



Stantec Consulting Services Inc.
2999 Oak Road, Suite 800
Walnut Creek, CA 94597

May 1, 2024

Mr. Joel Metzger
General Manager
Utica Water and Power Authority
Via email at: joelm@uticawater.com

Dear Mr. Joel Metzger,

Reference: Task Order 3 Foothill Yellow Legged Frog Survey for Utica Water and Power Authority's (UWPA) FERC Conduit Exemption (P-2699 and P-2019)

Stantec Consulting Services, Inc. (Stantec) is pleased to provide this proposal to the Utica Water and Power Authority (UWPA) to assess the presence of foothill yellow-legged frogs (FYLF) in Angels Creek and Mill Creek, and to conduct visual encounter surveys (VES) and eDNA sampling for FYLF in suitable habitats with an emphasis on stream reaches that have been reported to contain FYLF in the recent past. FYLF in the South Sierra are listed by US Fish and Wildlife Service (USFWS) and California as endangered. Sampling protocols for FYLF generally require three sets of surveys. Each of the surveys focuses on a different life history stage of FYLFs. The first survey performed is a breeding survey conducted in late spring when water temperatures approach or exceed 12°C on the falling limb of the snowmelt hydrograph. At this time, adult FYLFs gather at the stream and the females deposit egg masses attached to boulders or large cobbles. Not only are adult FYLFs near the stream, egg masses also may be visible, and there are relatively high concentrations of eDNA present associated with the FYLF. The second survey is a tadpole survey. After the FYLF eggs hatch, tadpoles are present and growing in the stream. In the fall, after the tadpoles have metamorphosed into juvenile frogs, they begin to leave the stream and are found on land nearby.

During the FYLF visual surveys and eDNA sampling, the field team also will observe for and eDNA samples will be analyzed for the potential presence of red legged frogs (CRLF, are listed as threatened by USFWS), and western pond turtles (proposed for listing by USFWS). Doing so will provide cost savings by avoiding the need for additional surveys. However, CRLF are not expected based on past surveys and past habitat observations. The eDNA sampling will help confirm their presence or absence.

Due to the limited amount of information available about FYLFs and their habitat in Angels Creek and Mill Creek, and the length of stream present, we propose a phased approach to collecting data focusing on identifying suitable FYLF habitat and conducting VES and eDNA sampling in those habitats. A reconnaissance of habitats to identify suitable sampling sites is the first phase of this work. Details on the proposed scope of work and phase approach are presented below.

1 Task Order 3 - Proposed Scope of Services

Phase 1

Phase 1 of the approach would consist of a review of available information and a two-day field reconnaissance to help determine the likely areas that need to be characterized for FYLF habitat, locate potential sampling sites, and propose selected sites in Angels Creek and Mill Creek to be included in the study. An emphasis will be placed on the natural channel of Angels Creek between

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Murphys Powerhouse to downstream of Angels Diversion Dam, where there have been historic reports of FYLF. The product of this field trip will be a habitat characterization memo of potential sampling sites with a preliminary selection of high-quality habitat for potential breeding surveys.

Phase 2

This phase of work consists of two main components: (A) a meeting and site visit with the California Department of Fish and Wildlife (CDFW) to discuss FYLF survey locations and sampling protocols and (B) completion of the spring breeding surveys.

As requested by the California Department of Fish and Wildlife (CDFW), an agency field visit will be held with CDFW (and other resource agencies that may wish to participate). The purpose of the field visit will be to visit selected representative survey sites and other areas containing suitable FYLF habitat to select survey sites that the resource agencies believe would be necessary to assess the presence of FYLF. This site visit will be scheduled following the field reconnaissance and prior to the initial breeding survey.

Warming of stream waters in the project area is resulting in water temperatures associated with the onset of FYLF breeding. As such, we recommend that the first breeding survey occur immediately after the CDFW-requested field visit. FYLF breeding may occur when water temperatures increase to approximately 12° C, if FYLF are present. In order to increase the potential to detect FYLF breeding, we will need to initiate an initial breeding survey quickly after the site visit. The focus of the initial breeding survey will be the stream reach between Murphys Powerhouse to downstream of Angels Diversion and areas containing highly suitable breeding habitat identified. For highly suitable habitats, the focus will be in those stream segments that are warming quickly, and the likelihood of breeding is higher. Up to 25 sites will be surveyed in suitable habitats. The breeding surveys will include VES and eDNA sampling and will generally follow the survey approach of Seltnerich and Pool (2002). The presence of FYLF predators, such as bullfrogs, will be noted if present. The presence of predators may preclude the presence of FYLF. During this survey, observations of CRLF, western pond turtles (WPT), or aquatic invasive species (AIS) will be noted. Testing of eDNA samples will include testing for the presence of FYLF, CRLF, and WPT to increase the efficient use of field efforts. eDNA samples will be collected at each site included for VES.

Phase 3A

A preliminary study plan will be prepared to document sampling protocols and locations, likely prior to the agency site visit. Specifically, the plan will document methods and locations for FYLF VES and eDNA sampling and a rationale for site selection. Additional plan details will be developed in Phase 3B as sampling results are reviewed.

Phase 3B

Following the agency field visit and FYLF breeding survey field work, we will update the preliminary study plan and, depending upon results, if appropriate, modify the proposed field activities. If no FYLF or egg masses are observed and no FYLF eDNA detected, we would likely recommend that there is little need for additional field trips to survey for tadpoles or metamorphs to be included in the plan. We will provide the draft plan for UWPA review. We will address UWPA comments and provide a revised draft study plan for resource agency review. We assume that we may need one agency meeting to review the plan. During the meeting, we would present the study plan to the resource agencies and answer their questions. Agencies would be given 30 days to review the study plan. Upon receipt of agency comments, comments would be addressed, revisions made as

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necessary with the comments tabulated in a response to comments table, and consultation documented. This final study plan would be available to send to the agencies and filed with FERC.

Phase 4 (not included in accompanying budget)

Following the preparation of the study plan, and assuming FYLF are present, the remainder of FYLF sampling would take place, which would include one tadpole field trip (about one month following breeding) and one metamorph field trip (fall, likely September). Costing for Phase 4 will be estimated following the conclusion of Phase 3.

Technical Study Memo (not included in accompanying budget)

Following the conclusion of Phase 4, a technical study memo will be prepared. Upon completion, the draft Technical Study Memo will be provided to the agencies for a 30-day review, after which comments will be due. If requested, a virtual meeting will be held to present the results and discuss comments. Agency comments will be addressed, and the report will be finalized within 30 days of the meeting. After the report is finalized and consultation documented, the final memo will be provided to the agencies and filed with FERC. Similar to Phase 4, costs will be estimated for the Technical Study Memo following the conclusion of Phases 2 and 3.

Assumptions:

- Phase 1
 - UWPA will install and operate water temperature recorders in the stream segments to potentially be included in FYLF surveys. UWPA will download and transmit water temperature data from the monitors to Stantec on a no less than weekly basis.
 - UWPA will provide drone footage of areas of Mill Creek in Angels Creek that are under consideration for FYLF sampling.
 - Field reconnaissance and sampling will only take place on reasonably accessible sections of stream that do not require permission to access private lands and can be accessed safely.
 - We assume that the initial habitat reconnaissance can be completed in 2 days in the field by 2 biologists.
- Phase 2
 - A one-day field visit will be held with the CDFW (and other resource agencies) to visit survey sites (Agency Visit).
 - Initial breeding survey will take place over a 4-day period following the agency site visit.
 - The initial breeding survey will include no more than 10 sites between Murphy's Powerhouse and the stream reach immediately below Angels Diversion.
 - No more than 15 additional sites in high quality habitat will be included in other reaches and Mill Creek.
 - eDNA will be tested for FYLF, CRLF, and WPT.
- Phase 3
 - Stantec will document the additional survey sites and the rationale for adding them.
 - One round of UWPA review on the draft and final study plans. Electronic consolidated comments will be provided.

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- One meeting with resource agencies will be held virtually.
- Agency comments will be consolidated by agency.
- Phase 4
 - We assume 2 additional FYLF surveys (one tadpole, and one metamorph) at sites included in the study plan.
 - We assume that each FYLF VES sampling survey can be completed in 4 days in the field by 2 biologists.
 - The number of sites to be surveyed will be based on the results of Phases 2 and 3, which will be included in the final study plan.
- Technical Study Memo
 - We assume that UWPA will provide one round of consolidated comments.
 - We assume that each resource agency will provide one round of consolidated comments.

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Anticipated Project Schedule

Task	Schedule
Phase 1	
Desktop Assessment	May 3
Field Reconnaissance	May 6-7
Phase 2	
Agency Site Visit	May 8 -10 (1 day only)
Initial VES FYLF Breeding/Egg Mass Survey	Week of May 13
Phase 3A	
Preliminary Draft Study Plan to UWPA	~May 6
Phase 3B	
Review Draft Study Plan to Agencies	~May 30
Agency Review Period	~June 12 to July 12
Finalize Study Plan	~July 22
Phase 4 (scope and budget to be prepared after Phases 2 and 3)	
Tadpole Surveys	~June 10
Metamorph Surveys	September
Technical Study Memo	December

2 Task Order 3 - Proposal Budgetary Estimate

Stantec proposes to execute this work under the existing Master Services Agreement between Stantec and UWPA. Task Order 3 will be performed on a time and materials basis, with a not-to-exceed budget of **US \$73,070.14**, based on Tables below.

The budget requested above should be considered a reasonable estimate based on the assumption listed in the proposal and the anticipated level of engagement. Should you require any additional information, or if you have questions on any specific component of Stantec's proposal, please do not hesitate to contact me at the information below.

Sincerely,

STANTEC CONSULTING SERVICES INC.



Michael Manwaring, PG

Regional Sector Leader

Phone: 425-750-7989

michael.manwaring@stantec.com

Attachment: Task Order 2 - Subtask 3 Proposal Costs Estimate

Reference: Proposal Foothill Yellow Legged Frog Survey

Signature of Proposal Acceptance:

By signing below, UWPA authorizes Stantec to execute the above scope of work (Task Order 3).

Task Order 3

 05/01/24

Client Authorization / Date



Table 1. Cost Summary for Foothill Yellow-Legged Frog Surveys Phases 1 through 3A

Project Company	Stantec Consulting Services, Inc.
Project Currency	US Dollar
Contract Type	Time & Material
Project Number	
Project Name	Angels Utica FYLF Phase 1-3A
Client Name	Utica Water Power Agency
Business Centre	1857
Project Manager	Wayne Lifton
Project Independent Reviewer	Katie Ross-Smith

Project Summary	Total Fee
Labour	\$47,125.00
Expense	\$13,975.14
Subs	\$11,970.00
Total	\$73,070.14

Planned Start Date	Planned End Date
2024-05-01	2024-12-01

Name	Role	Billing Rate	Hours	Sub-Total Fee
Ross-Smith, Katie	Senior QA/QC	\$274.00	1.00	\$274.00
Lifton, Wayne	Senior Project Manager	\$274.00	54.00	\$14,796.00
Eschen, Iris	Environmental Specialist	\$160.00	4.00	\$640.00
Evans, Rick	Environmental Specialist	\$165.00	116.00	\$19,140.00
Kochhar Roberts, Malini	Environmental Specialist	\$160.00	2.00	\$320.00
Tosch, James	Administrative/Accounting Support	\$130.00	8.00	\$1,040.00
Holton, Tom	Sn. Environmental Specialist	\$185.00	3.00	\$555.00
Fee, Megan	Environmental Specialist	\$140.00	74.00	\$10,360.00
			262.00	\$47,125.00

Expense	Billing Rate	Units	Sub-Total Fee
Per Diem (daily) Stantec	\$200.00	12.00	\$2,400.00
Stantec Rental Equipment	\$1.00	159.00	\$159.00
Sub Rental Equipment	\$1.00	150.00	\$150.00
eDNA Sample Analysis	\$1.00	6,400.00	\$6,400.00
Per Diem (daily) Subsc	\$200.00	3.00	\$600.00
Mileage Stantec	\$0.69	160.00	\$110.40
Mileage Subs	\$0.69	840.00	\$579.60
4xr4 Truck Rental per Day	\$115.00	7.00	\$805.00
FRD	\$1.00	2,771.14	\$2,771.14
			\$13,975.14

Subs	Billing Rate	Units	Sub-Total Fee
Thomas Gast Assoc. Earl Gonsolin (including 5% markup)	\$199.50	60.00	\$11,970.00
			\$11,970.00



Table 2. Cost Summary - Foothill Yellow-Legged Frog Surveys Phases 1 through 3A

	Hours	Labour	Expense	Subs	Total
Totals	262.00	\$47,125.00	\$13,975.14	\$11,970.00	\$73,070.14
Task Name	Hours	Labour	Expense	Subs	Total
Coordination/PM	51.00	\$11,544.00	\$721.50	\$1,596.00	\$13,861.50
Phase 1- Reconnaissance	44.00	\$7,468.00	\$2,776.35	\$8,778.00	\$19,022.35
Phase 2 -Agency Visit and Breeding Surey	134.00	\$20,628.00	\$10,043.65	\$399.00	\$31,070.65
Phase 3A Preliminary Draft Study Plan	33.00	\$7,485.00	\$433.64	\$1,197.00	\$9,115.64