

**REQUEST FOR PROPOSALS (RFP)**  
for  
**Web-Based Lancaster County Healthy Watersheds Data System & Dashboard**

The Lancaster Clean Water Partners (Partners) along with the Lancaster County Conservation District (LCCD) are soliciting written proposals from qualified firms or individuals ***to provide a web-based data system and visual display tool to support residents and stakeholders of Lancaster County in viewing water quality data, key watershed health indicators, and Best Management Practice (BMP) implementation data from local, regional and national sources in an easy-to-understand format.*** As a Request for Proposal (RFP) this is not an invitation to bid and although price is very important, other factors will be taken into consideration.

The project scope, content of the proposal, and vendor selection process are summarized in this document. **Proposals must be received no later than June 3, 2024.** Proposals are to be sent via email with the words **“Lancaster County Watersheds Data System & Dashboard”** clearly indicated in the subject line of the email. Decisions are anticipated by June 30, 2024.

**Email Proposals to:**

Matthew Kofroth, Assistant District Manager, Lancaster County Conservation District  
mattkofroth@lanasterconservation.org

**INTRODUCTION**

The Partners brings together a diverse group of partner organizations – local leaders in business, municipal public service, higher education, conservation planning, and non-profit management – with a shared vision of clean and clear water in Lancaster County by 2040. The mission of this group is to rapidly accelerate and expand the ability of the partner organizations to restore and sustain healthy Lancaster County waterways. The Partners are committed to identifying and assisting regional interests, along with developing collaborative strategies through plans and programs that will improve and sustain the health of local watersheds and waterways.

The primary focus for the Partners is Lancaster County, but the county is also considered a pivotal element within the entire Chesapeake Bay drainage basin in Pennsylvania. The Partners provides leadership and coordination for the implementation of Lancaster’s Countywide Action Plan (CAP) as a component of the Pennsylvania Department of Environmental Protection’s (PADEP) Chesapeake Bay Watershed Implementation Plan (WIP).

Also providing leadership for Lancaster’s CAP, the Lancaster County Conservation District operates under the philosophy that the best way to advance the cause of conservation is to educate local citizens to become better environmental stewards. By building partnerships, providing technical assistance, and sharing information, we strive to achieve environmental compliance using common sense to build a culture of responsible stewardship. This philosophy feeds into the overall mission of the Conservation District which is to promote the stewardship of natural resources for Lancaster County and beyond which is what this project ultimately aims to achieve.

## **PURPOSE**

The primary purpose of the web-based Lancaster County Healthy Watersheds Data System & Dashboard is to provide an interface revealing the progress towards Lancaster CAP goals (BMP implementation) and water quality status indicators/trends for local water resources (e.g. streams) at a local level with timely data. The intention is that rapid BMP implementation related to the Lancaster CAP will help achieve the vision of clean and clear water in Lancaster County by 2040, and we need to better track the project-specific data in a singular, local system. The dashboard is intended to use that data to tell the story and show progress to partner audiences.

## **BACKGROUND**

Watersheds are delineated by the U.S. Geological Survey (USGS) using a nationwide system based on surface hydrologic features. This system divides the country into 22 regions (2-digit), 245 subregions (4-digit), 405 basins (6-digit), ~2,400 subbasins (8-digit), ~19,000 watersheds (10-digit), and ~105,000 sub-watersheds (12-digit). The hierarchical hydrologic unit code (HUC) for sub-watersheds is also known as HUC-12 watersheds which also is more representative of drainage areas tied to small, local tributary streams (catchments). Thirty-seven (37) HUC-12 watersheds are located within the jurisdictional boundaries of Lancaster County. These watersheds and catchments also represent the local approach to managing data and efforts. Several catchments across the county have been selected and are currently experiencing elevated water quality improvements and rapid BMP implementation efforts to remove any identified impairments to the streams within the catchment (also known as the “de-listing strategy”).

Water quality monitoring data and a significant portion of BMP implementation data are organized at the HUC-12 watershed level (and corresponding catchments within a HUC-12 watershed) across Lancaster County. Water quality monitoring data captured—and could be displayed in the dashboard—include nitrogen, phosphorus, sediment, Dissolved Oxygen (D.O.), and temperature. BMP implementation covers multiple sectors including the agricultural sector (forest buffers, cover crops, rotational grazing, conservation and nutrient management plans, etc.), the developed sector (bioswales, infiltration basins, conservation landscaping (turf-to-meadows), etc.), and the natural sector (stream restoration, wetlands, etc.). There will be multiple sources of existing data and the ultimate tool will need space for those plus a few data sources yet to arrive. Also, the product is intended to be developed in alignment with the Lancaster County Planning Department’s data hub, whenever possible to avoid duplication. Leads for this coordinated work along with data sources, testing, etc will be the CAP Coordinator team.

The Partners and LCCD envision an operational **Web-Based Lancaster County Healthy Watersheds Data Dashboard** that would have similar display (visualization) characteristics, functionality, and/or end-user capabilities as the following:

- Allegheny County Conservation District (ACCD) Impact Atlas and associated data/story maps found at <https://www.accdpa.org/impact>
- Westmoreland County Conservation District BMP Dashboard - <https://westmorelandconservation.org/bmp-portfolio/>

- Prince George’s County (Maryland) Dashboard and associated data display links and summaries found at <https://www.princegeorgescountymd.gov/departments-offices/dashboard> and <https://analytics.consultaegis.com/published/d411389ef2c9592d43e0252b2aac5ac8/cwp--county>

## **SCOPE OF SERVICES**

Respond in detail to items A through I listed in this section as they are requirements for the completion of services under this contract. Please note any proposed variations or suggested alternative approaches outlined in items A through I in the response.

- A. Platform Requirements:
  - 1. An existing web-based solution that the Partners /LCCD may use to display local water quality (max. five (5) parameters/indicators), Best Management Practice (BMP) implementation datasets (max. forty (40) BMPs, five (5) watershed health indicators (e.g. reproducing native trout), and three (3) miscellaneous indicators) for public view, data uploads, and explain in narrative formats what the data means.
  - 2. Have a user-friendly interface where public users can easily navigate the site and interactively adjust graphs and other figures within the front-facing part of the application.
  - 3. Enable Partners/LCCD staff users to easily create, develop, and edit data visualizations, text, and graphics on the back end of the application.
  - 4. Format datasets into county-level and HUC-12 watershed-level geographies.
  - 5. Delineate map interface to reveal catchments identified for the “de-listing strategy”, including specific and clear identification of streams that have been de-listed.
  - 6. Color-code datasets representing poor, fair, and optimal conditions for water quality and level of BMP implementation at watershed levels with a corresponding trend reference.
  - 7. Capable of delineating between or modifying operational and strategic Key Performance Indicators (KPIs).
- B. Architecture and IT Standards
  - 1. The product proposed will be hosted by the Lancaster County Conservation District (MS SQL server)
  - 2. Vendor should provide a list of client requirements.
  - 3. Vendor should list client application deployment methods (please include how these applications will be updated).
  - 4. Vendor should list any included backup and recovery capabilities, and the time frame to perform those actions.
- C. Training and Support Requirements
  - 1. Provide a single assigned, dedicated point of contact for support for the duration of the project. A backup point of contact must also be assigned in the case that the primary point of contact is unavailable.
  - 2. Provide in-depth introductory orientation to platform users at the beginning of the project. Training/Collaboration can be held in person or virtually based on the capacity and capabilities of both the Vendor and the assigned users by Partners /LCCD.
  - 3. Provide shorter follow-up training as needed per Partners /LCCD request.

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4. Provide the necessary materials (such as a training manual or other references) to Partners /LCCD users for training sessions.
  5. Modify proposed development schedule into a step-by-step workflow.
- D. Collaboration and Content Development Assistance
1. Ability to annotate visualizations/dashboards/reports
  2. Ability to share visualizations/dashboards/reports – internally and externally
  3. Ability to organize shared visualizations/dashboards/reports into logical groups internally.
  4. Ability to create and share a library of custom measures with internal users.
  5. Data sharing agreement(s) development assistance.
  6. Summarize or provide dashboard layout options at an early stage of the step-by-step workflow.
- E. Technology
1. Web-based and mobile view.
  2. Scheduled (annual) data refresh methods.
  3. Provides search capability over data sources; visualizations; reports; dashboards; reports. (example: limits of EmapPA do not allow this)
  4. Third-party data inclusion (USGS, SRBC, etc.) capabilities.
- F. Dashboarding
1. Supports comparison of multiple visualizations at watershed levels.
  2. Supports selecting and grouping additional datasets (e.g. funding) with primary water quality and BMP implementation rates by individual watersheds.
  3. Displays relationships between operational KPIs as progress indicators and strategic KPIs as goals.
- G. Analysis
1. Supports the ability to export underlying dashboard/visualization data to a flat file (Excel, CSV, etc.).
  2. Supports the ability for administrators to import underlying dashboard/visualization data from a flat file (Excel, CSV, etc.).
  3. Supports the ability to do ad hoc, customized reporting.
  4. Multiple, linkable tabs for data analysis descriptions.
  5. Explore the possibilities of login options for different types of users.
- H. Visualizations
1. Supports visualization of data/insights (i.e. infographics).
  2. Supports drill down, drill up, and time series slider on all visualizations (including infographics).
  3. Supports embedding of external visualizations (i.e. images, graphs, interactive maps, etc.).
  4. Suggested default visualization based on the context of the source data.
  5. Product supports interactive map visualizations (e.g. Esri).
  6. Ability to export visualizations.
- I. Reporting
1. Supports the ability of an end user to generate a report that would support funding or grant assistance requests.

**SUBMISSION REQUIREMENTS**

All proposals shall include the following information. The proposal should be concise and to the point.

1. *Vendor (Contractor) Identification:*  
Provide the name of the firm, the firm's principal place of business, the name and telephone number of the contact person and company tax identification number. Provide a summary narrative describing the history of the vendor.
2. *Scope of Services Acknowledgement:*  
Details and/or acknowledgment of items A through I under the "Scope of Services" section; including any proposed variations or suggested alternative approaches.
3. *Schedule:*  
Provide a timeline/schedule to develop the **Web-Based Lancaster County Healthy Watersheds Data Dashboard**, including timeframes for testing.
4. *Price Proposal:*  
The proposal shall include pricing for all services. Pricing shall be all-inclusive unless indicated otherwise.
5. *Client References:*  
Provide a minimum of *three (3)* client references (which should include delivery of products similar to the proposed Scope of Services in this RFP).

The Partners in partnership with LCCD will determine the best responsive proposal based on a combination of the proposed fee, experience, references, and the proposed scope of services.

**TERMS AND CONDITIONS**

The following terms and conditions will be incorporated into the Agreement for Services between the selected Vendor and the Lancaster Clean Water Partners, and subject to adjustments and revisions as appropriate and agreed upon:

1. Scope of Services. The Client desires to utilize the Vendor's services to:
  - a. The development, generation, and delivery of the **Web-Based Lancaster County Healthy Watersheds Data Dashboard** per the Scope of Services section in the Request for Proposals.
2. Deliverables. The Vendor is specifically responsible for organizing and focusing efforts on the following outcome:
  - a. Operational **Web-Based Lancaster County Healthy Watersheds Data Dashboard** meeting or exceeding the platform requirements, architecture and IT standards, technology, dashboarding, analysis, and visualization conditions per the Scope of Services section of the Request for Proposals.
3. Compensation. As compensation for performing the Services, Vendor shall receive \_\_\_\_ from the Client upon successful completion of the deliverables. Travel costs are not covered by the client. Client shall reimburse Vendor for expenses approved beforehand on behalf of the Client. The vendor agrees to maintain complete and accurate records to substantiate all services, expenses, and charges to the

Client. Client shall pay Vendor's invoices and reimbursable expenses within thirty (30) calendar days of receipt of Vendor's monthly statement.

4. Term. The term of this Agreement shall be for a period of one year from start date of the contract. This term may be extended by the mutual written consent of the Parties.

5. Timing. The Vendor agrees to timely perform the Services according to the schedules developed and approved by the Client.

6. Non-Exclusive Relationship. The Parties acknowledge that Client is not bound to use Vendor exclusively. It is further understood that the Vendor is free to contract for services to be performed for others. In addition, the Vendor is free to seek to coordinate efforts among the Client and other interested funders subject to the ultimate approval of the Client.

7. Termination. Either party may terminate this Agreement, with or without cause, upon thirty (30) calendar day written notification to the other party. During this thirty (30) day notice period, Client shall be under no obligation to utilize Vendor's services for any reason. During this thirty (30) day notice period, Vendor shall continue in good faith to provide the Services to Client as needed by the Client. If termination occurs at any point during the contract, the work product belongs to the client. See 9 below.

8. Relationship of Parties. The vendor's relationship with the Client shall be that of an independent contractor and nothing in this Agreement is intended to or should be construed to create a partnership, agency, joint venture, employment relationship, or affiliate of or with the Client. Vendor acknowledges that no federal, state, or local taxes will be withheld from the compensation paid to Vendor under this Agreement, nor will Vendor receive any employee benefits including, but not limited to, pension, health, social security, workers' compensation, unemployment compensation or other insurance. Vendor shall conduct all business in full compliance with all laws, codes, and regulations including, but not limited to, compliance with Internal Revenue Service regulations concerning all tax laws applicable to the operation of the business such as payment of all self-employment taxes, compliance with all employment tax requirements for withholding on any employees used by Vendor, and compliance with state employment and workers' compensation laws.

9. Ownership of Work Product. The vendor agrees that all work products developed by it along or in conjunction with others in connection with the performance of services according to this Agreement is and shall be the sole property of Client, and Vendor shall retain no ownership, interest, or rights therein. Work product includes but is not limited to contact lists, graphics, memoranda, slogans, taglines, and contact lists developed while under contract.

10. Confidentiality.

a. Definition of Confidential Information. "CONFIDENTIAL INFORMATION" as used in this Agreement shall mean any technical and nontechnical information including patent, copyright, trade secret, proprietary information, computer files, and client information related to the past, current, future, and proposed services of Client and includes, without limitation, Client property and Client's information concerning customers, research, financial information, purchasing, business forecasts, and marketing plans and information.

b. Nondisclosure and Nonuse Obligations. The vendor agrees to protect the confidentiality of all Confidential Information and, except as permitted in this section, Vendor shall neither use nor disclose the Confidential Information. The vendor may use the Confidential Information solely to perform consulting services under this Agreement for the benefit of the Client.

c. Exclusion from Nondisclosure and Nonuse Obligations. Vendor's obligations under Section 10 (b) ("NONDISCLOSURE AND NONUSE OBLIGATIONS") concerning any portion of the Confidential Information shall not apply to any such portion that Vendor can demonstrate (a) was in the public domain at or after the time such portion was communicated to Vendor by Client; (b) was rightfully in Vendor's possession free of any obligation of confidence at or after the time such portion was communicated to Vendor by Client; and (c) was developed by Vendor independently of and without reference to any information communicated to Vendor by Client. A disclosure of Confidential Information by Vendor, either (i) in response to a valid order by a court or other governmental body, (ii) otherwise required by law, or (iii) necessary to establish the rights of either party under this Agreement, shall not be considered a breach of this Agreement or a waiver of confidentiality for other purposes, provided, however, that Vendor shall provide prompt written notice thereof to Client to enable Client to seek a protective order or otherwise prevent such disclosure.

11. Severability. The covenants in this Agreement are severable and if any covenant or a portion thereof is held to be invalid or unenforceable for any reason, such covenant or portion thereof shall be modified or adjusted to the extent necessary to cure the invalidity or unenforceability, and all other covenants or provisions shall remain valid and enforceable.

12. Entire Agreement. This Agreement, and the exhibits hereto, express the entire agreement between the parties regarding the Services to be performed hereunder, and supersedes all prior agreements, understandings, and negotiations involving the Parties regarding the Services, whether written or oral, consistent or inconsistent, or otherwise. This Agreement may not be amended, modified, waived, terminated, or clarified except by written agreement signed by both Parties.

13. Binding Effect. This Agreement and all of its terms and conditions shall extend to and be binding upon the parties hereto and their respective successors, executors, administrators, heirs, personal representatives, and assigns.

14. LIMITATION OF LIABILITY. Notwithstanding anything herein to the contrary, the Foundation's liability hereunder, including in the event of a determination of a breach by it of any of the terms herein or of any damages or losses in connection therewith shall, in all events, be limited to the total professional fee due to the Foundation under the Scope of Work. No other member nor any affiliate or representative of the Foundation shall have any liability whatsoever under this Agreement.

15. MUTUAL INDEMNITY. Each party shall indemnify and hold harmless the other party and its affiliates, and the other party's and its affiliates' representatives, from and against any damages or losses due to the breach by the former party of any term or provision of this Agreement.

16. Choice of Law. This Agreement and any disputes hereunder shall be governed by and be interpreted per the laws of the Commonwealth of Pennsylvania.