



State of California – Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



January 13, 2023

Scott De Leon, Director
 Lake County Public Works Department
 255 North Forbes Street
 Lakeport, CA 95453
Scott.DeLeon@lakecountyca.gov

**Subject: California Department of Fish and Wildlife Supports Lake County
 Engagement in Clear Lake Hitch Task Force to Evaluate Modified Reservoir
 Releases and a Well-Drilling Moratorium to Protect Clear Lake Hitch**

Dear Mr. DeLeon:

Thank you for your staff's participation in the recent Emergency Clear Lake Hitch Summit held on December 8, 2022 in Lake County, CA. As discussed at the Summit and in recognition that Clear Lake Hitch¹ (*Lavinia exilichauda chi*, hitch) are on the brink of extinction,² the Department of Fish and Wildlife³ (CDFW) is reaching out to express our support for Lake County evaluating strategies to increase and protect instream flow in targeted hitch spawning creeks during the coming 2023 spawning season. Additionally, CDFW welcomes the County to join the Clear Lake Hitch Task Force – comprising local Tribal representatives, CDFW, and other state agencies – to coordinate and implement immediate and long-term actions to protect and conserve hitch. There is an urgent need for action and the County is uniquely positioned to evaluate and lead implementation of several priority actions. Specifically, CDFW supports County staff evaluating the following actions: 1) release of water from Adobe and Highland Reservoirs to augment flow in Adobe Creek during the hitch migration and spawning season, and 2) cessation of well-drilling permits and requests for voluntary groundwater extraction forbearance to increase flows in multiple spawning creeks, including Adobe Creek and Kelsey Creek.

CDFW recognizes that as we submit this letter of support, the current weather conditions have drastically changed toward a more favorable and wetter position for the near-term. We also recognize that these swings in climatic conditions can turn again at any moment,

¹ Clear Lake hitch is listed as a threatened species under CESA and as such it is unlawful to take a State-listed endangered or threatened species. (Fish & G. Code § 2080.) Take is defined as "hunt, pursue, catch, capture or kill or attempt to hunt, pursue, catch, capture or kill". (Fish & G. Code § 86.)

² Emergency Clear Lake Hitch Summit. December 8, 2022. Lake County, CA.

³ 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.) 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. (*Id.*, § 1802.)

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similar to what was observed in Water Year 2022, and that we must remain diligent in preparing for all types of projected outcomes, including the continuation of drought.

1) CDFW Supports Lake County Evaluating the Potential to Release Water from Adobe and Highland Reservoirs to Protect Hitch Migration and Spawning in Adobe Creek

CDFW supports Lake County managing County-owned and -operated Adobe and Highland Reservoirs to enable additional flow releases in Adobe Creek to allow hitch to migrate, spawn, and rear from March-May.

Hitch are present downstream of Adobe and Highland Springs Reservoirs in Adobe Creek, which has served as a preferential hitch spawning stream in times of drought. Within the past 10 years, hitch spawning has been observed in 12 tributary creeks to Clear Lake. In 2022, hitch spawning was only observed in three of those 12 creeks: Kelsey Creek, Adobe Creek, and Middle Creek. During this 2022 spawning season, Adobe Creek was observed to go dry despite supporting limited spawning. The desiccation of Adobe Creek precipitated an urgent hitch rescue.

Current streamflow monitoring data is not available for Adobe Creek. Available historical and modeled flow data and water rights reporting suggest Adobe Creek to be a flashy system in which water demand exceeds water availability in drier water years. Until there is a better accounting of water availability and demand, CDFW expects Adobe Creek flows are unlikely to support successful hitch passage and spawning in certain dry years,⁴ requiring additional managed bypass flows during hitch spawning season.

Current Adobe and Highland Springs Reservoir releases appear to be insufficient to meet hitch flow needs during spawning season,⁵ evidenced by multiple Adobe Creek hitch rescues (June 2014, April 2022, May 2022) and the continued hitch population decline. Consistent with CDFW's 2002 Protest of Lake County's Water Rights Application 31251 and Comments on the Mitigated Negative Declaration for the Adobe Creek Conjunctive Use Project, CDFW continues to be concerned with the significant adverse effects of insufficient and/or mistimed reservoir releases on hitch, particularly during dry years. Accordingly, CDFW supports Lake County staff evaluating reservoir management opportunities for additional flow releases from Highland and Adobe Reservoirs during the 2023 migration and spawning season and in the future to improve passage, spawning, and rearing conditions for hitch in Adobe Creek.

⁴ Ewing, B. 2022. California Department of Fish and Wildlife, Report "2022 Clear Lake Hitch (*Lavinia exilicauda chi*) Visual Surveys on Clear Lake Tributaries," <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=202598>.

⁵ Fish and Game Code section 5937 requires that "the owner of any dam shall allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around or through the dam, to keep in good condition any fish that may be planted or exist below the dam."

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2) CDFW Supports Lake County Evaluating the Potential of a Well-Drilling Moratorium to Protect Flow in Clear Lake Tributaries that Historically Supported Hitch Spawning Habitat

The Department supports Lake County considering implementation of a moratorium on new well-drilling permits in the Clear Lake watershed and considering issuance of a request to groundwater users to forbear extraction during hitch spawning season.⁶ Until such time as the County has a functional understanding of groundwater-surface water interconnectivity and a plan to manage surface water depletions attributable to groundwater extraction to avoid and mitigate adverse impacts to hitch, the County may consider pausing further groundwater extraction through a well drilling moratorium and reducing on-going extraction through voluntary forbearance requests. This action is not without precedent. In fall 2022, Sonoma County adopted a well drilling moratorium, stating that it was doing so in response to evolving California case law that requires local governments to protect public trust resources and to allow staff time to develop recommended changes to the Sonoma County well ordinance.⁷

Loss of in-channel flow in the Clear Lake watershed during spawning season has corresponded to significant hitch spawning and population decline over the past decade, and CDFW expects that a meaningful portion of streamflow depletion is attributable to shallow groundwater extraction. The Big Valley Groundwater Sustainability Plan identifies portions of Adobe Creek as interconnected with groundwater but lacks monitoring data to characterize with finer resolution the relationship between groundwater extraction and surface-flows in the Big Valley Basin. Most wells within the Clear Lake watershed are shallow, with a total completed depth of 200 feet below the ground surface or shallower. Specifically, there are approximately 203 wells located within 0.5 miles of Adobe Creek, 165 of which have a total completed depth of 200 feet below ground surface or shallower. Similarly, 259 wells are within 0.5 miles of Kelsey Creek, and 212 of those wells are 200 feet below ground surface or shallower. The presence of groundwater-surface water interconnectivity and the prevalence of shallow wells suggests a strong potential for well pumping to cause surface water depletions.

Until Lake County has a clearer concept of the extent of groundwater-surface water interconnectivity, a plan to manage for that interconnectivity, and an updated well ordinance that protects public trust interests, CDFW supports the County in evaluating a temporary moratorium on well-drilling and a County-initiated request for voluntary forbearance from groundwater users proximate to historical hitch spawning creeks during spawning season.

⁶ The Public Trust Doctrine imposes a distinct obligation to consider how groundwater management affects public trust resources, including navigable surface waters and fisheries. Groundwater hydrologically connected to surface waters is 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.). An entity responsible for groundwater management has “an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible.” (*National Audubon Society, supra*, 33 Cal. 3d at 446.) Accordingly, groundwater planning, including well-permitting, should consider potential impacts to and appropriate protections for interconnected surface waters and their tributaries, including those that support fisheries.

⁷ Sonoma County. October 2022. Well Drilling Moratorium.

<https://permitsonoma.org/boardofsupervisorsadoptswelldrillingmoratorium>.

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Moving Forward Together

With Lake County's commitment towards these actions, Clear Lake Hitch could have a significantly improved chance of sustaining their population. CDFW looks forward to partnering with the County on investigating the potential of these actions and additional actions, including increased education and enforcement. Please contact Felipe La Luz, Senior Environmental Scientist (Specialist), at Felipe.LaLuz@wildlife.ca.gov for information on participating in the Clear Lake Hitch Task Force.

If you have questions regarding this letter, or would like to discuss ways in which CDFW can better support County efforts, please contact Jennifer Garcia, Environmental Program Manager at 916-247-0678 or Jennifer.Garcia@wildlife.ca.gov, or you may direct written correspondence to the Department at the address above.

Sincerely,

DocuSigned by:

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Colin Purdy
Acting Regional Manager

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