



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670-4599
(916) 358-2900
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
MEGHAN HERTEL, Director



March 20, 2026

Donnie Stinnett
General Manager
Butte Water District
735 Virginia Street
Gridley, CA 95948
donnie@buttewater.net

Subject: TEMPORARY WATER TRANSFERS FROM 2026 TO 2030 PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)
SCH No. 2025081335

Dear Donnie Stinnett:

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Availability of a DEIR of an Environmental Impact Report (EIR) from Butte Water District (BWD) for the Temporary Water Transfers from 2026 to 2030 Project (Project) in Butte County pursuant to the California Environmental Quality Act (CEQA) statute and guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, plants and their habitats. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that it, by law, may need to exercise its own regulatory authority under the Fish and Game Code (Fish & G. Code).

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Fish & G. Code, § 1802.) Similarly for purposes of CEQA, CDFW provides, as available, biological expertise during public

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Temporary Water Transfers from 2026 to 2030

March 20, 2026

Page 2 of 7

agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

The Project consists of one-year water transfers over a five-year period from 2026 to 2030. Water transfers will include short-term transfers of up to 21,000 acre-feet (AF) in any year. This includes up to 14,000 AF from crop idling transfers and up to of 6,500 AF from groundwater substitution transfers. Cropland idling water transfers will make water available by reducing the consumptive use of surface water applied for irrigation. In a groundwater substitution program, groundwater is pumped and used for agricultural purposes in lieu of surface water supplies. The equivalent surface water supplies are then not diverted and are made available for transfer. The Project will extract up to 6,500 AF of groundwater from two BWD production wells, these volumes may increase if BWD develops additional groundwater substitution capacity during the five-year period of analysis. BWD anticipates that the key recipient of transfer supplies will be Valley Water, who has the first right of refusal of water transfers as a part of the Project. In the event that Valley Water does not elect to receive the transferred water, BWD may pursue transfers to the environment or other buyers where BWD can utilize its existing water infrastructure to convey transfer water. If both Valley Water and a direct conveyance route for the transfer water are not available, BWD may pursue a simultaneous water exchange to convey water to the environment or other buyers. No new construction or improvements by BWD, Valley Water or other potential buyers, or DWR, would be necessary for the production and transfer of water resulting from the Project. However, if BWD develops additional groundwater substitution capacity, a third production well could be installed during the five-year Project duration and would likely be used for Project activities if completed.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist BWD in adequately identifying and, where appropriate, mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document. Based on the Project's avoidance of significant impacts on biological resources with implementation of mitigation measures, CDFW concludes that an Environmental Impact Report is appropriate for the Project.

Temporary Water Transfers from 2026 to 2030

March 20, 2026

Page 3 of 7

COMMENT 1: Giant Garter Snake and California Endangered Species Act

Issue: Giant garter snake (*Thamnophis gigas*, GGS) is a State- and federally-listed species with a well-established presence within the Project area. Most of the extant populations of GGS in the Sacramento Valley occur in approximately 494,000 acres of rice agriculture and its associated canals (Halstead et al. 2019).

The DEIR proposes to limit the Project's adverse impacts on GGS by implementing Mitigation Measures BIO-6 to BIO-9 and BIO-13 to BIO-14. Mitigation Measures BIO-6 to 9 focus on well site impacts, while BIO-13 to BIO-14 focus on water transfer and crop idling. These measures are valuable but may not be sufficient to reduce the Project's potential adverse impacts on GGS to below significant.

GGS in the Sacramento Valley are strongly reliant on rice agriculture. Adult GGS survival rates are higher when a greater percentage of the lands surrounding their home ranges are actively cultivating rice. Reducing rice production may also impact GGS populations by reducing the productivity of prey species and/or by increasing the concentration of predators in the nearby canals (Halstead et al. 2019). Reduced rice production may prompt affected GGS to move into other surrounding habitats, increasing the density of GGS and the competition for prey. A significant reduction in the amount of rice grown in the Project area is likely to significantly reduce overall GGS survival rates in the area.

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the CESA. CDFW recommends that a CESA Incidental Take Permit (ITP) be obtained if the Project has the potential to result in "take" (Fish & G. Code § 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species during any point of the Project. Please note that mitigation measures that are adequate to reduce impacts to a less-than significant level to meet CEQA requirements may not be enough for the issuance of an ITP. To issue an ITP, CDFW must demonstrate that the impacts of the authorized take will be minimized and fully mitigated (Fish & G. Code § 2081 (b)).

Comment 1.1 Cumulative Impacts Analysis

Issue: BWD last participated in groundwater substitution transfers in 2021 and 2022, and groundwater substitution and land idling transfers in 2014 and 2018. It is not clear if the proposed lands for 2026 have previously been idled, or what the rotational idling frequency is for participating lands in the BWD water transfer program. Sacramento Valley rice production was cut by approximately 50% in 2022 (NASA 2022), which likely increased mortality in GGS across California. Continued habitat impacts on an already stressed population may have greater overall effects than they would in isolation.

Recommendation: Cal. Code Regs. Tit. 14, § 15355 (b) states that, "The cumulative impact from several projects is the change in the environment which

Temporary Water Transfers from 2026 to 2030

March 20, 2026

Page 4 of 7

results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.” CDFW recommends the DEIR be revised to include an analysis of the cumulative effects of repeated reductions of the density of active rice fields within BWD’s boundaries that have taken place because of its water transfer program. CDFW recommends the DEIR include measures to minimize and fully mitigate the impacts to any State-listed species the Project has potential to take. To reduce the significance of the Project’s impact on GGS, CDFW recommends measures such as reducing the proposed acreage of idled rice crops, restoring or enhancing existing GGS habitat, creating new GGS habitat, or preserving vegetative cover in edge rows and canals to provide areas of safe forage and shelter for GGS.

COMMENT 2: Groundwater Dependent Ecosystems

Issue: CDFW is concerned with potential localized and cumulative impacts associated with proposed and future groundwater substitution water transfers that may impact groundwater dependent ecosystems. Ecological communities or species that depend on groundwater emerging from aquifers or on groundwater occurring near the ground surface are collectively known as groundwater dependent ecosystems (GDEs) (23 Cal. Code Regs. § 351 (m)). These GDEs include seeps and springs; wetlands and lakes; rivers, streams, and estuaries; and terrestrial vegetation.

Water transfers made available by groundwater substitution have the potential to affect groundwater hydrology due to increased groundwater extraction and reduced groundwater recharge. Correlating effects could be temporary and/or long-term declines in groundwater levels, reduction of groundwater storage, depletions of interconnected surface water, land subsidence, integrated water quality. These effects have the potential to adversely impact GDEs and the species therein in basins where water transfers are made available by groundwater substitution.

The DEIR has identified the historical low groundwater level of each well as the groundwater level trigger that, when reached, will result in a reduction in pumping volume or cessation of transfer pumping from the applicable well. Historical groundwater lows reflect surface water scarcity during which time groundwater extraction becomes the primary water supply. For instance, during the 2012 to 2016 drought, groundwater extraction increased to replace more than 70% of the reduced surface water supplies for agriculture (Lund 2018). It is likely that at these historically low groundwater levels in the Sacramento Valley, vegetated aquatic GDEs experienced adverse impacts due to combined groundwater depletion and reduced surface water availability during the series of dry and critically dry water years of the last drought (CDFW 2019). Groundwater extraction lowers groundwater tables and exacerbates already low streamflow where groundwater-surface water interconnectivity exists. These depleted conditions lead to poor instream habitat availability, increased water temperatures, and stressed or dying riparian vegetation and terrestrial groundwater dependent vegetation that limits available forage and habitat relying on groundwater

Temporary Water Transfers from 2026 to 2030

March 20, 2026

Page 5 of 7

triggers that mere periods of extreme water scarcity and associated ecosystem duress does not protect against adverse impacts to habitat.

Recommendation: CDFW recommends identifying more protective groundwater level triggers for inclusion in the groundwater substitution transfer mitigation plan that are shallower than the historical minimum groundwater elevations that occurred in the transfer pumping wells. The groundwater level triggers should be shallower than the historical low groundwater levels to avoid adverse impacts of transfer-related pumping on GDEs, especially cumulative impacts that may manifest after sequential dry or critically dry water years when groundwater reliance and streamflow depletions increase. For example, the mitigation plan could include a reduction in the transfer pumping rate at 70% of the historical low groundwater elevation, and a cessation of pumping at 80% of the historical low groundwater elevation.

COMMENT 3: Streamflow Depletion Factors

Issue: The DEIR states that additional site-specific technical analyses may be undertaken to determine a streamflow depletion factor (SDF) for BWD and assumes that the range will be between 12% and 20% to offset the potential streamflow effects of the added groundwater pumping associated with the transfer.

Streamflow depletion is a function of many criteria, including the distance of a pumping well from a nearby stream; streamflow depletion can occur relatively quickly from continued pumping from wells adjacent to surface waters (USGS 2012). Surface water supply effects on groundwater substitution transfers compound over time, particularly when transfers occur in back-to-back years or when dry hydrologic years follow the transfer period, extending the duration of aquifer refill (Reclamation 2019). Dry consecutive hydrology corresponds to increased reliance on groundwater and necessarily increases the volume of streamflow depletion from surface water supplies as rivers refill depleted aquifers at a greater rate. Thus, groundwater substitution transfers concurrent with dry antecedent conditions can increasingly contribute to streamflow depletion throughout a series of sequential dry water years (DWR 2022). The Sacramento Valley Groundwater-Surface Water Simulation Model developed by the Department of Water Resources determined the effect of groundwater pumping on stream depletion can be gradual and last for decades (DWR 2023). Absent accurate streamflow depletion factors, groundwater transferors may be under-counting their surface water usage by selling surface water rights while pumping additional river water via subsurface stream depletion; this undercounting of streamflow depletions can negatively impact aquatic and riparian ecosystems.

Recommendation: CDFW recommends incorporating a site-specific SDF into the FEIR, rather than deferring this analysis to the future. The SDF should consider multiple criteria impacting streamflow depletion rates that more accurately account for the volume of streamflow depletion attributable to pumping transfer water. At a minimum, the BWD transfer should be subject to a 20% SDF as presented by the Department of Water Resources and the Bureau of Reclamation at the 2024 Water Transfers Annual Meeting as a negotiated, presumptive, interim SDF to be applied to groundwater

Temporary Water Transfers from 2026 to 2030

March 20, 2026

Page 6 of 7

substitution transfers for Water Year 2026.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be submitted online or mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

Pursuant to Public Resources Code § 21092 and § 21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the proposed project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 or emailed to R2CEQA@wildlife.ca.gov.

CDFW appreciates the opportunity to comment on the DEIR for the Temporary Water Transfers from 2026 to 2030 to assist BWD in identifying and mitigating Project impacts on biological resources. CDFW personnel are available for consultation regarding biological resources and strategies to minimize and/or mitigate impacts. Questions regarding this letter or further coordination should be directed to Alyssa Obester, Senior Environmental Scientist (Specialist) at alyssa.obester@wildlife.ca.gov.

Sincerely,

DocuSigned by:

C3A86764C0AD4F6...

Morgan Kilgour
Regional Manager

Temporary Water Transfers from 2026 to 2030

March 20, 2026

Page 7 of 7

ec: Morgan Kilgour, Regional Manager
Jennifer Garcia, Environmental Program Manager
Briana Seapy, Senior Environmental Scientist (Supervisory)
Alyssa Obester, Senior Environmental Scientist (Specialist)
California Department of Fish and Wildlife

Office of Land Use and Climate Innovation, State Clearinghouse, Sacramento

REFERENCES

Bureau of Reclamation, San Luis & Delta-Mendota Water Authority (Reclamation). 2019. Long-Term Water Transfers Environmental Impact Statement/Environmental Impact Report.

California Department of Fish and Wildlife (CDFW). 2019. Statewide Drought Response: Stressor Monitoring.

Department of Water Resources (DWR). 2022. Bulletin 120 Water Supply Forecast.

Department of Water Resources (DWR). 2023. Sacramento Valley Groundwater-Surface Water Simulation Model Technical Memorandum 5.

Halstead, B.J., Rose, J.P., Reyes, G.A., Wylie, G.D. and Casazza, M.L. 2019. Conservation reliance of a threatened snake on rice agriculture. *Global Ecology and Conservation*, 19:e00681.

Lund, Jay et al. Lessons from California's 2012-2016 Drought. 2018. *Journal of Water Resources Planning and Management*. 144(10).
[https://doi.org/10.1061/\(ASCE\)WR.1943-5452.0000984](https://doi.org/10.1061/(ASCE)WR.1943-5452.0000984)

NASA Earth Observatory. "A Rough Year for Rice in California." October 3, 2022.
<https://earthobservatory.nasa.gov/images/150412/a-rough-year-for-rice-in-california>.

U.S. Geological Survey (USGS). 2012. Streamflow Depletion by Wells – Understanding and Managing the Effects of Groundwater Pumping on Streamflow.