

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

REGION 1 – NORTHERN REGION
619 2nd Street
Eureka, CA 95501



LAKE OR STREAMBED ALTERATION AGREEMENT

NOTIFICATION NO. EPIMS-HUM-50755-R1C
Unnamed Tributary to Fish Creek, Tributary to South Fork Eel River,
Tributary to the Eel River and the Pacific Ocean

Shawn Richter
Richter Water Diversions and Stream Crossings Project (Project)
10 Encroachments

This Lake or Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and Shawn Richter (Permittee).

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, the Permittee initially notified CDFW on May 9, 2024, that the Permittee intends to complete the Project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the Project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, the Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, the Permittee agrees to complete the Project in accordance with the Agreement.

PROJECT LOCATION

The Project to be completed is located within the Fish Creek – South Fork Eel River watershed, approximately 1.8 miles southeast of the town of Benbow, County of Humboldt, State of California. The Project is located in Section 5, T05S, R04E, Humboldt Base and Meridian; in the Garberville U.S. Geological Survey 7.5-minute quadrangle; Assessor’s Parcel Number 033-120-009-000; latitude 40.0524 N and longitude 123.7608 W at the point of diversion (POD-1/Pond-1).

PROJECT DESCRIPTION

The Project is limited to ten encroachments. Two encroachments are for water diversion: one from an on-stream pond for cannabis irrigation and one for domestic use from an unnamed tributary to Fish Creek. Work for the water diversion will include use

and maintenance of the water diversion infrastructure. The eight other proposed encroachments are to upgrade existing culverts. Work for these encroachments will include excavation, removal of the existing culverts, replacement with new properly sized culverts, backfilling and compaction of fill, and rock armoring as necessary to minimize erosion.

Table 1. Project Encroachments with Description

ID	Latitude/Longitude	Description
POD-1/Pond-1	40.0525, -123.7610	<p>Water diversion from an on-stream pond, for irrigation use only. Modify and maintain water diversion structure consistent with the Agreement.</p> <p><u>Seasonal Diversion Minimization.</u> To minimize adverse impacts to native pond breeding amphibians (when present) the following diversion minimizations apply: from November 1 to March 31, the Permittee shall divert water at a rate no greater than the rate of water flowing into the pond (i.e., water diversion shall not decrease the pond depth). From April 1 to September 1, when native larval amphibians are present, the Permittee shall cease diverting water once the pond volume is one third of the maximum pond volume. To comply with this measure; the Permittee shall establish a fixed visual marker(s) (e.g., stage plate) in the pond as a reference for water level thresholds.</p>
POD-2	40.0518, -123.7595	<p>Water diversion from an unnamed stream, tributary to Fish Creek, for domestic use only. Modify and maintain water diversion structure consistent with the Agreement. Permittee may only divert when surface water is present.</p> <p><u>Maximum Diversion Rate.</u> The maximum instantaneous diversion rate from the water intake shall not exceed one (1) gallon per minute (gpm) at any time.</p> <p><u>Bypass Flow (POD-2).</u> The Permittee shall pass 80% of the flow at all times to keep all aquatic species including fish and other aquatic life in good condition below the point of diversion.</p> <p><u>Seasonal Diversion Minimization – Domestic Use.</u> No more than 100 gallons per day shall be diverted during the low flow season from April 1 to November 15 of each year. Water shall be diverted only if the Permittee can adhere to the maximum diversion rate and bypass flow conditions of this Agreement (above).</p>
SC-1	40.0530, -123.7628	<p>An existing undersized 18” diameter CMP culvert shall be upgraded to a minimum 24” diameter culvert installed to grade, aligned with the natural channel, and long enough to extend beyond the the fill. Rock armor the inlet and outlet as necessary to minimize erosion. Work for this project shall be completed by the expiration of this Agreement.</p>
SC-2	40.0527, -123.7622	<p>An existing 18” diameter culvert is failing, perched, and buried under road fill from scraping activities. This crossing shall be replaced with a minimum 18” diameter culvert set to grade, aligned with the natural stream channel, and long enough to extend beyond the fill. Rock armor the inlet and outlet as</p>

		necessary to minimize erosion. Work for this project shall be completed by no later than October 31, 2027.
SC-3	40.0523, -123.7618	An existing 24" diameter culvert is undersized, too long, and not properly set to grade. The culvert shall be upgraded to a minimum 30" diameter culvert set to grade, aligned with the natural channel, and long enough to extend beyond the fill appropriately. Rock armor the inlet and outlet as necessary to minimize erosion. Work for this project shall be completed by the expiration of this Agreement.
SC-4	40.0520, -123.7611	An existing 18" diameter culvert that is plugged at the inlet, rusted through, and failing shall be upgraded to a minimum 18" diameter culvert. The new culvert shall be set to grade, aligned with the natural channel, and appropriately sized in length. Rock armor the inlet and inlet as necessary to minimize erosion. Work for this project shall be completed by no later than October 31, 2026.
SC-5A/5B	40.0512, -123.7605	SC-5A is an existing undersized, rusted, and plugged 18" diameter culvert shall be replaced with a minimum 24" diameter culvert. The new crossing shall be properly set to grade, aligned with the natural channel, and appropriately sized for length. Rock armor the inlet and outlet as necessary to minimize erosion. SC-5B is properly functioning and sized, however, may require a rock channel to direct flow to the inlet of the newly replaced SC-5A. Both crossings are within ten feet of each other on a driveway entrance. Work for this project shall be completed by no later than October 31, 2027.
SC-6	40.0512, -123.7601	An existing 12" diameter culvert is undersized, plugged at the inlet, and damaged. The crossing shall be upgraded to a minimum 24" diameter culvert set to grade, aligned with the natural channel, and sized appropriately for length. Rock armor the inlet and outlet as necessary to minimize erosion. Work for this project shall be completed by no later than October 31, 2027.
SC-7	40.0528, -123.7605	An existing unimproved dirt ford shall be upgraded to a rock ford, requiring approximately 5-10 cubic yards of disturbance in a 200 sq ft prism. Rock shall be set to the appropriate depth and sizing per the Notification BMPs. Work for this project shall be completed by no later than October 31, 2027.
SC-8	40.0525, -123.7610	An existing 24" diameter culvert functions as the overflow for Pond-1. The outlet portion of the culvert extends approximately 50' where its outlet flows roughly 6' above the stream channel. The culvert shall be shortened so the footprint is within the channel of the watercourse and does not hang suspended above the channel. The bed, bank, and channel surrounding where the culvert is newly shortened shall be rock armored with approximately 1.33 cu ft of rip rap with a mean diameter of 6-12". If any modification to the bed, bank, or channel is required, the slopes shall remain at no greater than 2:1. Work for this project shall be completed by no later than October 31, 2026.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include Chinook Salmon (*Oncorhynchus tshawytscha*), Coho Salmon (*O. kisutch*), Steelhead Trout (*O. mykiss*), Western Brook Lamprey (*Lampetra richardsoni*), Pacific Lamprey (*Entosphenus tridentata*), Southern Torrent Salamander (*Rhyacotriton variegatus*), Coastal Giant Salamander (*Dicamptodon tenebrosus*), Foothill Yellow-legged Frog (*Rana boylei*), Coastal Tailed Frog (*Ascaphus truei*), Northwest Pond Turtle (*Actinemys marmorata*), amphibians, reptiles, aquatic invertebrates, mammals, birds, and other aquatic and riparian species.

The adverse effects the project could have on the fish or wildlife resources identified above include:

Impacts to water quality:

- Increased water temperature;
- Reduced instream flow; and
- Temporary increase in fine sediment transport;

Impacts to bed, channel, or bank and direct effects on fish, wildlife, and their habitat:

- Loss or decline of riparian habitat; and
- Direct impacts on benthic organisms;

Impacts to natural flow and effects on habitat structure and process:

- Cumulative effect when other diversions on the same stream are considered;
- Diversion of flow from activity site;
- Indirect impacts;
- Impediment of up- or down-stream migration;
- Water quality degradation; and
- Damage to aquatic habitat and function.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

The Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. The Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. The Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of the

Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.

- 1.3 Change of Conditions and Need to Cease Operations. If conditions arise, or change, in such a manner as to be considered deleterious by CDFW to the stream or wildlife, operations shall cease until corrective measures approved by CDFW are taken. This includes new information becoming available that indicates that bypass flows and diversion rates provided in this agreement are not providing adequate protection to keep aquatic life downstream in good condition or to avoid “take” or “incidental take” of federal or State listed species.
- 1.4 Adherence to Existing Authorizations. All water diversion facilities that the Permittee owns, operates, or controls shall be operated and maintained in accordance with current law and applicable water rights.
- 1.5 Notification of Conflicting Provisions. The Permittee shall notify CDFW if the Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact the Permittee to resolve any conflict.
- 1.6 Project Site Entry. Permittee agrees that CDFW personnel may enter the Project site at any time to verify compliance with the Agreement.
- 1.7 Notice of Work Initiation. The Permittee shall contact CDFW within the seven-day period preceding the beginning of work permitted by this Agreement. Information to be disclosed shall include Agreement number, and the anticipated start date.
- 1.8 Agreement Compliance. The proposed work shall comply with all measures included in this Agreement. **Failure to comply with these measures may result in suspension or revocation of this Agreement.**

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, the Permittee shall implement each measure listed below.

- 2.1 Permitted Project Activities. Except where otherwise stipulated in this Agreement, all work shall be in accordance with the Permittee Notification received on May 9, 2024, with revisions received on July 29, 2024, together with all maps, BMP's, photographs, drawings, and other supporting documents submitted with the Notification.
- 2.2 Incidental Take. This Agreement does not allow for the “take,” or “incidental take” of any federal or State listed threatened or endangered listed species.

Project Timing

- 2.3 Work Period. All work, not including authorized diversion of water, shall be confined to the period **June 1 through October 31** of each year. Work within the active channel of a stream shall be restricted to periods of dry weather. Precipitation forecasts and potential increases in stream flow shall be considered when planning construction activities. Construction activities shall cease, and all necessary erosion control measures shall be implemented prior to the onset of precipitation.
- 2.4 Work Completion. The proposed work at SC-4 and SC-8 shall be completed by no later than October 31, 2026. The proposed work at SC-2, SC-3, SC-5A, SC-6, and SC-7 shall be completed as soon as possible but no later than October 31, 2027. The proposed work at SC-1 and SC-3 shall be completed prior to the expiration of this Agreement's term. A notice of completed work, including photographs of each site, shall be submitted to CDFW within seven (7) days of work completion for each encroachment.
- 2.5 Extension of the Work Period. If weather conditions permit, and the Permittee wishes to extend the work period before June 1 or after October 31, a written request shall be made to CDFW at least five (5) working days before the proposed work period variance. Written approval (letter or e-mail) for the proposed time extension must be received from CDFW prior to activities beginning before June 1 or continuing past October 31.
- 2.6 Avoidance of Nesting Birds. Fish and Game Code sections 3503 and 3503.5 prohibits the taking or destroying of native bird's nests or eggs. Vegetation maintenance or removal (e.g., clearing and grubbing) shall occur between September 1 and March 15. Removal areas should be managed once cleared to reduce nesting potential during the breeding season.

Vegetation Management

- 2.7 Minimum Vegetation Removal. No native riparian vegetation shall be removed from the bank of the stream, except where authorized by CDFW. Permittee shall limit the disturbance or removal of native vegetation to the minimum necessary to achieve design guidelines and standards for the Authorized Activity. Permittee shall take precautions to avoid damage to vegetation outside the work area.

Water Diversion

- 2.8 Maximum Diversion Rate (POD-2). The maximum instantaneous diversion rate from the water intake shall not exceed **one (1) gallon per minute** (gpm) at any time.

- 2.9 Bypass Flow (POD-2). The Permittee shall pass **80% of the flow** at all times to keep all aquatic species including fish and other aquatic life in good condition below the point of diversion.
- 2.10 Seasonal Diversion Minimization – Domestic Use (POD-2). No more than **100 gallons per day** shall be diverted during the low flow season from **April 1 to November 15** of each year. Water shall be diverted only if the Permittee can adhere to the maximum diversion rate and bypass flow conditions of this Agreement (above).
- 2.11 Measurement of Diverted Flow. Permittee shall install and maintain an adequate measuring device (i.e., flow totalizer) for measuring the instantaneous and cumulative rate of diversion. This measurement shall begin as soon as this Agreement is signed by the Permittee. The device shall be installed within the in-line flow of diverted water. The Permittee shall maintain records of diversion, and provide information including, but not limited to the following:
- 2.11.1 The amount (in gallons) of water diverted from the stream per month. Separate the amount of water diverted by use (e.g., domestic, irrigation, etc.).
- 2.11.1 Photographs of each measuring device at the end of each month, showing the device serial number and flow reading. Photographs should be labeled with the date the photo was taken, the water use period, the water use type (e.g., domestic), and the associated POD (e.g., POD-1).
- 2.11.2 At CDFW's request, Permittee shall make available for review any diversion records required by the State Water Resources Control Board.
- 2.12 Water Management Plan. The Permittee shall submit a Water Management Plan (WMP) no later than **sixty (60) days** from the time this Agreement is made final that describes how compliance will be achieved under this Agreement. The WMP shall include details on water storage, water conservation, or other relevant material to maintain water needs in coordination with seasonal diversion minimization and/or forbearance and bypass flow requirements. The WMP shall include a brief narrative describing water use on the property, include photographs to support the narrative, and site map (drawn to scale) that includes all water infrastructure components (e.g., location of water lines, POD(s), flow totalizer(s), water storage facilities, etc.).

Water Diversion Structure and Placement

- 2.13 Diversion Infrastructure Plan. The Permittee shall submit a Diversion Infrastructure Plan (DIP) for CDFW review and approval by no later than **October 31, 2024**. The DIP shall include a narrative describing the different elements of the water diversion infrastructure, supporting photographs and diagrams, and justification of

how compliance with the CDFW Fish Screen Criteria and other applicable measures will be achieved under this Agreement.

Following CDFW approval of the DIP, and installation of the water diversion infrastructure, the Permittee shall submit a report of completion. The report shall include a minimum of four photographs of the project work, including but not limited to an upstream and downstream viewpoint, close up of the water diversion structure, and close up of the water diversion intake screen.

- 2.14 Intake Structure. No polluting materials (e.g., particle board, pressure-treated wood, plastic sheeting) shall be used to construct or screen, or cover the diversion intake structure.
- 2.15 Intake Structure Placement. Infrastructure installed in the streambed (e.g., cistern or spring box) shall not exceed 20 percent of the active channel width and shall not be located in the deepest portion of the channel. The diversion shall be located at least 25 feet from the spring head (i.e., emergence of surface water).
- 2.16 Intake Screening. The Permittee shall regularly inspect, clean, and maintain screens in good condition.

Screening Criteria

- 2.16.1 A water intake screen with round openings shall not exceed 1/8 (0.125) inch diameter; a screen with square openings shall not exceed 1/8 (0.125) inch measured diagonally; and a screen with slotted openings shall not exceed 0.069 inches in width. Slots must be evenly distributed on the screen area.
 - 2.16.2 The screen shall be designed to distribute the flow uniformly over the entire screen area.
 - 2.16.3 The water intake screens shall be securely fitted and attached (e.g., threaded or clamped) to the intake line.
 - 2.16.4 The water intake screen may be constructed of any rigid material, perforated, woven, or slotted. Stainless steel or other corrosion-resistant material is recommended to reduce clogging due to corrosion. Care should be taken to not use materials deemed deleterious to aquatic species.
- 2.17 Avoid Impeding Aquatic Species Passage. The water diversion structures shall be designed, constructed, and maintained such that they do not constitute a barrier to upstream or downstream movement of aquatic life.

- 2.18 Avoid Entry, Impingement, and Entrapment. The water diversion structure(s) shall be designed, constructed, and maintained such that they do not result in impingement, entry, or entrapment of aquatic life or other wildlife.
- 2.19 Water Line Placement. Except for the purpose of connecting to the point of diversion, all water lines shall be placed outside of the stream channel. Any water line located in the stream channel shall be designed, constructed, and maintained to minimize damage and displacement of materials downstream.
- 2.20 Seasonal Diversion Disconnection (POD-1). Permittee shall disconnect or shut off (with valve) all water lines from the point of diversion (e.g., cistern, spring box, etc.) and water storage facilities at the end of each diversion season.
- 2.21 Heavy Equipment Use. No heavy equipment shall be used in the excavation or replacement of the existing water diversion structure. The Permittee shall use hand tools or other low impact methods of removal/replacement. All project materials and debris shall be removed from the project site and properly disposed of off-site upon project completion.

Diversion to Storage

- 2.22 Water Conservation. The Permittee shall make best efforts to minimize water use, and to follow best practices for water conservation and management.
- 2.23 Water Storage. All water storage facilities (WSF; e.g., reservoirs, storage tanks, and bladders tanks) should be located outside bed, bank, or channel of a stream. Covers/lids shall be securely affixed to water tanks at all times to prevent entry by wildlife. Permittee shall cease all water diversion at the point of diversion when WSFs are filled to capacity.
- 2.24 Storage Maintenance. Water storage facilities shall have a float valve to shut off the diversion when tanks are full to prevent overflow. Water shall not leak, overflow, or overtop WSFs at any time. Permittee shall regularly inspect all water storage facilities and infrastructure used to divert water to storage and repair any leaks.
- 2.25 Reservoirs/Ponds. Shall be appropriately designed, sized, and managed to contain any diverted water in addition to precipitation and storm water runoff, without overtopping.
- 2.26 State Water Code. This Agreement does not constitute a valid water right. The Permittee shall comply with State Water Code sections 5100 and 1200 et seq. as appropriate for the water diversion and water storage.

Reservoirs

- 2.27 No Stocking. Stocking of fish, wildlife, or plant of any kind, in any stream, lake or wetland (i.e., Waters of the State), shall be prohibited without written permission from CDFW pursuant to section 6400 of the FGC.
- 2.28 Invasive Species Management for Reservoirs. Permittee shall implement an Invasive Species Management Plan (ISMP) prepared by a qualified Biologist for any existing or proposed reservoir. The plan shall include, at a minimum, annual seasonally appropriate surveys of invasive aquatic species (i.e., baseline surveys), focused on American bullfrog (*Lithobates catesbeianus*) and Centrarchid fish. The baseline surveys will form the basis to measure success of the ISMP. The qualified Biologist shall coordinate with CDFW to develop eradication measures appropriate for the identified invasive aquatic species based on site specific conditions. An annual monitoring report shall be prepared and submitted to CDFW.
- 2.28.1 Bullfrog Management Plan. If American bullfrogs are observed, they shall be appropriately controlled, with the goal of population eradication, including but not limited to, annual multi-effort direct removal of all life stages, using various techniques (e.g., air rifle, gigging, trapping, seining, and draining of reservoirs) to break reproduction. The bullfrog management plan must be site specific, and the goal shall be eradication of the population. If at any time additional invasive aquatic species are detected, Permittee shall submit an updated ISMP for Reservoirs to CDFW for review and approval.
- 2.29 Off-Stream Reservoirs. Should be appropriately designed, sized, and managed to contain any diverted water in addition to precipitation and storm water runoff, without overtopping. The Permittee should install an overflow spillway that will withstand a 100-year flood event, designed with a dispersal mechanism, or low-impact design, that discourages channelization and promotes dispersal and infiltration of flows to prevent surface overflow from reaching any stream, lake or wetland (i.e., Waters of the State). The spillway should be designed and placed to allow for a minimum of two feet of freeboard.
- 2.30 Seasonal Diversion Minimization (POD-1). To minimize adverse impacts to native pond breeding amphibians (when present) the following diversion minimizations apply: from **November 1 to March 31**, the Permittee shall divert water at a rate no greater than the rate of water flowing into the pond (i.e., water diversion shall not decrease the pond depth). From **April 1 to September 1**, when native larval amphibians are present, the Permittee shall cease diverting water once the pond volume is one third of the maximum pond volume. To comply with this measure; the Permittee shall establish a fixed visual marker(s) (e.g., stage plate) in the pond as a reference for water level thresholds.

Stream Crossings

- 2.31 Stream Protection. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other deleterious material from project activities shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into the stream. All project materials and debris shall be removed from the project site and properly disposed of off-site upon project completion.
- 2.32 Equipment Maintenance. Refueling of machinery or heavy equipment, or adding or draining oil, lubricants, coolants, or hydraulic fluids shall not take place within stream bed, channel, and bank. All such fluids and containers shall be disposed of properly off-site. Heavy equipment shall not be stored within stream bed, channel, and bank.
- 2.33 Hazardous Spills. If at any time any material which could be hazardous or toxic to aquatic life enters a stream, the Permittee shall immediately notify the California Emergency Management Agency State Warning Center at 1-800-852-7550, and immediately initiate clean-up activities. Permittee shall notify CDFW at 707-445-6493 and consulted regarding clean-up procedures as soon as practicable, but no later than 24 hours after the spill.
- 2.34 Work Prohibition in Wetted Stream. No work is authorized in a wetted stream channel (i.e., where surface or subsurface water is present). All work shall be conducted when the stream is dry. Permittee shall notify CDFW if it determines that work in a wetted stream is required to complete a project.
- 2.35 Excavated Fill. Excavated fill material shall be placed in a stable upland location where it cannot deliver to a stream or wetland. To minimize the potential for material to enter the watercourse during the winter period, all excavated and relocated fill material shall be contoured to drain water, and compacted to effectively incorporate and stabilize loose material into existing road and/or landing features.
- 2.36 Runoff from Steep Areas. The Permittee shall ensure that runoff (concentrated flow) from steep, erodible surfaces will be slowed and diverted into stable areas with little erosion potential or contained behind erosion control structures. Erosion control structures such as straw bales and/or siltation control fencing shall be placed and maintained until the threat of erosion ceases. Frequent water bars shall be placed on dirt roads, heavy equipment tracks, or other work trails to control erosion.
- 2.37 Culvert Installation.
- 2.37.1 If the project is located in a moderate to very high Fire Hazard Severity Zone as designated by CAL FIRE, culvert materials should consist of corrugated metal pipe (CMP). Use of High-Density Polyethylene (HDPE)

pipe is not recommended.

- 2.37.2 Existing fill material in the crossing shall be excavated down vertically to the approximate original channel and outwards horizontally to the approximate crossing hinge points (transition between naturally occurring soil and remnant temporary crossing fill material) to remove any potential unstable debris and voids in the older fill prism.
- 2.37.3 Culvert shall be installed to grade (not perched or suspended), aligned with the natural stream channel, and extend lengthwise completely beyond the toe of fill. If culvert cannot be set to grade, it shall be oriented in the lower third of the fill face, and a downspout or appropriately-sized energy dissipator (e.g., boulders, riprap, or rocks) shall be installed above or below the outfall as needed to effectively prevent stream bed, channel, or bank erosion (scouring, headcutting, or downcutting). The Permittee shall ensure basins are not constructed, and channels shall not be widened at culvert inlets.
- 2.37.4 Culvert bed shall be composed of either compacted rock-free soil or crushed gravel. Bedding beneath the culvert shall provide for even distribution of the load over the length of the culvert and allow for natural settling and compaction to help the culvert seat into a straight profile. The crossing backfill materials shall be free of rocks, limbs, or other debris that could allow water to seep around the culvert and shall be compacted.
- 2.37.5 Culvert inlet/outlet (including the outfall area) and fill faces shall be armored where stream flow, road runoff, or rainfall energy is likely to erode fill material and the outfall area.
- 2.37.6 Permanent culverts shall be sized to accommodate the estimated 100-year flood flow (i.e., ≥ 1.0 times the width of the bankfull channel width or the 100-year flood size, whichever is greater), including debris, culvert embedding, and sediment loads.

2.38 Crossing Maintenance

- 2.38.1 The placement of armoring shall be confined to the work period when the stream is dry or at its lowest flow.
- 2.38.2 No heavy equipment shall enter the wetted stream channel.
- 2.38.3 No fill material, other than clean (washed) rock, shall be placed in the stream channel. Rock shall be sized to withstand washout from high stream flows and extend above the ordinary high-water level. Rock armoring shall not constrict the natural stream channel width and shall be keyed into a

footing trench with a depth sufficient to prevent instability.

2.39 Road Approaches. The Permittee shall treat road approaches to new or re-constructed permanent stream crossings to minimize erosion and sediment delivery to the stream. Permittee shall ensure road approaches are hydrologically disconnected to the maximum extent feasible to prevent sediment from entering the stream crossing site, including when a stream crossing is being constructed or reconstructed. Road approaches shall be armored from the stream crossing to the nearest effective water bar or point where road drainage does not drain to the stream crossing, with durable rock.

2.40 Ford Crossing, Armored Fill, and Vented Crossings.

2.40.1 Ford crossings, and armored and vented crossings, are considered permanent watercourse encroachments and shall accommodate the 100-year flood flow plus associated sediment and debris.

2.40.2 Hydrologically connected road approaches to ford crossings, and armored and vented crossings, shall be rocked and maintained to avoid delivery of fine sediment to the watercourse below.

2.40.3 Ford crossings, and armored and vented crossings, shall be maintained as necessary to avoid delivery of fine sediment to the watercourse below.

2.40.4 Ford crossings, and armored and vented crossings, shall be sufficiently out sloped to minimize aggradation of suspended sediments at the crossing.

2.40.5 The lowest point of ford crossings, and armored and vented crossings, shall be constructed within or directly over the original stream channel, to the extent feasible, in order to contain high flows up to twice bank-full and to avoid diversion potential.

2.40.6 Armor material shall be comprised of durable angular screened quarry rock of sufficient size and placement to minimize mobilization during a 100-year storm event.

2.40.7 If maximum fill heights exceed 15 feet or fills exceed 500 cubic yards of fill, rock sizing, armoring thickness, chute width and chute depth shall be calculated and sized using the nomograph provided in Figure 23 of Cafferata et al (2017).

2.40.8 Stream crossing spillway fill slopes shall be armored from the roadbed to the natural channel in a manner sufficient to prevent significant scour or removal of armor during high flows. Scour is expected through road surface rock cap.

Erosion Control and Pollution

- 2.41 Erosion Control. Permittee shall use erosion control measures throughout all work phases where sediment runoff could enter a stream, lake, or wetland (i.e., Waters of the State).
- 2.42 Seed and Mulch. Upon completion of construction operations and/or the onset of wet weather, Permittee shall stabilize exposed soil areas within the work area. Permittee shall utilize vegetative (e.g., plant seed) or other non-vegetative methods such as jute mat, coir mat, wood chip mat, straw mat/wattle, straw mulch, native duff (leaves, needles, fine twigs, etc.), or lopped native slash to protect and stabilize soils. Straw mulching shall utilize at least 2 to 4 inches of clean, weed-free, straw (such as rice or barley). Seeding shall use regional native seed or non-native seed that is known not to persist or spread [e.g., barley (*Hordeum vulgare*), or wheat (*Triticum aestivum*)]. No known invasive grass seed such as annual or perennial ryegrass (*Lolium multiflorum* or *L. perenne*, which are now referred to as *Festuca perennis*), shall be used.
- 2.43 Erosion and Sediment Barriers. Permittee shall monitor and maintain all erosion and sediment barriers in good operating condition throughout the work period and the following rainy season, defined herein to mean **October 31 through June 1**. Maintenance includes, but is not limited to, removal of accumulated sediment and/or replacement of damaged sediment fencing, coir logs, coir rolls, and/or straw bale barriers. If the sediment barrier fails to function as designed, Permittee shall employ corrective measures, and notify CDFW immediately.
- 2.44 Prohibition on Use of Monofilament Netting. To minimize the risk of ensnaring and strangling wildlife, Permittee shall not use any erosion control materials that contain synthetic (e.g., plastic or nylon) monofilament netting, including photo- or biodegradable plastic netting. Geotextiles, fiber rolls, and other erosion control measures shall be made of loose-weave mesh, such as jute, hemp, coconut (coir) fiber, or other products without welded weaves.
- 2.45 Site Maintenance. Permittee shall be responsible for site maintenance including, but not limited to, re-establishing erosion control to minimize surface erosion and ensuring drainage structures and stream banks remain sufficiently stable.
- 2.46 Cover Spoil Piles. Permittee shall have readily available erosion control materials such as wattles, natural fiber mats, or plastic sheeting, to cover and contain exposed spoil piles and exposed areas to prevent sediment from eroding into a stream, lake, or wetland (i.e., Waters of the State). Permittee shall apply and secure these materials prior to rain events to prevent loose soils from entering a stream, lake, or wetland (i.e., Waters of the State).
- 2.47 No Dumping. Permittee shall not deposit, permit to pass into, or place where it can pass into a stream, lake, or wetland (i.e., Waters of the State) any material

deleterious to fish and wildlife, or abandon, dispose of, or throw away within 150 feet of a stream, lake, or wetland (i.e., Waters of the State) any cans, bottles, garbage, motor vehicle or parts thereof, rubbish, litter, refuse, waste, debris, or the viscera or carcass of any dead mammal, or the carcass of any dead bird.

Project Inspection

- 2.48 Project Inspection. Work shall be inspected by a California licensed engineer, or other qualified professional with appropriate license or qualifications, to ensure the projects were implemented as designed, and in compliance with this Agreement. A copy of the **Project Inspection Report** shall be submitted to CDFW **within ninety (90) days** of completion of the Project(s).

Information to be disclosed shall include, but not be limited to, the Agreement number, upstream and downstream photos of each work site (labeled with the LSAA project ID), a detailed description of the work completed, and comments related to the performance of the completed project(s).

3. Reporting Measures

Permittee shall meet each reporting requirement described below. All reports shall be submitted by e-mail to CDFW at R1LSAEureka@wildlife.ca.gov.

- 3.1 Notice of Work Initiation. The Permittee shall contact CDFW within the seven-day period preceding the beginning of work permitted by this Agreement (measure 1.7). Information to be disclosed shall include Agreement number, and the anticipated start date.
- 3.2 Notice of Work Completion. The proposed work at SC-4 and SC-8 shall be completed by no later than October 31, 2026. The proposed work at SC-2, SC-3, SC-5A, SC-6, and SC-7 shall be completed by no later than October 31, 2027. The proposed work at SC-1 and SC-3 shall be completed prior to the expiration of this Agreement's term. A notice of completed work (measure 2.4) shall be submitted to CDFW **within seven (7) days** of work completion. Information to be disclosed shall include Agreement number, photos of each work site labeled with the project ID, and a short description of the work completed.
- 3.3 Measurement of Diverted Flow. Copies of the Water Diversion Records (measure 2.11) shall be submitted to CDFW no later than **March 31** of each year beginning in **2025**.
- 3.4 Water Management Plan. The Permittee shall submit a Water Management Plan (measure 2.12) within **60 days** from the effective date of this agreement.

- 3.5 Diversion Infrastructure Plan. The Permittee shall submit a Diversion Infrastructure Plan (measure 2.13) for CDFW review and approval by no later than **March 31, 2024**.
- 3.6 Invasive Species Management for Reservoirs. The Permittee shall submit all required documents described in the Invasive Species Management for Reservoirs (measure 2.28) including subsection 2.28.1, Bullfrog Management Plan no later than **December 31** of each year.
- 3.7 Project Inspection. The Permittee shall submit the Project Inspection Report (measure 2.48) to CDFW **within ninety (90) days** of completion of the Project(s).

CONTACT INFORMATION

Written communication the Permittee or CDFW submits to the other shall be delivered to the address below unless the Permittee or CDFW specifies otherwise.

To Permittee:

Shawn Richter
8889 E Bell Rd, Ste 205
Scottsdale, AZ 85260
(480) 688-0597
sr@richter-law.com

To CDFW:

Department of Fish and Wildlife
Northern Region
619 2nd Street
Eureka, California 95501
EPIMS.R1C@wildlife.ca.gov
Joshua.Gruver@wildlife.ca.gov
Attn: Lake and Streambed Alteration Program
Notification No. EPIMS-HUM-50755-R1C

LIABILITY

The Permittee shall be solely liable for any violation of the Agreement, whether committed by the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of or require the Permittee to proceed with the project. The decision to proceed with the project is the Permittee's alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety this Agreement if it determines that the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide the Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide the Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to the Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against the Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 *et seq.* (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes the Permittee or any person acting on behalf of the Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

The Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and the Permittee. To request an amendment, the Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by the Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, the Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(b), the Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, the Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

If the Permittee fails to submit a request to extend the Agreement prior to its expiration, the Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (FGC section 1605(f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after the Permittee signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the

applicable FGC section 711.4 filing fee listed at
http://www.wildlife.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall **expire five years** from date of execution, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. The Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of the Permittee, the signatory hereby acknowledges that he or she is doing so on the Permittee's behalf and represents and warrants that he or she has the authority to legally bind the Permittee to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the project described herein. If the Permittee begins or completes a project different from the project the Agreement authorizes, the Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

CONCURRENCE

Through the electronic signature by the permittee or permittee's representative as evidenced by the attached concurrence from CDFW's Environmental Permit Information Management System (EPIMS), the permittee accepts and agrees to comply with all provisions contained herein.

The EPIMS concurrence page containing electronic signatures must be attached to this agreement to be valid.