Agency: California Department of Fish and Wildlife

Project Title: Butte Valley Wildlife Area Ground Water Monitoring

This Right of Entry Permit ("**Permit**") is made and entered into as of June 01, 2025, between the State of California, acting by and through the California Department of Fish and Wildlife ("**State**" or "**CDFW**"), and Siskiyou County Flood Control & Water Conservation District a local government agency, its officers, employees, agents and contractors (the "**Permittee**").

RECITALS

- A. The State owns, operates, and maintains Butte Valley Wildlife Area (the "**Property**") in the County of Siskiyou, State of California; and
- B. Permittee has applied to State for permission to access the Property for purposes of carrying out studies related to shallow groundwater investigation on Butte Valley Wildlife Area (the "**Project**").
- C. The State desires to accommodate Permittee's application for permission to enter the Property for purposes of the Project, as and to the extent such project is (check one)

□ ultimately described, permitted, approved and conditioned by the environmental document dated , State Clearinghouse No. _____ (the "**Environmental Document**") and as may be conditioned by any other regulatory agency having jurisdiction. *OR*

 \boxtimes described in the planning/engineering documents for the Project which are attached hereto as Exhibit B (the "**Project Designs**")].

TERMS AND CONDITIONS

This Permit is made upon and subject to the following terms and conditions:

- 1. **Project Description:** By this Permit, State gives permission to Permittee to enter upon those lands legally described and depicted on the attached <u>Exhibit A</u> (the Property) solely for the purpose of the Project, the limits of which are shown on Exhibit A.
- 2. Permit Subject to Laws and Permits: Permittee shall, at Permittee's sole cost and expense, comply with all municipal, state, and federal authorities now in force or which may hereafter be in force pertaining to the Project and use of the Property as provided by this Permit. This Permit is expressly made subject to any and all applicable laws, statutes, codes, regulations, ordinances, orders, requirements, and regulatory permits or approvals, including any conditions of such permits and approvals issued or required to be issued by such regulatory agencies for or in connection with the Project. All such conditions shall be subject to the prior written approval of State.

Prior to entering or commencing any work on the Property, Permittee shall obtain all such legally required permits or approvals and submit to the State full and complete copies of the same, including

documentation related to or referenced in such permits and approvals, along with the corresponding agency contact and telephone numbers, and related California Environmental Quality Act ("**CEQA**") and/or National Environmental Policy Act documentation, if applicable.

- **3.** Term of Permit: This Permit shall only be for the period beginning on 06/01/2025, and ending on 06/30/2029, unless revoked or terminated according to its terms or reasonably extended by written mutual agreement.
- 4. Consideration: This Paragraph is intentionally left blank.
- **5. Permit Subject to Existing Claims:** This Permit is subject to existing contracts, permits, leases, licenses, encumbrances, and claims, as well as all matters of record which may affect the Property.
- 6. Waiver of Claims and Indemnity: This Permit is made on the express condition that the State is to be free from any and all liability by reason of injury or death to persons or loss or damage to property, from whatever cause, arising out of the use by Permittee, its directors, officers, employees, agents, representatives or contractors ("Permittee's Parties") of the Property or any part of it. Permittee, on behalf of itself and each of Permittee's Parties, waives all claims against the State, its directors, officers, employees, agents, representatives and contractors, for injury (including death), loss or damage caused by, arising out of, or in any way connected with the exercise of this Permit or the Project. Permittee covenants and agrees to protect, save harmless, indemnify, and defend the State, its directors, officers, employees, agents, representatives and contractors from and against any and all claims, losses, costs, expenses, damages or liability (collectively, "Claims") caused by, arising out of, or in any way connected with the Project, including any CEQA lawsuits against CDFW, any failure on the part of Permittee to fulfill its obligations under this Permit, and any exercise by Permittee of the rights granted by this Permit, except Claims resulting solely from the willful or grossly negligent acts of the State. Permittee will further cause such indemnification and waiver of claims in favor of the State to be inserted in each contract and agreement that Permittee executes for the provision of equipment, materials or services in connection with the Project.
- 7. Damage to Lands and Property: Permittee shall be responsible for any damage to lands of the State or third parties resulting from installation, operation, and maintenance of the Project, including, but not limited to soil erosion, collapse or subsidence and damage resulting from it. Permittee shall promptly repair and restore to its original condition any property of the State or any third party, including, but not limited to, levees, roads, bridges, ditches, pipelines, water developments, utilities, buildings, and fences that may be damaged or destroyed in connection with the Project.
- 8. Hazardous Materials: Without limiting the obligations of Permittee under Paragraph 6 of this Permit, Permittee hereby releases and agrees to indemnify, defend, protect, and hold harmless the State from and against any and all Claims (as defined in Paragraph 6 above) arising from or connected with any Hazardous Materials (as defined below) present, alleged to be present, released in, from, or about, or otherwise associated with the Project or the Property at any time, except any Hazardous Materials placed, disposed, or released by State. This release and indemnification includes, without limitation, Claims for injury to or death of any person or damage to any property; and the violation or alleged violation of, or other failure to comply with, any Environmental Laws (as defined below). If any action or proceeding is brought against the State by reason of any such Claim, Permittee shall, at the

election of and upon written notice from State, defend such action or proceeding by counsel reasonably acceptable to the State or reimburse State for all charges incurred for services of the California Attorney General in defending the action or proceeding.

The term "Hazardous Materials" includes, without limitation, any substance, material or waste that is: (a) flammable, explosive or radioactive; (b) a petroleum product or petroleum hydrocarbon, including crude oil, or any product, by-product or fraction thereof; or (c) designated, defined, classified or regulated as a hazardous material, hazardous waste, hazardous or toxic substance, pollutant, contaminant or related material under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. section 9601, et seq.; hereinafter, "CERCLA"); the Resource Conservation and Recovery Act of 1976 (42 U.S.C. section 6901, et seq.; hereinafter "RCRA"); the Toxic Substances Control Act (15 U.S.C. section 2601, et seq.; hereinafter "TSCA"); the Hazardous Materials Transportation Act (49 U.S.C. section 5101, et seq.; hereinafter "HTA"); the Hazardous Waste Control Law (Health & Saf. Code section 25100, et seq.; hereinafter "HCL"); the Carpenter-Presley-Tanner Hazardous Substance Account Act (Health & Saf. Code section 25300, et seq.; hereinafter "HSA"), including the regulations adopted and publications promulgated pursuant to such statutes, or any other applicable Environmental Laws now in effect or enacted after the date of this Permit. The term "Environmental Laws" includes without limitation, CERCLA, RCRA, TSCA, HTA, HCL, HSA and any other federal, state, local or administrative agency statute, code, ordinance, rule, regulation, order or requirement relating to pollution, protection of human health or safety, the environment, or Hazardous Materials.

- **9. Contractors:** Permittee shall incorporate the terms, conditions, and requirements of this Permit when contracting out all or any portion of the work permitted hereunder. Permittee shall be responsible for ensuring that all contractors and subcontractors comply with the terms and conditions of this Permit. Failure of any contractor or subcontractor to abide by the terms and conditions of this Permit shall constitute a default by Permittee (see Paragraph 24) allowing State to terminate this Permit and seek all legal remedies.
- 10. Labor Code Requirements; Prevailing Wage: Permittee understands and agrees that work performed on the Property may be subject to California Labor Code requirements, which include prevailing wage provisions. For more details, please refer to the Department of Industrial Relations (DIR) website at <u>http://www.dir.ca.gov</u>. Permittee shall pay prevailing wage to all persons employed in the performance of any part of the Project if required by law to do so.
- **11. Insurance Requirements:** As a condition of this Permit, and in connection with its indemnification and waiver of claims for the Project, Permittee will provide, and/or cause its contractors to provide, a policy or policies of insurance as follows:

COMMERCIAL GENERAL LIABILITY

Permittee shall maintain general liability coverage with limits of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate annually for bodily injury and property damage liability combined. The policy shall include coverage for liabilities arising out of the Project, Property, operations, independent contractors, products, completed operations, personal and advertising injury, and liability assumed under this Permit as an insured contract.

The policy must include State of California, the California Department of Fish and Wildlife, and their officers, agents and employees as additional insureds by endorsement, but only insofar as the operations under this Permit are concerned. The additional insured endorsement must be provided with the certificate of insurance.

AUTOMOBILE LIABILITY

Permittee shall maintain motor vehicle liability insurance with limits of not less than \$1,000,000 per accident for bodily injury and property damage. The policy shall name the State of California and the California Department of Fish and Wildlife as additional insureds by endorsement with respect to liability arising out of all vehicles owned, hired and non-owned. The additional insured endorsement must be provided with the certificate of insurance.

WORKERS' COMPENSATION

Permittee shall maintain statutory workers' compensation and employer's liability coverage for all its employees who will be engaged in the performance of the Project, including special coverage extensions where applicable. Employer's liability limits of \$1,000,000 shall be required, and the policy shall include a waiver of subrogation in favor of the State of California and the California Department of Fish and Wildlife. The waiver of subrogation endorsement must be provided with the certificate of insurance.

GENERAL REQUIREMENTS

Permittee shall ensure that the following general requirements are met:

a. Insurance Companies must be acceptable to the Department of General Services, Office of Risk and Insurance Management.

b. Coverage needs to be in-force for the complete term of this Permit. If insurance expires during the term of the Permit, a new certificate must be received by the State within thirty (30) days of the expiration date of the existing policy. Any new insurance must meet the requirements of this Permit.

c. Permittee shall notify the State within five business days of Permittee's receipt of any notice of cancellation or non-renewal of any insurance required by this Permit.

d. Permittee is responsible for any deductible or self-insured retention contained within the insurance program.

e. In the event Permittee fails to keep in effect at all times the specified insurance coverage, the State may, in addition to any other remedies it may have, terminate this Permit upon the occurrence of such event, subject to the provisions of this Permit.

f. Any insurance required to be carried shall be primary, and not excess, to any other insurance carried by the State.

g. If Permittee is self-insured in whole or in part as to any of the above described types and levels of coverage, Permittee shall provide State with written acknowledgment of this fact at the time of the execution of this Permit. The State may require financial information to justify Permittee's self-insured status. If, at any time after the execution of this Permit, Permittee abandons its self-insured status, Permittee shall immediately notify State of this fact and shall comply with all of the terms and conditions of this Insurance clause pertaining to policies of insurance in regard to those types and levels of insurance.

It is agreed that State shall not be liable for the payment of any premiums or assessments on the required insurance coverage.

FIRE AND CASUALTY DAMAGES.

State will not keep improvements (if any) which are constructed or installed by Permittee under the provisions of this Permit insured against fire or casualty, and Permittee shall make no claim of any nature against State by reason of any damage to the business or property of Permittee in the event of damage or destruction by fire or other cause, arising other than from or out of gross negligence or willful misconduct of agents or employees of the State in the course of their employment.

- **12. Reservation of Rights:** State reserves the right to use the Property in any manner, provided such use does not unreasonably interfere with Permittee's rights herein.
- 13. Access Limits and Special Conditions: Access to the Property and use of roads/trails shall be limited to the route(s) designated by State and as depicted in Exhibit A. Minimization Measure and Special Conditions to be implemented by Permittee: 1) During Waterfowll season BVWA is closed to all nonhunters on hunt days (Wednesdays, Saturdays, and Sundays) 2) Provide a description of work and a map of the proposed transect and wells. 3) CDFW shall need to approve of the location of the proposed transect and wells. 3) CDFW shall need to approve of the location of the proposed transect and wells. 5) Data will be shared with CDFW annually. 6) Vehicles operated on CDFW lands must be free of invasive weeds and operated by a licensed driver safely and at appropriate speeds. There shall be fire suppression equipment in the vehicles, such as a shovel and fire extinguisher. 7) No overnight camping without prior approval and no open-flame cooking. 8) Right to Enter could be suspended during times of high fire danger or other extreme conditions
- 14. Notice of Work: Prior to any entry upon the Property for any of the purposes hereinabove set forth, Permittee shall notify the CDFW staff person named below (the "CDFW Representative") in writing at least three (3) business days prior to commencement of work. Permittee shall also notify the CDFW Representative in writing at least forty-eight (48) hours in advance of any change in the project schedule or prior to cessation of work.

Butte Valley Wildlife Area/Mike Sandahl 1724 Ball Mountain Rd., Montague, CA 96094 (530) 200-1952 BVWA 530-398-4627 Michael.Sandahl@wildlife.ca.gov

- 15. Limits of Work: In no event shall this Permit authorize work in excess of, contrary to, or that varies from <u>Project Designs</u> or the terms and conditions of any regulatory agency permit or approval or any other Project documents Exhibits A and B, approved by State. Under no circumstances, whether or not permitted or authorized by any regulatory agency permit or approval, shall work exceed that which is reasonably necessary to carry out the purpose of the Project or extend beyond the Project boundaries as depicted in Exhibit A. The State has issued this Permit in its capacity as the owner of the Property. Nothing in this Permit constitutes regulatory approval of the Project by the State or CDFW.
- **16. Special Hazards:** <u>The Butte Valley Wildlife Area is open to the public for hunting. Hunters are present on the Property during hunting seasons (Generally from October to January). Hunters on the Property and adjacent lands possess, and discharge loaded firearms, live ammunition, bows and arrows, air and gas guns, and other propulsive devices, any of which may damage or destroy property or cause personal injury or death.</u>

Permittee acknowledges that conditions on the Property and adjacent lands, including hunting and hunting related activities, may damage or destroy facilities, equipment and property, or make any part of the project area unsafe to use at any given time. It shall be the sole responsibility of Permittee to determine in advance of undertaking any activities if such activities can be conducted safely, and to take such precautions as permittee may deem appropriate to protect facilities, equipment, and property from damage.

Permittee shall conduct and take all necessary precautions to ensure that Permittee's Parties conduct, all of their activities with extreme care, and shall ensure the highest possible standards of safety during any entry or activities within the Property. The standards of safety shall include, but not be limited to, the following:

Permittee shall inform Permittee's Parties of any and all potential dangers, including, but not limited to, hunting and hunting-related activities, encounters with wild animals and livestock, non-potable water, risks

of earth movement and rugged road conditions, and shall monitor carefully all activities of Permittee's Parties within the Property.

Permittee shall ensure that Permittee's Parties are properly prepared to respond to any medical emergencies involving any of Permittee's Parties."

- **17. Public Safety:** Permittee shall erect orange plastic temporary construction fencing prior to commencement of work to prohibit public access to the construction zone, if applicable. Permittee shall remove such fencing within two (2) days of the completion of work. Permittee shall, or shall cause its contractors or subcontractors to take any and all other necessary and reasonable steps to protect the public from harm due to Project activities.
- **18. Compliance with Monitoring and Mitigation Measures:** Natural resource monitoring and mitigation measures shall be completed in consultation with and to the satisfaction of the CDFW Representative by applicable dates stated in the permit, approval, or other Project document under which the measure is required, if applicable.

Activities conducted on the Property authorized by this Permit will comply with all state and federal laws, including but not limited to the California Endangered Species Act (Fish and Game Code section 2808, *et seq.*), Fish and Game Code section 1600, *et seq.*, and the California Environmental Quality Act ((Public Resources Code 21000–21189). Unless otherwise authorized by this Permit, all activities conducted on the Property will comply with applicable Department Land Regulations set forth in: <u>Sections 550 and 551, Title 14, California Code of Regulations.</u>

State will advise Permittee if any new special status species, threatened/endangered species protocols, or other resource issues are identified on the Property. Permittee shall consult with the State to determine the appropriate level of avoidance/mitigation necessary to protect the resource(s) during future work.

- **19. Restoration of Property:** Permittee shall be responsible for restoration, repair, and revegetation of the Property as specified in the <u>Project Designs</u>] in consultation with, and to the satisfaction of, the CDFW Representative, unless otherwise specified, no later than 180 days after completion of the Project. These obligations shall survive the expiration or termination of this Permit
- **20. Right to Halt Work:** The State reserves the right to halt work and require Permittee to carry out restoration, repair, and mitigation measures at any time, with or without prior notice to Permittee, in the event the State determines that any provision contained herein is violated, or any other threat to the Property or its resources, or the health and safety of any person(s) on the Property arises.
- **21. Use Restrictions:** The use of the Property by Permittee and/or Permittee's Parties shall be restricted to the daytime hours between sunrise and sunset on a day-by-day basis, unless otherwise approved in advance in writing by State.

Activities on the Property shall be conducted only in a manner consistent with this Permit that will not interfere with the orderly operation of the Property. Permittee agrees to prohibit any disorderly conduct and/or contraband. Contraband includes, but is not limited to: beer, alcoholic beverages, marijuana, illegal and illicit drugs, firearms, explosives, and weapons.

Use of specified roads and trails (as identified on Exhibit A) by any motorized vehicle (including but not limited to motorcycle, car, truck, jeep, tractor, or all-terrain vehicle) shall be limited to only the

Permittee and Permittee's Parties for patrol, maintenance or repair purposes only and shall be subject to all other conditions and/or restrictions of this Permit.

Permittee shall not use or allow the Property to be used, either in whole or in part, for any purpose other than as herein set forth, without the prior written consent of CDFW.

22. State's Right to Enter: At all times during the term of this Permit, there shall be and is hereby expressly reserved to State and to any of its agencies, contractors, agents, employees, representatives or licensees, the right at any and all times, and any and all places, to enter upon said Property to survey, inspect, or perform any other lawful State purposes.

Permittee agrees to not interfere with State's right to enter.

23. Protection of Property: Permittee shall protect the Property, including all improvements and the natural resources thereon, at all times at Permittee's sole cost and expense, and Permittee shall strictly adhere to the following restrictions:

(a) Permittee may not place or dump garbage, trash or refuse anywhere upon or within the Property, except in self-contained trash receptacles that are maintained to State's satisfaction by Permittee.

(b) Permittee may not commit or create, or suffer to be committed or created, any waste, hazardous condition and/or nuisance to occur upon the Property.

(c) Permittee may not cut, prune or remove any native trees or brush upon the Property, except for routine fire protection, trail clearing, maintenance or the elimination of safety hazards, without first obtaining written permission from the CDFW Representative.

(d) Permittee may not disturb, move or remove any rocks or boulders upon the Property except for routine fire protection, trail clearing, maintenance or the elimination of safety hazards, without first obtaining written permission from the CDFW Representative.

(e) Permittee may not grade or regrade, or alter in any way, the ground surface of the Property, without first obtaining written permission from the CDFW Representative.

(f) Permittee may not bait, poison, trap, hunt or engage in any other activity which results in the killing, maiming or injury of animals or wildlife upon the Property, without first obtaining written permission from the CDFW Representative.

(g) Permittee shall not generate, use, store, release, or dispose of Hazardous Materials on the Property, or authorize or permit any of the same by any third party.

(h) Permittee shall exercise due diligence in the protection of the Property against damage or destruction by fire, vandalism or other cause.

24. Default: In the event of a default or breach by Permittee of any of the terms or conditions set forth in this Permit, State may at any time thereafter, without limiting State in the exercise of any right or remedy at law or in equity which State may have by reason of such default or breach:

(a) Maintain this Permit in full force and effect and recover the consideration, if any and other monetary charges as they become due, without terminating Permittee's right to use of the State Property, irrespective of whether Permittee shall have abandoned the Property.

(b) Terminate this Permit whereupon Permittee shall immediately vacate and surrender possession of the Property to State. In such event, State shall be entitled to recover from Permittee all damages incurred by State by reason of Permittee's default including, but not limited to, the following:

(i) any amount necessary to compensate State for all the detriment proximately caused by Permittee's failure to perform its obligations under this Permit or which in the ordinary course of events would be likely to result therefrom; plus

(ii) at State's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by applicable law. Upon termination of this Permit, State shall have the right to make any reasonable repairs, alterations, restoration, or modifications to the Property, which State, in its sole discretion, deems reasonable and necessary for the State's use of the Property.

- **25. State's Right to Cure Permittee's Default:** At any time, after Permittee is in default or material breach of this Permit, State may, but is not required to, cure such default or breach at Permittee's cost. If State at any time, by reason of such default or breach, pays any sum or does any act that requires the payment of any sum, the sum paid by State shall be due immediately from Permittee to State at the time the sum is paid by State, and if received from Permittee at a late date shall bear the maximum interest allowed by California law from the date the sum is paid by State receives payment from Permittee.
- **26. Revocation of Permit:** State shall have the absolute right to revoke this Permit for any reason upon ten (10) days written notice to Permittee. Written notice to Permittee may be accomplished by electronic or facsimile transmission, and the notice period set forth in this paragraph shall begin on the date of the written notice. If Permittee is in breach of the Permit or owes money to the State pursuant to this Permit, any prepaid monies paid by Permittee to State shall be held and applied by the State as an offset toward damages and/or amounts owed. Nothing stated herein shall limit the State's exercise of its legal and equitable remedies. All written notices to Permittee shall be sent to the following address:

Matt Parker SGMA Plan Manager Siskiyou County Flood Control & Water Conservation District 1312 Fairlane Road Yreka, CA 96097 530-842-8005 mparker@co.siskiyou.ca.us

- **27. Recovery of Legal Fees:** If any action is brought by State to enforce or interpret any provision of this Permit or to restrain the breach of any agreement contained herein, or for the recovery of possession of the Property, or to protect any rights given to the State against Permittee, and if the State shall prevail in such action on trial or appeal, Permittee shall pay to State such amount in attorney's fees in said action as the court shall determine to be reasonable, which shall be fixed by the court as part of the costs of said action.
- **28. Voluntary Execution and Independence of Counsel:** By their respective signatures below each party hereto affirms that they have read and understood this Permit and have received independent counsel and advice from their attorneys with respect to the advisability of executing this Permit.
- **29. Reliance on Investigations:** Permittee accepts this Permit, and the Property to which it pertains, in its as-is condition and has made such investigation of the facts pertaining to this Permit and all the matters pertaining thereto as Permittee deems necessary.

- **30. Entire Agreement:** The parties further declare and represent that no inducement, promise or agreement not herein expressed has been made to them and this Permit contains the entire agreement of the parties, and that the terms of this agreement are contractual and not a mere recital.
- **31. Warranty of Authority:** The undersigned each hereby represents that he or she has the authority to, and by signing this Permit does, bind the person or entity on whose behalf and for whom they are signing this

Permit and the attendant documents provided for herein, and this Permit and said additional documents are, accordingly, binding on and enforceable against said person or entity.

32. Assignment: This Permit shall not, nor shall any interest herein, be assigned, mortgaged, hypothecated, or transferred by Permittee, whether voluntary or involuntary or by operation of law, nor shall Permittee let

or sublet or grant any license of permit with respect to the use and occupancy of the Property or any portion thereof, without the prior written consent of State.

33. Choice of Law: This Permit will be governed and construed by the laws of the State of California.

IN WITNESS WHEREOF, the undersigned have executed this Permit effective as of the date first set forth above.

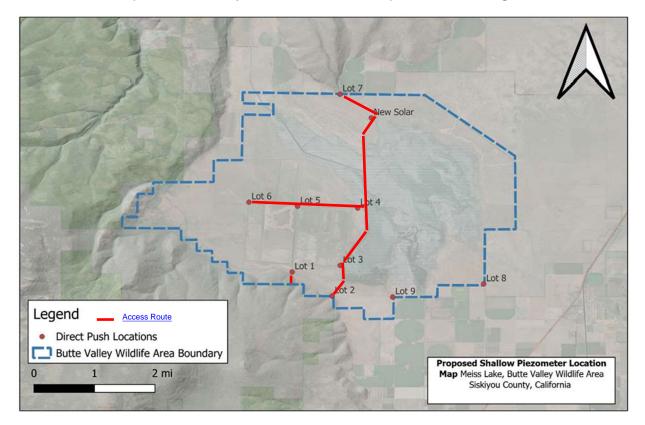
STATE OF CALIFORNIA California Department of Fish and Wildlife

SISKIYOU COUNTY

By: _____ Print Name: Tina Bartlett Title:Regional Manager, Northern Region 1 By: _____ Print Name

Print Name:Nancy Ogren Title: Chair

Exhibit A



Map of Butte Valley Wildlife Area and Proposed Monitoring Sites

Siskiyou County, Butte Valley Groundwater Basin, SGMA Compliance Butte Valley Wildlife Area Shallow Groundwater Investigation Description of Proposed Work

April 2025

Introduction

This document provides a description of a proposed hydrogeological investigation in the Meiss Lake area taken by the Butte Valley Groundwater Sustainability Agency (GSA) to implement the Butte Valley Groundwater Sustainability Plan (GSP). The work described is based on an understanding of project requirements and timeline. Data for this project will be compiled into a technical memo used to satisfy the requirements of the Sustainable Groundwater Management Act.

Problem and Solution

Assessment of Interconnected Surface Water (ISW) and Groundwater-Dependent Ecosystems (GDEs) is required by SGMA (Water Code §§ 10720–10737.8) and its implementing regulations (23 CCR 354.16[g] and 354.28[c][6]). Without accurate shallow groundwater monitoring data near potential ISW and GDE areas the GSP's ability to set defensible sustainable management criteria and protect beneficial uses is limited. The Butte Valley GSP identifies a critical data gap in assessing whether surface water in Butte Valley interacts hydraulically with the underlying aquifer in Chapter 2, section 2.2.2.6 (ISW summary) and 2.2.2.7 (GDE summary). Additionally, during GSP development multiple agencies provided public comment highlighting the need for additional data collection of ISW and GDEs. A summary of the comments is provided in the following section, "GSP Development Comments" and provided in **Attachment A**.

Butte Valley is topographically closed and under natural conditions surface water flows to Meiss Lake. Meiss Lake and the surrounding wetlands constitute the largest potential GDE in the Valley and are habitat for wildlife. Meiss Lake is managed by the California Department of Fish and Wildlife (CDFW) which is supportive of improved understanding of Meiss Lake and the surrounding area. For these reasons, a study of groundwater connectivity to the underlying aquifer near Meiss Lake would efficiently close the ISW and GDE data gap identified in the GSP.

GSP Development Comments

CDFW Letter to Butte Valley GSA (September 23, 2021) in comments CDFW-007 and CDFW-008 cites the hydrologic and habitat importance of Meiss Lake and state that in their opinion the GSP does not adequately address or classify the lake and wetland under 23 CCR § 354.16(g); Water Code § 10727.4(I).

The Nature Conservancy letter to Butte Valley GSA (September 26, 2021) does not explicitly state Meiss Lake, but broadly critiques insufficient data used for ISW and GDE classification in comments NGO-021 and NGO-022 which results in inadequate identification of ISW or GDE locations.

Butte Valley GSP Alignment

The proposed work directly addresses the GSP's call for more robust data collection and identification around potential GDEs, including Meiss Lake. The proposed monitoring wells and continuous measurements will significantly reduce interpolation gaps, ensuring the GSP's conceptual model accurately reflects local conditions. The results of improved data collection will determine if Meiss Lake is:

- Primarily groundwater-fed (a gaining lake),
- Primarily feeding the groundwater (a losing lake),
- Subject to seasonal reversals in flow direction, or
- Not significantly hydraulically connected to the aquifer.

Determining which of these scenarios applies is critical to closing data gaps identified during GSP development and satisfying the requirements of SGMA. Determining the status of ISW and/or GDEs in the Meiss lake region will allow for the appropriate determination of ISW sustainable management criteria and avoid incorrect or misguided classifications of groundwater connectivity in the region.

To address these legal and technical requirements, the Butte Valley GSA proposes to install and monitor a network of shallow wells around Meiss Lake. This combined approach of water-level, periodic water-quality sampling, and a continuous surface-water gauge will generate the data necessary for verifying conditions of GDEs/ISWs, refining the conceptual hydrogeologic model, and maintaining compliance with SGMA and the Butte Valley GSP's sustainability goals.

This work aligns with the following Executed Grant Agreement with the Department of Water Resources (Agreement Number 4600015620):

- Component 4: Well Inventory which is for monitoring well construction and/or instrumentation,
- Component 5: Monitoring Network which includes collection and analysis of hydrogeochemical samples, and improved analysis of GDEs.

Proposed Scope of Work

Task 1: Finalize Planning and Permitting

This task involves identifying up to 10 potential well locations around Meiss Lake, prioritizing known data gap areas referenced in the GSP. It also includes securing site access and appropriate permits through coordination with the California Department of Fish and Wildlife, as well as

selecting and contracting a C-57 licensed driller (Driller) and identify a licensed geologist to oversee drilling. The goal is to install 6 to 8 wells.

Task 1 Approach:

- a) A finalized project plan and permit package.
- b) Seek and review qualified well drillers.
- c) Execute contractor agreements.

Task 2: Well Drilling and Construction

Under this task, direct push technology (e.g., GeoProbe) will be used to install 2-inch diameter pre-packed screen wells using appropriate-sized rigs and tooling. These technologies are expected to reach a maximum depth of approximately 20-30 feet. The driller will be responsible for coordinating with a licensed geologist who will prepare a technical memo or brief report summarizing the construction of the wells, including a map of locations, well logs developed during drilling, and copies of submitted well completion reports. The memo or report must be stamped by a California Professional Geologist (PG). The PG may be provided by the GSA or by the driller. Cuttings will be used to develop logs following the Unified Soil Classification System (USCS) and will be stored at the CDFW field office at the end of drilling.

Task 2 Deliverable:

- a) As-built diagrams for each installed well.
- b) Technical memo or report stamped by a PG with well logs, map of locations, and DWR well completion reports.
- c) Documentation of final well count (anticipated 6–8 total) based on field conditions.
- d) Storage of drilling cuttings at the CDFW field office.

Task 3: Instrumentation and Initial Sampling

After well construction, each nested well will be equipped with a telemetered, pressurecompensated data logger recording water level at 15-minute intervals. A dedicated lake gauge will be installed in Meiss Lake to monitor lake stage at the same intervals. This will be located adjacent to the existing gauge. An initial round of groundwater and surface water sampling will be conducted for general chemistry (major ions, nutrients) and radon analyses.

Task 3 Deliverable:

- a) Map of installed sensors and telemetered systems transmitting continuous data.
- b) An initial sampling report summarizing baseline water-quality parameters and radon levels.

Task 4: Ongoing Monitoring

Continuous monitoring of water levels in all wells and the lake gauge will be performed. As needed seasonal radon and chemistry sampling campaigns will be conducted to capture variations in groundwater–surface water interactions. If needed, additional weather or rain

gauges will be installed on one or more well location to correlate precipitation and evaporation with observed water-level changes.

Task 4 Deliverable:

a) Any interim recommendations for adjusting instrumentation or sampling frequencies based on data trends.

Task 5: Reporting and GSP Integration

This task evaluates time-series water-level data, geochemical signatures, and radon tracer results to determine groundwater–surface water connectivity and possible seasonal flow reversals. This analysis will refine the local hydrogeologic conceptual model around Meiss Lake and guide any recommended updates to sustainable management criteria under the Butte Valley GSP. Key findings will be presented to stakeholders, and if needed, integrated into the GSP 5 year update submitted in early 2027.

Task 5 Deliverable:

- a) A final technical memorandum presenting refined conceptual models, recommended GSP revisions or management strategies, and data interpretations included in the next Butte Valley Annual Report.
- b) Presentation materials for engaging the GSA, Advisory Committee, and other stakeholders.

Schedule

The project is anticipated to extend over two years (Q1 2025 through Q4 2026) with data collection continuing as needed during the duration of GSP implementation. The first year (2025) will focus on site planning, permitting, drilling, and baseline sampling. During the second year (2026), ongoing monitoring will be maintained, leading to final data analysis, reporting, and integration with the Butte Valley GSP. The schedule is shown in **Table 1**.

Task	Task Description	Expected Completion Dates
1	Planning and Permitting	Draft: Q1-Q2, 2025
2	Well Drilling and Construction	Draft: Q2-Q3, 2025
3	Instrumentation & Initial Sampling	Draft: Q3-Q4, 2025
4	Ongoing Monitoring	Draft: Q1-Q4, 2026
5	Reporting & GSP Integration	Draft: Q4, 2026

Table 1. Schedule

Attachments

Attachment A - Comments from GSP Development

Attachment B - Map of Proposed Monitoring Well Locations near Meiss Lake

Attachment A - Comments from GSP Development

California Department of Fish and Wildlife comments:

CDFW-007 The Draft GSP mentions certain GDEs, but does not provide consideration of those GDEs or assess potential impacts to those GDEs from groundwater pumping. The Draft GSP also fails to identify or appropriately consider certain GDEs, including Meiss Lake within the BVWA. Historically, Meiss Lake was a natural wetland that spanned the Butte Valley Basin and received natural inputs from both groundwater and surface water. Due to unsustainable groundwater management practices, Meiss Lake has been reduced in size to about 4,000 acres, but it continues to support a wide variety of species and habitats. Currently, Meiss Lake receives natural inputs from surface water tributaries and is occasionally supported by pumped groundwater as needed in dry years to support groundwater-dependent species. Thus, Meiss Lake qualifies as a GDE that must be identified and appropriately considered in the draft GSP because it is a historic natural wetland that continues to rely on groundwater inputs to **CDFW-008** sustain its species and habitat. In defining GDEs entitled to consideration in a GSP, SGMA statutes and regulations do not require features to rely on groundwater from a particular source in order to qualify as GDEs. (23 CCR § 354.16(g); Water Code § 10727.4(l).)

Alternatively, if the District were to nevertheless conclude that Meiss Lake is not a GDE, Meiss Lake must be considered a managed wetland, with its groundwater inputs appropriately accounted for in the Draft GSP's water budget. GSPs must account for groundwater extraction for all water use sectors including managed wetlands, managed recharge, and native vegetation. (23 CCR §§ 351(al) and 354.18(b)(3).)

Chapter 2 of the Draft GSP contains a description of the BVWA's water management practices depending on the water year type or impacts to Meiss Lake, the lowest point in the basin. Many of the streams, including Butte Creek, have been "sufficiently appropriated" during the irrigation season, meaning that allocated water likely exceeds available supplies, leaving little to enter Meiss Lake. The Draft GSP's water budget must consider and account for the fact that Meiss Lake may go dry in certain years and may require inputs of pumped groundwater for wetland habitat restoration and to support groundwater-dependent species. By failing to account for groundwater inputs to Meiss Lake, the GSP has not adequately analyzed the groundwater-surface water relationship in the Basin or developed a complete water budget.

CDFW-008 Cont'd.

April 2025

The Nature Conservancy Comments:

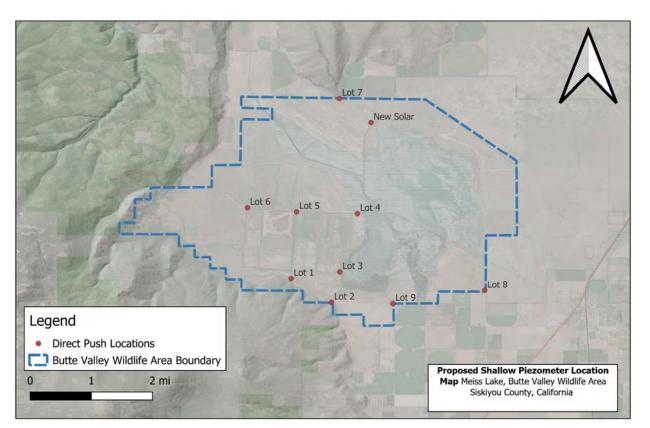
Groundwater Dependent Ecosystems and Interconnected Surface Waters

Sustainable management criteria provided in the GSP do not consider potential impacts to environmental beneficial users. The GSP neither describes nor analyzes direct or indirect impacts on environmental users of groundwater or surface water when defining undesirable results. This is problematic because without identifying potential impacts to GDEs and beneficial users of interconnected surface waters, minimum thresholds may compromise, or even destroy, environmental beneficial users. Since GDEs are present in the basin, they must be considered when developing SMC for the basin.

NGO-021 cont.

The GSP states that the depletion of interconnected surface water sustainability indicator is not applicable in the Basin, but this has not been proven. Chapter 2 of the GSP disregards ISWs due to data gaps. However, they should be retained as potential ISWs and preliminary SMC for the depletion of interconnected surface water sustainability indicator should be established.

NGO-022



Attachment B - Map of Proposed Monitoring Well Locations near Meiss Lake