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**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



March 30, 2021

Via Electronic Mail

Mr. Anthony Emmert  
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**Subject: Comments on the Assessment of Groundwater Dependent Ecosystems for the Fillmore and Piru Basins Groundwater Sustainability Plan**

Dear Mr. Emmert:

The California Department of Fish and Wildlife (CDFW) is providing comments on the Fillmore and Piru Basins-Groundwater Sustainability Agency's (FPB-GSA) Assessment of Groundwater Dependent Ecosystems for the Fillmore and Piru Basins Groundwater Sustainability Plan (GDE-FPB). The GDE-FPB Memorandum was prepared pursuant to the Sustainable Groundwater Management Act (SGMA). As trustee agency for the State's fish and wildlife resources, CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species (Fish & Game Code §§ 711.7 and 1802).

Development and implementation of groundwater sustainability plans (GSPs) under SGMA represents a new era of California groundwater management. CDFW has an interest in the sustainable management of groundwater, as many sensitive ecosystems and species depend on groundwater and interconnected surface waters, including ecosystems on CDFW-owned and managed lands within SGMA-regulated basins. SGMA and its implementing regulations afford ecosystems and species-specific statutory and regulatory consideration, including the following as pertinent to GSPs:

- GSPs must **identify and consider impacts to groundwater dependent ecosystems (GDEs)** [23 CCR § 354.16(g) and Water Code § 10727.4(l)];
- Groundwater Sustainability Agencies must **consider all beneficial uses and users of groundwater**, including environmental users of groundwater [Water Code §10723.2 (e)];
- GSPs must **identify and consider potential effects on all beneficial uses and users of groundwater** [23 CCR §§ 354.10(a), 354.26(b)(3), 354.28(b)(4), 354.34(b)(2), and 354.34(f)(3)];
- GSPs must **establish sustainable management criteria that avoid undesirable results** within 20 years of the applicable statutory deadline, including **depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water** [23 CCR § 354.22 *et seq.* and Water Code §§ 10721(x)(6) and 10727.2(b)], and **describe monitoring networks** that can

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identify adverse impacts to beneficial uses of interconnected surface waters [23 CCR § 354.34(c)(6)(D)]; and,

- GSPs must **account for groundwater extraction for all water use sectors** including managed wetlands, managed recharge, and native vegetation [23 CCR §§ 351(a) and 354.18(b)(3)].

Furthermore, the Public Trust Doctrine imposes a related but distinct obligation to consider how groundwater management affects public trust resources, including navigable surface waters and fisheries. Groundwater hydrologically connected to surface waters are also subject to the Public Trust Doctrine to the extent that groundwater extractions or diversions affect or may affect public trust uses (*Environmental Law Foundation v. State Water Resources Control Board* (2018), 26 Cal. App. 5th 844; *National Audubon Society v. Superior Court* (1983), 33 Cal. 3d 419). Accordingly, groundwater plans should consider potential impacts to and appropriate protections for interconnected surface waters and their tributaries, and interconnected surface waters that support fisheries, including the level of groundwater contribution to those waters.

In the context of SGMA statutes and regulations, and Public Trust Doctrine considerations, groundwater planning should carefully consider and protect environmental beneficial uses and users of groundwater, including fish and wildlife and their habitats, groundwater dependent ecosystems, and interconnected surface waters.

## COMMENT OVERVIEW

CDFW supports ecosystem preservation and enhancement in compliance with SGMA and its implementing regulations based on CDFW expertise and best available information and science. CDFW offers the following comments and recommendations below to assist FPB-GSA in identifying and evaluating impacts on GDEs. Additional suggestions are included for FPB-GSA's consideration during development of the Fillmore and Piru Basins Groundwater Sustainability Plan.

## COMMENTS AND RECOMMENDATIONS

### Comment #1: Do Not Eliminate GDEs Based on the 30-foot Depth to Groundwater Criterion

**Comment:** 2.1.2 Procedure, starting on p. 11 - GDE identification, required per California Code of Regulations, Title 23 § 354.16(g), is based on methods that risk exclusion of ecosystems that may depend on groundwater.

**Issue #1:** The GDE-FPB Memo utilizes Rohde *et al.* (2018) by "*assigning GDE status to vegetation communities either within 30 feet of the ground surface or where interconnected surface waters are observed*" (pg. 11). This depth-to-groundwater method applied to the Natural Communities Commonly Associated with Groundwater (NCCAG) dataset to eliminate potential GDEs is fallible.

**Issue #2:** CDFW is concerned with the removal of potential GDEs with a depth to groundwater greater than 30 feet from the 2005-2015 baseline. The 2005-2015 baseline that the analysis depends on (starting pg. 74) falls several years into a historic drought when groundwater levels throughout the Fillmore Basin were trending lower than usual due to reduced surface water

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availability. As such, this period of groundwater elevations with several years of a historic drought does not consider representative climate conditions or account for GDEs that can survive a finite period without groundwater access (Naumburg et al. 2005). Naumburg *et al.* (2005) presents several models that evaluate how GDEs rely on fluctuating groundwater elevations for long-term survival. GDEs have been sustained by groundwater, despite the depth of the groundwater table being greater than 30 feet below ground surface due to these fluctuating groundwater elevations.

**Recommendation:** CDFW recommends developing a hydrologically robust baseline that considers the groundwater elevation fluctuations associated with climate conditions. This approach would also account for the inter-seasonal and inter-annual variability of GDE water demand.

**Comment #2: Effluent Releases from Los Angeles County are an Important Contributor to Surface Water Flow**

**Comment:** 3.3.1 Piru Groundwater Basin, p. 27 - data gap regarding effluent releases in Los Angeles County.

**Issue:** CDFW agrees with the GDE-FPB Memorandum that effluent releases in Los Angeles County are believed to be a significant contributor to surface water flow. Riparian habitat, a GDE within the basin, relies on various locations with a high groundwater table and the subsurface flows that help to maintain the high groundwater table.

**Recommendation:** CDFW recommends closely monitoring effluent releases in Los Angeles County, to understand and incorporate how much the effluent releases contribute to not only surface flow, but also subsurface flow and groundwater recharge.

**Comment #3: Additional Remote Sensing and Shallow Groundwater Wells are Needed to Understand Groundwater Elevations for GDE Units**

**Comment:** 3.1 Groundwater Levels, p. 19 - data gaps *“because there are no representative wells located in or near the unit. Many of the wells used in the analysis below are screened below the shallow groundwater depths used by GDEs and may not accurately represent the actual groundwater elevation.”*

**Issue:** CDFW agrees with the GDE-FPB Memorandum that the groundwater levels may not be accurate under the GDEs due to lack of critical groundwater level data. According to p. 30 - *“The role of shallow groundwater elsewhere in the basin is less certain and will be assessed based on interpolated groundwater elevation and vegetation.”* The current monitoring network lacks enough representative distribution of shallow groundwater monitoring wells to monitor impacts to environmental beneficial uses and users of groundwater and interconnected surface waters [23 CCR § 354.34(2)].

**Recommendation:** CDFW recommends the installation of shallow groundwater monitoring wells near potential GDEs and interconnected surface waters, potentially pairing multiple-completion wells with additional streamflow gauges. CDFW agrees with the GDE-FPB Memorandum’s recommendation on p. 91 that states: *“remote sensing and shallow groundwater elevation monitoring, particularly during and following droughts is recommended.”* This will

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facilitate an improved understanding of surface water-groundwater interconnectivity and the overall health of GDEs.

## CONCLUSION

CDFW appreciates the opportunity to provide comments on the GDE-FPB Memorandum. Additionally, we appreciate FPB-GSA's continued coordination with CDFW while FPB-GSA develops a draft GSP. If you have any questions or comments regarding this letter, please contact Steve Slack, Environmental Scientist, at [Steven.Slack@wildlife.ca.gov](mailto:Steven.Slack@wildlife.ca.gov).

Sincerely,

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Enclosures (Literature Cited)

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