



University of Maryland
CENTER FOR ENVIRONMENTAL SCIENCE
APPALACHIAN LABORATORY

January 30, 2026

Bret Meldrum
Socioeconomics and Resource Recovery Division Manager
Acting Cooperative Ecosystem Studies Units National Network Coordinator
Natural Resource Stewardship and Science Directorate
National Park Service
(970) 442-0322

Dear Bret,

Please accept this letter as our formal intent to renew the Chesapeake Watershed (CW) CESU Master Cooperative Agreement in 2026. We would also like the National Park Service (NPS) Research Coordinator position that supports the Network to continue to be stationed at the Appalachian Laboratory.

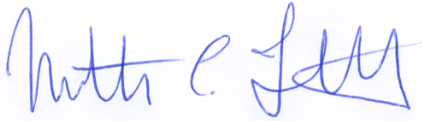
The University of Maryland Center for Environmental Science - Appalachian Laboratory (host) and 90 nonfederal partners, along with all of our federal partners, have confirmed their membership in the CW CESU Research Network. We are very excited to report that we received responses from every federal and non-federal partner in our network, which is a testament to the strong efforts to regularly communicate with our network in the last five years. One of our nonfederal partners – Gallaudet University - informed us that they no longer wish to remain part of the network under the new agreement. A full list of nonfederal partners and their up-to-date contacts can be found at <https://cwcesu.org/non-federal-partners/>. The federal partner list can be found at <https://cwcesu.org/federal-partners/>.

We would like to take this opportunity to briefly highlight some key accomplishments of the CW CESU. Our network experienced significant growth since 2021, processing 521 projects - nearly doubling the volume of the previous five years. A list of CW CESU projects processed for the renewal period can be found at <https://cwcesu.org/renewal-information/>. These awards reached nearly 75% of our nonfederal partners, supporting vital research in service of the unique missions of our federal partners. Central to this success was our commitment to the next generation of scientists; we engaged 217 undergraduate and 258 graduate students in direct field research and mentorship, bridging the gap between academia and federal careers.

The CW CESU also maintained high engagement, with a 91% average attendance at manager meetings and a 4.5/5 partner satisfaction rating. The host institution provided over \$122,000 in support, ensuring stable operations and the maintenance of our Experts and Projects databases. Moving forward, we are focused on finalizing a new strategic plan to enhance our collaborative impact.

Please contact Rhonda Schwinabart at rschwinabart@umces.edu, with any questions or concerns about the enclosed self-assessment. We look forward to working with the National CESU Council in the upcoming months.

Sincerely,



Dr. Matthew C. Fitzpatrick

UMCES-Appalachian Laboratory
Professor and Associate Director for Research
Co-Director of the Chesapeake Watershed CESU

2026 SELF-ASSESSMENT MATERIALS

Guidance Questions:

Category A: Federal Responsibilities

Did each federal agency in the CESU:

1. Provide opportunities for coordinated, collaborative scientific and scholarly activities (i.e., research, technical assistance, and education) that inform stewardship of, and education about, public trust heritage resources in alignment with CESU, agency, and partner mission goals, programmatic objectives, and authorities? Provide details, including reference to agency-support (or lack thereof) and activities over the current five-year term (e.g., number of projects; types of projects; management issues, topics, or subject matter areas).

The full list of projects processed through the Chesapeake Watershed (CW) CESU during this period can be found at <https://cwcesu.org/renewal-information/>. Federal partners processed 521 projects to nearly 75% of our partners during this period.

The full list of projects can be found here:
<https://airtable.com/appBbO95YVm55H4Iz/shrFMEnSXnFr3uzig>

Some federal partners report serving on graduate student committees at partner institutions.

2. Provide funds for basic support and salary for CESU host university (or other nonfederal partner institution) faculty/personnel, as appropriate? How have federal partners provided support to the host university over the current five-year term (both financial and in-kind) specifically to support CESU operations? Provide details regarding support (e.g., support by agency, fiscal year, instrument/mechanism) and associated expenditures.

Host support is vital to the continued operation of CESU activities, including supporting outreach, annual meeting planning, new partner enrollment, and data tracking. There were significant challenges in having these funds allocated to the host institution in a consistent and timely manner. Fortunately for the CW, the National Park Service Capitol Region office was able to provide additional support in some years, allowing us to launch and maintain a new website, improve our databases, and offer student awards and fellowships.

3. Make available federal personnel to serve on the CESU Federal Managers Committee? Did all federal technical representatives actively participate in CESU Federal Managers Committee activities, CESU partner meetings, and other CESU

activities (e.g., communication, planning, reporting)? Provide details, including reference to consistent agency participation (or lack thereof) over the current five- year term (identified by agency, as appropriate).

The Federal Managers Committee Meeting was held in 2021 through 2024; for these four meetings we had nearly perfect attendance from the federal partners, averaging 91% (at that time). The meetings were mostly held in a blended format (in-person and virtual) or solely virtual via Zoom and/or MS Teams. There was no Federal Partners meeting held in 2025 due to the government shut-down and staffing changes within our federal agencies. You can view the agendas, notes, and recordings of our meetings by visiting our website [here](#).

4. Comply with CESU Network, host university, and nonfederal partner institution rules, regulations, and policies (e.g., professional conduct; health and safety; use of services and facilities; use of animals, recombinant DNA, infectious agents or radioactive substances) and ensure its employees follow the Code of Ethics for U.S. Government Employees? Provide details, including examples of best practices or areas of concern (identified by agency, as appropriate).

Yes, as far as we are aware.

5. Did federal agency employees actively participate in the activities of the host university and nonfederal partner institutions, including serving on graduate student committees or teaching courses? Provide details, including examples of courses or other service activities.

Dan Filer, NPS Chesapeake Watershed CESU Research Coordinator and Acting Culture Resources Program Manager for the National Capital Region, holds the rank of Adjunct Assistant Professor with the UMCES Appalachian Laboratory of the University of Maryland Center for Environmental Science. He attends faculty meetings of the UMCES Appalachian Laboratory as needed and assists the Office of Research Administration (ORAA) with questions related to federal funding. Additionally, Dan Filer has connected researchers at UMCES Appalachian Laboratory with practitioners and managers to develop collaborative opportunities that have benefited both the federal government and the host institution.

6. Take responsibility for their respective agency's role in administering the CESU agreement, transferring funds, and supervision of agency employees? Provide details, including examples of best practices or areas of concern (identified by agency, as appropriate).

Of the 521 projects initiated through the CW CESU during this period, we are unaware of any major administrative issues or concerns. We note the number of projects during the last renewal period was 259; the network saw nearly double that number for this latest renewal period.

7. Provide administrative assistance, as appropriate, necessary to execute the CESU agreement and subsequent amendments or modifications (e.g., timely processing, signatures)? Provide details, including reference to consistent and/or effective assistance (or lack thereof) over the current five- year term (identified by agency, as appropriate).

As far as we are aware, there were no issues related to the execution of the CESU agreement on the federal side. Dan Filer provided extensive support to parks and programs within the National Park Service for new agreements and modifications, as well as support to the other federal agencies, mainly advising on the financial assistance process and assisting with identification of cooperators.

8. Federal Agency Response Only: What percentage of projects were conducted successfully (e.g., project tasks completed, products/outputs accepted by the sponsoring agency)? What percentage of projects were unsuccessful (e.g., project tasks incomplete, products/outputs not accepted by the sponsoring agency)? Provide details (e.g., what factors influenced/contributed to project success or failure)?

All completed projects have submitted final reports (both FFR and PPR reports) and we have records of many of the final products in our Projects Database posted on our website. You can see the projects for this period by searching the [Projects Database](#) or viewing the webpage for this renewal period [here](#).

Category B: Host University Responsibilities

Did the host university:

1. Allow and encourage its faculty to engage in participating federal agency sponsored research, technical assistance and education activities related to the CESU objectives? Provide details, including description of faculty engagement and two highlighted/example projects.

The following UMCES faculty have served as Principal Investigators on CW CESU facilitated projects started during the current agreement period:

- Dr. Elizabeth North - Oyster Larval Transport/Hydrodynamic Modeling for the Herring Bay Sanctuary, Maryland (USACE)
- Dr. Thomas Miller - National Information Collaboration on Ecohydraulics (NICE): Beneficial Use for Fisheries (USACE)
- Dr. Steven Keitzer - Co-development of a Natural Resource Condition Assessment for Katahdin Woods and Waters National Monument (NPS)
- Julianna Brush - Building seagrass resilience through implementation of resilient genotype-driven seagrass restoration (NPS)
- Katie Laumann - Landscape Approaches to Resource Stewardship (NPS)

- Dr. Mario Tamburri - Supporting the development and execution of a Technology Transition Framework (TTF) (USGS)
- Dr. Allen Place - [HCI: USHABCI \(US Harmful Algal Bloom Control Incubator\) \(NOAA\)](#), which is hosted and coordinated by Dr. Place and his team at the Institute of Marine and Environmental Technology (IMET), a research unit of UMCES.
- Dr. William Dennison - Translating USGS science into management products, dated February 7, 2020, revised March 10, 2020 (USGS) (Project start date is 5/1/2021)
- Dr. David Nelson -
 - Geographic origins of trumpeter swans wintering in western states (USGS)
 - Assessing vulnerability of California leaf-nosed bats to renewable energy development: diet analysis and spatially explicit demographic models to inform permitting and management decisions (USGS)
- Katie Kline -
 - Interactive Online Map for National Park Service Chesapeake Watershed Cooperative Ecosystem (NPS)
 - Chesapeake Watershed CESU NPS Fellowship Program (NPS)
- Dr. Lorie Staver - Rare Plant Study at Piscataway Park (NPS)
- Dr. Cindy Palinkas - Applied Field Research on Ecological Functions at Living Shoreline Installations (USACE)
- Dr. Matt Fitzpatrick - Climate Change Vulnerability Assessment for Rare Plant Species (NPS)
- Dr. Rodney Richardson - Metagenetic species identification and diet analysis (NPS)

Additional information about projects that closed during this agreement period can be found [here](#).

UMCES faculty and researchers are also encouraged to participate in the CW CESU Projects Database and new faculty are encouraged to meet with Dr. Filer to learn more about CESU opportunities, and he is invited to attend UMCES weekly events such as our seminars and annual events such as the MEES Colloquium and UMCES Faculty Convocation.

The CESU has also been the focus of past seminars in AL's Visiting Scholar Seminar Series, including talks by federal agency scientists. The seminars are attended by UMCES faculty, and invitations are also sent to faculty at nearby CESU-partner Frostburg State University.

2. Provide basic administrative and clerical support over the current five-year term (i.e., in support of CESU operations)? Provide details (e.g., nature and level of support).

a. How much did it cost the host institution to support the CESU over the current five-year term? Provide details (e.g., CESU-specific costs, Director and/or staff time, % FTE, travel, facilities, administrative services, equipment, supplies, communications, printing, web hosting).

UMCES AL provided the following financial support for the CW CESU for the 5-year period:

- Salary and fringe \$71,045 which includes 8% additional effort for Rhonda Schwinabart (host coordinator)
- 3% effort for Matt Fitzpatrick (co-Director)
- 1% effort to Eric Farris (IT support/management of CESU WiFi/wired networks and shared drive maintenance).
- In kind contribution of \$48,000 for private office space and services to NPS coordinator*
- Materials, supplies and services - Dedicated CESU zoom account \$1,200; Constant Contact subscription \$2,672

Total: \$122,917

*For a 150 sq ft fully furnished private office with unlimited copying, phone/long distances and unlimited internet in Maryland, you can expect to pay approximately \$800-1,500 per month, depending on location and provider.

b. Where is the CESU Director's office officially stationed within the host institution (e.g., Office of the President, School of Natural Resources, Department of Forest Resources)? Provide details (e.g., location relative to other departments, schools, greater organization), as appropriate.

The offices of Dr. Matt Fitzpatrick, Professor and Associate Director for Research for the Appalachian Laboratory, and Co-Director Dr. Dan Filer, NPS CW CESU Research Coordinator, are both located at the Appalachian Laboratory (AL) in Frostburg, Maryland. AL is one of the research laboratories of the University of Maryland Center for Environmental Science (UMCES), which is a member of the University System of Maryland and designated as the host institution for the CW CESU.

3. Provide access for CESU federal agency personnel (e.g., CESU Research Coordinator) to campus facilities, including library, laboratories, and computer facilities? Provide details and examples.

Dan Filer, NPS Chesapeake Watershed CESU Research Coordinator, has an office in the Appalachian Laboratory, as well as a reserved parking space for his assigned federal car. He has access to the Laboratory's CESU network drive, copiers/printers, conference, and meeting rooms. The program has also been assigned a separate Zoom account by the University which is used in addition to the MS Teams account provided by the NPS. These accounts are used for

hosting the program's Annual and Federal Managers meetings, weekly staff meetings, and as-needed meetings with both federal and non-federal partners.

4. Provide suitable office space, furniture and laboratory space, utilities, computer network access and basic telephone service for CESU federal agency personnel (e.g., CESU Research Coordinator) to be located at the Host University? Provide details (e.g., challenges, successful approaches, examples).

Dan Filer, NPS CW CESU Research Coordinator, was given premium faculty office space at UMCES-AL, including utilities, telecommunications, printers/copiers, and mailing services. He chose not to utilize laboratory space offered to the NPS. He has key card access to the building that allows him entry outside of normal business hours. He has been assigned an UMCES email account and telephone and has access to the UMCES network drive where the CESU files are stored.

5. Offer educational and training opportunities to participating federal agency employees, as appropriate? Provide details (e.g., number of trainings, number of people, course dates, course descriptions).

The Appalachian Laboratory's Visiting Scholar Seminar Series hosts science talks by researchers from within UMCES and from outside institutions. Federal partners have presented seminars and are welcome to attend seminars. Seminars are offered in a hybrid format when possible.

6. Coordinate activities, as appropriate, with the CESU federal, tribal, and nonfederal partners and develop administrative policies for such coordination? Provide details.

- a. Was a CESU Managers Committee maintained and convened, at least annually? Please provide details (e.g., meeting dates, meeting agendas, number/affiliation of participants, meeting minutes).

Federal Manager meetings were convened in 2021, 2022, 2023, and 2024. Due to uncertainties at the federal level a meeting was not held in 2025, although Dr. Filer maintained close contact with our federal leads throughout the year. Agendas and other meeting materials for past meetings can be found at [here](#).

- b. Were periodic meetings of the CESU partners convened, at least annually, for the purpose of collaboration and coordination of CESU activities? Provide details (e.g., meeting dates, meeting agendas, level of participation, affiliation of participants, meeting minutes).

Annual partner meetings were held in 2021, 2022, 2023, and 2024. The meeting for 2025 was scheduled for Thursday, November 6, 2025, but was cancelled due to the federal government shutdown. In 2024, a hybrid meeting was held with the

in-person held at National Conservation Training Center (NCTC) in Shepherdstown, WV in conjunction with the CESU National Network Meeting.

Agendas, recordings and other materials for past meetings can be found [here](#).

c. What efforts were made to communicate each tribal and nonfederal partner institution's strengths and expertise to the federal partners (e.g., listing investigators on the CESU website, expertise database, meetings)? Provide details (e.g., challenges, successful approaches).

The CW CESU hosts [an Experts Database](#) that features all researchers at partner institutions that elect to share profiles. The database integrates with our [Projects Database](#) to show the researcher's past CW CESU projects on the profile.

One challenge with this approach has been ensuring that researchers keep profiles updated. The Host conducts an annual review and calls for updates with researchers, removing those who do not respond, review, or update their profiles.

Additionally, Dr. Filer visits partner institutions when possible and conducts meetings with interested researchers either in person or virtually to stay abreast of their available research skills. He maintains contact with federal partners to stay informed of current and upcoming research needs. As a result, he is often able to assist federal agencies in identifying qualified researchers for projects.

Respondents to our 2026 renewal survey, suggested hosting virtual or in-person networking events in conjunction with or separate from our annual meeting to allow researchers, especially those at smaller institutions, to have the opportunity to network directly with federal agency leads.

d. How were federal funding announcements and/or other opportunities communicated to partners across the CESU? Provide details (e.g., challenges, successful approaches).

The CW CESU maintains a Constant Contact email list, which is used to share funding and other opportunities with partners. In the past, the CW CESU also posted notifications to X (formerly Twitter); however, given changes in the social media landscape and to reach as much of the CW CESU audience as possible, this platform is no longer used in communicating notices with partners. Under the new agreement, we will work with partners to identify other communications channels (Slack, other social media channels, etc.).

Category C: Participation of all Partners

1. What efforts did the host university, tribal, nonfederal, and federal partners undertake to engage students in projects and other activities of the CESU? Provide details (e.g., challenges, best practices, statistics for graduate and undergraduate student involvement, example projects).

Partners provided student engagement data, as well as feedback on best practices and challenges, in response to our renewal survey. One researcher noted, “CW CESU projects are actually the best kinds for involving students because the project sponsors specifically encourage educational activities that can be productive parts of the research.” Partners report 217 undergraduates and 258 graduate students involved in CW CESU projects during this period. A summary of results is provided below, and all responses can be found [here](#).

Efforts to Engage Students:

- Direct Involvement: Partners reported engaging students as research assistants, field assistants, and interns for data collection, site analysis, and archival research.
- Mentorship Models: Peer-to-peer mentoring was highlighted, where graduate students train and mentor undergraduates, which reinforces technical knowledge for the older students while making complex research more approachable for the younger ones.
- Career Development: Some agencies, like the National Council on Public History, provided students with opportunities to present their work directly to National Park Service (NPS) colleagues to obtain career advice.

Challenges:

- Scheduling: Navigating student schedules during busy academic semesters and coordinating travel for field work were cited as frequent difficulties.
- Quality Control: The learning process can lead to varying work quality, sometimes requiring extensive edits by project leads.

Best Practices:

- Early Involvement: Engaging students as early as possible in project development and literature reviews gives them a greater sense of ownership.
- Clear Expectations: One PI uses an extensive document outlining expectations for fieldwork behavior and safety procedures, followed by a signed contract regarding data ownership.

2. Did all partners actively participate in CESU activities (e.g., meetings, phone calls, signing amendments, strategic planning, reporting)? Provide details (e.g., if not, why not? participation statistics, challenges to participation, successful approaches, best practices).

As in the 2021 CW CESU Renewal, the CW CESU received 100% participation in the partner self-assessment survey that went to nonfederal and federal partners in November 2025. Respondents report satisfaction with the CW CESU host with an average rating of 4.5 out of 5 (“extremely satisfied”). The lowest rating received was a 3, and 69% of respondents gave the host a rating of 5 (“extremely satisfied”).

Of respondents, 70% indicated they felt engaged in the network, referencing annual meetings, email correspondence, and voting opportunities, as well as contact with Dan Filer or Rhonda Schwinabart.

Comments from those who answered “no” include various challenges faced internally by both federal and nonfederal institutions, including not having the bandwidth to pursue projects or greater engagement, internal communications issues, new points of contact with limited experience or knowledge about past engagement, and feds being part of multiple CESUs; The CW CESU was recognized in several comments for strong communication efforts and good customer service.

Some federal partners noted that "reshaping efforts" and "reduced bandwidth" across agencies have led to diminished engagement. Smaller institutions reported that limited resources or a lack of graduate-level programs made it difficult to participate in advanced research.

Suggestions for maintaining or building future engagement include the following:

- a. Host annual meetings at partner institutions again
- b. Notify institution POCs when their faculty are responding to opportunities
- c. Host webinars/virtual seminars to share what others are working on.
- d. Host quarterly or bimonthly meetings, perhaps on a regional or affinity group basis
- e. Provide funding for CESU partners to support each other in events
- f. Develop a one-pager for feds to learn about CW CESU
- g. Invite the National Office to become more involved in regional CESUs
- h. Reintroduce the newsletter
- i. Offer more undergraduate-focused or capacity-building research efforts, which would allow institutions without graduate programs to participate more fully. Additionally, offering clearer pathways for smaller institutions to engage—such as short-term projects, micro-grants, or collaborative partnerships with larger universities—could help increase involvement across the network

- j. Host CESU meet ups at conferences and other networking opportunities
- k. Include announcements from partners in emails that go out

3. What percentage of partners received funding through the CESU over the current five-year term?

Nearly 75% of nonfederal partners received funding during these last five years from six of our federal partners. According to survey results, for those with funding, project success rates were high. Multiple partners (e.g., Western Pennsylvania Conservancy, University of Virginia) reported a **100% success rate** for project completion. Many smaller institutions report challenges in obtaining funding.

Projects for the 2021-2026 period can be found [here](#). 521 Projects were executed during this time period.

The host is currently updating records based on project data received through the renewal survey process. This list will update in real time as projects are updated or entered.

4. What efforts were made to encourage and broaden participation in the CESU by all partners (e.g., HBCUs, tribal colleges, small academic institutions, state and local government agencies)? Provide details (e.g., participation statistics, challenges to participation, successful and/or novel approaches).

The CW CESU hosts annual meetings open to all partners. During the report period, these meetings have been held remotely or in hybrid format, which has enabled greater participation by all partners across the geography of the network.

5. What is the date of the most current version of the CESU's strategic plan? How well do the activities of the CESU reflect the priorities and objectives outlined in the plan? Provide details (e.g., challenges, best practices, example projects).

Following the 2021 renewal, the CW CESU formed a committee and started the process to draft a strategic plan; however, a plan was not finalized. In the 2026 agreement, the CW CESU will resume this process and ensure that the resulting plan aligns with current executive orders and secretarial priorities.

6. Did the participating federal agencies, host university, tribal, and nonfederal partners develop and follow annual work plans to guide the activities of the CESU? Provide details (e.g., challenges, successful approaches, example projects).

The NPS reported following annual work plans and task agreements to guide activities and ensure milestones are met.
Many partners noted that UMCES is "incredibly organized," "diligent," and

"responsive" in disseminating information and guiding the partnership. Partners generally felt their activities aligned with the CESU mission, citing "aligned interests" and "collaborative spirit".

7. Have partners successfully obtained the tribal, federal, state, or local government permits and/or permissions from private landowners necessary to execute projects under the CESU agreement over the current five-year term? Provide details (e.g., challenges, successful approaches, examples).

- **Success in Permitting:**

- Partners successfully obtained NPS research permits, state wildlife permits, and private landowner permissions for diverse projects.
- Examples include permits for bat surveys in Rock Creek Park, Lepidoptera inventories at Manassas National Battlefield Park, and eagle tagging at state and federal levels.

- **Challenges:** Some projects required complex multi-agency permitting, such as an SAV restoration project needing permits from the NPS, Army Corps of Engineers, and state wetlands programs.

8. What instances exist where projects, programs, or partners have derived benefit as a result of the established CESU relationship, independent of federal awards administered through the CESU (i.e., where simply being a partner in the CESU aided furtherance of other efforts; without/outside direct funding through a CESU project award)? Provide a brief description of any such examples.

In the renewal survey, 37% of respondents reported “added benefits to CESU membership. These included:

- **Networking:** Partners frequently cited the value of new professional connections and "expanded conversations" with potential collaborators that occur simply by being a member.
 - Partnerships and larger professional networks for agencies and PIs
 - Tools, such as Experts Database, to identify experienced collaborators
- **Professional Development:** The relationship has led to new research ideas, increased student engagement, and shared publications outside of direct CESU awards.
 - Better connections to federal agencies has led to improved training for students (better meet workforce needs and demands)

- Benefits to students by engaging in research projects (learning, networking, future employees at institutions and agencies)
 - Student awards and funding
 - Presentations and publications- some partners provided lists of publications and presentations. Original materials and publication lists from partners can be found [here](#).
- **Capacity Building:** Preservation Maryland used the CESU model to explore establishing a similar state-level partnership. Other examples included:
 - New scientific findings and research ideas
 - Better informed resource management decisions
 - Helps meet land grant mission
 - Increased project portfolios for institutions; positioned researchers to receive other funding; raises research profile of institutions and PIs
 - Low indirect costs for federal agencies