

**REQUEST FOR SERVICE CONTRACT
MAINTENANCE OF MONITORING EQUIPMENT
FOR
COASTAL PROTECTION AND RESTORATION AUTHORITY (CPRA)**

Sabine Refuge Water Control Structures at Headquarters Canal, West Cove Canal, and Hog Island Gully
(CS-0023)

INTRODUCTION

Sabine Refuge Water Control Structures at Headquarters Canal, West Cove Canal, and Hog Island Gully (CS-0023) project area is located within the Sabine National Wildlife Refuge, approximately 9 mi (14.5 km) south of the town of Hackberry in Cameron Parish, Louisiana. Established on December 6, 1937, the Sabine Refuge is bound on the east by Calcasieu Lake, on the west by Sabine Lake, on the north by the North Line Canal, and on the south by the South Line Canal, pasture land and coastal ridges. The project is authorized by the Coastal Wetland Planning, Protection and Restoration Act (CWPPRA). The United States Department of Interior/US. Fish and Wildlife Service (USFWS) is the Federal Sponsor with the Coastal Protection and Restoration Authority (CPRA) as the local sponsor. CPRA and USFWS will review, comment and provide input into all phases of the process covered by this document, for the CS-0023 Project.

The objective of this scope is to carry out the maintenance of three monitoring stations. Monitoring equipment is already on-site and is the property of CPRA. Should equipment become inoperable, damaged, and or need repair/replacement, a separate purchase order request and approval will be required from CPRA.

There will be no pre-bid meeting and or site visit. Prospective bidders should familiarize themselves with the project site and monitoring station locations prior to submitting a bid.

FEATURES REQUIRING MAINTENANCE

Maintenance is required on three monitoring sites. The continuous monitoring stations with telemetry, includes the following equipment at each site:

1. In-Situ Aqua Troll 200 Sande that measures conductivity, salinity, depth, and temperature
2. VuLink telemetry which transmits the sonde data to the internet
3. Three D Cell batteries, requiring replacement every 3 months

A station location map and site coordinates are located in Attachment C – Project Features Map

MAINTENANCE PROCEDURES

All sites must be serviced once per month using the procedure listed below. A "continuous recorder calibration sheet" must be completed for each station and returned to the CPRA Lafayette Field office with the downloaded data. Any repairs to the station's electronics or mounting hardware must also be performed during the service visit. Any parts/material needed to repair equipment or mounting hardware will be added to the cost of the service visit. Prior approval from CPRA is required before any repairs are done. Submit detailed cost information to justify payment.

CPRA expects high-quality data to be collected and delivered with as few gaps as possible. Address problems with monitoring equipment promptly. Be prepared to service or replace equipment on each field trip and address larger problems on the next scheduled trip. Data completeness, the ratio of the amount of valid data obtained to the amount expected, is 85%. Consideration will be given for land rights restrictions and factors outside the control of the Contractor.

a) Equipment required to perform maintenance includes:

1. Laptop computer with compatible In-Situ Software or In-Situ Wireless TROLL Com with smartphone app for communication with the In-Situ Aqua 200 sonde.
2. Handheld salinity/conductivity/temperature meter
3. Conductivity calibration standard

b) Routine Maintenance Procedure:

1. Disconnect sonde cable from telemetry box connector.
2. Connect sonde to laptop/wireless TROLL Com with smartphone app and record data onto calibration sheet under the "Dirty Readings" section/ "Constant Recorder" row.
3. Place handheld meter to the water next to the sonde and read its data on the calibration sheet under "Dirty Readings" section/ "Calibration Instrument" row.
4. Remove sonde from mounting pipe and record the depth reading in the "Dirty Readings" section/ "Depth out of Water" box.
5. Physically clean the sonde with a brush and clean water. Also, remove sensor guard and clean each sensor. Then clean inside of sensor guard. Reinstall sensor guard.
6. Using the laptop/wireless TROLL Com with smartphone app, stop the existing data logging file, and then download this file onto the laptop/wireless TROLL Com with smartphone app.
7. While the sonde is still out of the water; record the sonde depth reading under the "Clean Readings" section/ "Depth out of Water" box on the calibration sheet. Note: If this reading is not equal to Zero then calibrate depth to zero.
8. Reinstall sonde into mounting pipe and record data onto the calibration sheet under the "Clean Readings" section/"Constant Recorder" row.
9. Place handheld meter in the water next to the sonde and record its data on the calibration sheet under "Clean Readings" section/ "Calibration Instrument" row.
10. Calculate the SpCond difference in the "Clean Readings" section by subtracting the SpCond of the constant recorder from the SpCond of the calibration instrument and record this as a percentage in the "% Difference" box. Note: if this % difference is greater than 5% then a calibration on the sonde must be performed (see calibration procedure below).
11. Create a new data logging file and start the data logging process.
12. Disconnect sonde from laptop/Wireless TROLL Com and reconnect field cable to VuLink telemetry.
13. Read the staff gauge that is mounted at each station and record under "Staff Gauge" section/ "Staff Gauge (NAVD)."

Calibration Procedure:

a) Conductivity

1. Connect laptop/Wireless TROLL Com to sonde.
2. Remove sonde sensor guard.
3. Install sonde calibration cup.
4. Pour conductivity calibration solution into calibration cup.

5. Wait for conductivity readings to stabilize then select calibrate on laptop/Wireless TROLL Com.
6. Record data under the "Calibration Required" section/ "Constant Recorder" row on the data sheet.

b) Depth

1. Connect laptop/Wireless TROLL Com to sonde.
2. Hold sonde upright out of the water.
3. Wait for the depth readings to stabilize then calibrate depth to zero.
4. Record data under the "Calibration Required" section/ "Constant Recorder" row on the data sheet.

Following field maintenance of instrumentation, all downloaded data and Continuous Reader Calibration Sheets must be provided to the CPRA Lafayette Regional Office.

Above procedure is to be performed once per month.

Data Quality Assessment/Quality Control (QA/QC) Procedure:

In the office after sondes have been serviced and data has been collected, the QA/QC Contractor should follow the steps below to ensure the data has been processed properly:

1. Examine the calibration sheet for completeness and accuracy.
 - a. Are calculations correct?
 - b. Is the staff gauge minus water level measurement within 0.05 feet, if available?
2. Check that the data from the calibration sheet was correctly transferred to the "Data" worksheet of the Excel file.
3. Check that the starting/ending dates and times of the data within the Excel file correspond with the dates and times on the calibration sheets.
4. Ensure that all data were shifted correctly.
 - a. If the percent difference was greater than 5% between the dirty continuous recorder readings and the calibration instrument for the salinity or water level data, then a shift should have been applied to the shifted data columns.
5. Ensure that all depth data were correctly converted to NAVD88, ft.
6. Ensure there is no suspect data in the file.
 - a. Outliers in the salinity or water level graphs should be removed. Always delete data from the adjusted (shifted) columns; never delete raw data.
 - b. If there are any raw water level readings of 0.03 ft or less, remove all corresponding adjusted (shifted) data.
7. Ensure there are no missing dates/times
 - a. Insert a spacer for any missed readings including the date, time and organization name. All other columns should remain blank.
8. Check that the transition between the previous and current month's data is smooth and that no sample point is missing between the two sample periods due to instrument servicing.

DELIVERABLES

The contracting party will submit reports having the information below. These reports are to be submitted on a monthly or quarterly basis as shown below.

1. Values of the salinity and water level readings taken during the reporting period.
2. Each month after sonde servicing, digitally deliver a pdf of the scanned field calibration sheet with any field notes and the Excel spreadsheet provided for data shifts and formatting.

Reporting and invoicing contacts to be provided upon award.

In the event that monitoring equipment needs repair beyond the routine maintenance intended by this scope of work, the contractor will notify CPRA of the need for repairs and or replacement of equipment/materials. With an approved cost proposal for repairs/replacement of equipment/materials, CPRA will generate a purchase order for payment for the work by the contractor. No repair/replacement of equipment or materials should be done prior to obtaining approval and a purchase order from CPRA.

INSURANCE AND BONDS

The Contractor shall purchase and maintain without interruption, for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by the Contractor, its agents, representatives, employees or subcontractors. The duration of the contract shall be from the inception of the contract until the date of final payment.

Minimum Scope and Limits of Insurance

1.1 Worker's Compensation

Worker's Compensation insurance shall be in compliance with the Worker's Compensation law of the State of Louisiana. Employer liability is included with a minimum limit of \$500,000 per accident/per disease/per employee. If Work is to be performed over water and involves maritime exposure, applicable LHWCA, Jones Act or other maritime law coverage shall be included and the Employers Liability limit increased to a minimum of \$1,000,000. A.M. Best's insurance company rating requirement may be waived for Worker's compensation coverage only.

1.2 Commercial General Liability

Commercial General Liability insurance, including Personal and Advertising Injury Liability and Products and Completed Operations Liability, shall have a minimum limit per occurrence based on the project value. The Insurance Services Office (ISO) Commercial General Liability occurrence coverage form CG 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. Claims-made form is unacceptable.

The aggregate loss limit must apply to each project. ISO form CG 25 03 (current form approved for use in Louisiana), or equivalent, shall also be submitted. The State project number, including part number, and project name shall be included on this endorsement.

COMBINED SINGLE LIMIT (CSL) PER OCCURRENCE

The required minimum combined single limit amount of insurance shall be as provided below:

Initial Contract Amount	Minimum Insurance
Up to \$1,000,000	\$1,000,000
From \$1,000,001 to \$2,000,000	\$2,000,000
Over \$2,000,000	\$5,000,000

1.3 Automobile and Watercraft Liability

Automobile Liability Insurance and Watercraft Liability Insurance shall have a minimum combined single limit per occurrence of \$1,000,000. ISO form number CA 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. This insurance shall include third-party bodily injury and property damage liability for owned, hired, and non-owned automobiles and/or watercraft. If any non-licensed motor vehicles and/or watercraft are engaged in operations within the terms of the contract on the site of the work to be performed thereunder, such insurance shall cover the use of any such vehicles.

NOTE: If the Contractor does not own an automobile and/or watercraft and such vehicles are utilized in the execution of the contract, then hired and non-owned coverage is acceptable. If an automobile and/or watercraft is not utilized in the execution of the contract, then automobile and/or watercraft coverage is not required.

1.4 Excess Umbrella

Excess Umbrella Insurance may be used to meet the minimum requirements for General Liability, Automobile Liability, and Watercraft Liability only.

1.5 Pollution Liability (required when asbestos or other hazardous material abatement is included in the contract)

Pollution Liability insurance, including gradual release as well as sudden and accidental, shall have a minimum limit of not less than \$1,000,000 per claim. A claims-made form will be acceptable. A policy period inception date of no later than the first day of anticipated Work under this contract and an expiration date of no earlier than 30 days after anticipated completion of all Work under the contract shall be provided. There shall be an extended reporting period of at least 24 months, with full reinstatement of limits, from the expiration date of the policy. The policy shall not be cancelled for any reason, except nonpayment of premium.

1.6 Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and accepted by the Owner. The Contractor shall be responsible for all deductibles and self-insured retentions.

Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

2.1 Worker's Compensation and Employers Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Owner, its officers, agents, employees, and volunteers for losses arising from Work performed by the Contractor for the Owner.

2.2 General Liability Coverage

The Owner, its officers, agents, employees, and volunteers are to be added as additional insureds as respects liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor, premises owned, occupied or used by the Contractor. ISO Form CG 20 10 (current form approved for use in Louisiana), or equivalent, is to be used.

The Contractor's insurance shall be primary as respects the Owner, its officers, agents, employees, and volunteers. The coverage shall contain no special limitations on the scope of protection afforded to the Owner, its officers, officials, employees, or volunteers. Any insurance or self-insurance maintained by the Owner shall be excess and non-contributory of the Contractor's insurance.

The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the policy limits.

2.3 All Coverages

Coverage shall not be canceled, suspended, or voided by either party (the Contractor or the insurer) or reduced in coverage or in limits except after 30 days written notice has been given to the Owner. Ten-day written notice of cancellation is acceptable for non-payment of premium. Notifications shall comply with the standard cancellation provisions in the Contractor's policy.

Neither the acceptance of the completed Work nor the payment thereof shall release the Contractor from the obligations of the insurance requirements or indemnification agreement.

The insurance companies issuing the policies shall have no recourse against the Owner for payment of premiums or for assessments under any form of the policies.

Any failure of the Contractor to comply with reporting provisions of the policy shall not affect coverage provided to the Owner, its officers, agents, employees, and volunteers.

2.4 Acceptability of Insurers

All required insurance shall be provided by a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located. Insurance shall be placed with insurers with an A.M. Best's rating of A-:VI or higher. This rating requirement may be waived for Worker's compensation coverage only.

If at any time an insurer issuing any such policy does not meet the minimum A.M. Best rating, the Contractor shall obtain a policy with an insurer that meets the A.M. Best rating and shall submit another certificate of insurance as required in the contract.

2.5 Verification of Coverage

Contractor shall furnish the Owner with Certificates of Insurance reflecting proof of required coverage. The Certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The Certificates are to be received and approved by the Owner before Work commences and upon any contract renewal thereafter.

The Certificate Holder must be listed as follows:

State of Louisiana
Coastal Protection and Restoration Authority
150 Terrace Avenue
Baton Rouge, LA 70802
Attn: Project # _____

In addition to the Certificates, Contractor shall submit the declarations page and the cancellation provision endorsement for each insurance policy. The Owner reserves the right to request complete certified copies of all required insurance policies at any time.

Upon failure of the Contractor to furnish, deliver, and maintain such insurance as above provided, this contract, at the election of the Owner, may be suspended, discontinued, or terminated. Failure of the Contractor to purchase and/or maintain any required insurance shall not relieve the Contractor from any liability or indemnification under the contract.

If the Contractor does not meet the insurance requirements at policy renewal, at the option of the Owner, payment to the Contractor may be withheld until the requirements have been met, OR the Owner may pay the renewal premium and withhold such payment from any monies due the Contractor, OR the contract may be suspended or terminated for cause.

2.6 Subcontractors

Contractor shall include all subcontractors as insureds under its policies OR shall be responsible for verifying and maintaining the certificates provided by each subcontractor. Subcontractors shall be subject to all of the requirements stated herein. The Owner reserves the right to request copies of subcontractor's certificates at any time.

If Contractor does not verify subcontractors' insurance as described above, Owner has the right to withhold payments to the Contractor until the requirements have been met.

2.7 Worker's Compensation Indemnity

In the event Contractor is not required to provide or elects not to provide Worker's compensation coverage, the parties hereby agree the Contractor, its Owners, agents and employees will have no cause of action against, and will not assert a claim against, the State of Louisiana, its departments, agencies, agents and employees as an employer, whether pursuant to the Louisiana Worker's Compensation Act or otherwise, under any circumstance. The parties also hereby agree that the State of Louisiana, its departments, agencies, agents and employees shall in no circumstance be, or considered as, the employer or statutory employer of Contractor, its Owners, agents and employees. The parties further agree that Contractor is a wholly independent Contractor and is exclusively responsible for its employees, Owners, and agents. Contractor hereby agrees to protect, defend, indemnify and hold the State of Louisiana, its departments, agencies, agents and employees harmless from any such assertion or claim that may arise from the performance of this contract.

2.8 Indemnification/Hold Harmless Agreement

Contractor agrees to protect, defend, indemnify, save, and hold harmless, the State of Louisiana, all State Departments, Agencies, Boards, and Commissions, its officers, agents, servants, employees and volunteers, from and against any and all claims, damages, expenses and liability arising out of injury or death to any person or the damage, loss or destruction of any property which may occur, or in any way grow out of, any act or omission of Contractor, its agents, servants and employees, or any and all costs, expenses and/or attorney fees incurred by Contractor as a result of any claims, demands, suits or causes of action, except those claims, demands, suits or causes of action arising out of the negligence of the State of Louisiana, all State Departments, Agencies, Boards, Commissions, its officers, agents, servants, employees and volunteers.

Contractor agrees to investigate, handle, respond to, provide defense for, and defend any such claims, demands, suits, or causes of action at its sole expense and agrees to bear all other costs and expenses related thereto, even if the claims, demands, suits, or causes of action are groundless, false or fraudulent.