



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Northern Region
601 Locust Street
Redding, CA 96001
(530) 225-2300
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



August 2, 2019

Ms. Lindsey Magranet
Siskiyou Resource Conservation District
P.O. Box 268
Etna, CA 96027

Dear Ms. Magranet:

Final Lake or Streambed Alteration Agreement, Notification No. 1600-2019-0345-R1, Scott River; Scott River Off-Channel Habitat Project

Enclosed is the final Streambed Alteration Agreement (Agreement) for the Scott River Off-Channel Habitat Project (Project). Before the California Department of Fish and Wildlife (CDFW) may issue an Agreement, it must comply with the California Environmental Quality Act (CEQA). In this case, CDFW determined your Project is exempt from CEQA and filed a Notice of Exemption (NOE) on the same date it signed the Agreement.

Under CEQA, the filing of a NOE triggers a 35-day statute of limitations period during which an interested party may challenge the filing agency's approval of the Project. You may begin the Project before the statute of limitations expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this letter, please contact me at (530) 225-2362 or by email at brad.henderson@wildlife.ca.gov.

Sincerely,

Brad Henderson
Aquatic Conservation Planning Supervisor

Notice of Exemption

To:
Office of Planning and Research
For U.S. Mail:
P.O. Box 3044
Sacramento, CA 95812-3044

From:
Department of Fish and Wildlife
Region 1 - Northern
601 Locust Street
Redding, California 96001



Street Address:
1400 Tenth Street
Sacramento, CA 95814

Project Title: Scott River Off-Channel Habitat Project (Lake or Streambed Alteration Agreement No. 1600-2019-0345-R1)

Project Location (include county): The project is located on the Scott River, in the County of Siskiyou, State of California.

Project Description: The California Department of Fish and Wildlife has executed Lake and Streambed Alteration Agreement number 1600-2019-0345-R1, pursuant to Section 1602 of the Fish and Game Code to Siskiyou Resource Conservation District.

The project is limited to the construction of an off-channel salmonid winter habitat pond on Scott River at river-mile 26.6. The pond is intended to provide thermally buffered and low-velocity deep water shelter as these qualities are limited due to the flood plain lacking complexity. The proposed project as described involves the excavation of a pond, which measures approximately 0.25 acre in size and a depth of 15-16 feet. The connection point will be established by using an existing oxbow to create an access channel to allow the fish to move volitionally between the pond and oxbow as long as sufficient water levels exist. The oxbow does disconnect seasonally; however groundwater should provide sufficient subsurface flow for a water supply and temperature buffer in the pond. Up to 12,000 cubic yards of spoil will be excavated and deposited 200 feet from the main channel. In addition, for shelter and habitat complexity, 10-12 large wood will be installed, and native riparian planting will occur. Rock and cobble may also be placed along slopes for stability of the large woody debris and/or for stability. Exposed soils will be seeded and strawed, as well as planted with a mixture of native trees, shrubs, herbs and grasses to aid in revegetation and prevent erosion.

After the project is constructed, Permittee will perform maintenance of the constructed habitat as needed over the term of the Agreement. Permittee will implement the Monitoring and Adaptive Management Plan. This plan includes water quality monitoring, functionality monitoring and maintenance, fish health monitoring, and reporting. The overall project site is approximately one acre, including the pond footprint, spoil disposal site and staging areas.

Public Agency Approving Project: CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Person or Public Agency Carrying Out Project: Siskiyou Resource Conservation District (530) 467-3975

Exempt Status:

Statutory Exemption.

Categorical Exemption. Type – **Class 33; California Code of Regulations, title 14, section 15333**, Small Habitat Restoration Project not to exceed five acres in size to assure the maintenance, restoration, enhancement, or protection of habitat for fish, plants or wildlife.

Reasons why project is exempt: The Project will have no significant effects on the environment.

CDFW Contact Person: Brad Henderson (530) 225-2362

Signature: 

Date: 8/2/15

Brad Henderson
Aquatic Conservation Planning Supervisor

Date received for filing at OPR: _____

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
REGION 1 - NORTHERN
601 LOCUST STREET
REDDING, CA 96001



STREAMBED ALTERATION AGREEMENT
NOTIFICATION No. 1600-2019-0345-R1
SCOTT RIVER

SISKIYOU RESOURCE CONSERVATION DISTRICT
SCOTT RIVER OFF-CHANNEL HABITAT PROJECT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and Siskiyou Resource Conservation District (Permittee) as represented by Ms. Lindsay Magranet.

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on May 2, 2019 that 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, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

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

PROJECT LOCATION

The project is located at Scott River, a tributary to Klamath River in the County of Siskiyou, State of California; Latitude: 41.62991 N, Longitude: 122.93570 W; Section 30, Township 44N, Range 9W; U.S. Geological Survey (USGS) map Russell Peak, Mount Diablo Base and Meridian; Assessor's Parcel Number (APN) 014-130-490.

PROJECT DESCRIPTION

The project is limited to the construction of an off-channel salmonid winter habitat pond on Scott River at river-mile 26.6. The pond is intended to provide thermally buffered and low-velocity deep water shelter as these qualities are limited due to the flood plain lacking complexity. The proposed project as described involves the excavation of a pond, which measures approximately 0.25 acre in size and a depth of 15-16 feet. The connection point will be established by using an existing oxbow to create an access channel to allow the fish to move volitionally between the pond and oxbow as long as

sufficient water levels exist. The oxbow does disconnect seasonally; however groundwater should provide sufficient subsurface flow for a water supply and temperature buffer in the pond. Up to 12,000 cubic yards of spoil will be excavated and deposited 200 feet from the main channel. In addition, for shelter and habitat complexity, 10-12 large wood will be installed, and native riparian planting will occur. Rock and cobble may also be placed along slopes for stability of the large woody debris and/or for stability. Exposed soils will be seeded and strawed, as well as planted with a mixture of native trees, shrubs, herbs and grasses to aid in revegetation and prevent erosion.

After the project is constructed, Permittee will perform maintenance of the constructed habitat as needed over the term of the Agreement. Depending upon the environmental response, the project maintenance activities may include, but are not limited to, clearing the access channel, rock slope protection, riparian planting and/or weed management. Maintenance will involve hand labor where applicable but may require heavy equipment modifications. Permittee will coordinate with CDFW in advance of any maintenance activities requiring heavy equipment to ensure that adequate water quality and species protection measures are established and implemented.

Permittee will implement the Monitoring and Adaptive Management Plan, included as a supplement to the notification on July 31, 2019. This plan includes water quality monitoring, functionality monitoring and maintenance, fish health monitoring, and reporting.

The overall project site is approximately one acre, including the pond footprint, spoil disposal site and staging areas. All work shall be in accordance with submitted plans and diagrams and any subsequent revisions approved by CDFW in writing.

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*), other game and non-game fishes, western pond turtle (*Actinemys marmorata*), foothill yellow-legged frog (*Rana boylei*), other amphibians and reptiles, aquatic invertebrates, mammals, birds, and other aquatic wildlife, and riparian vegetation.

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

Impacts to water quality:

- increased water temperature due to lower flows instream;
- change in dissolved oxygen; and
- water quality degradation.

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

- stranding of fish or hindering fish passage;
- fish entrapment in isolated pool due to loss of connectivity;
- direct impacts on benthic organisms;
- damage to aquatic habitat and function;
- increased channel cross section;
- direct and/or incidental take; and
- indirect impacts to downstream spawning and rearing habitat.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. 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. 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 Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW if 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 Permittee to resolve any conflict.
- 1.4 Project Site Entry. Permittee agrees that CDFW personnel may enter the project site at any time to verify compliance with the Agreement, provided CDFW: a) provides 24 hours advance notice; and b) allows the Permittee or representatives to participate in the inspection and/or monitoring.
- 1.5 Stream and Pond Defined. A stream is defined as a body of water that flows perennially, intermittently, or ephemeraly. Streams can include a channel, banks, bed, and floodplains were these features are present. Pond is defined as a perennial, intermittent, or ephemeral body of water of substantially at rest within a defined basin.

- 1.6 Bank Defined. The land, including its vegetation that confines or otherwise defines the outermost boundary of a lake, or stream when its waters rise to the highest level of confinement.
- 1.7 Notification Referenced. Permittee's notification (Notification of Lake or Streambed Alteration) together with all maps, plans, photographs, drawings, and all other supporting documents submitted with the notification to describe the activity is hereby incorporated by reference into this Agreement. Permittee shall conduct project activities within the work areas and using the mitigative features described in the notification and supporting documents, unless such project activities, work areas or mitigative features are modified by the provisions of this Agreement, in which case the activities shall be conducted as described in this Agreement.
- 1.8 Other Agency Permitting Requirements. The U.S. Army Corps of Engineers (Corps) has permitting requirements for certain instream projects under Section 404 of the Federal Clean Water Act. If this project features the placement of dredged or fill materials into the channels of streams (below the ordinary high water mark) that are waters of the United States, a permit may be required by the Corps. If your project needs a permit from the Corps, you will also need to obtain a Water Quality Certification pursuant to Section 401 of the Federal Clean Water Act from the Regional Water Quality Control Board (Regional Water Board). In addition, if your project will involve disturbance within or discharges of pollutants to waters of the State of California, the Regional Water Boards may require a permit, whether or not the Corps requires a permit. If there is any question regarding the possibility of the project meeting the above limitations, the Permittee should contact the Corps and the Regional Water Board prior to beginning work. This Agreement in no way represents permitting requirements by the Corps or the Regional Water Board. It is the responsibility of the Permittee to contact the Corps, and to comply with the provisions of any Section 404 permit issued, if required by the Corps. Similarly, it is the responsibility of the Permittee to contact the Regional Water Board and to comply with the provisions of any Section 401 Certification, Regional Water Board Waste Discharge Requirements or waiver of Waste Discharge Requirements issued by the Regional Water Board.

2. Avoidance and Minimization Measures

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

PROJECT TIMING AND COORDINATION

- 2.1 All work shall be confined to the period commencing July 1 and ending October 15, provided the stream is dry or at its lowest flow. If weather conditions permit and the stream is dry or at its lowest flow, the Permittee may perform work within the stream channel or on the banks outside of the above referenced work window,

provided a written request is made to CDFW at least five (5) days before the proposed work period variance. Written approval from CDFW for the proposed work period variance must be received by the Permittee prior to the start or with the continuation of work outside of the above referenced work window.

- 2.2 If work is performed outside of the above referenced work window, the Permittee shall do all of the following:
 - a. Stage erosion and sediment control materials at the work site.
 - b. Cease work and implement erosion control measures when there is a forecast of more than 30% chance of rain, or at the onset of any precipitation. Monitoring of the 72 hour forecast from the National Weather Service is recommended.
- 2.3 The Permittee shall instruct all persons who will be completing any ground disturbing activity at a worksite to comply with the conditions set forth in this Agreement and shall inspect each work site before, during, and after completion of any ground-disturbing activity at the work site.
- 2.4 Notwithstanding Condition 2.1 above, removal of the above-ground portions of existing trees and shrubs shall occur after August 15 and before March 15 to avoid impacts to nesting birds. If vegetation must be removed during the nesting season (March 15 to August 31) nest surveys shall be conducted by a qualified biologist prior to vegetation clearing.

HABITAT AND SPECIES PROTECTION

- 2.5 All work areas described in this Agreement shall be flagged or fenced with temporary fencing to prohibit unauthorized and unnecessary disturbance of vegetation.
- 2.6 Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations.
- 2.7 All vegetation removal along the streambanks or within the floodplain shall be conducted provided the banks and floodplain are above stream flow levels. Work may continue during precipitation events provided stream flows have not risen into work areas, and provided project operations are conducted such that sediment delivery will not result.
- 2.8 Wherever possible, the Permittee shall use hand tools (i.e. chainsaws, clippers, brush whackers, etc.) to remove vegetation located near mature native trees as to not damage trees or their root structures. Larger equipment shall not be used for vegetation removal without prior written approval from CDFW.

- 2.9 The Permittee shall ensure that the spread or introduction of invasive exotic species shall be avoided to the maximum extent possible. When practicable, invasive exotic plants at the work site shall be removed.
- 2.10 Aquatic habitat elements such as existing pools, spawning sites, large wood or structures that include large wood or vegetation that overhangs the channel shall not be disturbed.
- 2.11 Riparian planting shall include only local plant materials native to the project area, unless CDFW provides prior written approval.
- 2.12 The Permittee shall maintain grade, contour, and meander of all portions of the stream outside of the constructed pond habitat throughout the duration of this project.

PETROLEUM, CHEMICAL AND OTHER POLLUTANTS

- 2.13 Staging, storage, and re-fueling areas for machinery, equipment, and materials shall be located a minimum distance of 100 feet from waters of the State.
- 2.14 No equipment or machinery shall be operated within any flowing stream.
- 2.15 Any turbid water pumped from the work site shall be disposed of in an upland location where it will not drain directly into any stream channel. The settling basin shall not be allowed to drain to the stream until the stored water is less turbid than the stream flow into which it is released.
- 2.16 Groundwater and subsurface flow encountered during excavation of the pond should be pumped to a natural or excavated settling basin on stable soil outside of the channel, unless it is determined to be better for the overall health of the pond to not pump out the water. If, however, the surface water of the stream becomes turbid due to the hyporheic connection, pumping shall be reinstated to decrease instream turbidity during construction.
- 2.17 Upon CDFW determination that turbidity/siltation levels resulting from project related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation, shall be halted until effective CDFW approved control devices are installed, or abatement procedures are initiated.
- 2.18 Stationary equipment such as motors, pumps, generators, and welders that contain deleterious materials, located within or adjacent to a stream shall be positioned over drip pans.
- 2.19 All activities performed in or near a stream shall have absorbent materials designated for spill containment and clean-up activities on-site for use in an accidental spill. The Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7550 and immediately initiate the clean-up

activities. CDFW shall be notified by the Permittee and consulted regarding clean-up procedures.

2.20 No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, asphalt, paint or other coating material, oil or petroleum products or other organic or earthen material from any construction, or associated activity of whatever nature shall be allowed to enter into, or placed where it may be washed by rainfall or runoff into, waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream.

EROSION AND SEDIMENT CONTROL

2.21 The project shall at all-times feature adequate erosion and sediment control devices to prevent the degradation of water quality.

2.22 The Permittee shall prevent the discharge of sediment, and/or muddy, turbid, or silt-laden waters, resulting from the project, into the stream channel. Where necessary to prevent such discharge, the Permittee shall properly install and maintain sediment barriers (including but not limited to filter fabric fencing, fiber mats, rice straw or fiber wattles or rolls) capable of preventing downstream sedimentation/turbidity. Said devices shall be cleaned of all trapped sediment as necessary to maintain proper function. Recovered sediment shall be disposed of where it shall not return to the waters of the State. Said devices shall be completely removed from the channel, along with all temporary fills, upon completion of operations.

2.23 The Permittee shall remove all excess spoils from the work area and shall dispose of them in a legal manner which prevents them from re-entering "waters of the State", and in such a manner so that they do not negatively affect aquatic species and/or other sensitive native habitat communities.

2.24 Soils exposed by project operations shall be mulched to prevent sediment runoff and transport. Mulches shall be applied so that not less than 90% of the disturbed areas are covered. All mulches (except hydro-mulch) shall be applied in a layer not less than two inches deep. All mulches shall be kneaded or tracked-in with track marks parallel to the contour, and tackified as necessary to prevent excessive movement. All exposed soils and fills shall be reseeded with a mix of native grasses common to the area, free from seeds of noxious or invasive weed species, and applied at a rate which will ensure establishment.

2.25 If necessary to prevent mobilization of loose soils, fiber mats shall be laid over loose soils prior to mulching and tracking.

2.26 Soils adjacent to the stream channel that are exposed by project operations shall be adequately stabilized when rainfall is reasonably expected during construction,

and immediately upon completion of construction, to prevent the mobilization of such sediment into the stream channels or adjacent wetlands. National Weather Service 72 hour forecasts shall be monitored by the Permittee to determine the chance of precipitation.

EQUIPMENT ACCESS

- 2.27 Vehicles shall not be driven, or equipment operated, in water covered portions of a stream, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the Agreement to complete authorized work.
- 2.28 Structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur.
- 2.29 Equipment shall access the sites using the routes depicted in the notification.

MAINTENANCE ACTIVITIES

- 2.30 The Permittee may repair/maintain the pond or access channel authorized by this Agreement, provided the Permittee notifies CDFW prior to commencing any repair/maintenance activities.
- 2.31 The Permittee shall notify CDFW within 10 business days if non-native species including American bullfrog (*Lithobates catesbeianus*) and green sunfish (*Lepomis cyanellus*) inhabit the off-channel ponds to determine proper management of the species.

MONITORING ACTIVITIES

- 2.32 The Permittee shall commence regular weekly review of water quality data starting no later than May 1 of each year to ensure the 18 degrees Celsius threshold is determined as early as possible to start coordination with CDFW.
- 2.33 Following the second season of water quality and fish health monitoring, the Permittee shall review water quality conditions and aquatic resources response to determine whether changes to long-term management of the pond may be warranted, in coordination with CDFW and NMFS. If water quality conditions are determined to be unfavorable and/or potential harm to fisheries is occurring, CDFW may, in coordination with the Permittee and NMFS, amend the Agreement to incorporate additional adaptive management measures designed to address any ongoing salmonid impacts.

3. Reporting Measures

Permittee shall meet each reporting requirement described below.

- 3.1 An annual monitoring summary shall be submitted to CDFW each year for which this Agreement is valid, due by December 31 of each year after construction is completed. The monitoring efforts should include, at the minimum, 4 dates of monitoring physical characteristics with seasonal change showing: a) dissolved oxygen, highlighting seasonal highs and lows, b) water temperature, including seasonal highs and lows, and c) other physical characteristics of the pond such as overall condition and % survival of riparian plantings, percent canopy cover, turbidity, and connectivity of the inlet (filling in with sediment-needed maintenance vs. self-maintaining). Additionally, coho snorkel survey data, including relative abundance estimates by species and age class shall be summarized, including how these estimates were made, and any other pertinent information to the health of the fishery as it pertains to the utilization of these ponds for rearing habitat.
- 3.2 Permittee shall promptly inform CDFW if salmonids are observed in the pond after time the pond becomes disconnected from the Scott River. After the pond is disconnected, any observations of salmonid stress behavior or clinical indicators of poor health, disease, or mortality shall be reported to CDFW immediately.

CONTACT INFORMATION

Any communication that Permittee or CDFW submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or CDFW specifies by written notice to the other.

To Permittee:

Siskiyou Resource Conservation
District
P.O. Box 268
Etna, CA 96027
Attn: Lindsay Magranet
sisqrccd@sisqtel.net

To CDFW:

Department of Fish and Wildlife
Northern Region
601 Locust Street
Redding, California 96001
Attn: Ms. Janae Scruggs
Notification #1600-2019-0345-R1
janae.scruggs@wildlife.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of 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 Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of 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 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 Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to 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 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 Permittee or any person acting on behalf of 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 Permittee or any person acting on behalf of 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 Permittee or any person acting on behalf of 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.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and Permittee. To request an amendment, 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 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, 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), 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, 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 Permittee fails to submit a request to extend the Agreement prior to its expiration, 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 Permittee's 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
<https://www.wildlife.ca.gov/Conservation/CEQA/Fees>.

TERM

This Agreement shall expire 5 years from the effective date, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. 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.

EXHIBITS AND ATTACHMENTS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

- Exhibit A – Monitoring and Adaptive Management Plan

AUTHORITY

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

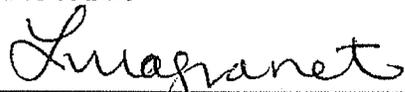
AUTHORIZATION

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

CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

**FOR SISKIYOU RESOURCE CONSERVATION
DISTRICT**



Lindsay Magranet
District Administrator

8-1-2019

Date

FOR DEPARTMENT OF FISH AND WILDLIFE



Brad Henderson
Aquatic Conservation Program Supervisor

8-2-2019

Date

Prepared by: Janae R. Scruggs
Senior Environmental Scientist (Specialist)

Monitoring and Adaptive Management Plan

The Siskiyou Resource Conservation District (SRCD) and the Karuk Fisheries Program (KFP) will be collaboratively monitoring and managing the proposed off channel pond located adjacent to river mile 26.6 of the Scott River after implementation. The SRCD will be tracking water quality parameters, while the KFP will be taking the lead in seasonally monitoring fish utilization and assessing the health of juvenile salmonids. This plan will lay out a monitoring strategy that will inform an adaptive approach for fish management at the newly established off channel habitat. The KFP will consult in advance with the National Marine Fisheries Service (NMFS) and the California Department of Fish and Wildlife (CDFW) regarding potential fish management actions.

Expected Fish Utilization

The proposed off-channel pond has been designed to support salmonids year-round by providing deep (> 6 feet), low-velocity habitat that is thermally buffered by groundwater contributions and offers complex shelter elements. The pond is most suitable for over-wintering fish seeking refuge from high velocities and low water temperatures on the mainstem Scott River. It is unknown how many juvenile salmonids will access and utilize the site on a seasonal basis but literature reviews suggest that the carrying capacity could exceed 1,000 fish (if the density is approximately 3,500 fish per acre). Occupancy by juvenile salmonids is expected to be highest during the late fall, winter and spring months and lowest during the summer months. It is not uncommon for salmonids to reside in these types of habitats through the base-flow period if water quality conditions are conducive to rearing and specifically if there is sufficient groundwater contributions to keep water cool. Other ponds in nearby watersheds including Horse Creek and Seiad Creek support over-summering populations of juvenile salmon. The proposed off channel pond is scheduled for construction during the fall of 2019 and inhabitation by juvenile salmonids is anticipated to begin immediately.

This plan proposes to monitor fish utilization during the summer months when fish are most likely to encounter stressful habitat conditions. The KFP will focus on assessing the health of salmonids choosing to over-summer in the pond when it is isolated from the mainstem.

Expected Water Quality Conditions

The proposed off-channel pond has been designed to maintain water depths that result in temperature stratification (> 6 feet) through the annual base-flow period when the habitat becomes isolated and even through drought years when the mainstem of the Scott River becomes disconnected or dry. Furthermore, adjacent well data indicates that groundwater through the proposed pond site will maintain water temperatures suitable and even preferable for salmonids. These conditions are likely to attract fish seeking cold water refugia during the late spring and early summer months when the pond remains connected to the Scott River.

Dissolved oxygen concentrations in the pond are generally expected to be lower through the warmer months of the year due to thermodynamics, however, this trend can be substantially altered by the presence and abundance of aquatic vegetation. The rapid growth of aquatic vegetation can increase dissolved oxygen levels, while the subsequent decomposition process can decrease dissolved oxygen levels. Additionally, the daily balance between photosynthesis and respiration rates can produce large diurnal fluctuations in dissolved

oxygen levels. Based on habitat conditions through the oxbow, the off-channel pond is anticipated to be colonized by aquatic vegetation within several years.

Proposed Water Quality Monitoring

The SRCD proposes to follow the same water quality monitoring protocols that have been used at other off channel pond locations in the Scott Valley including the lower French Creek site. The water quality parameters that the SRCD will be monitoring to insure year-round suitability for rearing salmonids include water level (water surface elevation), water temperature and dissolved oxygen concentration.

Water surface elevation within the pond will be monitored using an Onset water level datalogger deployed inside a stilling well with a mounted staff gage. An independent Onset barometer will be maintained for compensation purposes. The reference point elevation of the staff gage will be surveyed to compute water surface elevation in the NAVD88 vertical datum and correlate the records to maximum pond depth. Staff gage readings will be taken periodically to calibrate the datalogger readings. Onset software and Microsoft Excel spreadsheets will be used to process the water level data, which will be monitored for a period up to three years after implementation (through September 2022).

Water temperature within the pond will be monitored through a network of calibrated Onset water temperature dataloggers protected in PVC housing and securely cabled to the bank or a buoy. At least two devices will be installed in the constructed habitat at various depths to document stratification and seasonal turnover events. Daily minimum, maximum and average temperatures and moving weekly average temperatures (MWAT) will be calculated in Microsoft Excel spreadsheets. Water temperature within the pond will be monitored for a period up to three years after implementation (through September 2022).

Water temperature in the mainstem Scott River adjacent to the pond will also be monitored for comparison. An Onset water temperature datalogger protected in PVC housing and securely cabled to the bank will be operated from spring to fall. The device will not be operated during the winter because of the potential for damage during high flow periods. Daily minimum, maximum and average temperatures and moving weekly average temperatures (MWAT) will be calculated in Microsoft Excel spreadsheets. Water temperature in the Scott River will be monitored for a period up to three years after implementation (through September 2022).

Dissolved oxygen concentration within the pond will be monitored using an Onset dissolved oxygen datalogger protected in PVC housing and securely cabled to a t-post. Field calibration will be completed every two weeks using a handheld YSI 550A Dissolved Oxygen Meter to monitor for potential drift. Microsoft Excel spreadsheets will be used to process the dissolved oxygen data, which will be monitored for one full year after implementation (through September 2020).

Proposed Functionality Monitoring and Maintenance

The SRCD will be visually documenting functionality of the project design components (i.e. condition of the access channel, integrity of the pond banks, establishment of riparian vegetation) through direct observation and photos at every site visit. The SRCD will be performing maintenance of the constructed habitat as needed over the 5-year term of the Streambed Alteration Agreement. Depending upon the environmental response,

maintenance activities may include, but are not limited to, clearing the access channel, rock slope protection, riparian planting and/or weed management. Maintenance will involve hand labor where applicable but may require heavy equipment modifications. The SRCD will coordinate with the NMFS and the CDFW in advance of any maintenance activities requiring heavy equipment to ensure that adequate water quality and species protection measures are established.

Proposed Fish Health Monitoring

The KFP will initiate fish health monitoring within the pond in the late spring when water temperatures begin to exceed 18C in the mainstem Scott River. The KFP will be informed of when water temperatures begin to exceed 18C in the mainstem Scott River by checking the real-time gage¹ near the mouth and by communication with the SRCD, who will be periodically checking the water temperature datalogger in the Scott River adjacent to the site. This typically occurs during the month of June but can occur as early as May or as late as July depending upon the water year. The 18C threshold has been selected as the trigger point to start monthly (every 4 weeks) monitoring because juvenile salmonids are known to start seeking cold water refuge at around 19C based on studies the KFP has done in the mainstem Scott River near Kelsey Creek and other locations along the Klamath River. A more frequent bimonthly (every 2 weeks) monitoring routine will occur when the pond becomes disconnected from the mainstem Scott River channel or minimum water temperatures within the pond exceed 18C. The KFP will be informed of when either of these conditions occur by communication with the SRCD who will be periodically checking connectivity of the oxbow/access channel and the water temperature dataloggers within the pond.

The KFP proposes a simple observation-based approach that involves snorkel surveys to determine presence (or absence) of juvenile salmonids and relative abundance estimates by species and age class. The surveys will include examination of individual fish for signs of stress behavior or clinical indicators of poor health or disease such as bloated gut, pale color or lethargic flight response.

If minimum water temperatures exceed 19C in the off-channel pond or fish show signs of stress behavior/clinical indicators of poor health, the KFP will consult with the NMFS and the CDFW to determine a course of action. If it is determined that the appropriate solution is to relocate salmonids, the KFP will work with agency staff to prepare a plan outlining how fish will be removed, transported and released into other suitable habitat within the watershed. Current flow and water quality conditions will be a key factor in determining where fish will be relocated for maximum survival. The KFP will coordinate with the NMFS and the CDFW to ensure that all necessary authorizations and take coverages are in place before relocating fish.

Reporting

The SRCD and the KFP will consult with the NMFS and the CDFW regarding any unanticipated conditions that may result in significant adverse impacts to salmonids, and specifically coho salmon. The SRCD and KFP will produce annual monitoring reports describing water quality and fisheries monitoring of the constructed habitat that will be submitted to the NMFS and the CDFW as they become available.

¹ <http://waterquality.karuk.us:8080/Data/List/Parameter/Water%20Temp/Statistic/LATEST/Interval/Latest>