

PERFORMANCE WORK STATEMENT (PWS)

Monitoring and Evaluation of Russian River Coho Salmon

Part 1 General Information

1. GENERAL: This is a non-personnel services contract to provide Monitoring and Evaluation of Russian River Coho Salmon. The Government shall not exercise any supervision or control over the contract service providers performing the services herein. Such contract service providers shall be accountable solely to the Contractor who, in turn is responsible to the Government.

1.1 Description of Services/Introduction: The contractor shall provide all personnel, equipment, supplies, facilities, transportation, tools, materials, supervision, and other items and non-personal services necessary to perform Monitoring and Evaluation of Russian River Coho Salmon as defined in this Performance Work Statement except for those items specified as government furnished property and services. The contractor shall perform to the standards in this contract.

1.2 Background:

The U.S. Army Corps of Engineers (USACE) plans to continue monitoring and evaluating the effectiveness and performance of the Russian River Coho Salmon Captive Broodstock Program (RRCSCBP), located at Don Clausen Fish Hatchery (Sonoma County). This effort includes monitoring juvenile and adult coho salmon in multiple release streams to:

- Estimate juvenile survival from release to the smolt stage
- Develop expanded counts of hatchery-origin adults
- Evaluate natural spawning success
- Assess trends in abundance of naturally produced Coho Salmon

The required monitoring has occurred primarily on Willow, Dutch Bill, Green Valley, and Mill creeks for approximately the past 20 years, and will continue in these or other Russian River tributaries or the mainstem as directed by the RRCSCBP technical advisory committee (TAC). The TAC includes representatives of the National Marine Fisheries Service (NMFS), the California Department of Fish and Wildlife (CDFW), and USACE.

1.3 Objectives:

1. Document coho salmon metrics for the Russian River watershed (e.g., survival of hatchery-released juveniles, smolt to adult return (SAR) ratios number of returning adults, spawning success, and natural production).
2. Evaluate the effectiveness and performance of the RRCSCBP, and provide information for adaptive management decisions as needed.

1.4 Scope: The Contractor shall conduct in-stream fish monitoring activities in the Russian River watershed sufficient to evaluate the effectiveness of the RRCSCBP at maintaining or increasing the naturally-spawned coho salmon population. Services include obtaining permits and landowner access agreements; collecting, analyzing, and interpreting monitoring data; and coordinating with NMFS, CDFW, Sonoma Water, and USACE as necessary to support the RRCSCBP. The contractor shall accomplish the following tasks:

1. Obtain all permits necessary to conduct the monitoring program (e.g., ESA section 10(a)1(A) permit from NMFS, Scientific Collector's permit from CDFW, etc.);
2. Obtain, update, and/or maintain all landowner access agreements necessary to conduct the monitoring program. Approximately 100 landowner agreements are needed to provide access for three RRCSCBP partners (CDFW, Sonoma Water, and USACE) in addition to the contractor;

3. Estimate the freshwater and marine survival of released juvenile hatchery coho salmon through use of PIT tags and PIT tag detection systems. Fifteen percent of juvenile coho will be implanted with a PIT tag prior to release from Don Clausen Warm Springs Hatchery, and fish will be tagged according to release tributary and release season. Paired PIT tag antenna arrays will be operated year-round on four index release streams (currently Willow, Dutch Bill, Green Valley, and Mill Creeks) to track PIT-tagged fish following their release. Detections of PIT-tagged fish will be used to generate estimates of survival from release to the smolt stage (freshwater survival) and from the smolt stage to the adult stage (marine survival).
4. Estimate the number of returning PIT-tagged coho adults for the index release streams (currently Willow, Dutch Bill, Green Valley, and Mill Creeks) with paired PIT tag detection systems. Antenna efficiency information from the paired arrays, the ratio of PIT-tagged to non-PIT-tagged hatchery releases, and the average ratio of hatchery to naturally-spawned returns from spawner surveys will be used to estimate the total number of coho returning to each of the four index release streams.
5. Estimate the total number of redds produced in up to four release streams (currently Willow, Dutch Bill, Green Valley, and Mill Creeks) through winter redd surveys; conduct spawner surveys to document the return of adult coho salmon. Coho carcasses encountered will be scanned with a coded wire tag (CWT) wand to determine whether the fish was of hatchery origin (CWT present) or natural origin (no CWT). Conduct summer snorkeling surveys to document the presence and minimum number of naturally-spawned juvenile coho in each of the release streams. Surveys will be conducted prior to the release of hatchery fish each year. The number of release streams monitored in any given year will depend on watershed conditions.
6. Document increases in coho natural production through use of downstream migrant traps operated seasonally on two to four index release streams. Each juvenile coho captured will be scanned with a CWT wand to determine origin, and estimates of hatchery and naturally-spawned coho smolts will be generated each year. Fin tissue will be collected on a portion of captured smolts for subsequent genetics analysis. Coho carcass data and minimum count data from snorkeling surveys will also be used to document increases in abundance and spatial distribution of naturally-produced coho salmon.
7. Document coho, and other listed species, presence in the upper river through the use of migrant traps operated seasonally near Hopland, CA.

1.5 Period of Performance: The period of performance shall be for one (1) Base Year of 12 months and four (4) 12-month option years. The Period of Performance reads as follows:

Base Year: December 1, 2026 through November 30, 2027

Option Year: December 1, 2027 through November 30, 2028

Option Year II: December 1, 2028 through November 30, 2029

Option Year III: December 1, 2029 through November 30, 2030

Option Year IIII: December 1, 2030 through November 30, 2031

1.6 General Information

1.6.1 Quality Control: The contractor shall develop and maintain an effective quality control program to ensure services are performed in accordance with this PWS. The contractor shall develop and implement procedures to identify, prevent, and ensure non-recurrence of defective services. The contractor's quality control program is the means by which he assures himself that his work complies with the requirement of the contract. The QPC shall be delivered with the contractor's proposal. Three copies of a comprehensive written QCP shall be submitted to the KO and COR within 5 working days when changes are made thereafter. After acceptance of the quality control plan the contractor shall receive the contracting officer's acceptance in writing of any proposed change to his QC system.

1.6.2 Quality Assurance: The government shall evaluate the contractor's performance under this contract in accordance with the Quality Assurance Surveillance Plan. This plan is primarily focused on what the Government must do to ensure that the contractor has performed in accordance with the performance

standards. It defines how the performance standards will be applied, the frequency of surveillance, and the minimum acceptable defect rate(s).

1.6.3 Recognized Holidays: The contractor is not required to perform services on holidays.

New Year's Day	Labor Day
Martin Luther King Jr.'s Birthday	Columbus Day
President's Day	Veteran's Day
Memorial Day	Thanksgiving Day
Independence Day	Christmas Day

1.6.4 Hours of Operation: The contractor is responsible for conducting business, between the hours of 8 am to 4 pm, Monday thru Friday except Federal holidays or when the Government facility is closed due to local or national emergencies, administrative closings, or similar Government directed facility closings. For other than firm fixed price contracts, the contractor will not be reimbursed when the government facility is closed for the above reasons. The Contractor must at all times maintain an adequate workforce for the uninterrupted performance of all tasks defined within this PWS when the Government facility is not closed for the above reasons. When hiring personnel, the Contractor shall keep in mind that the stability and continuity of the workforce are essential.

1.6.5 Place of Performance: The work to be performed under this contract will be performed in the field (Russian River watershed) or at the contractor's facility.

1.6.6 Type of Contract: The government will award a firm-fixed price contract.

1.6.7 Security Requirements: No security clearances are required.

1.6.7.1 Physical Security: The contractor shall be responsible for safeguarding all government equipment, information and property provided for contractor use.

1.6.7.2 Key Control: No government keys or key cards will be issued to the contractor.

1.6.7.3 Lock Combinations: No government lock combinations will be provided to the contractor.

1.6.8 Special Qualifications: Field crews shall be under the direct supervision of a qualified fisheries biologist.

1.6.9 Post Award Conference/Periodic Progress Meetings: The Contractor agrees to attend any post award conference convened by the contracting activity or contract administration office in accordance with Federal Acquisition Regulation Subpart 42.5. The contracting officer, Contracting Officers Representative (COR), and other Government personnel, as appropriate, may meet periodically with the contractor to review the contractor's performance. At these meetings the contracting officer will apprise the contractor of how the government views the contractor's performance and the contractor will apprise the Government of problems, if any, being experienced. Appropriate action shall be taken to resolve outstanding issues. These meetings shall be at no additional cost to the government.

1.6.10 Contracting Officer Representative (COR): The (COR) will be identified by separate letter. The COR monitors all technical aspects of the contract and assists in contract administration. The COR is authorized to perform the following functions: assure that the Contractor performs the technical requirements of the contract; perform inspections necessary in connection with contract performance; maintain written and oral communications with the Contractor concerning technical aspects of the contract; issue written interpretations of technical requirements, including Government drawings, designs, specifications; monitor Contractor's performance and notifies both the Contracting Officer and Contractor of any deficiencies; coordinate availability of government furnished property, and provide site entry of Contractor personnel. A letter of designation issued to the COR, a copy of which is sent to the Contractor, states the responsibilities and limitations of the COR, especially with regard to changes in cost or price, estimates or changes in delivery dates. The COR is not authorized to change any of the terms and conditions of the resulting order.

1.6.11 Key Personnel: The following personnel are considered key personnel by the government: Contract/Program Manager/Alternate Contract/Program Manager. The contractor shall provide a contract/program manager who shall be responsible for the performance of the work. The name of this person and an alternate who shall act for the contractor when the manager is absent shall be designated in writing to the contracting officer. The contract/program manager or alternate shall have full authority to act for the contractor on all contract matters relating to daily operation of this contract. The contract manager or alternate shall be available between 8:00 a.m. to 4:00 p.m., Monday thru Friday except Federal holidays or when the government facility is closed for administrative reasons. Qualifications for all key personnel are listed below:

1.6.11.1 Contract/Program Manager and Alternate. The Contract/Program Manager and Alternate must be proficient in Microsoft Word and Excel.

1.6.12 Identification of Contractor Employees: All contract personnel attending meetings, answering Government telephones, and working in other situations where their contractor status is not obvious to third parties are required to identify themselves as such to avoid creating an impression in the minds of members of the public that they are Government officials. They must also ensure that all documents or reports produced by contractors are suitably marked as contractor products or that contractor participation is appropriately disclosed.

1.6.13 Contractor Travel: All travel requires Government approval/authorization and notification to the COR.

1.6.14 Other Direct Costs: This category includes travel (outlined in 1.6.13), reproduction, and shipping expenses associated with training activities and visits to contractor facilities.

1.6.15 Data Rights: The Government has unlimited rights to all documents/material produced under this contract. All documents and materials, to include the source codes of any software, produced under this contract shall be Government owned and are the property of the Government with all rights and privileges of ownership/copyright belonging exclusively to the Government. These documents and materials may not be used or sold by the contractor without written permission from the Contracting Officer. All materials supplied to the Government shall be the sole property of the Government and may not be used for any other purpose. This right does not abrogate any other Government rights.

1.6.16 Organizational Conflict of Interest: Contractor and subcontractor personnel performing work under this contract may receive, have access to or participate in the development of proprietary or source selection information (e.g., cost or pricing information, budget information or analyses, specifications or work statements, etc.) or perform evaluation services which may create a current or subsequent Organizational Conflict of Interests (OCI) as defined in FAR Subpart 9.5. The Contractor shall notify the Contracting Officer immediately whenever it becomes aware that such access or participation may result in any actual or potential OCI and shall promptly submit a plan to the Contracting Officer to avoid or mitigate any such OCI. The Contractor's mitigation plan will be determined to be acceptable solely at the discretion of the Contracting Officer and in the event the Contracting Officer unilaterally determines that any such OCI cannot be satisfactorily avoided or mitigated, the Contracting Officer may effect other remedies as he or she deems necessary, including prohibiting the Contractor from participation in subsequent contracted requirements which may be affected by the OCI.

1.6.17 Phase In/Phase Out Period: Does not apply.

PART 2
DEFINITIONS & ACRONYMS

2. DEFINITIONS AND ACRONYMS:

2.1. DEFINITIONS:

2.1.1. **CONTRACTOR.** A supplier or vendor awarded a contract to provide specific supplies or service to the government. The term used in this contract refers to the prime.

2.1.2. **CONTRACTING OFFICER (KO).** A person with authority to enter into, administer, and or terminate contracts, and make related determinations and findings on behalf of the government. Note: The only individual who can legally bind the government.

2.1.3. **CONTRACTING OFFICER'S REPRESENTATIVE (COR).** An employee of the U.S. Government appointed by the contracting officer to administer the contract. Such appointment shall be in writing and shall state the scope of authority and limitations. This individual has authority to provide technical direction to the Contractor as long as that direction is within the scope of the contract, does not constitute a change, and has no funding implications. This individual does NOT have authority to change the terms and conditions of the contract.

2.1.4. **DEFECTIVE SERVICE.** A service output that does not meet the standard of performance associated with the Performance Work Statement.

2.1.5. **DELIVERABLE.** Anything that can be physically delivered, but may include non-manufactured things such as meeting minutes or reports.

2.1.6. **KEY PERSONNEL.** Contractor personnel that are evaluated in a source selection process and that may be required to be used in the performance of a contract by the Key Personnel listed in the PWS. When key personnel are used as an evaluation factor in best value procurement, an offer can be rejected if it does not have a firm commitment from the persons that are listed in the proposal.

2.1.7. **PHYSICAL SECURITY.** Actions that prevent the loss or damage of Government property.

2.1.8. **QUALITY ASSURANCE.** The government procedures to verify that services being performed by the Contractor are performed according to acceptable standards.

2.1.9. **QUALITY ASSURANCE Surveillance Plan (QASP).** An organized written document specifying the surveillance methodology to be used for surveillance of contractor performance.

2.1.10. **QUALITY CONTROL.** All necessary measures taken by the Contractor to assure that the quality of an end product or service shall meet contract requirements.

2.1.11. **SUBCONTRACTOR.** One that enters into a contract with a prime contractor. The Government does not have privity of contract with the subcontractor.

2.1.12. **WORK DAY.** The number of hours per day the Contractor provides services in accordance with the contract.

2.1.12. **WORK WEEK.** Monday through Friday, unless specified otherwise.

2.2. ACRONYMS:

ACOR	Alternate Contracting Officer's Representative
AFARS	Army Federal Acquisition Regulation Supplement

AR	Army Regulation
CCE	Contracting Center of Excellence
CDFW	California Department of Fish and Wildlife
CFR	Code of Federal Regulations
CONUS	Continental United States (excludes Alaska and Hawaii)
COR	Contracting Officer Representative
COTR	Contracting Officer's Technical Representative
COTS	Commercial-Off-the-Shelf
CWT	Coded Wire Tag
DA	Department of the Army
DD250	Department of Defense Form 250 (Receiving Report)
DD254	Department of Defense Contract Security Requirement List
DFARS	Defense Federal Acquisition Regulation Supplement
DMDC	Defense Manpower Data Center
DOD	Department of Defense
FAR	Federal Acquisition Regulation
HIPAA	Health Insurance Portability and Accountability Act of 1996
KO	Contracting Officer
NMFS	National Marine Fisheries Service
OCI	Organizational Conflict of Interest
OCONUS	Outside Continental United States (includes Alaska and Hawaii)
ODC	Other Direct Costs
PIPO	Phase In/Phase Out
PIT	Passive Integrated Transponder
POC	Point of Contact
PRS	Performance Requirements Summary
PWS	Performance Work Statement
QA	Quality Assurance
QAP	Quality Assurance Program
QASP	Quality Assurance Surveillance Plan
QC	Quality Control
QCP	Quality Control Program
RRCSCBP	Russian River Coho Salmon Captive Broodstock Program
TE	Technical Exhibit
USACE	U.S. Army Corps of Engineers, San Francisco District

PART 3
GOVERNMENT FURNISHED PROPERTY, EQUIPMENT, AND SERVICES

3. GOVERNMENT FURNISHED ITEMS AND SERVICES:

The government will furnish no items or services.

PART 4
CONTRACTOR FURNISHED ITEMS AND SERVICES

4. CONTRACTOR FURNISHED ITEMS AND RESPONSIBILITIES:

4.1 General: The Contractor shall furnish all supplies, equipment, facilities and services required to perform work under this contract that are not listed under Section 3 of this PWS.

4.2. Materials: The Contractor shall furnish materials, supplies, and equipment necessary to meet the requirements under this PWS.

4.3. Equipment: The Contractor shall furnish vehicles; downstream migrant traps; PIT tag transceivers and antenna arrays; field equipment such as buckets, nets, waders, and drysuits; office equipment such as furniture, communication and computing devices, or other assets equipment necessary to meet the requirements under this PWS.

PART 5 SPECIFIC TASKS

5. SPECIFIC TASKS:

5.1. Basic Services: The contractor shall provide services for developing and conducting detailed research into coho salmon juvenile survival and adults returning to spawn in the Russian River watershed to help determine the success of the RRCSCBP and provide data useful to adaptively manage the program. The contractor shall provide all necessary personnel, equipment, supplies, direction, and supervision during the course of working on this project. The project must cover the 1,485 square mile Russian River basin, targeting priority watersheds. Work must occur in cooperation with more than 500 private landowners which control 90% of the basin, as well as the Federal, State and local agencies that are involved in the recovery effort.

5.2. Post-Award Conference: A post-award conference is tentatively planned for approximately two weeks after contract award. The meeting shall involve a discussion of the terms of the contract, goals, objectives, and ensure that mutual expectations are clearly understood.

5.3 Stakeholder Meeting: Approximately two weeks after the post-award conference, the contractor shall schedule and arrange a stakeholder meeting (including any necessary equipment such as audio-visual).

5.3.1 The meeting shall include USACE, NMFS, CDFW, and other interested participants and collaborators of the RRCSCBP technical advisory committee.

5.3.2 The contractor shall provide a presentation and explanation of the proposed study design/research plan including monitoring locations.

5.3.3 The contractor shall coordinate with possible related add-on studies by stakeholders and incorporate relevant protocols to avoid impacts or advance recovery to listed species as identified in required permits for the program.

5.3.4 The contractor shall consider and incorporate any applicable suggestions, as a result of this meeting, into the study that would improve the monitoring effort from previous years.

5.3.5 The contractor shall address any other pertinent issues related to the study that may arise.

5.3.6 The contractor shall develop and route meeting minutes to the pertinent stakeholders within seven (7) calendar days of the meeting. The appropriate stakeholders shall have seven (7) calendar days to provide any notes or feedback to the meeting minutes. Upon collection of all comments, the contractor shall finalize the meeting minutes within seven (7) calendar days and provide to the stakeholders.

5.4 Detailed Research Plan: This shall be a formal document, updated annually, describing proposed schedules, contingency plans, adaptive management; and how data analyses and conclusions would specifically address the survival and escapement of program fish. Some deviation from these guidelines may be acceptable if sufficiently justified (e.g., watershed conditions) by the Contractor or development of the Detailed Research Plan and agreed to by the stakeholders and in writing by USACE. The detailed research plan should not exceed 15 pages (exclusive of any tables, figures, or references) single spaced.

5.4.1 The draft research plan shall be submitted, via email, within one week after the stakeholder meeting to the COR and USACE Technical POC (Beth Campbell, elizabeth.a.campbell@usace.army.mil), with courtesy copies sent to NMFS and CDFW.

5.4.2 After incorporating the feedback and recommendations received by the COR, a final research plan shall be submitted electronically within seven (7) calendar days (See 4.9.4 for additional details). Any

recommendations not incorporated shall be explained in a separate response document to accompany the final research plan.

5.4.3 The final document shall be suitable for public distribution by USACE.

5.5 Summer Abundance and Spatial Distribution Study:

5.5.1 The contractor is responsible for assessing relative abundance and spatial distribution of juvenile coho in up to four index release streams. Index streams will be identified which provide representative anadromous species composition of the Russian River and fish hatchery facilities (i.e., coho salmon and steelhead) in coordination with the RRCSCBP. Snorkeling and electrofishing surveys will be conducted from June through August in which juvenile salmonids are counted and/or captured and identified to species and life stage. The number of index release streams, and number of months, monitored in any given year will depend on watershed conditions. The total effort in any given year can be assumed to not exceed 12-monitoring-months where, $(\# \text{ of index streams}) \times (\# \text{ of months monitored}) = \# \text{ of monitoring-months}$. If requested by the RRCSCBP and when possible, juvenile fish will be collected and transported to hatchery facilities for incorporation into Broodstock. Tissue samples for DNA analysis will also be collected. GPS points will be collected at survey pools so that juvenile distribution can be mapped.

5.5.2 The contractor shall then prepare and submit a summer abundance and spatial distribution draft report including methods, results, maps, discussion, and recommendations. The report is due to the COR and USACE Technical POC, via email, no later than March 1, unless agreed otherwise.

5.5.3 After incorporating the feedback and recommendations received by the COR, a final summer abundance and spatial distribution report shall be submitted electronically within thirty (30) calendar days (See Paragraph 4.9.4 for additional details). Any recommendations not incorporated shall be explained in a separate response document to accompany the summer abundance and spatial distribution report.

5.6 Smolt Abundance and Freshwater Survival Study:

5.6.1 The contractor shall estimate smolt abundance and juvenile freshwater survival (release to smolt) from March through June in up to four index release streams using a combination of smolt trapping and operation of PIT tag detection systems. In addition, the contractor shall estimate smolt abundance in upper Russian River near Hopland, CA for the same period using a combination of trapping or approved visual methods/technologies. The number of index release streams, and number of months, monitored in any given year will depend on watershed conditions. The total effort in any given year can be assumed to not exceed 16-monitoring-months, where, $(\# \text{ of index streams}) \times (\# \text{ of months monitored}) = \# \text{ of monitoring-months}$. All coho captured in traps will be measured and scanned for PIT and CWT tags. Length, weight and identifying marks or tags will be recorded. If requested by the RRCSCBP and when possible, juvenile fish will be collected and transported to hatchery facilities for incorporation into Broodstock. Tissue samples for DNA analysis will also be collected.

5.6.2 The contractor shall prepare and submit a smolt abundance and freshwater survival draft report including methods, results, discussion, and recommendations. The report is due to the COR and USACE Technical POC, via email, no later than November 1, unless agreed otherwise.

5.6.3 After incorporating the feedback and recommendations received by the COR, a final smolt abundance and freshwater survival report shall be submitted electronically within thirty (30) calendar days (See Paragraph 4.9.4 for additional details). Any recommendations not incorporated shall be explained in a separate response document to accompany the summer survival report.

5.7 Escapement Study:

5.7.1 The contractor shall estimate the number of adults returning to four index release streams by conducting spawner surveys and operating PIT tag detection systems from December through April. During spawning surveys, redds, live fish, and carcasses will be counted. Carcasses will be measured,

scanned for tags and when possible, tissue samples for DNA analysis will be collected. The contractor shall provide notification to the COR no less 72-hrs prior to planned field activities. GPS points will be collected at redd locations in order to map spatial distribution of spawning adults.

5.7.2 The contractor shall then prepare and submit an escapement draft report including methods, results, maps, discussion, and recommendations. The report is due to the COR and USACE Technical POC, via email, no later than July 1, unless agreed otherwise (See Paragraph 4.9 for additional details).

5.7.3 After incorporating the feedback and recommendations received by the COR, a final escapement survival report shall be submitted electronically within thirty (30) calendar days. Any recommendations not incorporated shall be explained in a separate response document to accompany the summer survival report.

5.8 Permits:

5.8.1 The contractor is responsible for determining and obtaining all required permits for the required work. Additionally, the contractor is required to obtain all necessary permission from landowners for accessing private property for stream access along with completing necessary notifications before accessing the site.

5.9 Additional Document Details:

5.9.1 Draft Documents shall be submitted in a Microsoft Word 365 compatible format as a single document. The text shall be single spaced with a page size shall be 8.5x 11 inches. Any submittals larger than 20 MB shall be transmitted over the contractor's FTP site.

5.9.2 All documents shall be written in standard proper English generally conforming to a widely accepted style manual consistent with the product, for example, the Government Printing Office (GPO) or Council of Biological Editors (CBE) style manuals. The technical level of writing should be such that the material is fully understandable by a technical person without specific training in the field at hand but without compromising its value to the target audience. The target audience includes technical, managerial, executive, and senior scientist personnel in various regulatory and related government agencies as well as stakeholders in the broader community. The work may be used for regulatory, permitting, policy and related issues as well as possible follow-up research. Specific jargon to the field should either be clearly explained in the text or defined in a glossary.

5.9.3 Submittals either not addressing contractual obligations or with extensive errors may be returned without complete reviews for revision at no additional cost to the government. Thus, the contractor is encouraged to use a professional editor or proofreader for all submittals.

5.9.4 In order to ensure quality of the final versions of reports for PWS 5.5, 5.6, and 5.7 for public release, we highly encourage the contractor to seek and incorporate comments from the members of the RRCSPB and government prior to publication. Use of data derived from this contract for other purposes is acceptable providing proper acknowledgment of support from the government is provided.

PART 6
APPLICABLE PUBLICATIONS

6. APPLICABLE PUBLICATIONS (CURRENT EDITIONS)

6.1. The Contractor must abide by all applicable regulations, publications, manuals, and local policies and procedures.

PART 7
ATTACHMENT/TECHNICAL EXHIBIT LISTING

7. Attachment/Technical Exhibit List:

- 7.1. Attachment 1/Technical Exhibit 1 – Performance Requirements Summary
- 7.2. Attachment 2/Technical Exhibit 2 – Deliverables Schedule

TECHNICAL EXHIBIT 1

Performance Requirements Summary

The contractor service requirements are summarized into performance objectives that relate directly to mission essential items. The performance threshold briefly describes the minimum acceptable levels of service required for each requirement. These thresholds are critical to mission success.

Performance Objective (The Service required—usually a shall statement)	Standard	Performance Threshold (This is the maximum error rate. It could possibly be “Zero deviation from standard”)	Method of Surveillance
PRS # 1. The contractor shall provide a Quality Control Plan per section 1.6.1.	The contractor provided a clear, well-written Quality Control Plan per section 1.6.1 on time. If changes occur to the QPC after award, the contractor shall submit the updates to the KO and COR for review and approval.	No Deficiencies Permitted	100 Percent Inspection
PRS # 2 The contractor shall provide a Stakeholder Meeting per section 5.3.	The contractor provided a Stakeholder Meeting held approximately two weeks after the post-award conference and addressed the requirements of section 5.3.	No Deficiencies Permitted	100 Percent Inspection
PRS # 3 The Contractor shall provide a Detailed Research Plan per section 5.4.	The contractor provided a Detailed Research Plan approximately one week after the Stakeholder Meeting and addressed the requirements of section 5.4.	No Deficiencies Permitted	100 Percent Inspection
PRS # 4 The contractor shall provide Seasonal Study Reports per sections 5.5 through 5.7 and 5.9.	The contractor provided Seasonal Study Reports on time and in accordance with the requirements of sections 5.5 through 5.7 and 5.9.	One valid complaint per month.	100 Percent Inspection

TECHNICAL EXHIBIT 2

DELIVERABLES SCHEDULE

<u>Deliverable</u>	<u>Frequency</u>	<u># of Copies</u>	<u>Medium/Format</u>	<u>Submit To</u>
Summer Abundance and Spatial Distribution Report	Annually	2 copies--1 each to COR and USACE Technical POC. Draft by March 1; Final 30 days after receiving review edits and comments	Draft: MS Word document via email Final: MS Word and pdf documents via email	Elizabeth A. Campbell U.S. Army Corps of Engineers 450 Golden Gate Avenue, 4 th Floor San Francisco, CA 94102 elizabeth.a.campbell@usace.army.mil
Smolt Abundance and Freshwater Survival Study	Annually	2 copies--1 each to COR and USACE Technical POC. Draft by November 1; Final 30 days after receiving review edits and comments	Draft: MS Word document via email Final: MS Word and pdf documents via email	Elizabeth A. Campbell U.S. Army Corps of Engineers 450 Golden Gate Avenue, 4th Floor San Francisco, CA 94102 elizabeth.a.campbell@usace.army.mil
Escapement Study	Annually	2 copies-1 each to COR and USACE Technical POC. Draft by July 1; Final 30 days after receiving review edits and comments	Draft: MS Word document via email Final: MS Word and pdf documents via email	Elizabeth A. Campbell U.S. Army Corps of Engineers 450 Golden Gate Avenue, 4th Floor San Francisco, CA 94102 elizabeth.a.campbell@usace.army.mil

Quality Assurance Surveillance Plan (QASP)
Project: Monitoring and Evaluation of Russian River Coho Salmon
Contract # TBD

Project Description

The U.S. Army Corps of Engineers (USACE) requires continued monitoring and evaluation of the effectiveness and performance of the Russian River Coho Salmon Captive Broodstock Program (RRCSCBP). The purpose of this project is to monitor juvenile and adult coho salmon in multiple release streams to estimate juvenile survival, develop expanded counts of hatchery-origin adults, evaluate natural spawning success, and assess trends in the abundance of naturally produced Coho Salmon. This information will provide the necessary data for adaptive management decisions.

General Scope of Services

The Contractor shall conduct in-stream fish monitoring activities in the Russian River watershed sufficient to evaluate the effectiveness of the RRCSCBP at maintaining or increasing the naturally-spawned coho salmon population. Services include:

- Obtaining necessary permits (e.g., ESA section 10(a)1(A), Scientific Collector's permit) and maintaining ~100 landowner access agreements.
- Estimating freshwater and marine survival of released juvenile hatchery coho salmon using PIT tags and paired antenna arrays on up to four index streams.
- Estimating the number of returning PIT-tagged coho adults and total redds produced via winter spawner and redd surveys.
- Documenting increases in coho natural production through the operation of downstream migrant traps.
- Documenting coho and other listed species presence in the upper river using migrant traps near Hopland, CA.
- Preparing and submitting comprehensive seasonal study reports (Summer Abundance and Spatial Distribution, Smolt Abundance and Freshwater Survival, and Escapement).

For the full scope of service description, see document on file in the paperless contract file.

Performance Standard(s)

- All applicable regulations, publications, manuals, and local policies and procedures governing fish monitoring and endangered species handling.
- Detailed Research Plan (updated annually) approved by the RRCSCBP stakeholders and USACE.
- Contract Performance Requirements Summary (PRS) defined in the Performance Work Statement (PWS).

Acceptable Quality Level

- **Satisfactory:** Performance and submittals meet the standard with few exceptions, resulting in minimal delays to the project.
- **Marginal:** Performance and submittals result in moderate delay or impact to the project.
- **Unsatisfactory:** Performance and submittals result in unacceptable (i.e., the government may incur additional costs) delay or impact to the project.

Quality Assurance Surveillance Plan (QASP)
Project: Monitoring and Evaluation of Russian River Coho Salmon
Contract # TBD

Methods of Review and Frequency

1. Contractor Quality Control (QC): The Contractor shall develop and maintain an effective Quality Control Plan (QCP) to ensure services are performed in accordance with the PWS. Internal QC procedures must identify, prevent, and ensure non-recurrence of defective services. Three copies of the written QCP must be delivered with the proposal and updated within 5 working days of any changes.

2. Government Quality Assurance (QA): The Government will evaluate the contractor's performance to verify that services meet acceptable standards. Surveillance will focus primarily on 100 Percent Inspection of all mission-essential deliverables and performance objectives:

- **Quality Control Plan (PRS #1):** 100% Inspection. Must be clear, well-written, and submitted on time. *Threshold: No Deficiencies Permitted.*
- **Stakeholder Meeting (PRS #2):** 100% Inspection. Must be held approximately two weeks after the post-award conference and adequately address stakeholder coordination, research plans, and meeting minutes. *Threshold: No Deficiencies Permitted.*
- **Detailed Research Plan (PRS #3):** 100% Inspection. Must be provided approximately one week after the Stakeholder Meeting and incorporate stakeholder feedback. *Threshold: No Deficiencies Permitted.*
- **Seasonal Study Reports (PRS #4):** 100% Inspection. Draft and Final reports for Summer Abundance, Smolt Abundance, and Escapement studies must be provided on time, incorporating technical review edits. *Threshold: Maximum of one valid complaint per month.*

Remedy

Incentive:

- Early schedule completion, *Above Satisfactory* rating on work performed,
- Meet schedule requirements, *Satisfactory* rating on work performed,
- Late schedule completion, *Unsatisfactory* rating on work performed.

Remedy:

Inspection of Services, FAR 52.246-4 applies: The contractor shall develop a plan for recovery. Continuous review until performance is satisfactory or better. Elevate to higher level of contract management if actions fail to result in improvement. If the acceptable scheduling level falls below Satisfactory, additional task orders may not be issued.