Lahontan Regional Water Quality Control Board

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File: Environmental Doc Review
Kern County

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Comments on the Draft Environmental Impact Report for Bullhead Solar Project, Kern County, State Clearinghouse No. 2022110504

Lahontan Regional Water Quality Control Board (Water Board) staff received the Draft Environmental Impact Report (EIR) for the above-referenced Project (Project) on December 1, 2023. The EIR was prepared by the Kern County Planning and Natural Resources Department (County) and submitted in compliance with provisions of the California Environmental Quality Act (CEQA). Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations (CCR), title 14, section 15096. We thank the County for providing Water Board staff the opportunity to review and comment on the EIR. Based on our review, we recommend the following: (1) natural drainage channels and flow paths should be maintained through the Project site to ensure no net loss of function and value of waters of the state; (2) identify post-construction storm water management as a significant Project component; and (3) identify and list the beneficial uses of all water resources within the Project area. Our comments are outlined below.

WATER BOARD'S AUTHORITY

All groundwater and surface waters are considered waters of the State. All waters of the State are protected under California law. State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the United States. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the United States.

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards

for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml.

GENERAL COMMENTS AND RECCOMENDATIONS

Our general comments and recommendations, as they pertain to renewable energy development within the Lahontan Region, are outlined below.

1. In general, the installation of Photovoltaic (PV) grid systems for these types of projects has the potential to hydrologically modify natural drainage systems. Of particular concern is the collection of onsite storm water runoff and the concentrated discharge of that storm water to natural drainage channels. Design alternatives that are compatible with low impact development (LID) should be considered. LID components include: maintaining natural drainage paths and landscape features to slow and filter runoff and maximize groundwater recharge; managing runoff as close to the source as possible; and maintaining vegetated areas for storm water management and onsite infiltration. We recommend natural drainage channels and flow paths be maintained through the Project site to avoid no net loss of function and value of waters of the state as a result of Project implementation.

2. The EIR should identify post-construction storm water management as a significant Project component, and a variety of best management practices (BMPs) that effectively treat post-construction storm water runoff, particularly maintaining native vegetation, should be evaluated as part of the Project. Based on our experience with other solar developments in the Mojave Desert, native vegetation is the most efficient and cost-effective post-construction BMP to treat storm water runoff. Because revegetating disturbed soils in the desert is particularly challenging due to low rainfall, extreme climatic conditions, and relatively slow growth rates, we strongly encourage Project proponents to maintain and mow existing vegetation rather than clear and grub the entire site during construction. For those projects where native vegetation is maintained, we have observed that the need to implement temporary BMPs is greatly minimized, and the costs associated with implementation and maintenance of post-construction BMPs is significantly reduced.

3. The Project is located within the Antelope Hydrologic Unit (Hydrologic Unit No. 626.00) and overlies the Antelope Valley groundwater basin (Basin No. 6-44). The beneficial uses of these waters are listed either by watershed (for surface waters) and by groundwater basin (for groundwater) in Chapter 2 of the Basin Plan. The proposed Project should identify and list the beneficial uses of all water resources within the Project area.

4. Equipment staging areas, excavated soil stockpiles, and hazardous materials (i.e. oils and fuels) should be sited in upland areas outside surface waters and adjacent flood plain areas. These locations should also be included on Project maps or site plans, which are needed to evaluate the Project impacts.

5. The EIR should include additional mitigation measures on preventing increased sedimentation, and erosion, resulting from increased impervious areas and sheet flow.

SPECIFIC COMMENTS ON THE ENVIRONMENTAL REVIEW

Our specific comments on the Project and environmental review, as they pertain to water quality and hydrology, are outlined below.

1. **Mitigation Measure (MM) 4.9-1**, should include a statement that the use of pesticides and herbicides will not be used in waterways on the project site.

2. **Project Impact 5.1 HYD-1**, states that the project may include construction of a retention basin for stormwater management, which would provide limited recharge to the aquifer and minimize runoff risk such as erosion and degrading water quality. Please include a statement including other methods that will be used to prevent runoff risk such as sedimentation and erosion, in the event that a retention basin is not constructed.

PERMITTING REQUIREMENTS FOR INDIVIDUAL PROJECTS

A number of activities associated with the proposed Project may have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. The required permits may include the following.

1. Land disturbance of more than 1 acre and construction may require a CWA, section 402(p) storm water permit, including a National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit, Water Quality Order (WQO) 2022-0057-DWQ, obtained from the State Water Board, or individual storm water permit obtained from the Lahontan Water Board.

2. Streambed alteration and/or discharge of fill material to a surface water may require a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge and fill waste discharge requirements for impacts to non-federal waters, both issued by the Lahontan Water Board.

3. Construction of retention basins may require a National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit, Water Quality Order (WQO) 2022-0057-DWQ, obtained from the State Water Board, or individual storm water permit obtained from the Lahontan Water Board.

We request that the draft EIR recognize the potential permits that may be required for the Project, as outlined above, and identify the specific activities that may trigger these permitting actions in the appropriate sections of the environmental document. Information regarding these permits, including application forms, can be downloaded from our website at http://www.waterboards.ca.gov/lahontan/. Early consultation with Water Board staff regarding potential permitting is recommended.

Thank you for the opportunity to comment on the draft EIR. If you have any questions regarding this letter, please contact me at (760) 243-2355, tiara.crucius@waterboards.ca.gov or Christina Guerra, Senior Engineering Geologist, at (760) 241-7333, christina.guerra@waterboards.ca.gov. Please send all future correspondence regarding this Project to the Water Board's email address at Lahontan@waterboards.ca.gov and be sure to include the State Clearinghouse No. and Project name in the subject line.

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cc: California Department of Fish and Wildlife (Reg4Assistant@wildlife.ca.gov)
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