

**Request for Quotation:** FDA-RFQ-2023-1267575

**Response Date:** Date: September 6, 2023, 4:00 p.m. Eastern Time.

This is a solicitation for commercial services prepared in accordance with the format in FAR 12.6 as supplemented with FAR 8 and additional information included in this notice. The incorporated provisions and clauses are those in effect through Federal Acquisition Circular (FAC) 2023- 03 dated May 26<sup>th</sup>, 2023.

THIS ANNOUNCEMENT IS A COMBINED SYNOPSIS/SOLICITATION.

The Government intends to issue a Firm Fixed Price Purchase Order.

Set Aside: Small Business

NAICS Code: 541370. The Associated Size Standard is \$16.5 million.

Line-Item Structure:

0001: Contract for Water Project Site Selection for 10 states – GIS Mapping Services

**Requirement:**

**1. Background:**

**BRIEF DESCRIPTION OF REQUIREMENT/STATEMENT OF NEED:**

This acquisition is in support of a chief scientist grant entitled: **“Applied One Health Antimicrobial Resistance Monitoring: Modernizing methods for high throughput detection and reporting of critically important antimicrobial resistance (AMR) from water used for food and agriculture.”** The focus of the proposed research will be to survey antimicrobial resistance in surface water. From a One Health perspective, surface waters function as key environmental integrators between humans, animals, agriculture, and the environment and represent the perfect matrix to provide a broadscale understanding of baseline AMR prevalence across the environment. This objective is part of the mission of the National Antimicrobial Resistance Monitoring System (NARMS) and the Center for Veterinary Medicine (CVM). The overall project will organize collection methods, laboratory processing methods, bioinformatic analyses, and consensus reporting that will streamline data across multiple academic, and governmental efforts. Expected results include an FDA validated protocol for detection of AMR from water with the understanding that the methodology can be expanded to other FDA relevant matrices for which the description of AMR is critical to public health.

**2. Objectives:**

The objective of this acquisition is for a contractor to assist with identification of surface water collection sites based on statistically significant (z values) for land categorized as urban, agricultural, and natural –

using data from the National Land Cover Database. The contractor will provide detailed AR GIS maps and statistical values for each state.

### **3. Scope/Requirements/Deliverables:**

The Contractor shall provide all resources necessary to accomplish the tasks and deliverables described in this Statement of Work (SOW)

#### **Deliverables**

- Excel charts with z scores of classification values for Florida, New York, and Arkansas and seven additional states TBD. The seven states will be identified at the time of award.
- Maps with aggregates of highest developed land, highest agricultural land, and highest natural land - scored with the previously described methodology – for Florida, New York, Arkansas, and seven additional states TBD.
- Maps will also have layers that include public access sites, boat launches, bridges, parks, and all other relevant features to assist with selection of safe, publicly accessible, water sampling sites in the human impact classification zones.

### **4. Tasks and Minimum Requirements:**

#### **NLCD Reclassification**

The vendor shall assist with the identification of water sites by using the data from National Land Cover Database (NLCD 2019; 30 m resolution) as areas with high intensity agriculture, high intensity impervious surface (urban), and high intensity green space for each state.

#### **Site Selection by NCDL Values**

Site selection and all landcover analyses will be conducted using ArcGIS Pro 2.9.3 (Environmental Systems Research Institute, Redlands, California). The NLCD utilizes 21 classifications of land cover. The NLCD for each state will be reclassified into three datasets to show zones defined as

- high intensity agricultural zones (NLCD value = 82 [Cultivated Crops]);
- high intensity developed zones (NLCD value = 24 [Developed, High Intensity]) or,
- high intensity green space (NLCD value = 41 [Deciduous Forest], 42 [Evergreen Forest], 43 [Mixed Forest], 51 [Dwarf Scrub], 52 [Shrub/Scrub], 71 [Grassland/Herbaceous], 72 [Sedge/Herbaceous], 73 [Lichens], 74 [Moss], 90 [Woody Wetlands], and 95 [Emergent Herbaceous Wetlands]).

#### **State Tessellations**

USA states will be tessellated into 10 square kilometer hexagons to aggregate the data from all three datasets described above. Aggregating the reclassified grid data creates spatially equivalent analytical units and is a requirement for hot spot analysis.

### **Hot and Cold Spot Analysis Statistics**

Hot Spot Analysis, or Getis-Ord  $G_i^*$  Test will be conducted to assess the value of each hexagon in the context of its neighbors to categorize patterns per hexagon into hot spots, cold spots, or 'no pattern' (ArcGIS 2021) using K nearest neighbor, and high z-score values for each hot spot to indicate the degree of clustering of highest values for each land class.

### **Public Access Site Identification/Cross-referencing**

Once a series of hot spots is determined for high intensity agriculture areas, high intensity developed areas, and high intensity green spaces, the vendor will use the Z scores to extract a point layer of public boat launches or public docks to find accessible locations to sample freshwater nearest each type of land class hotspot. Top 20 percent of z scores for public access sites will be extracted and analyzed manually to result in 5-10 points for each of the three land class conditions for each state.

### **Watershed Delineation**

The vendor will select points in

- 1) separate watersheds using the National Hydrography Dataset (HUC8 watershed boundary polygons)
- 2) as close to the pour point of each watershed as possible
- 3) homogenously distributed across the hot spots for each state as possible
- 4) with public access spots for collection

## **5. The contractor shall provide the following Documentation Requirements:**

When the services of the Contractor are terminated, expire contractually, or are otherwise not extended, or upon request by the Contracting Officer at any time, the Contractor shall issue, within five (5) working days, a "Certificate of Maintainability" for any or all equipment acquired and/or maintained under this contract.

The certificate shall state that preventive maintenance in accordance with the specifications of the Original Equipment Manufacturer (OEM) has been performed and that the equipment is performing in accordance with the OEM's specifications such that the OEM (or the OEM's successor in interest) would commit that it would assume maintenance of the equipment without billing any one-time charges (including but not limited to repair or inspection charges) if such maintenance were assumed effective the day after the Contractor's performance ceases. The Contractor is responsible for bearing all costs associated with obtaining such certification at no separate charge to the Government.

Should the Contractor fail to issue the required Certificate of Maintainability in accordance with this clause, or should any equipment fail to perform in accordance with the certification, the Contractor shall be liable to the Government for any reasonable costs incurred by the

Government for the purpose of bringing the equipment up to the required OEM maintenance level.

If equipment is acquired under this contract, without maintenance of such equipment being concurrently acquired under the contract, the Contractor shall issue a Certificate of Maintainability for such equipment at the time of delivery for each piece of equipment. The certificate shall state that the equipment is in such condition that the OEM (or the OEM's successor in interest) would commit that it would assume maintenance of the equipment without billing any charges to the Government.

All charges required obtaining the requisite performance of the equipment, up to the later of the time the equipment is accepted by the Government, or the warranty expires, shall be borne by the Contractor. The time the equipment is accepted by the Government is the date that the Government determines that the equipment has passed acceptance testing, not the effective date of acceptance. The fact that the equipment may have been acquired with a warranty does not relieve the Contractor of its obligations under this clause.

- Certification Documentation
- Instrument Manuals

**6. Repair Service and Documentation:**

All deliverables required under this contract shall be packaged, marked, and shipped in accordance with Government specifications. At minimum, all deliverables shall be marked with the contract number and contractor name. The Contractor shall guarantee that all required materials shall be delivered in immediate usable and acceptable condition.

Shipping Destination:

**Delivery complete dataset to:**

FDA/CVM/OAS

Attention: Andrea Ottesen

MOD2, Loading Dock

8401 Muirkirk Rd

Laurel, MD 20708

**7. Deliverable Table/Period of Performance:**

- Excel charts with z scores of classification values for Florida, New York, and Arkansas and seven additional states TBD. The seven states will be identified at the time of award.
- Maps with aggregates of highest developed land, highest agricultural land, and highest natural land - scored with the previously described methodology – for Florida, New York, Arkansas, and seven additional states TBD.

- Maps will also have layers that include public access sites, boat launches, bridges, parks and all other relevant features to assist with selection of safe, publicly accessible, water sampling sites in the human impact classification zones.

**Period of Performance:**

Award is anticipated by 7/14/2023 with data delivery planned within 60-days of award.

**8. Inspection and Acceptance:**

All deliverables required under this award will be shared with FDA (maps of sites with corresponding statistics) will be provided to FDA researchers via e-mail including excel files of the full metadata and links to interactive ARC GIS maps. Vendor shall contact the Technical Point of Contact (TPOC) to schedule data delivery. The data will be inspected by the TPOC for accuracy and condition.

**9. Places of Performance:**

FDA/CVM/OAS  
Attention: Andrea Ottesen  
MOD2, Loading Dock  
8401 Muir Kirk Rd  
Laurel, MD 20708

**10. EVALUATION AND AWARD:**

**Basis for Award:**

The Government intends to evaluate quotes and, if necessary, conduct discussions with all responsible Offerors within the competitive range. The award will be made to the Offeror whose quote conforms to the terms and conditions of the solicitation and award may be made to other than the lowest priced or the highest technically rated offer.

Relative importance and trade-offs. The Government will base the determination of best value on performance, and the other evaluation factors identified elsewhere in this solicitation. The determination of best value also considers the relative importance of the evaluation factors. Technical factors and past performance of the product in use in industry when combined are significantly more important than price. It is pointed out; however, should technical competence between Offerors be considered approximately the same, then price could become primary.

FDA will base its award decision using a best value analysis that results in the most advantageous acquisition for the Government. FDA's acquisition strategy used to obtain best value may result in an award to other than the lowest priced, technically rated Offeror. Best value analysis spans a continuum from the lowest priced, technically acceptable proposal to those proposals in which tradeoffs between price, past performance, and each Offeror's technical solution is evaluated. This tradeoff process depends on the Government's

assessment of quality factors, including but not limited to past performance, compliance with solicitation requirements, technical excellence, prior experience, and price.

The proposed price will be evaluated but not scored. The price evaluation will determine whether the proposed prices are fair and reasonable in relation to the solicitation requirements. Proposed prices shall be entirely compatible with the technical quotations.

Although price is the least important evaluation factor, it will not be ignored. The degree of importance of the proposed prices will increase with the degree of equality of the proposals in relation to the other factors on which selection is to be based

#### Factor 1: Technical Approach:

Instruction: The quote shall include all information necessary for FDA to determine if the proposed product meets the technical requirements including any supporting information such as product brochures.

- The FDA will evaluate the extent to which the Quoter's quotation demonstrates their proposed product will meet the technical requirements. The proposed product will further be evaluated whether humane euthanasia of cattle can be performed consistent with the AVMA's Guidelines for the Humane Slaughter of Animals, how the unit functions (how cattle enter, are humanely restrained, and how cattle exit), and how the unit is operated (ease of use).

#### Factor 2: Relevant Experience:

Instruction: The Quoter shall provide a written narrative describing at least three (3) projects that are most similar to the requirements in the SOW in terms of type and scope. The cited projects must have been completed in the last 5 years. Projects listed may include those entered into by the Federal Government, agencies of state and local Governments, and commercial customers.

- The Government will evaluate the extent to which the Quoter's quotation demonstrated recent experience within the last 5 years on related efforts.

### **11. Instructions to Offeror for Proposal Submission:**

FAR 52.212-1 Instructions to Offerors—Commercial Items (Jun 2020)

PROPOSAL SUBMISSION FORMAT:

\*The solicitation does not commit the Government to pay any cost for the preparation and submission of a quote or proposal. It is also advised that the Contracting Officer (CO) is the only individual who can legally commit and obligate the Government to the expenditure of public funds in connection with the proposed acquisition. \*

**QUOTES DUE: Quote is due, electronically via email to [Ronald.Paraham@fda.hhs.gov](mailto:Ronald.Paraham@fda.hhs.gov) for the RFQ no later than July 7, 2023, 4:00 p.m. Eastern Time. Late submissions may not be evaluated. The subject line shall read: FDA-23-1267575 Contract for Water Project Site Selection for 10 states – GIS Mapping Services.**

The offeror or applicant shall submit all electronic documents for Microsoft Office suite products without the use of "macros". When submitting proposals via email, DO NOT include .exe, .mso, or any other executable file types that could potentially trigger email security protections (i.e., email blocks, quarantine). If the offeror or applicant submits documents that contain macros, macro referenced files, and/or executable files, the Government will not be able to view or open such documents and the submission will be considered non-responsive to the solicitation. No additional time will be given to an offeror or applicant to correct the document submission and the Government will not inform the offeror or applicant that their submission is non-responsive prior to award. It is the offerors or applicant's responsibility to ensure all electronic documents are submitted without the use of macros.

**FDA Electronic Invoicing and Payment Requirements - Invoice Processing Platform (IPP) (Jan 2022)**

a) All Invoice submissions for goods and or services must be made electronically through the U.S. Department of Treasury's Invoice Processing Platform System (IPP).

<http://www.ipp.gov/contractors/index.htm>

(b) Invoice Submission for Payment means any request for contract financing payment or invoice payment by the Contractor. To constitute a proper invoice, the payment request must comply with the requirements identified in FAR 32.905(b), "Content of Invoices" and the applicable Payment clause included in this contract, or the clause 52.212-4 Contract Terms and Conditions – Commercial Items included in commercial items contracts. The IPP website address is: <https://www.ipp.gov>.

(c) -----

(1) The Agency will enroll the Contractors new to IPP. The Contractor must follow the IPP registration email instructions for enrollment to register the Collector Account for submitting invoice requests for payment. The Contractor Government Business Point of Contact (as listed in SAM) will receive Registration email from the Federal Reserve Bank of St. Louis (FRBSTL) within 3 – 5 business days of the contract award for new contracts or date of modification for existing contracts.

(2) Registration emails are sent via email from [ipp.noreply@mail.eroct.wai.gov](mailto:ipp.noreply@mail.eroct.wai.gov).

Contractor assistance with enrollment can be obtained by contacting the IPP Production Helpdesk via email to [IPPCustomerSupport@fiscal.treasury.gov](mailto:IPPCustomerSupport@fiscal.treasury.gov) or phone (866) 973-3131.

(3) The Contractor POC will receive two emails from IPP Customer Support, the first email contains the initial administrative IPP User ID. The second email, sent within 24 hours of receipt of the first email, contains a temporary password. You must log in with the temporary password within 30 days.

(4) If your company is already registered to use IPP, you will not be required to re-register.

(5) If the Contractor is unable to comply with the requirement to use IPP for submitting invoices for payment as authorized by HHSAR 332.7002, a written request must be submitted to the Contracting Officer to explain the circumstances that require the authorization of alternate payment procedures.

(d) Invoices that include time and materials or labor hours Line Items must include supporting documentation to (1) substantiate the number of labor hours invoiced for each labor category, and (2) substantiate material costs incurred (when applicable).

(e) Invoices that include cost-reimbursement Line Items must be submitted in a format showing expenditures for that month, as well as contract cumulative amounts.

(1) At a minimum the following cost information shall be included, in addition to supporting documentation to substantiate costs incurred

rate, the total cost per person and a total amount for this category.

- Indirect Costs (i.e., Fringe Benefits, Overhead, General and Administrative, Other Indirect)- show rate, base and total amount.

- Consultants (if applicable) - include the name, number of days or hours worked, daily or hourly rate, and a total amount per consultant.

- Travel - include for each airplane or train trip taken the name of the traveler, date of travel, destination, the transportation costs including ground transportation shown separately and the per diem costs. Other travel costs shall also be listed.

- Subcontractors (if applicable) - include, for each subcontractor, the same data as required for the prime Contractor.

- Other Direct Costs - include a listing of all other direct charges to the contract, i.e., office supplies, telephone, duplication, postage; and

- Fee – amount as allowable in accordance with the Schedule and FAR 52.216-8 if applicable.

(f) Contractor is required to attach an invoice log addendum to each invoice which shall include, at a minimum, the following information for contract administration and reconciliation purposes:

(1) list of all invoices submitted to date under the subject award, including the following:

- invoice number, amount, & date submitted

- corresponding payment amount & date received

- total amount of all payments received to date under the subject contract or order

- and, for definitized contracts or orders only, total estimated amounts yet to be invoiced for the current, active period of performance.

(g) Payment of invoices will be made based upon acceptance by the Government of the entire task or the tangible product deliverable(s) invoiced. Payments shall be based on the Government certifying that satisfactory services were provided, and the Contractor has certified that labor charges are accurate.

(h) If the services are rejected for failure to conform to the technical requirements of the task order, or any other contractually legitimate reason, the Contractor shall not be paid, or shall be paid an amount negotiated by the CO.

(i) Payment to the Contractor will not be made for temporary work stoppage due to circumstances beyond the control of U.S. Food and Drug Administration such as acts of God, inclement weather, power outages, and results thereof, or temporary closings of facilities at which Contractor personnel are performing. This may, however, be justification for excusable delays.

(j) The Contractor agrees that the submission of an invoice to the Government for payment is a certification that the services for which the Government is being billed, have been delivered in accordance with the hours shown on the invoices, and the services are of the quality required for timely and successful completion of the effort.



(k) Questions regarding invoice payments that cannot be resolved by the IPP Helpdesk should be directed to the FDA Employee Resource and Information Center (ERIC) Helpdesk at 301-827-ERIC (3742) or toll-free 866-807-ERIC (3742); or, by email at ERIC@fda.hhs.gov. Refer to the Call-in menu options and follow the phone prompts to dial the option that corresponds to the service that's needed. All ERIC Service Now Tickets will either be responded to or resolved within 48 hours (2 business days) of being received. When emailing, please be sure to include the contract number, invoice number and date of invoice, as well as your name, phone number, and a detailed description of the issue.

(END OF CLAUSE)

### **Clauses**

The following HHSAR clauses apply to this order:

352.222-70: Contractor Cooperation in Equal Employment Opportunity Investigations (December 2015)

352.239-73: Electronic Information and Technology Accessibility Notice (Dec 2015)

352.239-74: Electronic Information Technology Accessibility (December 2015)

HHSAR Clauses can be viewed in full text at:

<https://www.hhs.gov/grants/contracts/contract-policies-regulations/hhsar/part-352-solicitation-provisions-contract-clauses/index.html#>

All Applicable clauses from the awardee GSA contract