



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
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Governor's Office of Planning & Research

NOV 23 2022

STATE CLEARING HOUSE

November 22, 2022

Jeremy Shaw
Fresno County Department of Public Works and Planning
Development Services and Capital Projects Division
2220 Tulare Street, Sixth Floor
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Subject: **Heartland Hydrogen Project, Unclassified Conditional Use Permit Application Nos. 3630 and 3631 and Variance Application No. 4122 (Project) Notice or Preparation (NOP) State Clearinghouse No. 2022100609**

Dear Jeremy Shaw:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) for an Environmental Impact Report (EIR) from Fresno County Department of Public Works and Planning (Fresno County), as Lead Agency, for the Heartland Hydrogen Project, Unclassified Conditional Use Permit Application Nos. 3630 and 3631 and Variance Application No. 4122 (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game 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,

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.

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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 (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments 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.), related authorization as provided by the Fish and Game Code will be required.

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or Federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T, as specified in the CEQA Guidelines section 15380, CDFW recommends it be fully considered in the environmental analysis for the Project.

As a responsible agency, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

PROJECT DESCRIPTION SUMMARY

Proponent: Plug Project holding Co., LLC and Heartland Solar 1, LLC

Objective: The Project proposes to construct, operate, maintain, and eventually decommission facilities to generate hydrogen fuel from renewable sources (photovoltaic solar energy and treated wastewater) on approximately 2,371 acres in western Fresno County. The Project would rely on the proposed solar facility to convert sunlight into electricity, which would be used to power the hydrogen facility that would split the recycled water into hydrogen and oxygen (electrolysis). The hydrogen, solar, and tertiary wastewater treatment facilities together constitute the Heartland Hydrogen Project (Project). The Project also includes an approximate 1.25-mile electrical interconnection service line to the existing Tranquillity Switching Station, a second

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transmission line internal to the solar/hydrogen site to provide power from the solar facility to the hydrogen facility, and other associated facilities and infrastructure. The Project would be capable of producing approximately 30,000 kilograms per day of renewable or “green” hydrogen for zero emission transportation fuel to be used by fuelcell electric vehicles operating statewide.

Location: The proposed project is located in an unincorporated area 10 miles east of Interstate 5, east of Los Angeles Avenue, south of W. American Avenue, west of State Route 33 (SR 33, also called S. Derrick Avenue), north of Manning Avenue, and 1.25 miles north of PG&E’s existing Tranquillity Switching Station. The tertiary wastewater treatment facility would be located within the fence line of the existing Mendota Wastewater Treatment Plant (MWTP) located at 3699 Bass Avenue, Mendota.

The APNs that comprise the proposed Project site include Assessor Parcel Numbers (APNs): 028-140-38, 028-140-23, 028-140-32, 028-140-36, 028 140-37, 028-160-16, 028-160-17, 028-160-19, 028-160-20, 028-160-22, 028-170-17, 028-170-18, 028-170-41, 028-170-42, 028-170-43, 028-170-44, 028-170-45, 028-170-46, 028-170-47, 028-170-48, 028-170-60, 028-170-61, 028-060-32, 028-060-33, and 028-060-41.

The original NOP incorrectly associated the City of Mendota portion of the Project site, where the tertiary wastewater treatment facility would be located, on APN 013-020-06T. This APN is actually located well north of the current MWTP and proposed tertiary wastewater facility. Per a phone and email conversation between CDFW and Fresno County (Jeremy Shaw) on November 3rd, 2022, the correct APNs for the tertiary wastewater treatment facility include APNs 013-050-58ST, 013-050-68ST, and 013-050-73ST. CDFW evaluated the corrected APNs for this comment letter.

Timeframe: Unspecified

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Fresno County in adequately identifying and/or 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 Draft EIR.

Aerial imagery of the Project boundary and its surroundings show the area contains undeveloped agricultural land and developed artificial ponds within the MWTP that may have suitable habitat for special status species. Based on a review of the Project description, a review of California Natural Diversity Database (CNDDDB) records, and the surrounding habitat, several special status species could potentially be impacted by Project activities.

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The Project area is within the geographic range of several special status animal species including the State threatened Swainson's hawk (*Buteo swainsoni*). Additionally, the portion of the Project that is located within the MWTP is within the geographic range of the State and federally threatened giant gartersnake (*Thamnophis gigas*); and the State species of special concern western pond turtle (*Emys marmorata*).

Swainson's Hawk (SWHA)

SWHA have been documented to occur in several locations along the eastern boundary of the Project site (CDFW 2022) and have the potential to nest and forage within and adjacent to the Project site. The habitat types present within the vicinity of the Project site provide suitable foraging habitat for SWHA, increasing the likelihood of SWHA occurrence. In addition, there are trees and structures located within 10 miles of the Project area, specifically adjacent to the MWTP and Derrick Avenue, that may provide suitable nesting habitat.

To evaluate potential project-related impacts, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting SWHA following the entire survey methodology developed by the SWHA Technical Advisory Committee (SWHA TAC 2000) as part of the biological technical studies conducted in support of the Draft EIR. SWHA detection during protocol-level surveys warrants consultation with CDFW to discuss how to implement Project activities and avoid take. In addition to conducting surveys, CDFW recommends the Draft EIR include the following measures:

Recommended Mitigation Measure 1: SWHA Surveys Prior to Construction

Depending on the time between the initial survey efforts conducted in support of the Draft EIR and project construction, CDFW recommends that additional surveys, following the survey methodology developed by the SWHA Technical Advisory Committee, be repeated the survey season immediately prior to construction.

Recommended Mitigation Measure 2: SWHA Avoidance Buffer

if Project-specific activities will take place during the SWHA nesting season (i.e., February 1 through September 15), and active SWHA nests are present, CDFW recommends a minimum ½-mile no-disturbance buffer be delineated and maintained around each nest, regardless of whether it was detected by surveys or observed incidentally. These buffers would remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, to prevent nest abandonment and other take of SWHA as a result of Project activities.

Recommended Mitigation Measure 3: SWHA Take Authorization

CDFW also recommends that in the event an active SWHA nest is detected, and a ½-mile no-disturbance buffer is not feasible, consultation with CDFW is warranted to

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discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

Recommended Mitigation Measure 4: SWHA Foraging Habitat Mitigation

Finally, CDFW recommends compensation for the loss of SWHA foraging habitat as described in CDFW's "Staff Report Regarding Mitigation for Impacts to Swainson's Hawks" (CDFG 1994) to reduce impacts to foraging habitat to less than significant. The Staff Report recommends that mitigation for habitat loss occur within a minimum distance of 10 miles from known nest sites. CDFW has the following recommendations based on the Staff Report:

- For projects within 1 mile of an active nest tree, a minimum of 1 acre of habitat management (HM) land for each acre of development is advised.
- For projects within 5 miles of an active nest but greater than 1 mile, a minimum of $\frac{3}{4}$ acre of HM land for each acre of development is advised.
- For projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree, a minimum of $\frac{1}{2}$ acre of HM land for each acre of development is advised.

Special-Status Reptiles and Amphibians

Special status reptiles and amphibians including giant garter snake (GGS) and western pond turtle have been documented directly adjacent to the MWTP within the Fresno Slough (CDFW 2022). GGS in particular are known to occupy managed waterways, including those managed for agricultural irrigation (USFWS 2017). There is the potential that special status reptiles and amphibians may utilize the habitats directly adjacent to and within the MWTP. CDFW recommends that a qualified biologist conduct a habitat assessment within the MWTP and its immediate vicinity as part of the biological technical studies conducted in support of the Draft EIR. If any suitable habitat is documented within or directly adjacent to the MWTP during these surveys, coordination with CDFW is recommended for guidance on mitigation measures such as surveys, take avoidance, minimization, and mitigation.

Editorial Comments and/or Suggestions

Lake and Streambed Alteration: If streams, swales, or drainages occur on the Project site, Project activities may be subject to CDFW's regulatory authority pursuant to Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); (c) deposit debris, waste or other materials that could

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pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial.

CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement; therefore, if the Draft EIR approved for the Project does not adequately describe the Project and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary for LSA Agreement issuance. For information on notification requirements, please refer to CDFW's website (<https://wildlife.ca.gov/Conservation/LSA>) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593 or R4LSA@wildlife.ca.gov.

Project Alternatives Analysis: CDFW recommends that the information and results obtained from the biological technical surveys, studies, and analysis conducted in support of the project's Draft EIR be used to develop and modify the project's alternatives to avoid and minimize impacts to biological resources to the maximum extent possible. When efforts to avoid and minimize have been exhausted, CDFW advises that remaining impacts to sensitive biological resources be mitigated to reduce impacts to a less than significant level, if feasible.

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 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 mailed electronically to CNDDDB at the following email address:

CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

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).


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CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist Fresno County Department of Public Works and Planning in identifying and mitigating Project impacts on biological resources.

If you have any questions, please contact Jeremy Pohlman, Senior Environmental Scientist (Specialist), at the address provided on this letterhead, by telephone at (805) 588-5674 or by electronic mail at Jeremy.pohlman@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Julie A. Vance
Regional Manager

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REFERENCES

California Department of Fish and Game (CDFG), 1994. *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo Swainsoni) in the Central Valley of California*. California Department of Fish and Wildlife.

CDFW, 2022. *Biogeographic Information and Observation System (BIOS)*. <https://www.wildlife.ca.gov/Data/BIOS>. Accessed November 03, 2022.

Swainson's Hawk Technical Advisory Committee (SWHA TAC), 2000. *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the Central Valley of California*. Swainson's Hawk Technical Advisory Committee. May 31, 2000.

United States Fish and Wildlife Service (USFWS), 2017. *Recovery Plan for the Giant Garter Snake (Thamnophis gigas)*. U. S. Fish and Wildlife Service, Region 8, Sacramento, California. September 2017.

Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP)**

PROJECT: Heartland Hydrogen Project

SCH No.: 2022100609

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
SWHA	
Recommended Mitigation Measure 1: SWHA surveys prior to construction	
Recommended Mitigation Measure 3: SWHA take authorization	
Recommended Mitigation Measure 4: SWHA foraging habitat mitigation	
<i>During Construction</i>	
SWHA	
Recommended Mitigation Measure 2: SWHA avoidance buffer	