536(a)(2); 50 C.F.R. 402.14(a). The facilitation of transfers from the Sacramento Valley to users south of the Delta is an entirely separate action from the continued long-term operations of the SWP/CVP. Therefore, BOR must initiate an independent consultation with the National Marine Fisheries Service ("NMFS") for the DWB.

Finally, the Letter of Concurrence issued by NMFS and dated December 23, 2003 found that EWA project actions are unlikely to affect Winter-run Chinook, Spring-run Chinook and Central Valley Steelhead. This letter is obsolete because it relates to project actions undertaken through the EWA rather than the DWB. Because the DWB's environmental setting and individual transfers are different from those listed in EWA documents, BOR cannot appropriately rely on this concurrence letter.

Conclusion

The EA/FONSI proposed for the DWB is unwarranted. NEPA requires preparation of a programmatic EIS when similar and cumulative actions will likely result in environmental impacts. In this case, overwhelming evidence demonstrates that several water transfers and the

⁴ McManus, Dan et al. Sacramento River Basinwide Water Management Plan. California Department of Water Resources' Northern District, January 2003, page 13.

resulting rice field fallowing in Butte, Glenn, Colusa, Sutter and Yolo Counties will significantly and adversely impact the Giant Garter Snake through habitat reduction. In addition, groundwater extractions will reduce streamflow for listed salmonids. BOR must prepare an EIS and initiate separate formal consultations with USFWS and NMFS.

* * *

Defenders requests all NEPA notices for the above-referenced project. The requested notices should be mailed to Defenders' office at the address listed above.

Defenders appreciates BOR's commitment to maintaining the viability of sensitive species while facilitating water transfers during this challenging time. We look forward to assisting BOR in conducting a comprehensive environmental analysis of the DWB.

Sincerely,



Joshua Basofin
California Representative
Defenders of Wildlife

