

Name of Project: **Peterson, Ulatis, Putah, Western Tributary Fish Monitoring**

## **SOLANO COUNTY WATER AGENCY**

### **AGREEMENT FOR PROFESSIONAL SERVICES (Professional Services/Consultant)**

THIS AGREEMENT, **effective July 1, 2023**, is between SOLANO COUNTY WATER AGENCY, a public agency existing under and by virtue of Chapter 573 of the 1989 statutes of the State of California, hereinafter referred to as "Agency," and **TRPA Fish Biologists**, hereinafter referred to as "Contractor."

The Agency requires services for **Peterson, Ulatis, Putah, Western Tributary Fish Monitoring**; and the Contractor is willing to perform these services pursuant to the terms and conditions set out in this Agreement.

IT IS MUTUALLY AGREED, as follows:

1. **SCOPE OF SERVICES**

The Agency hereby engages the Contractor, and the Contractor agrees to perform the services for **Peterson, Ulatis, Putah, Western Tributary Fish Monitoring**, as described in Exhibit A, in accordance with the terms of this Agreement and any applicable laws, codes, ordinances, rules or regulations. In case of conflict between any part of this Agreement, this Agreement shall control over any Exhibit.

2. **COMPENSATION**

Compensation for services shall be as follows: Hourly rate of personnel plus any allowed reimbursable expenses based on unit costs as indicated on any allowed reimbursable expense in Exhibit B **not to exceed \$447,750** for all work contemplated by this Agreement.

3. **METHOD OF PAYMENT**

Upon submission of an invoice by the Contractor, and upon approval of the Agency's representative, the Agency shall pay the Contractor monthly in arrears for fees and allowed expenses incurred the prior month, **however in no event shall the cumulative total paid pursuant to this agreement exceed the maximum amount provided for in paragraph 2 of this Agreement.** Every invoice shall specify hours worked for each task identified in Exhibit A undertaken.

Each invoice shall be accompanied by a spreadsheet showing, by month, costs incurred to date for the project broken down by the Tasks identified in Exhibit A. The spreadsheet shall show, for each task, budget amounts, total expended and remaining amounts. The spreadsheet shall show a subtotal for each fiscal year covered by the contract. Any

amendments to the contract shall be listed and incorporated into spreadsheet. An example of a typical spreadsheet shall be provided by the Agency.

4. **TIME OF PERFORMANCE**

This Agreement shall become effective as of the date it is executed and said services will take place between this date and **June 30, 2025** as directed by the Agency.

5. **MODIFICATION AND TERMINATION**

This Agreement may be modified or amended only by written instrument signed by the parties hereto, and the Contractor's compensation and time of performance of this Agreement shall be adjusted if they are materially affected by such modification or amendment.

This Agreement may be terminated by the Agency at any time, without cause, upon written notification to the Contractor. The Contractor may terminate this Agreement upon 30 days written notice to Agency.

Following termination by the Agency or the Contractor, the Contractor shall be reimbursed for all expenditures made in good faith in accordance with the terms of this Agreement that are unpaid at the time of termination.

6. **PERMITS**

Permits required by governmental authorities will be obtained at the Contractor's expense, and the Contractor will comply with local, state and federal regulations and statutes including Cal/OSHA requirements.

7. **INDEMNIFY AND HOLD HARMLESS**

*To the extent permitted by law, Consultant shall hold harmless, defend at its own expense, and indemnify Solano County Water Agency, its directors, officers, employees, and authorized volunteers, against any and all liability, claims, losses, damages, or expenses, including reasonable attorney's fees and costs, arising from all acts or omissions of Consultant or its officers, agents, or employees in rendering services under this contract; excluding, however, such liability, claims, losses, damages or expenses arising Solano County Water Agency's sole negligence or willful acts.*

8. **INSURANCE**

**Minimum Insurance Requirements:** Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries or death to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Consultant, his agents, representatives, employees or sub-contractors.

**Coverage** - Coverage shall be at least as broad as the following:

1. **Commercial General Liability (CGL)** - Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 00 01) including products and completed operations, property damage, bodily injury, personal and advertising injury with limit of at least two million dollars (\$2,000,000) per occurrence or the full per occurrence limits of the policies available, whichever is greater. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (coverage as broad as the ISO CG 25 03, or ISO CG 25 04 endorsement provided to Solano County Water Agency) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability** – (if necessary) Insurance Services Office (ISO) Business Auto Coverage (Form CA 00 01), covering Symbol 1 (any auto) or if Consultant has no owned autos, Symbol 8 (hired) and 9 (non-owned) with limit of one million dollars (\$1,000,000) for bodily injury and property damage each accident.
3. **Workers' Compensation Insurance** - as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease. **Waiver of Subrogation:** The insurer(s) named above agree to waive all rights of subrogation against the Solano County Water Agency, its elected or appointed officers, officials, agents, authorized volunteers and employees for losses paid under the terms of this policy which arise from work performed by the Named Insured for the Agency; but this provision applies regardless of whether or not the Solano County Water Agency has received a waiver of subrogation from the insurer.

If the Consultant maintains broader coverage and/or higher limits than the minimums shown above, the Solano County Water Agency requires and shall be entitled to the broader coverage and/or higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the Solano County Water Agency.

**Other Required Provisions** - The general liability policy must contain, or be endorsed to contain, the following provisions:

1. **Additional Insured Status:** Solano County Water Agency, its directors, officers, employees, and authorized volunteers are to be given insured status (at least as broad as ISO Form CG 20 10 10 01), with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts, or equipment furnished in connection with such work or operations.
2. **Primary Coverage:** For any claims related to this project, the Consultant's insurance coverage shall be primary at least as broad as ISO CG 20 01 04 13 as respects to the Solano County Water Agency, its directors, officers, employees and authorized volunteers. Any insurance or self-insurance maintained by the Solano County Water Agency its directors, officers, employees and authorized volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

**Notice of Cancellation:** Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the Solano County Water Agency.

**Self-Insured Retentions** - Self-insured retentions must be declared to and approved by the Solano County Water Agency. The Solano County Water Agency require the Consultant to provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or Solano County Water Agency.

**Acceptability of Insurers** - Insurance is to be placed with insurers having a current A.M. Best rating of no less than A: VII or as otherwise approved by Solano County Water Agency.

**Verification of Coverage** – Consultant shall furnish the Solano County Water Agency with certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the Solano County Water Agency before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant's obligation to provide them. The Solano County Water Agency reserves the right to require complete, certified copies of all required insurance policies, including policy Declaration pages and Endorsement pages.

**Sub-contractors** - Consultant shall require and verify that all sub-contractor maintain insurance meeting all the requirements stated herein, and Consultant shall ensure that Solano County Water Agency its directors, officers, employees, and authorized volunteers are an additional insured are an additional insured on Commercial General Liability Coverage.

9. **COMPLIANCE WITH LAW**

The Contractor shall be subject to and comply with all federal, state and local laws and regulations applicable with respect to its performance under this Agreement, including but not limited to, licensing, employment and purchasing practices; and wages, hours and conditions of employment.

10. **RECORD RETENTION**

Except for materials and records, delivered to the Agency, the Contractor shall retain all materials and records prepared or obtained in the performance of this Agreement, including financial records, for a period of at least three years after the Contractor's receipt of the final payment under this Agreement. Upon request by the Agency, the Contractor shall make such materials and records available to the Agency at no additional charge and without restriction or limitation to State and federal governments at no additional charge.

11. **OWNERSHIP OF DOCUMENTS**

All materials and records of a finished nature, such as final plans, specifications, reports and maps, prepared or obtained in the performance of this Agreement, shall be delivered

to and become the property of the Agency. All materials of a preliminary nature, such as survey notes, sketches, preliminary plans, computations and other data, prepared or obtained in the performance of this Agreement, shall be made available, upon request, to the Agency at no additional charge and without restriction or limitation on their use.

12. **SUBCONTRACT AND ASSIGNMENT**

This Agreement binds the heirs, successors, assigns and representatives of the Contractor. The Contractor shall not enter into subcontracts for any work contemplated under this Agreement and shall not assign this Agreement or monies due or to become due, without the prior written consent of the General Manager of the Agency or his designee, subject to any required state or federal approval. (*Note: list any subcontractors here*)

13. **NONRENEWAL**

The Contractor understands and agrees that there is no representation, implication, or understanding that the services provided by the Contractor under this Agreement will be purchased by the Agency under a new agreement following expiration or termination of this Agreement, and waives all rights or claims to notice or hearing respecting any failure to continue purchase of all or any such services from the Contractor.

14. **NOTICE**

Any notice provided for herein are necessary to the performance of this Agreement and shall be given in writing by personal delivery or by prepaid first-class mail addressed as follows:

AGENCY

Chris Lee, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

CONTRACTOR

Kathleen Salamunovich, Owner  
TRPA Fish Biologist  
890 L Street  
Arcata, CA 95521

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The parties have executed this Agreement the day and year first above written. If the Contractor is a corporation, documentation must be provided that the person signing below for the Contractor has the authority to do so.

Solano County Water Agency  
a Public Agency

TRPA Fish Biologists

By: \_\_\_\_\_  
Chris Lee,  
General Manager

By: \_\_\_\_\_  
Kathleen A. Salamunovich,  
Owner/Business Manager

**FOR SCWA USE ONLY**

Contract Period: July 1, 2023 to June 30, 2025  
File Number: AG-T-15  
Account Manager: Alex Rabidoux  
G/L Account #: Varies (see Exhibit A)  
Job Cost #: -----  
Contract Type: Professional Services

## EXHIBIT A

### SCOPE OF SERVICES

<b>Task</b>	<b>Description</b>	<b>G/L Code</b>
1	Winter/Spring Putah Ck. Juvenile Chinook Survey	6149SC
2	Annual Fall Lower Putah Ck. Fish Monitoring	6149SC
3	Peterson / Big Ditch Quarterly Fish Surveys	6105N/SC
4	Pleasants Ck. Fish Triannual Surveys	6149SC
5	Fall Western Solano County Fish Surveys	6140AC-1722
6	Fall Ulati Flood Control Project Fish Surveys	6140U-8503
7	Misc. Data Review / Analyses	6149SC
8	Participation in Salmon Working Group	6149SC
9	Fall Vacaville Area Stream Fish Surveys	6140U-8503



TRPA Fish Biologists  
890 L Street  
Arcata, CA 95521  
Telephone: (707) 630-5220

May 24, 2023

Mr. Chris Lee, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

Subject: Proposals for SCWA Projects for FY 2024-2025

Dear Mr. Lee:

At your request TRPA Fish Biologists (“TRPA”) has prepared the following Scopes of Work to identify the rationale and methods for multiple projects to be performed for Solano County Water Agency during the next two fiscal years (2024 and 2025), which begin on July 1, 2023, and continue through June 30, 2025. The proposed work will be conducted on a time and materials basis, so only surveys or work items that are actually completed will be billed. It is assumed that these new contracts, once approved, will replace the existing contracts which we already have in place with SCWA under the former General Manager.

<b>Task 1 - Winter/Spring Putah Creek Biweekly Juvenile Chinook Snorkel Surveys</b>
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Prior to 2021 salmon run size estimates for lower Putah Creek varied from 75 to 1,500 adult fish annually. Poor water quality conditions in the Toe Drain and lower mile of Putah Creek in November and December 2021 blocked most of the Fall 2021 Chinook salmon run and resulted in a low adult escapement with a late maturing and low productivity Chinook fry year class. The Fall 2022 adult Chinook salmon spawning escapement rebounded and was estimated to have exceeded 1,000 adult salmon. TRPA proposes to conduct snorkel surveys at multiple areas along lower Putah Creek every two weeks during the winter juvenile Chinook emergence and early-spring outmigration periods (early February through mid-May). The surveys will entail snorkel counts along 7-9 sites distributed along nine miles of creek between the UC Davis Russell Ranch area and the Putah Diversion Dam (Table 1).

Table 1. Potential snorkel sites along lower Putah Creek.

Site Name	Miles downstream of Putah Diversion Dam
Putah Diversion Dam	0.0
Morales	0.8
Dry Creek	2.4
Winters Putah Creek Park (lower and upper sites)	3.0
Interstate 505 split channel (2 sites)	4.1
Russell Ranch	9.2
Pedrick Road	12.8





The goal of these surveys is to attempt to document salmon fry emergence, assess relative abundance, identify rearing areas, and document timing of outmigration from the basin. These snorkel surveys are contingent upon adequate visibilities to allow observations and counts along the lower creek. We have presented a budget for biweekly surveys throughout the expected juvenile Chinook emergence, rearing and outmigration period.

Pending landowner approval, we would conduct surveys at seven to nine sites along the lower basin (Table 1). Alternate sites may be added or substituted depending upon access approval, visibility, and fish movement. Our proposed budget includes eight biweekly surveys per survey year conducted from early February through mid-May (Table 2).

Table 2. Proposed Tentative Winter/Spring snorkel survey dates\*

Survey	Fiscal Year 2024	Fiscal Year 2025
#1	7 February	5 February
#2	21 February	19 February
#3	6 March	5 March
#4	20 March	19 March
#5	3 April	2 April
#6	17 April	16 April
#7	1 May	30 April
#8	15 May	14 May

\*weather/flow and turbidity level dependent

Efficacies of the surveys are dependent on adequate water visibilities that will allow snorkelers to see and identify juvenile Chinook. Based upon our experience in the lower Putah Creek basin, we assume adequate visibilities in the nine miles of the creek between Russell Ranch and PDD will allow us to document emergence and rearing in this reach during most times. Storm events may limit efficacy of surveys in this upper reach. Uncontrolled spills from Lake Berryessa may also affect surveys. If successful, surveys in lower portions of the basin will provide information on use and duration of lower basin rearing areas by juvenile Chinook and outmigrant timing.

Survey dates may be adjusted to avoid storm events which will likely limit snorkel visibilities. We will remain in close contact with SCWA throughout the project so that if results are less than satisfactory, schedules can be adjusted/changed/canceled.

Following the final survey, a memo report will be prepared and submitted to SCWA.

I have attached a detailed breakdown of our time and materials budget estimate (attached as Exhibit A). Invoicing will occur monthly, and all work is on a time and materials basis.



## Task 2 - Annual Fall Lower Putah Creek Fish Monitoring

TRPA staff has been sampling the fish fauna of lower Putah Creek using tote barge electrofishing since August 1991. Since the 2000 Accord, this sampling has been conducted under the aegis of the Lower Putah Creek Coordinating Committee. The SOW for this Project will include continuing the annual fall fish surveys in October 2023 and 2024 and the maintenance of long-term monitoring of the distribution and relative abundance of fish populations in lower Putah Creek between Putah Diversion Dam and Mace Boulevard (Table 3).

Table 3. Fish Survey Monitoring sites along lower Putah Creek.

Site Name	Miles downstream of Putah Diversion Dam
Putah Diversion Dam/Morales	0.0 - 0.8
Dry Creek	2.4
Winters Putah Creek Park	3.0
Interstate 505 split channel	4.1
Russell Ranch	9.2
Stevenson Bridge (Road 95A)	10.1
Pedrick Road (Road 98)	12.8
Old Davis Road	15.6
Mace Boulevard (Road 104)	19.0

This long-term monitoring is unique in both its length of record and extent of the sample area for tracking changes to the resident fish populations of a Central Valley river basin in response to hydrologic conditions, which is even more valuable given the recent extended periods of below normal water years followed by periodic wet water years in the Sacramento Valley. TRPA is proposing to sample multiple sites along Lower Putah Creek over three and one-half days in mid-October (prior to the annual salmon attraction pulse flow) using the same methods and sampling gear as previous efforts. The data will be entered into the existing long-term fish database (as well as an MS Excel format) for use by SCWA, UCD, and other interested parties.

TRPA has the requisite State and Federal permits to perform the proposed work.

TRPA will also prepare a memo report following each survey detailing the sampling effort and summarizing the results.

I have attached a detailed breakdown of our time and materials budget estimate (attached as Exhibit B). Invoicing will occur monthly, and all work is on a time and materials basis. Surveys of additional sites (if required or requested) will require adjustment to the proposed budget based on new time and materials considerations.



### Task 3 - Peterson Ranch/Big Ditch Quarterly Fish Surveys

SCWA recently purchased the Peterson Ranch Property in eastern Solano County, about seven miles northwest of the City of Rio Vista. SCWA has an ongoing riparian habitat enhancement Program along The Big Ditch (located on the ranch property) as part of mitigation for its North Bay Aqueduct Project. These restoration efforts include fencing along the slough to exclude cattle and to allow re-establishing riparian habitat to benefit and improve conditions for native Sacramento-San Joaquin Delta fish assemblages. The Big Ditch drains lowland agricultural and grazing lands northwest of Rio Vista. The project area includes the lower 2.5 miles of The Big Ditch drainage that ultimately drains into the Lindsay/Cache Slough Complex of the middle Delta (Figure 1).

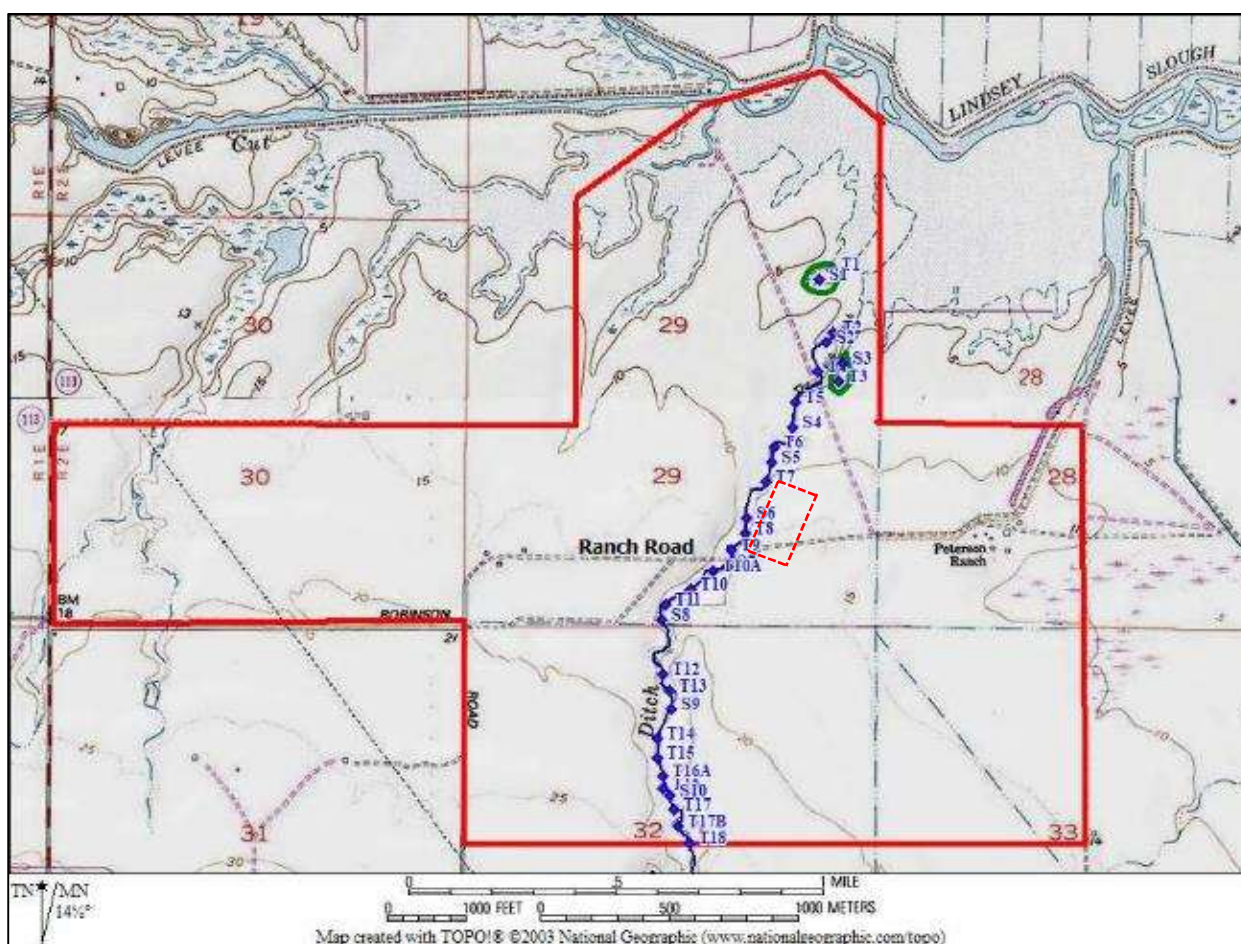


Figure 1. Map of The Big Ditch and the Peterson Ranch Project area (red boundary) showing the locations of seining (S) and minnow trapping (T) sites sampled during the 2019-2023 seasonal fish surveys. Green lines denote off channel pools included in surveys. Red dashed line marks cattle exclusion area and native tree restoration plots. Ranch Road delimits the downstream and upstream portions of the project area.



TRPA is proposing to continue the seasonal fish surveys along the Big Ditch channel on the Peterson Ranch Property for fiscal years 2024 through 2025. To avoid potential habitat for listed smelt species, no sampling will be conducted within 2000 feet of Lindsay Slough. This biological sampling will provide information on the distribution and relative abundance of fish and other aquatic organisms in the Big Ditch drainage. Hydrologic conditions in the Big Ditch are variable and range from periods of no flow and isolated pools in the summer and fall, to some periods of higher stream flow in the winter and spring following rainfall events. To date fourteen seasonal surveys have been conducted between October 2019 and April 2023. We are proposing to continue the quarterly sampling to include the eight more quarterly surveys for the Summer 2023 through Spring 2025 period.

Due to a combination of high water conductivity (which limits the effectiveness of electrofishing), elevated summer water temperature (which could impact aquatic organism survival during electrofishing), and the potential for the presence of non-natal rearing ESA-listed salmonids in the area, TRPA is proposing to continue its quarterly fish surveys for the 2024 and 2025 fiscal years using seine nets and minnow trapping techniques at multiple locations along the 1.8 miles of The Big Ditch, which includes 4,935 feet of channel between the southern Peterson Property line and the Ranch Road Crossing (Figure 1) and 4,406 feet of channel downstream of the Ranch Road Crossing to the 2,000-foot buffer area around Lindsay Slough (Figure 1).

Seining would be conducted at 6 sites downstream and another 4 sites upstream of the Ranch Road Bridge. Baited minnow traps will be deployed at additional sites to increase capture effort through the project area. Habitat evaluations during an early August 2019 site visit showed multiple areas of dry channel along with areas of isolated pools with swaths of emergent aquatic vegetation. Effective seining would be limited to those areas of shallow, open water in the isolated pools with low gradient banks onto which seines can be pulled. Baited minnow traps will be used to augment sampling in the more entrenched and deeper portions of the channel. Because of the wetland nature of the project area and presence of grazing cattle, access to the The Big Ditch project area is limited to foot access along the channel, with some limited vehicle access along a raised gravel road area that parallels the channel in the downstream portion of the Project area. This proposed scope of work is for continuing the quarterly surveys during the next two fiscal years of 2024 and 2025 (i.e., July 2023 through June 2025).

TRPA will prepare a memo report detailing the sampling effort and summarizing the results following the completion of the fall survey of each cycle.

TRPA has the requisite State and Federal permits to perform the work.

I have attached a detailed breakdown of our time and materials budget estimate (attached as Exhibit C). Invoicing will occur monthly, and all work is on a time and materials basis.





#### Task 4 - Pleasants Creek Fish Triannual Surveys

TRPA is proposing to continue the triannual (i.e., spring, summer, and fall ) fish surveys along Pleasants Creek in Solano County. This biological sampling is intended to supplement the existing information on the distribution and relative abundance of fish in the basin. Hydrologic conditions in Pleasants Creek are variable and range from periods of no flow in the summer and fall (i.e., isolated ponds at various locations) to some stream flow in the winter and spring following rainfall events. Surveys will consist of backpack electrofishing surveys at 8-9 locations in the basin at cooperating landowner properties (Figure 2).

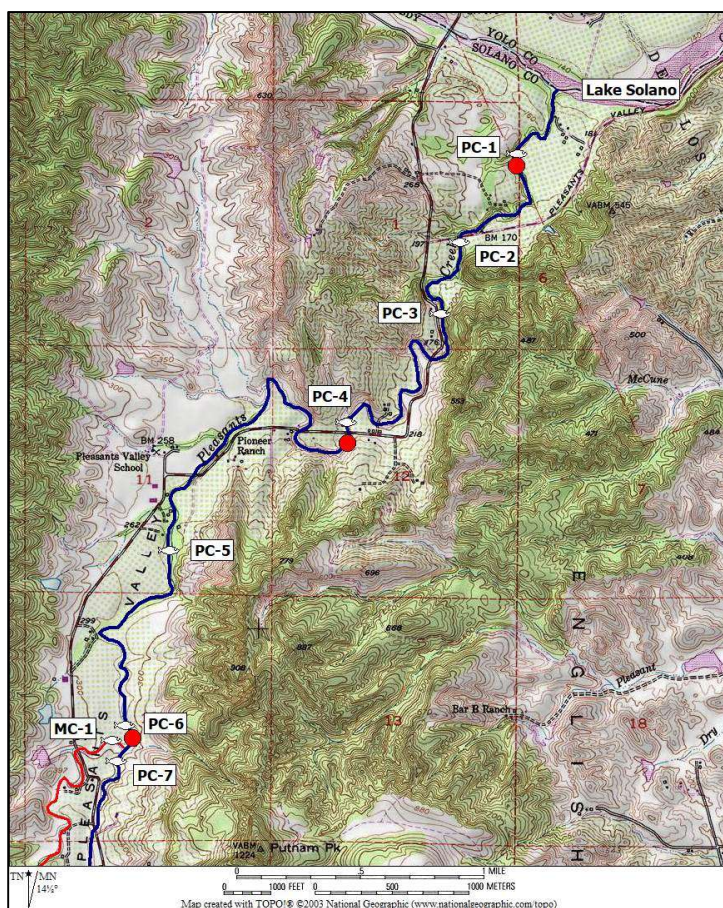


Figure 2. Map of Pleasants Creek (blue line) and lower Miller Canyon (red line) showing the locations of the eight fish sampling sites surveyed during the seasonal fish surveys.

The length of sample reaches at each site will vary based upon the length of individual habitat units (i.e., pool, riffle, run). Generally, several hundred feet of stream will be sampled at each site and typically this includes a minimum of several riffle-pool sequences if the stream is flowing. The number and locations of sample sites will depend on the ability of



TRPA biologists and the Putah Creek stream keeper to arrange access with landowners willing to cooperate. TRPA is proposing to conduct six seasonal surveys over the next two fiscal years (Table 4).

Table 4. Proposed Pleasants Creek surveys and timing for FY 2024-2025 (July 2023 through June 2025).

Survey	Timing
#1	July 2023
#2	October 2023
#3	May 2024
#4	July 2024
#5	October 2024
#6	May 2025

TRPA will prepare a memo report detailing the sampling effort and summarizing the results following the completion of the fall survey of each cycle.

TRPA has the requisite State permits to perform the work.

I have attached a detailed breakdown of our time and materials budget estimate (attached as Exhibit D). Invoicing will occur monthly, and all work is on a time and materials basis.

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#### Task 5 - Fall Western Solano County Stream Fish Surveys

TRPA is proposing to continue the fish surveys along Suisun, Green Valley, and Ledgewood creeks in Solano and Napa counties. This biological sampling was intended to update information on the distribution and relative abundance of fish in western Solano County stream basins in the vicinity of the SCWA service area. Original surveys were conducted in 1999-2001 and repeated in 2016-2022. Hydrologic conditions in both Suisun and Ledgewood basins had changed over the fifteen-year period, with large areas of intermittent or no flow. The original surveys were conducted following a period of several consecutive wet water years, while the 2016-2022 surveys have included alternating dry and wet water years. Two fall surveys would be conducted at about 20 sites within the Project area (Table 5) during the 2024-2025 fiscal years covered during this contract period (i.e., fall 2023 and fall 2024 surveys). The proposed Fall sampling in early October 2023 and 2024 will use the same methods as the previous surveys. The fish surveys will be conducted using a portable backpack electrofisher to stun and capture fish at multiple sites in the three stream basins (Table 5).



Table 5. Western Solano Streams Fish Survey Monitoring sites.

Basin	Site
Suisun Creek	Cordelia Road
Suisun Creek	Suisun Parkway
Suisun Creek	Solano Community College
Suisun Creek	Rockville Road
Suisun Creek	Suisun Valley Road Bridge (lower)
Suisun Creek	Putah South Canal Siphon
Suisun Creek	Caymus Vineyards
Suisun Creek	Suisun Valley Road Bridge (upper)
Suisun Creek	Wooden Valley Cross Road
Green Valley Creek	Commerce Court
Green Valley Creek	Turner Court
Green Valley Creek	Reservoir Lane
Green Valley Creek	Mason Road
Green Valley Creek	Green Valley Country Club
Green Valley Creek	Wildhorse Creek - Green Valley Water Treatment Plant
Ledgewood Creek	Auto Mall Parkway
Ledgewood Creek	Rockville Road
Ledgewood Creek	Abernathy Road
Ledgewood Creek	Putah South Canal Siphon
Ledgewood Creek	Mankas Corners

The length of sample reaches at each site vary based upon the length of individual habitat units (i.e., pool, riffle, run). Generally, several hundred feet of stream will be sampled at each site and typically this includes a minimum of three riffle-pool sequences. The number and locations of sample sites will depend on the ability of SCWA/SID to arrange access with landowners willing to cooperate. Alternate sites may need to be identified and access arranged. Following each of the surveys TRPA will prepare a memo report detailing the sampling effort and summarizing the results which can be shared with SCWA staff and any interested local stakeholders.

TRPA has the requisite State and Federal permits to perform the work.

I have attached a detailed breakdown of our time and materials budget estimate (attached as Exhibit E). Surveys of additional sites (if required or requested) will require adjustment to the proposed budget based on new time and materials considerations. Invoicing will occur monthly, and all work is on a time and materials basis.



## Task 6 - Fall Ulatis Project Flood Control Channel Fish Surveys

TRPA is proposing to repeat the fish surveys along the flood control channels that comprise the Ulatis Project in Solano County. This biological sampling is intended to update information on the distribution and relative abundance of fish in Ulatis Project channels that were originally conducted in 2000-2002 and have been repeated in 2018-2022. The Ulatis Flood Control Project is located in the Vacaville-Elmira urban corridor and is made up of approximately 43.5 miles of natural, realigned, and man-made stream channels created to alleviate recurring floods in the Ulatis watershed. The watershed area for the Ulatis Flood Control Project extends from the hills to the northwest of Vacaville to the Liberty Island area in the Delta. The Ulatis Flood Control Project is located in Solano County in lowland agricultural and grazing lands east of Vacaville and south of Dixon. SCWA management activities have prompted requests for additional information about the aquatic resources that reside in and utilize the Ulatis Project area. The object of the survey is to provide some basic information on the distribution and relative abundance of resident fish in the Project area. The focus of the sampling program is to collect biological data (lengths and counts) for fish throughout the project area to monitor distribution, abundance diversity, overall condition and health, and to describe the existing conditions within the Project area. Two fall surveys would be conducted at about 15 sites within the Project area (Table 6) during the 2024-2025 fiscal years covered during this contract period (i.e., fall 2023 and fall 2024 surveys).

Table 6. Ulatis Flood Control Project Fish Survey Monitoring sites.

Site
Ulatis upstream of Island
Ulatis at Browns Road
Ulatis at Maine Prairie Road
Ulatis at New Alamo confluence
Ulatis at Sweeney confluence
Ulatis at Ulatis Boulevard
New Alamo at Ulatis confluence
New Alamo at Vanden Road
Sweeney at Ulatis confluence
Sweeney at Midway Road
Sweeney at Meridian Road
McCune at Midway Road
A1 Channel at Highway 113
Horse Creek at Leisure Town Road
Gibson Canyon at Byrnes Road

The exact timing of the surveys is dependent on the annual irrigation season when end of the Maine Prairie Water District's irrigation dams and other infrastructure are removed and shallow/wadeable habitat is present, which typically occurs by early November. Previous sampling occurred at these same locations. Alternate or additional sites may be added in coordination with SCWA/SID.





Following each of the surveys TRPA will prepare a memo report detailing the sampling effort and summarizing the results which can be shared with SCWA staff and any interested local stakeholders.

TRPA has the requisite State and Federal permits to perform the work.

I have attached a detailed breakdown of our time and materials budget estimate (attached as Exhibit F). Surveys of additional sites (if required or requested) will require adjustment to the proposed budget based on new time and materials considerations. Invoicing will occur monthly, and all work is on a time and materials basis.

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#### **Task 7 - Miscellaneous Data Review/Analyses**

TRPA is anticipating the need to complete additional data review and analyses tasks involving updating Putah Creek fish abundance and stream temperature data as it becomes available. TRPA is currently in communication with UCD personnel to obtain unrecorded archived fish survey data that can be added to the existing long-term fish Putah Creek database (as well as an MS Excel format) for use by SCWA, UCD, and other interested parties.

This task will also provide for the time to review and analyze SCWA temperature and water pressure transducer data from data loggers distributed along lower Putah Creek and that are maintained and periodically downloaded by SCWA staff.

I have attached a detailed breakdown of our time and materials budget estimate (attached as Exhibit G). Invoicing will occur monthly, and all work is on a time and materials basis.

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#### **Task 8 - Participation in Salmon Working Group**

Following the March 2023 Putah Creek Data Summit, an informal Salmon Working Group was formed with members from SCWA, UCD, and SCWA-contractor staff. TRPA staff was included as part of this Salmon Working Group. While tasks have not been formally assigned to members of this working group it is anticipated that participation in several future meetings will be required.

I have attached a detailed breakdown of our time and materials budget estimate for anticipated participation in this working group for the 2024 and 2025 fiscal years (attached as Exhibit H). Invoicing will occur monthly, and all work is on a time and materials basis.

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### Task 9 - Fall Vacaville Area Stream Fish Surveys

TRPA is proposing to conduct preliminary coordination and reconnaissance level fish surveys along the natural stream channels of both Ulatis and Alamo creeks within and upstream of the city of Vacaville. This biological sampling is intended to provide information on the existing distribution and relative abundance of fish in these streams in the middle and upper basins before they drain into the levee habitat within the Ulatis Flood Control Project area. Initial work will include coordination with SCWA staff to identify potential sampling sites followed by site visits to ascertain access, hydrologic, and water quality conditions at those sites. Appropriate State and Federal permits will need to be obtained before any fish sampling can be conducted.

At this time, it is assumed that fish will be collected from 8-12 sites distributed along upper and middle Ulatis and Alamo creeks using a portable backpack electrofisher to stun and capture fish at multiple sites in the three stream basins. It is anticipated that fish collection surveys will be conducted sometime during the fall sampling season.

The length of sample reaches at each site vary based upon the length of individual habitat units (i.e., pool, riffle, run). Generally, fifty to several hundred feet of stream will be sampled at each site and typically this includes a minimum of three riffle-pool sequences. The number and locations of sample sites will depend on the ability of SCWA/SID to arrange access with landowners willing to cooperate. Following the surveys TRPA will prepare a memo report detailing the sampling effort and summarizing the results which can be shared with SCWA staff and any interested local stakeholders.

I have attached a detailed breakdown of our time and materials budget estimate (attached as Exhibit I). Surveys of additional sites (if required or requested) will require adjustment to the proposed budget based on new time and materials considerations. Invoicing will occur monthly, and all work is on a time and materials basis.

---

I hope these proposed Scopes of Work and attached budgets meet with your approval. For seasonal survey work items (Tasks 2-4), TRPA feels it is important to maintain the proposed sampling frequency in order to understand the physical and biological variability that occur in these unique project areas; however, we remain open to discussions with the Agency to adjust these scopes to meet SCWA budget considerations. If you have any technical questions, please contact our Senior Fisheries Biologist, Tim Salamunovich, at (707) 630-5220 (or via email ([t.salamunovich@trpafishbiologists.com](mailto:t.salamunovich@trpafishbiologists.com))). You can also contact me at the same office phone or via email ([k.salamunovich@trpafishbiologists.com](mailto:k.salamunovich@trpafishbiologists.com)). I look forward to hearing from you.



TRPA Fish Biologists  
890 L Street  
Arcata, CA 95521  
Telephone: (707) 630-5220

Proposals for SCWA Projects FY 2024-2025

May 24, 2023

Page 12

Thank you for your consideration of these projects.

Sincerely,

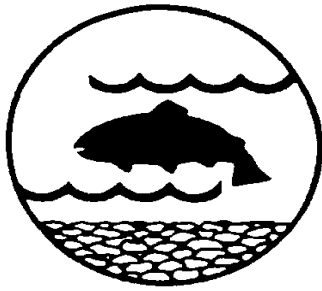
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Kathleen A. Salamunovich  
Owner/Business Manager  
TRPA Fish Biologists

## EXHIBIT B

### RATE OF COMPENSATION

Task	Description	Cost
1	Winter/Spring Putah Ck. Juvenile Chinook Survey	\$85,680
2	Annual Fall Lower Putah Ck. Fish Monitoring	\$67,260
3	Peterson / Big Ditch Quarterly Fish Surveys	\$77,840
4	Pleasants Ck. Fish Triannual Surveys	\$56,610
5	Fall Western Solano County Fish Surveys	\$37,760
6	Fall Ulatis Flood Control Project Fish Surveys	\$37,360
7	Misc. Data Review / Analyses	\$22,000
8	Participation in Salmon Working Group	\$27,240
9	Fall Vacaville Area Stream Fish Surveys	\$36,000
	<b>Total =</b>	<b>\$447,750</b>



## TRPA Fish Biologists

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Telephone: (707) 630-5220

E-mail: [t.salamunovich@trpafishbiologists.com](mailto:t.salamunovich@trpafishbiologists.com)

Date: May 24, 2023

**Exhibit A**

Cost Estimate: **Task 1**  
FY 2024-2025 Winter/Spring Putah Creek Juv. Chinook Snorkel Surveys

Contract Expiration: June 30, 2025

Prepared for: Mr. Chris Lee, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

### COST VARIABLES

		<u>RATE</u>
Senior Scientist 2 (SS1)	labor/hr	\$100.00
Senior Fish Biologist 1 (SFB1)	labor/hr	\$90.00
Fish Technician 7 (FT7)	labor/hr	\$70.00
Field Survey equipment	cost/day	\$160.00
Lodging	cost/night	\$125.00
Meals	cost/day	\$55.00
Vehicle Rental	cost/trip	\$250.00
Gas for rental vehicle	cost/trip	\$150.00

### JOB ELEMENTS

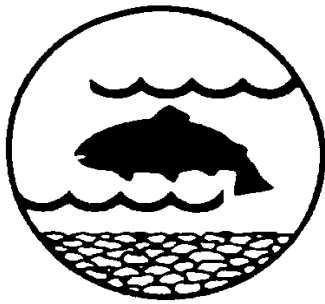
	<u>HOURS</u>	<u>COST</u>
<b>Sub-Task 1.1 - Study Coordination, Agency Coordination &amp; Equipment Preparation</b>		
Labor	SS2 hours 48	4,800.00
Task 1.1 Subtotal		4,800.00

### Sub-Task 1.2 - Field Surveys (eight (8) one-day field surveys per year\*)

Labor	SFB1 hours 144	12,960.00
	FT7 hours 144	10,080.00
Travel	SFB1 hours 176	15,840.00
	FT7 hours 176	12,320.00
Equipment	days 16	2,560.00
Lodging	nights 32	4,000.00
Meals	days 64	3,520.00
Vehicle rental	trips 16	4,000.00
Gas for rental Vehicle	trips 16	2,400.00
Task 1.2 Subtotal		67,680.00

### Sub-Task 1.3 - Data Analysis & Reporting

Labor	SS2 hours 132	13,200.00
Task 1.3 Subtotal		13,200.00
<b>Task 1 Two-Year Total</b>		<b>\$85,680.00</b>



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Date:

May 24, 2023

**Exhibit B**

Cost Estimate:

### Task 2

FY 2024-2025 Annual Fall Lower Putah Creek Fish Monitoring Survey

Contract Expiration:

June 30, 2025

Prepared for:

Mr. Chris Lee, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

#### COST VARIABLES

#### RATE

Senior Scientist 1 (SS1)	labor/hr	\$100.00
Senior Fish Biologist 1 (SFB1)	labor/hr	\$90.00
Fish Biologist 3 (FB3)	labor/hr	\$85.00
Fish Technician 7 (FT7)	labor/hr	\$70.00
GPP 2.5 Electrofisher rental	charge/day	\$600.00
Field Survey equipment	charge/day	\$315.00
Miscellaneous Field Supplies		\$50.00
Lodging	cost/night	\$125.00
Meals	cost/day	\$55.00
Vehicle Rental	cost/trip	\$625.00
Gas for rental vehicle	cost/trip	\$300.00

#### JOB ELEMENTS

#### HOURS

#### COST

##### Sub-Task 2.1 - Study Coordination, Agency Coordination & Equipment Preparation

Labor	SS2 hours	32	3,200.00
Task 2.1 Subtotal			3,200.00

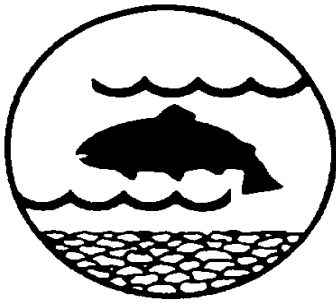
##### Sub-Task 2.2 - Field Survey (3.5 days for crew of five to sample nine sites per year)

Labor	SFB1 hours	66	5,940.00
	FB3 hours	66	5,610.00
	FT7 hours	198	13,860.00
Travel	SFB1 hours	28	2,520.00
	FB3 hours	28	2,380.00
	FT7 hours	84	5,880.00
GPP 2.5 Electrofisher	days	8	4,800.00
Equipment	days	8	2,520.00
Lodging	night	30	3,750.00
Meals	days	40	2,200.00
Vehicle rental	trips	4	2,500.00
Gas for rental Vehicle	trips	4	1,200.00
Miscellaneous Field Supplies		2	100.00
Task 2.2 Subtotal			53,260.00

##### Sub-Task 2.3 - Data Compilation, Database Update, & Reporting

Labor	SS2 hours	108	10,800.00
Task 2.3 Subtotal			10,800.00

**Task 2 Two-Year Total \$67,260.00**



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Date: May 24, 2023

**Exhibit C**

Cost Estimate: **Task 3**

FY 2024-2025 Quarterly Peterson Ranch/Big Ditch Fish Surveys

Contract Expiration: June 30, 2025

Prepared for: Mr. Chris Lee, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

COST VARIABLES		<u>RATE</u>
Senior Scientist 1 (SS1)	labor/hr	\$100.00
Senior Fish Biologist 1 (SFB1)	labor/hr	\$90.00
Fish Technician 7 (FT7)	labor/hr	\$70.00
Field Survey equipment	cost/day	\$225.00
Miscellaneous Field Supplies	cost/trip	\$50.00
Lodging	cost/night	\$125.00
Meals	cost/day	\$55.00
Vehicle Rental	cost/trip	\$400.00
Gas for rental vehicle	cost/trip	\$250.00

<b>JOB ELEMENTS</b>	<u>HOURS</u>	<u>COST</u>
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**Sub-Task 3.1 - Study Coordination, Agency Coordination & Equipment Preparation**

Labor	SS2 hours	32	3,200.00
Task 3.1 Subtotal			3,200.00

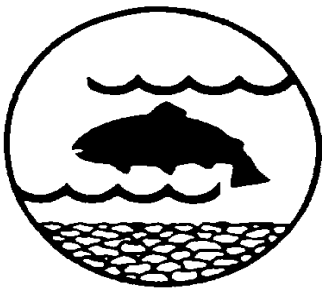
**Sub-Task 3.2 - Field Surveys**

*four (4) two-day seasonal field surveys per year\**

Labor	SFB1 hours	176	15,840.00
	FT7	176	12,320.00
Travel	SFB1 hours	104	9,360.00
	FT7	104	7,280.00
Equipment	days	16	3,600.00
Miscellaneous Field Supplies	trips	8	400.00
Lodging	night	32	4,000.00
Meals	days	48	2,640.00
Vehicle rental	trips	8	3,200.00
Gas for rental Vehicle	trips	8	2,000.00
Task 3.2 Subtotal			60,640.00

**Sub-Task 3.3 - Data Analysis & Reporting**

Labor	SS2 hours	140	14,000.00
Task 3.3 Subtotal			14,000.00
<b>Task 3 Two-Year Total</b>			<b>\$77,840.00</b>



# TRPA Fish Biologists

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Date: May 24, 2023

**Exhibit D**

Cost Estimate: **Task 4**  
FY 2024-2025 Triannual Pleasants Creek Fish Surveys

Contract Expiration: June 30, 2025

Prepared for: Mr. Chris Lee, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

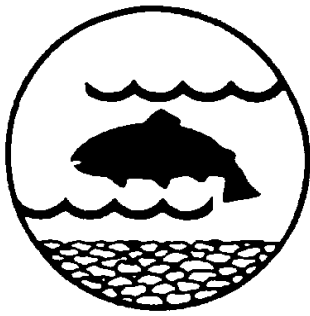
## COST VARIABLES

		<u>RATE</u>
Senior Scientist 1 (SS1)	labor/hr	\$100.00
Senior Fish Biologist 1 (SFB1)	labor/hr	\$90.00
Fish Technician 7 (FT7)	labor/hr	\$70.00
Backpack Electrofisher	cost/day	\$125.00
Backpack Electrofisher battery	cost/day	\$10.00
Field Survey equipment	cost/day	\$180.00
Miscellaneous Field Supplies	cost/trip	\$25.00
Lodging	cost/night	\$125.00
Meals	cost/day	\$55.00
Vehicle Rental	cost/trip	\$400.00
Gas for rental vehicle	cost/trip	\$250.00

## JOB ELEMENTS

		<u>HOURS</u>	<u>COST</u>
<b>Sub-Task 4.1 - Study Coordination, Agency Coordination &amp; Equipment Preparation</b>			
Labor	SS2 hours	18	1,800.00
Task 4.1 Subtotal			1,800.00
<b>Sub-Task 4.2 - Field Surveys</b>			
<i>three (3) two-day seasonal field surveys per year*</i>			
Labor	SFB1 hours	108	9,720.00
	FT7	108	7,560.00
Travel	SFB1 hours	78	7,020.00
	FT7	78	5,460.00
Electrofisher	days	12	1,500.00
Electrofisher Batteries	units	36	360.00
Equipment	days	12	2,160.00
Miscellaneous Field Supplies	trips	6	150.00
Lodging	night	24	3,000.00
Meals	days	36	1,980.00
Vehicle rental	trips	6	2,400.00
Gas for rental Vehicle	trips	6	1,500.00
Task 4.2 Subtotal			42,810.00
<b>Sub-Task 4.3 - Data Analysis &amp; Reporting</b>			
Labor	SS2 hours	120	12,000.00
Task 4.3 Subtotal			12,000.00
Task 4 Two-Year Total			\$56,610.00





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Date: May 24, 2023

**Exhibit E**

Cost Estimate: **Task 5**  
FY 2024-2025 Annual Fall Western Solano Streams Fish Survey

Contract Expiration: June 30, 2025

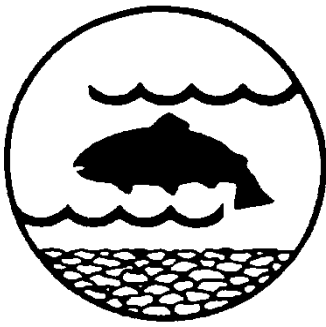
Prepared for: Mr. Chris Lee, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

COST VARIABLES		<u>RATE</u>
Senior Scientist 1 (SS1)	labor/hr	\$100.00
Senior Fish Biologist 1 (SFB1)	labor/hr	\$90.00
Fish Technician 7 (FT7)	labor/hr	\$70.00
Backpack Electrofisher	cost/day	\$125.00
Backpack Electrofisher battery	cost/day	\$10.00
Field Survey equipment	cost/day	\$165.00
Miscellaneous Field Supplies		\$75.00
Lodging	cost/night	\$150.00
Meals	cost/day	\$55.00
Vehicle Rental	cost/trip	\$700.00
Gas for rental vehicle	cost/trip	\$300.00

<b>JOB ELEMENTS</b>	<u>HOURS</u>	<u>COST</u>
<b>Sub-Task 5.1 - Study Coordination, Agency Coordination &amp; Equipment Preparation</b>		
Labor	SS2 hours 12	1,200.00
	<b>Task 5.1 Subtotal</b>	<b>1,200.00</b>

<b>Sub-Task 5.2 - Field Survey of Suisun, Ledge wood and Green Valley Creeks (4 days)</b>		
	<i>(assumes SCWA/SID can arrange access at sites along creeks)</i>	
Labor	SFB1 hours 80	7,200.00
	FT7 80	5,600.00
Travel	SFB1 hours 30	2,700.00
	FT7 30	2,100.00
Electrofisher	days 8	1,000.00
Electrofisher Batteries	units 24	240.00
Equipment	days 8	1,320.00
Lodging	night 16	2,400.00
Meals	days 20	1,100.00
Vehicle rental	trips 2	1,400.00
Gas for rental Vehicle	trips 2	600.00
Miscellaneous Field Supplies		100.00
	<b>Task 5.2 Subtotal</b>	<b>25,760.00</b>

<b>Sub-Task 5.3 - Data Analysis &amp; Reporting</b>		
Labor	SS2 hours 108	10,800.00
	<b>Task 5.3 Subtotal</b>	<b>10,800.00</b>
	<b>Task 5 Two-Year Total</b>	<b>\$37,760.00</b>



## TRPA Fish Biologists

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Date: May 24, 2023

**Exhibit F**

Cost Estimate: **Task 6**

FY 2024-2025 Annual Fall Ulatis Flood Control Channel Fish Survey

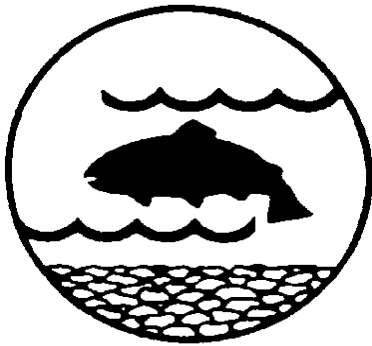
Contract Expiration: June 30, 2025

Prepared for: Mr. Chris Lee, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

COST VARIABLES		<u>RATE</u>
Senior Scientist 1 (SS1)	labor/hr	\$100.00
Senior Fish Biologist 1 (SFB1)	labor/hr	\$90.00
Fish Technician 7 (FT7)	labor/hr	\$70.00
Backpack Electrofisher	cost/day	\$125.00
Backpack Electrofisher battery	cost/day	\$10.00
Field Survey equipment	cost/day	\$165.00
Miscellaneous Field Supplies		\$75.00
Lodging	cost/night	\$125.00
Meals	cost/day	\$55.00
Vehicle Rental	cost/trip	\$700.00
Gas for rental vehicle	cost/trip	\$300.00

### JOB ELEMENTS

	<u>HOURS</u>	<u>COST</u>
<b>Sub-Task 6.1 - Study Coordination, Agency Coordination &amp; Equipment Preparation</b>		
Labor	SS2 hours 12	1,200.00
Task 6.1 Subtotal		1,200.00
<b>Sub-Task 6.2 - Field Survey of Ulatis Flood Control Channel (4 days)</b>		
Labor	SFB1 hours 80	7,200.00
	FT7 80	5,600.00
Travel	SFB1 hours 30	2,700.00
	FT7 30	2,100.00
Electrofisher	days 8	1,000.00
Electrofisher Batteries	units 24	240.00
Equipment	days 8	1,320.00
Lodging	night 16	2,000.00
Meals	days 20	1,100.00
Vehicle rental	trips 2	1,400.00
Gas for rental Vehicle	trips 2	600.00
Miscellaneous Field Supplies		100.00
Task 6.2 Subtotal		25,360.00
<b>Sub-Task 6.3 - Data Analysis &amp; Reporting</b>		
Labor	SS2 hours 108	10,800.00
Task 6.3 Subtotal		10,800.00
Task 6 Two-Year Total		\$37,360.00



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Date: May 24, 2023

**Exhibit G**

Cost Estimate:

### **Task 7**

FY 2024-2025 Miscellaneous Data Review/Analyses

Contract Expiration:

June 30, 2025

Prepared for:

Mr. Chris Lee, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

### **COST VARIABLES**

Senior Scientist 1 (SS1)

labor/hr

RATE

\$100.00

### **JOB ELEMENTS**

HOURS

COST

### **Sub-Task 7.1 - Data Review & Analysis**

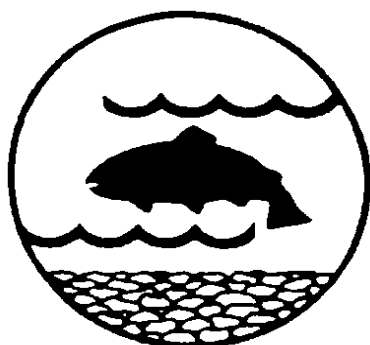
Labor

SS2 hours

220

22,000.00

**Task 7 Two-Year Total 22,000.00**



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Telephone: (707) 630-5220

E-mail: [t.salamunovich@trpafishbiologists.com](mailto:t.salamunovich@trpafishbiologists.com)

Date: May 24, 2023

**Exhibit H**

Cost Estimate: **Task 8**

FY 2024-2025 Salmon Working Group Participation

Contract Expiration: June 30, 2025

Prepared for: Mr. Chris Lee, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

### COST VARIABLES

		<u>RATE</u>
Senior Scientist 1 (SS1)	labor/hr	\$100.00
Lodging	cost/night	\$150.00
Meals	cost/day	\$55.00
Vehicle Rental	cost/trip	\$300.00
Gas for rental vehicle	cost/trip	\$150.00

### JOB ELEMENTS

#### Sub-Task 8.1 - Study Coordination & Phone Calls

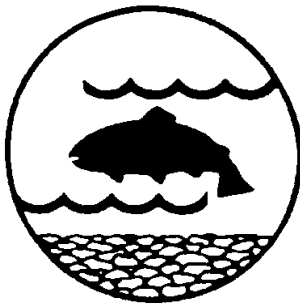
	<u>HOURS</u>	<u>COST</u>
Labor	SS1 hours 160	16,000.00
Task 8.1 Subtotal		16,000.00

#### Sub-Task 8.2 - Meetings

*(assume two in person one day meetings per year)*

Labor	SS1 hours	40	4,000.00
Travel	SS1 hours	44	4,400.00
Lodging	night	4	600.00
Meals	days	8	440.00
Vehicle rental	trips	4	1,200.00
Gas for rental Vehicle	trips	4	600.00
Task 8.2 Subtotal			11,240.00

**Task 8 Two-Year Total \$27,240.00**



## TRPA Fish Biologists

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E-mail: [t.salamunovich@trpafishbiologists.com](mailto:t.salamunovich@trpafishbiologists.com)

Date: May 24, 2023

**Exhibit I**

Cost Estimate: **Task 9**

FY 2024-2025 Annual Fall Vacaville Area Stream Fish Surveys

Contract Expiration: June 30, 2025

Prepared for: Mr. Chris Lee, General Manager  
Solano County Water Agency  
810 Vaca Valley Parkway, Suite 203  
Vacaville, CA 95688

COST VARIABLES		RATE
Senior Scientist 1 (SS1)	labor/hr	\$100.00
Senior Fish Biologist 1 (SFB1)	labor/hr	\$90.00
Fish Technician 7 (FT7)	labor/hr	\$70.00
Backpack Electrofisher	cost/day	\$125.00
Backpack Electrofisher battery	cost/day	\$10.00
Field Survey equipment	cost/day	\$165.00
Miscellaneous Field Supplies		\$75.00
Lodging	cost/night	\$150.00
Meals	cost/day	\$55.00
Vehicle Rental	cost/trip	\$700.00
Gas for rental vehicle	cost/trip	\$300.00
State Scientific Collector Permit	cost/permit	\$500.00

### JOB ELEMENTS

#### HOURS

#### COST

#### Sub-Task 9.1 - Study Coordination, Agency Coordination, Permit Aquisition & Equipment Preparation

Labor	SS2 hours	30	3,000.00
	Permit	1	500.00
Task 9.1 Subtotal			3,500.00

#### Sub-Task 9.2 - Field Survey of upper and middle Ulati and Alamo Creeks (3 days)

*(assumes SCWA/SID can arrange access at sites along creeks)*

Labor	SFB1 hours	60	5,400.00
	FT7	60	4,200.00
Travel	SFB1 hours	30	2,700.00
	FT7	30	2,100.00
Electrofisher	days	6	750.00
Electrofisher Batteries	units	18	180.00
Equipment	days	6	990.00
Lodging	night	16	2,400.00
Meals	days	16	880.00
Vehicle rental	trips	2	1,400.00
Gas for rental Vehicle	trips	2	600.00
Miscellaneous Field Supplies			100.00
Task 9.2 Subtotal			21,700.00

#### Sub-Task 9.3 - Data Analysis & Reporting

Labor	SS2 hours	108	10,800.00
Task 9.3 Subtotal			10,800.00

**Task 9 Two-Year Total \$36,000.00**