REQUEST FOR PROPOSAL (RFP)

Procurement of Services to develop and Host a Fully Integrated, Scalable, Digital Data Platform

For the:
Growing Value for Producers Through Increased Access to Markets for Climate-Smart Commodities Project

Funded by:
USDA Partnerships for Climate-Smart Commodities, Funding Pool 1
USDA-NRCS-COMM-22-NOFO0001139

RFP publication date:
28 July 2023

Question submission deadline
18 August 2023

Response to questions:
25 August 2023

Proposal submission deadline:
28 August 2023
BACKGROUND

Winrock International ("Winrock") is a global leader in developing carbon crediting standards that have directly supported existing and new markets, ensuring the highest standards for quality and integrity, instilling confidence in the environmental benefits achieved and facilitating transparency in credit transactions via transparent registry platforms. Winrock has also pioneered work with farming and food networks in the U.S. to advance transformations in agricultural production, value-chain coordination, and community-based food economies. Winrock’s *Growing Value for Producers Through Increased Access to Markets for Climate Smart Commodities* pilot project has been selected for funding by USDA through its Partnerships for Climate-Smart Commodities program.

The overall objective of the project is to increase the value of climate smart commodities through the development of a standardized, transparent and cost-effective market system for quantifying and tracking climate mitigation outcomes from U.S. agriculture. The pilot will build capacity with institutions interacting with a range of producers to support adoption of climate smart practices and generate producer-owned Agricultural GHG Certificates that can be monetized by producers through commodity markets for corporate buyers to achieve supply chain climate claims. The pilot project will design, build, and implement a first of its kind, fully integrated agricultural data collection, GHG quantification, verification and certificate registry system (the ACR Agriculture Registry), through which the practices and associated GHG benefits will be quantified and verified and then Certificates issued and tracked.

Winrock International seeks proposals under a public, competitive process to carry out the tasks described in the Scope of Work below. Winrock offers no guarantee of subsequent award as a result of releasing this tender and prospective bidders will not be reimbursed for costs associated with preparation of proposals. Winrock intends to issue a cost reimbursable subcontract for this activity upon completion of evaluations and selection of the most successful respondent, who will bid a not-to-exceed contract amount for the scope of work. The development of an ACR Agriculture Registry described in this RFP is part of a work for hire agreement under which Winrock International intends retain the intellectual property rights to the product.
SCOPE OF WORK

Winrock seeks to contract with a reputable IT services firm to design, build, test, launch, host, maintain and enhance an ACR Ag-branded, secure data and registry platform (the ACR Agriculture Registry) to quantify the GHG benefits of on-farm practices using COMET Planner and verify those practices through submission of digital monitoring data. Monitoring data will be automatically collected in the API-connected Arva and VidaCycle soil monitoring platforms, or submitted via manual upload of data, images, or documents to the ACR Agriculture Registry System via a smart app. In addition to the integrated GHG quantification, reporting and practice verification, the ACR Agriculture Registry shall also include a public platform on which the GHG benefits achieved will be issued to producers as Agriculture GHG Certificates and tracked across transactions with commodity buyers and market participants. Preliminary specifications on basic functionality to guide bids are included as **Exhibit A**.

<table>
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<tr>
<th>Phase</th>
<th>Timeline (After Kickoff)</th>
<th>Requirements</th>
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| Phase 1 | Q1 & Q2 Year 1 | Design the ACR Agriculture Registry  
  a. During the design phase the best available data to demonstrate practice implementation, including resolution and frequency will be identified for each practice implemented.  
  b. In-country travel to Midwest, Southwest, South Central, Great Plains, and/or Great Lakes regions is required for design sessions with ACR and agricultural producer partners to understand producer needs, challenges, and current technology access and preferences as well as typical use cases and legal assurance of data privacy. Up to four (4) design sessions with Winrock and project partners are anticipated in Year 1. A design session is generally defined as 1.5 working days and 2 travel days for 2 team members.  
  c. Enterprise GIS Setup |
| Phase 2 | Q3 & Q4 Year 1 | Build, test and launch the designed ACR Agriculture Registry.  
  a. Development – Beta  
  b. Testing  
  c. Development – Final  
  d. Testing  
  e. Launch |
| Phase 3 | Years 2-4 (overlaps with Phase 4) | Provide support for platform enhancements as needed |
| Phase 4 | Years 2-5 (overlaps with Phase 3) | Provide maintenance and hosting services for the registry platform, including monitoring, regular data back-ups and robust security provisions for data transfer and recovery. |
ELIGIBILITY CRITERIA

Outlined below are criteria that must be met for proposals to be considered. Only proposals that Winrock deems to sufficiently meet all these eligibility criteria will be evaluated.

1. **Timeline and scope**: Bidders must commit to an aggressive timeline of development and launch of the ACR Agriculture Registry. Development will start on or before October 1st with refinements, as needed, to the functionality design specifications. The final ACR Agriculture Registry should be delivered within 1 year of kickoff. The bidder must also agree to four years of hosting of the Registry platform.

2. **Experience - Bidders must demonstrate**:
   A. Successful experience developing, testing and hosting custom IT platform solutions and user interface development, including:
      - Proven expertise in database development inclusive of design, development, testing, user acceptance, and launch of end-to-end software solutions.
      - Successful experience with mobile application design.
      - Back-end application hosting.
      - Proven expertise with the development, testing and management of APIs and planning and implementation of data integration from multiple platforms.
      - Expertise in Python or other languages appropriate for interacting with data.
   B. Knowledge and expertise in ensuring data security, back-up and recovery of database platforms, including:
      - Experience implementing data security and recovery and secure access for a differentiated user management design to include multiple users, roles, and access levels.
   C. Knowledge and experience with interactive desktop and web GIS workflows and architecture, including:
      - Proven experience with GIS data management.
      - Demonstrated understanding of associated cloud storage needs.
      - Developing user-friendly mobile mapping applications.
   D. Proven project management and communication skills, including:
      - Demonstrated ability to assemble and manage a small technology team with the skills, resources, and team continuity needed to execute multiple discrete project phases over a multi-year year period.
      - Demonstrated ability to deliver services on time and within budget.
      - Commitment to successful project continuity, including commitment to retaining and managing team through multiple project phases, identifying and communicating risks, demonstrating flexibility, and providing smooth transition of project work to other developers or staff as needed.
   E. Experience within similar sector and funding mechanism, including:
      - Experience working with USDA.
      - Demonstrated successful partnership with agriculture or other land use management sector stakeholders.
3. **Geography**: Bidders must be based in the United States, with staff dedicated to this project able to travel within the continental US.

4. **Certification**: Bidders must demonstrate the following:
   A. Designation as an Esri Gold Business Partner with a preference for qualified Esri Federal Small Business Specialty or equivalent
   B. Certification with Microsoft Azure

5. **Price**: Bidders must commit to 1) developing, testing and launching the ACR Agriculture Registry for a not-to-exceed ceiling price (the bid price) and separately, 2) hosting the Agriculture Registry for an annual fixed price for 4 years. Any future Agriculture Registry hosting will be addressed in an amendment to the award agreement.

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**REQUIRED INFORMATION FOR PROPOSAL**

Proposals containing all of the following information and submitted following the section outline below will be considered complete. Winrock reserves the right to reject incomplete proposals.

1. Bidder approach to **scope of work** (maximum 5 pages)
   A. Breakdown of tasks, travel, timeline and deliverables.
   B. Explanation of how the solution fits with the goals of the project – including the development timeline – and lends itself to future changes and improvements.

2. Bidder **qualifications and experience** (maximum 5 pages)
   A. Summary of qualifications and experience addressing eligibility requirements listed in 2 above and including specific examples of relevant work conducted. Experience in environmental markets highly desirable.
   B. List of team member(s), role in the project and bio(s).
   C. At least one reference, including company name, contact name and contact information (email, phone, address), and a brief description of the engagement.
   D. Bidder contact: name, title and contact information (email, phone, address).

3. **Price Offer**: Proposal must clearly state a total not-to-exceed price in US dollars for items below broken out by category (labor, travel, other direct costs), which will be paid out on a cost-reimbursable basis. Bidder must have auditable systems to track time spent on the project to support billing invoices.
   A. Registry platform design, development, testing, launch and enhancements, broken out for phases 1-3 in the scope of work, including any general budget assumptions and proposed milestone payments for each deliverable;
   B. Travel costs such as airfare, hotel, and per diem for completing necessary meetings and design sessions with a requirement to follow USG travel rules; and
   C. Annual registry platform hosting from launch at the start of Year 2 through Year 5.
CRITERIA FOR PROPOSAL EVALUATION

Proposals will be evaluated with a maximum score of one hundred (100) points in the five categories below. The bid with the highest total score will be awarded.

1. **Price**: up to twenty-five (25) points based on bid price for registry development, testing and launch and annual registry hosting.

2. **Approach**: up to twenty (20) points based on the proposed approach to the scope of work, including appropriateness of technology platform and demonstration of understanding of key elements of the registry development to ensure meeting the specifications and timeline.

3. **Bidder qualifications related to IT database solutions**: up to twenty (20) points based on overall team qualifications and experience as outlined in Eligibility Criteria #2 A and B.

4. **Bidder qualifications related to GIS workflow and architecture**: up to twenty (20) points based on overall team qualifications and experience as outlined in Eligibility Criterion #2 C.

5. **Bidder qualifications related to organization and related partnership experience**: up to fifteen (15) points based on overall team qualifications and experience as outlined in Eligibility Criteria #2 D and E.

QUESTIONS, PROPOSAL DEADLINE AND SUBMISSION INSTRUCTIONS

Please submit any questions in writing to Winrock by **August 18, 2023** at ACR@winrock.org with subject “USDA Agriculture Registry RFP.” Responses will be provided by **August 25, 2023**.

An electronic copy of your proposal must be received by Winrock on or before close of business **Monday, August 28, 2023**. Send to ACR@winrock.org with subject “USDA Agriculture Registry RFP.”

Winrock expects to make an award and contract for the work within five weeks of the deadline for receiving proposals. Winrock will individually notify all bidders of the outcome of the RFP process.
EXHIBIT A: PRELIMINARY SPECIFICATIONS ON BASIC FUNCTIONALITY FOR THE ACR AGRICULTURE REGISTRY

Exhibit A offers preliminary specifications on basic functionality to guide bids. Specifications are subject to change as a result of consultations with agricultural producers and other partners. ACR will engage the successful bidder in the development of precise specifications.

OVERALL FUNCTIONALITY

The ACR Agriculture Registry implemented in this pilot is analogous to current carbon market registries, although the assets generated will not be carbon offset credits (as clearly defined by recognized independent standards, such as the ACR and compliance markets such as California and Alberta). Instead, producers will generate Agriculture GHG Certificates, a unique type of agricultural environmental asset representing one metric ton of CO₂ equivalent mitigated or sequestered as the result of climate smart practice implemented in a given year. Various tags can be added to the certificates in the ACR Agriculture registry such as vintage, practice, other certifications, contribution to Sustainable Development Goals (SDGs) or other supply chain markers per account holder preference as determined in the Design Phase.

Serialized certificates will be issued into the producer’s registry account. Producers and their authorized agents can transact certificates directly via the Registry, or if desired, via ACR Agriculture Registry linkages with marketplace platforms, including exchanges. The producer or authorized agent can transfer the serialized certificates to the buyer’s (or market participant’s) registry account for re-sale or retirement against corporate GHG claims. Retirements are public to facilitate tracking of corporate GHG claims.
Quantification, Monitoring, Reporting and Verification

The ACR Agriculture Registry designed, built, and implemented through this pilot will quantify GHG benefits of practices using COMET Planner and shall be scalable to every commodity, U.S. geography, and NRCS (and traditional equivalent) practice. Additional COMET Planner values will be generated following the procedure outlined in the COMET Planner Report for the following additional practices (at minimum): CSP 449, CSP 464, AWD, Row Rice and Tribal traditional equivalents for rangeland practices. In instances where this is not possible, quantification will be generated by Winrock project partners.

This system will communicate with the COMET Planner tool via an API to obtain GHG emissions or soil carbon accrual estimates by practice and Major Land Resource Area (MLRA) region based on producer inputs and maps.

On-farm data and proof of practice documentation (including images) will be uploaded manually by producers via a user interface smart app or via automated data collection through a linked farm data technology partner, including the Arva Intelligence platform and the VidaCycle soil monitoring platform. USDA data sets, remote sensing data, or other public datasets will be linked and accessed where on-farm data is not feasible or needs to be supplemented.

Various tags can be added to the certificates in the ACR Agriculture registry such as vintage, practice, other certifications, contribution to Sustainable Development Goals (SDGs) or other supply chain markers per account holder preference as determined in the Design Phase.

Certificate Issuance and Transactions

After reviewing the quantification, monitoring, reporting, and verification information on the ACR Agriculture Registry, the Administrator issues the appropriate quantity of serialized Agriculture GHG Certificates. Certificates are issued into the Producer’s account as inactive. Producers need to activate certificates prior to transacting them. Transactions include transfers, retirements, or cancellations.

Buyers and Market Participants can look to see which certificates are available per Producer or Farm. Sales of Agriculture GHG Certificates are arranged outside of the Registry and the executed on via an inter-account transfer on the Registry. The Producer Manager initiates a transfer of the certificates to the Buyer or Market Participant. The Buyer or Market Participant Account must accept the transfer of certificates into its account. The Producer Manager may withdraw the transfer prior to acceptance by the Buyer or Market Participant.

Producers, Buyers, Market Participants, or the Administrator can retire certificates. This is most commonly done by Producers or Buyers against corporate GHG claims or by Market Participants on behalf of third parties. Retirements reasons will be specified and retirement records are public.

Producers or Administrator can initiate the cancellation of certificates. Cancellation of a certificate removes it from the ACR Agriculture Registry. Cancellations must be confirmed by Administrator. Cancellation reasons will be specified and cancellation records are public.
While certificate issuance, retirement, and cancellation records are public, individual account certificate balances are private to the account holder except to the Administrator. Accounts holding certificates can filter, search, and group them for organizational purposes.

**Design considerations for future enhancements**

The ACR Agriculture Registry infrastructure implemented in this pilot shall be capable of being augmented to quantify, report, and track other benefits such as water quality, water quantity, biodiversity, or social benefits to producer communities. Future linkages with exchanges and the potential to generate transaction-specific invoices on transaction should also be possible.

**BRANDING**

The registry platform will be branded with the logo and color scheme of the Agriculture GHG Certificate program, to be developed through the Growing Value for Producers Through Increased Access to Markets for Climate-Smart Commodities Project in accordance with established organizational branding.

**ACCOUNT AND USER TYPES**

There are several Account types that will interact with the site, including:

- Producer
- Buyer (corporate, NGO)
- Market Participant
- Agriculture Registry Site Administrator aka Admin, Administrator
- Public user

**Producer Account**

A Producer Manager entity applies for the account in which it will ultimately register its Agriculture GHG Certificates and then becomes the point of contact for each Farm within the account. Producer Manager users upload required documentation and data. Producer Manager users can transfer certificates to Buyers and Market Participants, as well as retire and cancel certificates within their own account.

**Buyer Account**

Buyer accounts will each have a primary account user that initially applies for the account. Producer Managers transfer purchased certificates to Buyers. Buyers may then transfer purchased certificates to other Buyers and retire certificates within their account.

**Market Participant**

Market Participant accounts function the same as Buyer accounts but serve roles such as that of a retailer, broker, market maker, or custodian. Market Participants may be subject to different administrative program requirements and be granted different authority as it relates to Certificate transactions.

**Site Administrator Account**

The Site Administrators Account has full access to all registry system data. Administrator users review: all account applications, Producer documents, proposed emissions reductions data. Upon a successfully
reviewed reporting period the Administrator will issue associated certificates. They will also be tasked with keeping the data on the site accurate and helping the site’s users to do the same.

Public Users
Public users do not have accounts on the registry however they are expected to use the site to view publicly available reports and documents. Public users might include the following types of users: press, interested world citizens, politicians, NGO staff.

FUNCTIONALITY FOR ALL USER TYPES

Public Summary Page (Registry home page where users login)
- Intro text
- Certificate detail reports
  1. Aggregate values for all Agriculture GHG Certificates
     - Total Issued (includes inactive)
     - Total Cancelled
     - Total Retired
  2. Summary of Agriculture GHG Certificates per farm or producer
     - Total Issued (includes inactive)
     - Total Cancelled
     - Total Retired
     - Link to Public Farm Detail Pages
  3. Serialized Agriculture GHG Certificates issued report showing attributes/tags, current status of each certificate/batch of Agriculture GHG Certificates

Public Farm Detail Pages
- Location(s)
- Name
- Description
- Start Date
- Link to Farm Description/Design Document (once it is approved and made public by the Administrator)
- Total Agriculture GHG Certificates
- Agriculture GHG Certificates per Reporting Period
  - Total Issued (includes inactive)
  - Total Cancelled
  - Total Retired
  - Attributes/tags
  - Links to associated verification documentation
- Producer Manager Contact Name/Email (only visible to logged in users).
ALL AUTHENTICATED AND REGISTERED USERS

User Management Pages

- Log In
  - Note: Users will log in with username and password. Not email address.
- Forgot Password/Reset Password/Update Password functionality
  - Should implement 2 factor authentication
- Custom account creation forms per user type.
- Create New User Account
  - Needs a Captcha field
  - Required Fields
    - Account Type (see above)
    - Username
    - Email address
    - Password
    - Contact Name
    - Contact Title
    - Organization Info
      - Organization Name
      - Contact Address (City, State/Province, Country, Postal Code)
      - Contact Phone
      - Website – optional
  - Sends an email explaining next steps with a link for email address verification.
  - Log users in immediately to begin further editing of profile.

User Account Application and Approval
All Accounts start as “Pending Submission”, then after submitting initial registration form, including attachments, become “Pending Approval”. Their registration request can either be “Denied” or “Approved”.

- While they have status of “Pending Submission” all users regardless of type should be able to edit the following fields
  - Email Address
  - Password
  - Contact Name
  - Contact Title
  - Organization Info
  - Organization Name
  - Contact Address (City, State/Province, Country, Postal Code)
  - Contact Phone
  - Website – optional
  - Verify email button
  - Upload Copy of primary user ID (driver’s license/passport)
  - Upload Authorization Document for primary account user
  - Submit: Submit Account Application
- Status would now be “Pending”
- Screen would show “we’ll get back to you” message:
  - Thanks for your submission, we will review.
- After Administrator review, the status could be: Denied or Approved,
- Users with status of Denied see a denial message. An automatically sent message upon denial is also sent.
- Users with Approved may edit their Organization Profile. At first they would see a message that said: You’ve Been Approved

After Account Approval, Account Holder can further edit Organization Profile
- Initial Status on their Organization of “Approved”
- Editable fields from Organization Profile page for an “Approved” account include:
  - Contact Address
  - Contact Phone
  - Website (optional field)

PRODUCER MANAGER FUNCTIONALITY

Dashboard
- Link to Create a Farm
- Link to edit Organization Profile
- Under Farm heading:
  - Display list of reporting periods and status for each
  - Date Range, Number of Agriculture GHG Certificates, Status, Date Modified, link to Reporting Period Detail
  - Overall Agriculture GHG Certificate report: Inactive, Available, Canceled, Retired, Transferred, Total Issued for All Time
  - Breakouts for Retired, Canceled, Transferred (list of all transactions that retired Agriculture GHG Certificates.)
  - Current Status and Last Modified Date of a farm
  - Button: Make a transaction

Create “Farm”
- Farm Name (not editable after submission)
- Location(s) (not editable after submission)
- Description (not editable after submission)
- Practices by acreage and implementation dates
- Upload Documentation
- Status (New, Pending, Denied, Changes-Needed, Listed)

Reporting Period Detail
- Status of this Reporting Period New, Pending, Denied, Changes Needed, Issued
- Date Range: Date Range e.g., Jan 1, 2023 – Dec 31, 2023
• Proposed number of Agriculture GHG Certificates to issue, disaggregated by vintage year
• Reporting Period Documentation
• Date of Upload (auto)

BUYER & MARKET PARTICIPANT FUNCTIONALITY

Public Farm Detail
• Same as Public Farm Detail above, plus:
  • Anonymous Version of the certificates
    o Totals for Available, Transferred, Cancelled, Retired per Reporting Period

Buyer & Market Participant Detail (organization is public; other information viewable by Administrator and Producer Managers)
• Contact Name
• Contact Title
• Email Address
• Organization Info
  o Organization Name
  o Contact Address (City, State/Province, Country, Postal Code)
  o Contact Phone - optional
  o Website – optional
• Visible Only to Buyer
  o Agriculture GHG Certificates ordered by purchase date.
  o Columns include
    ▪ Date Purchased
    ▪ # Certificates Purchased
    ▪ Vintage year (linking to Reporting Period)
    ▪ Producer (linking to producer)
  o Buyer can also initiate a transfer to another buyer

ADMINISTRATOR FUNCTIONALITY

Every field in every record should have a history of entry and change (e.g., event log). Admin users have the ability to edit all fields in the database associated with users, farms, and reporting period data. Administrator may transfer, cancel, or retire any Agriculture GHG Certificates. Once emissions records are serialized into certificates the numbers and vintages should not be editable by admin. They can be cancelled, but not edited after creation. In the event of an accidental retirement or cancellation, Administrator has the ability reverse those otherwise permanent transactions.

Administrator Dashboard Contains:
1. List of all user logins and their status
   a. Ability to mark status as active or inactive
   b. Ability to reset passwords
2. List of all registry accounts and their status
   a. Ability to mark status as: approved, denied, terminated, suspended
   b. Link to their Organization Profile
3. List of all Producers and links to their Organization Profile, and all associated Farms and Reporting Periods.
   a. Shows all serialized certificates, inclusive of attributes and current account holder
5. Event Log
6. Functionality to send message to account holders (all accounts, Producer or Buyer account types only, or individual account holders)
7. All public reports