FINAL REPORT

Clean Water Initiative Program
2022 Clean Water Workforce Capacity Development
Phase 1

November 23, 2022

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Executive Summary

2022 Clean Water Workforce Capacity Development Project Background and Purpose

There is an expected short-term boost in funding for clean water projects over the next few fiscal years due to increased state revenues and federal-level investments in water infrastructure. In step with the increased demand and funding for clean water is a transformational shift in how the Agency of Natural Resources is directing clean water funding as a result of Vermont's 2019 Clean Water Service Delivery Act (Act 76). Act 76 secures a new long-term funding source for non-regulatory clean water projects and establishes a new funding and project delivery framework to support the State in meeting its water quality goals.

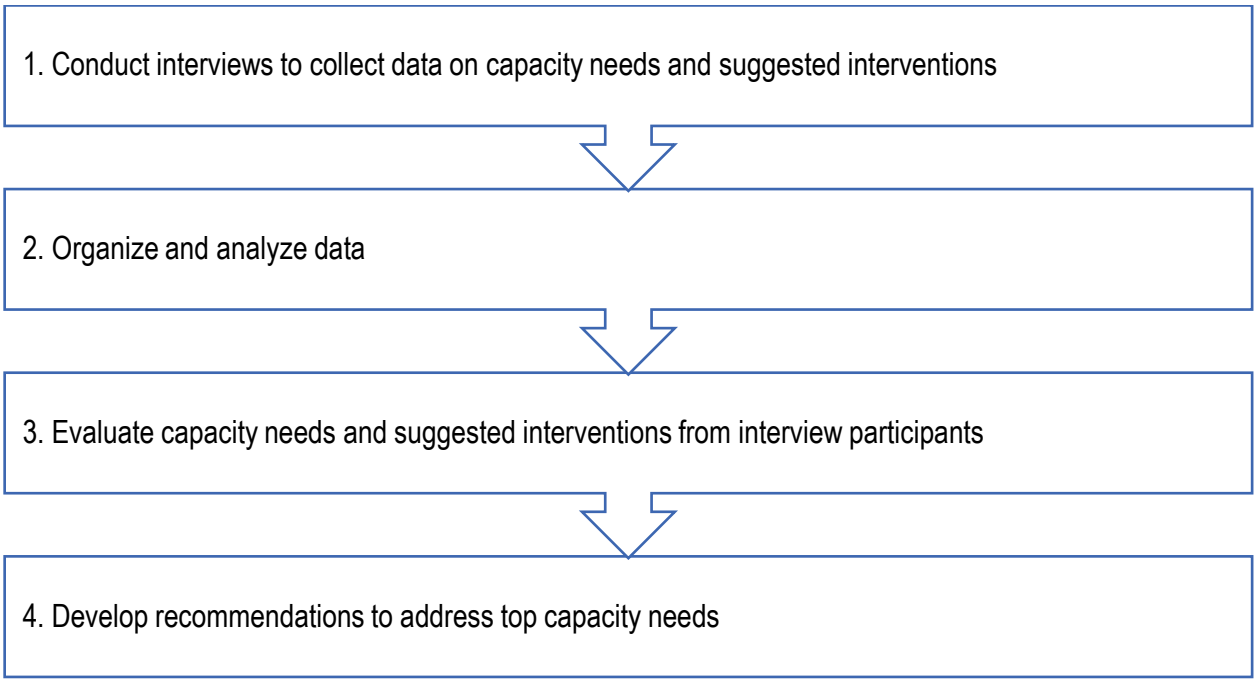
The Vermont Department of Environmental Conservation (DEC) Clean Water Initiative Program (CWIP) funds projects that restore, protect, and maintain water quality. DEC and CWIP rely on its strong network of partners in the clean water workforce to develop and oversee clean water project design, installation, operations, and maintenance. Recently, partners have identified obstacles to their ongoing success. CWIP is poised to provide financial and technical assistance for clean water workforce capacity development to ensure that the State and its valued partners can effectively and sustainably meet the increased demand for more clean water project development, design, implementation, and maintenance.

CWIP launched this 2022 Clean Water Workforce Capacity Development Project to help guide and inform the State's investments in the capacity of their partners. For Phase 1 of the initiative, CWIP hired a contractor (The Clark Group, LLC.) to conduct a capacity needs assessment through outreach to current and potential clean water partners. The goal of Phase 1 is to identify ways in which CWIP can support and invest in the capacity of their partners, both current and potential, in an equitable and inclusive way to address unmet capacity needs and ensure a strong partnership network that continues to efficiently deliver high-quality and high-priority clean water projects as funding evolves.

Phase 1 Data Collection Methodology

Data was collected through a series of 22 interviews with a variety of individuals who are either current or potential clean water project partners. Individuals that were interviewed were affiliated with watershed groups, Natural Resource Conservation Districts, Regional Planning Commissions, other non-profit organizations, and private consultants/contractors. Interviews were conducted to collect information on both organizational and network-wide capacity needs and suggested interventions to address those needs. **Figure 1** below is a visual representation of the data collection, analysis, evaluation, and recommendation process.

Figure 1. Data Collection, Analysis, Evaluation, and Recommendation Process



Contractor Recommendations for Phase 2

The recommendations provided in this report intend to help guide and inform how CWIP will make capacity investments during Phase 2 of this initiative. The following recommendations were developed by the TCG team to help inform Phase 2 of this initiative. To develop these recommendations, the TCG team utilized the data collected during interviews, identified top capacity needs, and reviewed and evaluated interventions suggested by interview participants to address those needs against CWIP's Considerations for Priority Interventions. These recommendations intend to address the most prevalent capacity needs identified by participants in order to enable them to accelerate the adoption of clean water projects. While the TCG team considered the interventions suggested by interview participants in developing recommendations, it should be noted that there is a distinction between the TCG team's recommendations and the interventions suggested by interview participants.

Strengthen Partner Network

Recommendation 1: CWIP should establish a multi-year capacity-building grant program with broad eligibility of staff, infrastructure, systems, contract, or other expenses directly or indirectly demonstrated by grant applicants to increase their capacity.

Recommendation 2: Work with the Clean Water Board to establish a baseline commitment of funding, based on predictable funding sources, for the capacity-building

grant program to enable partners to plan and budget, and commit to hiring and investing in staff. Identifying an amount of funding in year 1 that can be sustained will allow the building of a simple model to identify how many entities can be supported each year for a given budget.

Clean Water Service Provider Operations

Recommendation 3: Ensure that all protocols related to granting procedures, reporting requirements, and funding mechanisms are aligned across CWSPs to ensure that the capacity of partners working across watersheds is not depleted by the need to track, apply for, and manage multiple new funding mechanisms.

Recommendation 4: Establish a shared responsibility between CWSP and TBP to host regular calls for clean water partners to enhance collaboration, problem-solving, project identification and development, and to network. Consult with current and potential partners to identify a frequency and schedule that aligns with the project development cycle and seasonality.

Grant Process

Recommendation 5: Transition more grants to a rolling-basis to better align with project development cycles. Respondents did not identify specific grant programs but did speak to the misalignment of grant programs with project schedules. Rolling grants either direct from the granting agencies or within block grants can alleviate this constraint.

Recommendation 6: Continue to expand the block grant model wherever feasible. Respondents identified block granting as a successful mechanism to reduce grant administrative overhead and direct more capacity to projects.

Recommendation 7: Replace quarterly grant reports with reporting at the end of each major phase of a project. Identify specific project types, for example in a lower technical or risk category, and identify a lower tier of grant size (for example lowest 20% of project cost) to pilot reduced reporting requirements. Track successful project completion and impact on grantee capacity to evaluate if pilot should continue and if expansion is warranted.

Recommendation 8: Establish a cost-based trigger for budget review. CWIP should identify a standard threshold, such as a change in budget +/- a certain percentage, or with a floor or ceiling dollar threshold for smaller or larger projects, that will trigger a budget review during the grant timeline. Utilizing the approved budget, the grantee tracks project progress, and is responsible for notifying the state if changes to the project budget will trigger a budget review. This means the grantee would not submit budget updates aside from changes that meet the established threshold for budget review. Respondents

identified frequent budget reviews as a drain on capacity, and the approach recommended here is based on commonly used budget review triggers.

Recommendation 9: Convene a small study group to make recommendations for changes to the annual grants schedule, to include notification of funding opportunities, application due dates, application review dates, work plan development, contract execution, and reporting and monitoring requirements. The goal of the schedule should be to align with and take the greatest advantage of the project development cycle, seasonality, and other partner organizational management obligations.

Training

Recommendation 10: Increase the number of training sessions on DEC tools, Act 76 funding, the CWSP model, and integrate trainings from other grantor organizations.

Recommendation 11: Identify other organizations and entities who can host DEC training, or where DEC can present at conferences hosted by other entities – in particular to bring awareness of and education on DEC tools and grants to non-traditional partners.

Recommendation 12: Convene a small study group to recommend an annual training schedule that will align with the project development cycle, seasonality, seasonal, part-time and contract staffing, and other partner organizational management obligations.

Inter-agency/Entity Collaboration

Recommendation 13: Establish a working group of grantor organizations, from state agencies, federal agencies, and private sources to identify overlap and unmet needs, with the goal of establishing a 3-year strategic roadmap for the development, retirement, and evolution of grant programs.

Diversity, Equity, and Inclusion in the Clean Water Network

Recommendation 14: Develop an equitable mechanism to identify underserved areas – the gap between partner capacity and project potential by watershed, identifying areas of the state that are underserved by the current network of clean water partners, and where an investment in capacity building and training can increase the number of projects developed and implemented. Tactical basin plans provide the best source of potential project information at this current time. In the absence of a robust project database for a watershed CWIP may need to utilize a landscape scale analysis to identify where potential projects may not yet have been identified, and to target capacity building funds to nonprofits willing and able to docs on these watersheds.

Recommendation 15: Establish clear definitions and measurable targets to accelerate progress towards advancing DEI goals.

Recommendation 16: Coordinate with organizations working with underserved populations to identify employment opportunities.

Recommendation 17: Provide financial support to clean water partners to cover the increased costs of bringing on entry-level hires (mentoring, supervision, training, etc.).

Recommendations Specific to Workforce Development

Recommendation 18: Focus on Project Management as a key skill set needed in the sector overall. Identify training programs that are specifically designed for individuals involved in project management. Make these funds available to entities working in clean water. The funds would be used for training new hires as well as for up-skilling incumbent workers. Coordinate with the Vermont Department of Labor on this effort as they are familiar with and work with all of the training and education providers in the state. Consider modeling the distribution of funds generally along the lines of how the Vermont Training Program (run out of ACCD/Economic Development) grants funds to employers and education/training programs.

Recommendation 19: Increase support for volunteer initiatives. This is both a capacity issue as well as a workforce issue. Increased financial support to organizations would enable them to build capacity to organize and oversee volunteer-based projects. It could also fund paid positions for coordinators of local volunteer-staffed projects. These positions can be connected with a larger host/umbrella entity or be part of the volunteer-based initiatives. CWIP should include funds for the recruitment and training of these coordinators.

Recommendation 20: Expand the pool of engineers working on clean water projects. To approach this issue, DEC should first coordinate with other state agencies that work with engineers. Also, reach out to more engineering firms than were interviewed as part of this initiative to further understand the underlying reasons for this shortage. These reasons might include pay scales in Vermont being too low; State supported demand for engineers being too sporadic; engineers in the state not having the skills needed for clean water initiatives but who might utilize professional development if it were financially supported; or other reasons. This must be explored in more depth before a policy response can be implemented.

Recommendation 21: Do outreach to and fund training for boards and key staff within organizations (both non-profits as well as businesses) working on clean water initiatives. Leverage training models such as Common Good Vermont which provides nonprofit education and certification programs to Vermont nonprofits. Identify priority skills-development to increase the managerial, financial, grant writing, and governance expertise of clean water partners. Fund training for governing boards of non-profit organizations that receive clean water dollars.

Recommendation 22: Better utilize AmeriCorps as a source of clean water workforce. Where requested by organizations (likely the smaller ones) follow the model currently being jointly used by the Regional Planning Commission and The Lake Champlain Maritime Museum: The RPC (the larger organization) hosts the AmeriCorps volunteer. That volunteer spends a percentage of their time assigned to the LCMM. The LCMM praised this method as it provided them with a helper with no administrative burden attached.

Recommendation 23: Expand the number of college student internships involved in clean water work. Provide funds for organizational capacity to manage the interns and to pay wages to the interns. Confer and work closely with the Vermont Department of Labor on this effort.

Recommendation 24: Increase financial support to organizations for staff pay; provide that support over multiple years.

Recommendation 25: Identify and develop industry-recognized credentials in the clean water field. Turn to the Vermont Department of Labor (VDOL) to guide and coordinate this effort with the State and the education/training providers in the state. Also reach out to the Vermont Agency of Education and the Regional Technical Centers, as well as the Vermont Agency of Commerce and Community Development. Coordinate with clean water partners to identify the credentials and training that would be most helpful for their contractors and partners to ensure high quality outcomes for clean water projects.

Project Background and Purpose

Water Quality and Water Pollution in Vermont

Vermont is home to approximately 7,100 miles of rivers and streams, 230,900 acres of lakes, reservoirs, and ponds, and 300,000 acres of freshwater wetlands.[1] Water pollution limits our use and enjoyment of approximately 15% of Vermont's lakes and 20% of streams.[2] Protecting and restoring these valuable resources is essential for our human health, the environment, and the economy.

The primary source of water pollution in Vermont is sediment and nutrient runoff from stormwater, agricultural land, developed land, forest harvesting operations, and streambank erosion.[3] When excess nutrients (i.e., phosphorus and nitrogen) make their way into the water, it causes harmful algal blooms, decreases the amount of oxygen in the water for fish and aquatic life, and degrades water quality. Other stressors impacting the water quality of Vermont's waterways include but aren't limited to altered hydrology, aquatic invasive species, encroachment, toxic and pathogenic pollution, and riparian and aquatic habitat loss or modification. Climate change is expected to exacerbate many of these problems; bringing more extreme and frequent rainfall events to increase the volume of stormwater runoff, droughts to challenge base flows and groundwater recharge, and increased temperatures stressing local riparian and aquatic habitat conditions.

Overview of the Clean Water Initiative Program

While efforts to improve water quality in Vermont have been underway for decades, Vermont residents, officials, and organizations need to continue to work together and ramp up the progress to protect and restore our water systems. The state has made a long-term commitment to the Clean Water Initiative to provide the mechanisms, staffing, and financing necessary to achieve and maintain compliance with the Vermont Water Quality Standards. [4] To achieve this, the Vermont Department of Environmental Conservation's (DEC) Clean Water Initiative Program (CWIP) coordinates with committed state and federal agencies and local partners to fund, develop, implement, and track clean water projects that protect and restore water quality. CWIP relies on its strong network of partners in the Clean Water Workforce to develop and oversee clean water project design, installation, operations, and maintenance. Pending changes to the clean water funding context, however, suggest new challenges to capacity for the Clean Water Workforce.

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[1] (Vermont Department of Environmental Conservation, 2021)
[2] (Vermont Department of Environmental Conservation, 2022)
[3] Id. 2
[4] 10 V.S.A § 1387: https://legislature.vermont.gov/statutes/section/10/047/01387

New Clean Water Funding Conditions

There is an expected short-term boost in funding for clean water projects over the next few fiscal years due to increased state revenues and federal-level investments into water infrastructure. This will impact clean water projects supported by CWIP as well as those supported by other funding programs but that rely on Vermont's Clean Water Workforce to implement.

At the state level, the Clean Water Fund has seen a temporary boost in tax revenues from the recent housing market boom which has increased the dollars available for the Clean Water Board to allocate towards clean water projects.[5] Short-term federal investments include $100 million in American Rescue Plan Act (ARPA) dollars to be administered by the Agency of Natural Resources and allocated towards water infrastructure projects ($30 million of which went to the Clean Water Board to be allocated through the Clean Water Budgeting process across State Fiscal Years 2022-2024), as well as $200 million in ARPA dollars going directly to Vermont municipalities some of which may be directed towards water infrastructure work. There is also $63 million in Bipartisan Infrastructure Law (BIL) dollars to be administered by the Agency of Natural Resources for water infrastructure improvements. Finally, the Lake Champlain Basin Program is independently receiving an additional boost of $40 million in Bipartisan Infrastructure Law (BIL) dollars across five years, a portion of which will be invested in clean water projects in Vermont. While this increase in funding is sizable, it is expected to be brief and CWIP is interested in helping partners meet the pulse of this outsized demand in a manner that is sustainable after this funding subsides.

Clean Water Service Delivery Act ("Act 76") and the Regionalization of Clean Water Funding

In step with the increased demand and funding for clean water is a transformational shift in how the Agency of Natural Resources is directing clean water funding as a result of Act 76.[6] Specifically, Act 76 establishes Clean Water Service Providers (CWSPs) in each Tactical Basin Planning watershed in the Lake Champlain and Lake Memphremagog basins. Each CWSP is assigned interim phosphorus reduction targets for non-regulatory projects and awarded an annual Water Quality Restoration Formula Grant to pay for these projects. CWSPs are responsible for partnering with Basin Water Quality Councils (BWQCs) to identify, prioritize, implement, operate, and maintain non-regulatory clean water projects, effectively regionalizing decision making around clean water project

[5] For more information on the Clean Water Board and Clean Water Budget process, visit: https://dec.vermont.gov/water-investment/cwi/board

[6] Learn more about the Clean Water Service Delivery Act (Act 76) here: https://dec.vermont.gov/water-investment/statues-rules-policies/act-76

prioritization and funding. While CWIP continues to hold a few other granting rounds, the Water Quality Restoration Formula Grants are allocated a large portion of CWIP's annual spending plan for clean water projects thereby significantly impacting and shifting how CWIP funds clean water projects on the ground. CWIP expects this shift in funding mechanisms to introduce new or different partner capacity challenges.

Project Scope and Limitations

CWIP relies on its strong network of partners in the Clean Water Workforce to develop and oversee clean water project design, installation, operations, and maintenance. Recently, partners have identified challenges to their ongoing success. Pending changes to the clean water funding context described above may only serve to exacerbate these challenges.

Thanks to investments from the Clean Water Board and the Lake Champlain Basin Program, CWIP is poised to provide financial and technical assistance for clean water workforce capacity development. To help guide the State's investments, CWIP launched the 2022 Clean Water Workforce Capacity Development Project (the "Initiative"). This Initiative intends to support and invest in the capacity of the state's partners, both current and potential, in an equitable, inclusive, and sustainable way to address unmet capacity needs and ensure a strong partnership network that continues to efficiently deliver high-quality and high-priority clean water projects as funding evolves.

For Phase 1 of this Initiative, CWIP contracted with The Clark Group, LLC (TCG) to conduct an assessment through outreach to current and potential clean water partners (i.e., Vermont's "Clean Water Workforce"). The goals of the assessment were to uncover key Clean Water Workforce capacity challenges and to outline which investments in capacity would accelerate adoption and implementation of clean water projects statewide.

The **Core Questions** and **Considerations for Priority Interventions** (listed below) were designed by CWIP to help achieve the goals of this Initiative and were provided to TCG at the onset of the assessment to guide the data collection methodology, analysis, and recommendations. The recommendations in this report are intended to help inform Phase 2 of the Initiative.

Core Questions

CWIP identified the following Core Questions that were used to inform the data collection, analysis, and findings in this report:

1. Are there opportunities for increasing the capacity of partners already engaged in clean water work, and if so, how do we ensure equity and inclusion in this effort?

2. What tools/capacities/resources do partners need to efficiently manage additional clean water funding and/or to grow to meet additional funding? Which of these needs are most prevalent amongst many of the partners?
3. What tools/capacities/resources do partners need to be able to make a smooth transition under new funding mechanisms? What gaps are introduced under these new funding mechanisms? Which of these needs are most prevalent amongst many of the partners?
4. Are there capacity workforce gaps specific to a given sector (e.g., stormwater or forestry), clean water project type (e.g., dam removals or river corridor easements, or clean water project life stage (e.g., education, engineering, or maintenance)?
5. What is the potential for developing new partners in Vermont's clean water work? How do we ensure equity and inclusion in this effort?
6. Are there barriers to participation in clean water funding initiatives for traditionally underrepresented communities or for non-traditional clean water partners?
7. What types of capacity support currently exist around the State and are there gaps that create challenges in organizational success or inequity state-wide?
8. What internal (within the state of Vermont) changes or additional information sharing should be considered that would assist partners in activating clean water funding? Does the State present certain bottlenecks or barriers that could be improved?
9. What workforce development opportunities would be beneficial to partners in implementing clean water projects? Likewise, what workforces exist that may be underutilized?
10. What opportunities exist to increase collaboration versus competition among partners?
11. What types of interventions would most efficiently and equitably enhance capacity and address any identified barriers or bottlenecks?

Considerations for Priority Interventions

CWIP identified the following Considerations for Priority Interventions to be used as a framework for evaluating suggested interventions:

1. Which interventions will address the most pervasive capacity needs and/or bottlenecks or barriers across the network of partners?

2. Which interventions are most likely to accelerate voluntary clean water project adoption and implementation?
3. Which interventions support the sustainability of capacity improvements in the absence of future funding?
4. Which interventions are the most cost-effective and have the greatest impact given the funding available for Phase 2?
5. Which interventions address capacity gaps or needs not otherwise addressed by other funding initiatives?
6. Which interventions can be deployed in complement to the State's goals around diversity, equity, and inclusion?
7. Which interventions are best suited for the short-, medium-, and long-term horizons?

Contractor Workplan

The TCG team for this project includes:

- Jess Wymer, TCG, Project Manager
- Lisa Mahoney, TCG, Senior Advisor
- Emily Boedecker, Momentum Communications LLC, Senior Advisor
- Michele Kupersmith, Senior Advisor
- Emily Harris, TCG, Staff Support
- Caitlin Seznec, TCG, Staff Support

TCG and CWIP worked together to develop a workplan that established the project schedule, described how the tasks for the project would be completed, and the overall approach to answering the Core Questions. In coordination with CWIP, TCG designed a data collection and analysis methodology, interviewed participants, analyzed the data, developed initial findings, mapped respondents' input/findings to the Core Questions, and developed recommendations for Phase 2. The tasks outlined in the workplan were completed during Phase 1 and serve as the basis of this report.

Data Collection Methodology Design

The methodology was designed by 1) determining whether surveys or interviews would be used, 2) reviewing other relevant capacity development initiatives, 3) drafting questions and performing informal consultations, and 4) curating a diverse interviewee sample. The data collection methodology was designed to answer the Core Questions, identify capacity needs and suggested interventions, and inform the recommendations in this report.

Determining Data Collection Tool

Surveys and interviews were both considered as potential data collection tools. While surveys have the benefit of generating a larger sample size, interviews were chosen as the data collection tool given the interest in gathering more detailed information on specific capacity needs and to provide participants with more space to provide additional feedback. In addition, interviews were selected because the concepts of this initiative are difficult to convey in a survey and interviews allowed space for asking clarifying questions, for example, where there is a lack of universally used terminology across the clean water network.

Consideration and Review of Other Relevant Initiatives

TCG reviewed other relevant capacity-building assessments and funding sources identified by CWIP to avoid duplicating recent or ongoing efforts related to capacity building and to ensure that Phase 1 efforts were targeted toward remaining knowledge gaps. TCG also identified and reviewed other capacity-building grants and initiatives in neighboring states and throughout the country. The overarching goals of this process were to 1) identify already known capacity gaps and needs within Vermont's clean water workforce and use CWIP's initiative to build on those findings, and 2) review existing capacity-building grants in order to identify what funding clean water partners in Vermont have access to and to compare existing capacity-building funds in the state to those in the broader region and other regions across the country to learn what components and structure of capacity-building are most effective and efficient.

Based on the TCG's review of these capacity-building funds and initiatives, a few commonalities and priorities emerged that align with interviewee responses from Phase 1 of CWIP's initiative:

- Unrestricted funding is used across multiple geographies to support organizations' existing strategic plans or other organizational capacity needs identified by applicants.
- Multi-year funding programs aim to sustain capacity growth over time.

- Capacity-building funds can be coupled with free training programs to provide a framework for addressing gaps and coming up with new solutions.
- Funding can be targeted to build the capacity of a certain type of organization or be made available to a broader audience to build capacity of cross-sector networks that include non-traditional clean water partners.

TCG considered these commonalities and connections to interview responses when developing recommendations about capacity-building funding for CWIP constituents.

More information on these capacity initiatives can be found in **Appendix: Review and Consideration of Other Capacity Initiatives**.

Informal Methodology Consultations with Clean Water Practitioners

At the onset of the project, CWIP provided TCG with a list of entities and individuals that CWIP staff regularly engage with on clean water work and a list of other interest groups to use to identify participants in Phase 1 of the initiative. TCG reviewed this list and consulted with 5 individuals who have a deep knowledge and experience of clean water work, and were representative of the potential interviewees, to provide feedback on the draft interview questions and/or suggest interview participants. Individuals that provided consultations on the data collection methodology did not participate in interviews to maintain an even level of access to the interview questions prior to the interviews.

Interview Participants

Interview participants included both traditional and non-traditional partners.[7] TCG consulted with current clean water partners to help identify non-traditional and potential clean water partners to engage with. TCG also leveraged their team's expertise to identify potential interview participants in addition to considering participant suggestions from the informal consultations and CWIP's suggested contacts.

Selection Considerations

TCG conducted research and utilized their expertise to compile a comprehensive list of potential interview participants and to develop a draft list of proposed interview participants. To account for the more limited participation as a result of selecting the interview approach for the data collection methodology, the interview list was designed to represent diversity in the following criteria:

[7] Non-traditional clean water partners are organizations and groups that were identified by CWIP or other stakeholders who might have an interest in clean water projects but who are not currently funded by or do not currently regularly engage with CWIP.

- Type of organization (project managers, contractors/consultants, non-traditional/potential partners)
- Project sector (developed lands, natural resource protection and restoration, forestry, agriculture)
- Project stage (assessment, design, development, permitting, engineering, installation/construction, maintenance)
- Current/potential CWIP grant funding recipient
- Geographic service area
- Experience with/knowledge of Vermont clean water projects
- Organization size

After identifying a list of potential participants, TCG held a workshop with CWIP and CWIP provided input on the draft list of interview participants. During the workshop, CWIP and TCG worked to finalize a list of participants utilizing the selection criteria developed. See **Figure 3** for the redacted list of interview participants with some of the key selection criteria considerations.

Pre-Interview Information Sharing

The selected interview participants received an initial outreach email requesting their participation in the interview process, providing general background information, and explaining the next steps. The initial outreach was tailored based on if the interview participant was a non-traditional partner or not. For non-traditional partners, the outreach included context on why CWIP is interested in hearing from them.

Once the interview participants agreed to participate in the process, they were provided with a pre-interview primer. The primer contained information on how to schedule the interview, a link to the pre-interview survey questions (see Pre-Interview Survey), the list of interview questions, and supplementary materials to review prior to the interview. The supplementary materials included the interview questions, a visual aid of the Clean Water Project Process Map, information on clean water project lifecycles, examples of clean water projects, CWIP background information, and the Components of Organizational Capacity Diagram. These materials can be found in **Appendix: Pre-Interview Outreach Materials**. The pre-interview primer's purpose was to provide the participants with time to review the background materials for context and to think through their answers prior to the interview to minimize the likelihood that they would forget to share important information. Interview participants were also encouraged to share the interview questions with their colleagues to gather their feedback to include in their interview responses given the restraints on the number of participants.

Pre-Interview Survey

The pre-interview survey was designed to gather summary demographic data about the organizations that the participants were affiliated with. Gathering this data ahead of the interview reserved more time during the interviews for the participants to share detailed, qualitative information. See **Appendix: Pre-Interview Survey Questions**.

Interviews

Interviews were designed to take approximately 1 hour each, and interviews were conducted during a five-week time period. While the interview approach resulted in a more limited number of individuals that could participate in data collection compared to administering a survey, the interviews allowed for the collection of more detailed feedback that helped inform the basis of this report.

The interview questions were designed to collect qualitative data to be analyzed and organized in order to help answer CWIP's Core Questions. The interview questions were designed using simple terminology to be accessible for all interview participants. Interview questions were framed as open-ended questions in order to provide qualitative data on the stages of the clean water project life cycle and organizational capacity building and where intervention is most needed. Participants were asked follow-up questions during interviews when appropriate to provide further clarification and detail on the participant's experience.

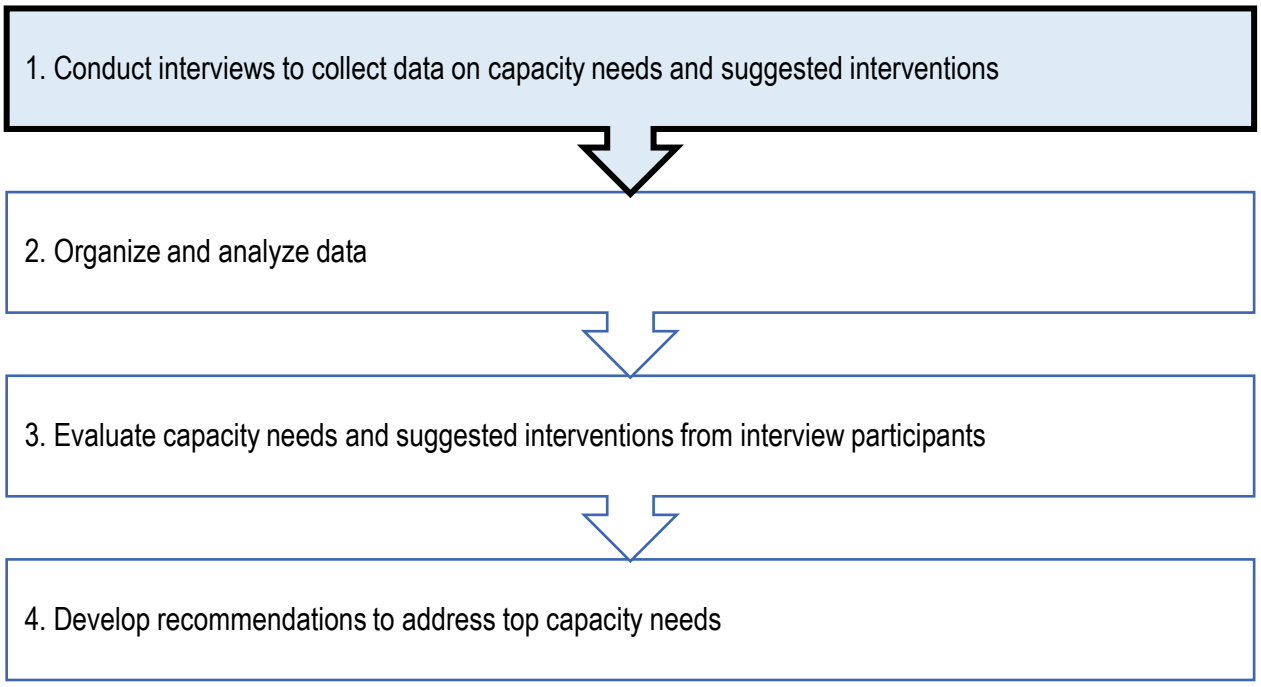
All participants opted to have their interviews recorded for note-taking purposes. Interview recordings were transcribed by TCG, and a redacted copy was provided to CWIP at the conclusion of the interview process.

A process map was developed to depict the clean water project lifecycle and was incorporated into the interview questions to help identify where potential interventions might aid with clean water workforce capacity development. All interview participants were provided the process map prior to their interview. The process map helped frame the participants' responses during the interview and was utilized in individual interviews when appropriate. See **Appendix: Clean Water Project Lifecycle Process Map**.

Data Collection

Figure 2 below is a visual representation of the data collection, analysis, evaluation, and recommendation process. This section of the report describes Step 1: Conduct interviews to collect data on capacity needs and suggested interventions.

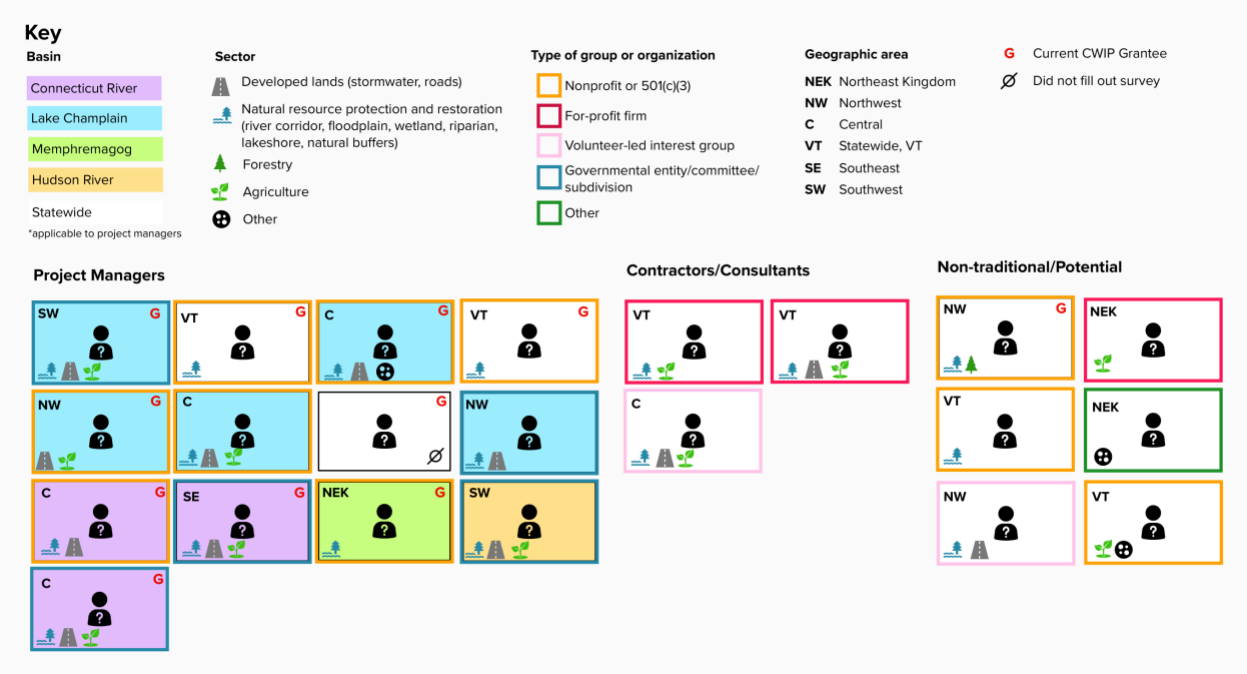
Figure 2. Data Collection, Analysis, Evaluation and Recommendation Process: Step 1



TCG compiled a broad list of potential interviewees based on recommendations from informal consultations, CWIP's recommendations, and TCG team's expertise. Based on time limitations for conducting interviews and using the selection criteria to maximize diversity, CWIP and TCG worked together to narrow down the list of potential interviewees to 26 individuals. Efforts to maximize participation included providing the opportunity for participants to submit written responses, having flexibility in interview format (phone call, in person, or online video conference), having flexibility in available interview times, and extending the deadline to submit written responses. Despite these efforts, only 22 out of the 26 identified participants were interviewed due to last-minute participant cancellations. Out of the 22 participants interviewed, 1 participant did not fill out the pre-interview survey; therefore, their survey data is not represented. Figure 3 below depicts the demographics of the 22 interview participants.

Data Collection

Figure 3. Redacted Interview Participant List



Project Managers, Contractors/ Consultants, and Non-traditional/ Potential Partners: The Contractor and CWIP worked together to determine the level of representation between the project managers, contractor/consultants, and non-traditional/potential partners. The decision was to have the primary group of interview participants be the project managers because they would have the most experience interacting with the CWIP granting process. Natural Resources Conservation Districts (NRDC), Regional Planning Commissions (RPC), and watershed groups were all represented.

- Project Managers: 13
    - NRDC: 3
    - RPC: 2
    - Watershed Group: 5
    - Other Non-profits: 3
- Contractor/Consultants: 3
- Non-traditional/Potential: 6

Type of Group or Organization

- Nonprofit or 501(c)(3): 10
- For-profit firm: 3
- Volunteer-led interest group: 2
- Governmental entity/committee/subdivision: 5
- Other: 1

Data Collection

Basins (only applicable to project managers)

- Connecticut River Basin: 3
- Lake Champlain Basin: 5
- Memphremagog Basin: 1
- Hudson River Basin: 1
- Statewide: 3

Geographic Area: The objective was to have equal geographic representation among the interview participants, however, scheduling and lack of response led to some areas having more participation than others. Many of the larger organizations tend to work at the statewide level, which is why a high number of organizations work at the state level.

- Northeast Kingdom: 3
- Northwest: 4
- Central: 5
- Statewide: 6
- Southeast: 1
- Southwest: 2

Data Analysis Methodology

Compile Interview Notes

TCG took notes during each of the interviews. After interviews, TCG used the interview recordings to fully transcribe the interview details and reviewed the individual interview notes to ensure consistency in the recordings and transcriptions for quality control of the data set.

Analysis

Individual statements from interview notes, which were originally organized by interview question, were labeled to correspond with the Core Questions. From that point, TCG reviewed the labeled responses and drew out consistent themes. Capacity needs and interventions suggested by participants were then organized by each of CWIP's Core Questions.

Because interview participants were encouraged to confer with their colleagues on the interview questions, some participants may have been speaking on behalf of several individuals. Taking this into consideration, statements that were only mentioned by one or two individual participants were included in the analysis. Significant consideration was given to all responses, but consistent responses were weighed more. The analysis aimed to represent individual experiences while also highlighting the major themes.

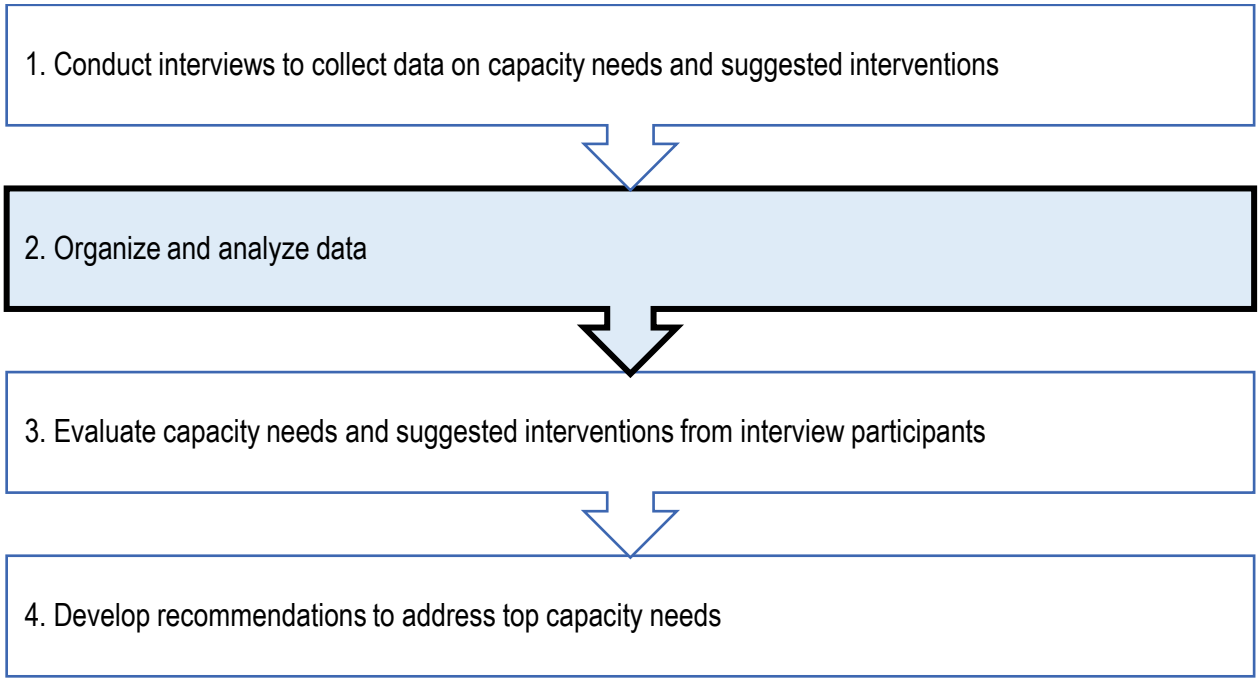
TCG prepared initial findings from the interviews and presented them to CWIP. CWIP provided feedback on the initial findings that informed the structure of the report.

During the data analysis phase, TCG identified capacity needs and evaluated interventions suggested by participants. Suggested interventions were evaluated using CWIP's Considerations for Priority Interventions. TCG then developed recommendations based on the evaluation, top capacity needs, and the TCG team's expertise.

Analysis of Data Collection Findings

Figure 4 below is a visual representation of the data collection, analysis, evaluation, and recommendation process. This section of the report describes Step 2: Organize and analyze data.

Figure 4. Data Collection, Analysis, Evaluation, and Recommendation Process: Step 2



This section of the report includes the data collected from the interviews organized by response to CWIP's Core Questions. For the purposes of this report, responses to the Core Questions listed below are limited to the data collected from the interviews and do not include any additional TCG or CWIP speculation in order to maintain the integrity of the data that was collected.

As discussed in the data collection methodology section of this report, each of the interview participants received the list of CWIP's Core Questions to review prior to their interview, but they were not asked to answer the Core Questions directly. Instead, a separate list of interview questions was developed in an attempt to collect information that would help to answer these Core Questions. This approach was selected for several reasons, including: an anticipated lack of universal understanding of some terminology used in the Core Questions, the extent of the content covered in the Core Questions being outsized for 1-hour long interviews, and for the interviews to be better inclusive of non-traditional clean water partners who may be unfamiliar with this work.

While the data collected from the interviews contributes to answering CWIP's Core Questions, some answers may still be incomplete in cases where there was no data to

support the answer. Therefore, answers to the Core Questions may benefit from further evaluation.

It should be noted that fact-checking was not part of the data analysis, and any statements included in this section that are inaccurate present an opportunity for CWIP to clarify and improve their communications and messaging to their partners.

Core Question 1 – Are there opportunities for increasing the capacity of partners already engaged in clean water work, and, if so, how do we ensure equity and inclusion in this effort?

Capacity Needs

Participants within the "Project Manager" category use existing plans (Tactical Basin Plans, river corridor plans, stormwater master plans, and watershed assessments) to identify potential projects because they are more likely to be eligible for funding. Participants said that there are undeveloped projects within those existing plans that they would be able to develop with more available staff time and funding. In areas of the state that have more limited access to these existing plans, organizations have to spend more time gathering data to identify projects, which limits their capacity to develop more projects.

Participants affiliated with organizations that receive dedicated staff funding or other unrestricted capacity funding said those funding sources are critical to their organization's ability to grow successfully.

Participants noted that in order to increase capacity and consider staffing up, they would need the ability to better predict funding levels year after year for voluntary clean water work.

Participants said there is insufficient funding for clean water work that is not directly tied to project implementation. Even with more clean water funding available in Vermont, administrative requirements have increased, which increases the cost for organizations, and this reduces the capacity of participants to implement more projects. Many participants need to balance their time between pursuing funding and administering grants with actual project development and implementation, which limits their capacity to take on additional work. This capacity constraint is particularly acute for organizations without dedicated administrative staff.

Project-based funding models and the need to apply for funding at multiple phases of the same project are limiting factors for participants' capacity to develop and implement more projects. Participants mentioned that they need to plan their budgets two to three years in advance, and annual project-focused funding is not dependable enough for some

organizations to hire more staff with confidence that they will be able to sustain their salaries over time.

Interventions Identified

1. Introduce more unrestricted funding into the CWIP granting models to provide organizations opportunities to increase the capacity of their existing staff or hire additional personnel to fill specific needs and expand capacity.

2. Dedicate more resources to developing river corridor plans and similar assessments in regions that do not already have them in order to aid in project development in those areas. Include a set of conceptual project designs in the plans to streamline the process.

Core Question 2 – What tools/capacities/resources do partners need to efficiently manage additional clean water funding and/or to grow to meet additional funding? Which of these needs are most prevalent amongst many of the partners?

Capacity Needs

Participants said that there is sufficient project work to justify hiring more people for their organization to be able to take on more projects, but they are unclear whether the amount of available funding will be sufficient to support new staff salaries over multiple years.

To manage additional clean water funding, participants said their organizations would need more dedicated project managers, administrative support, and landowner outreach coordinators.

- Participants mentioned that they currently have to split their time between project management, grant management, and associated administrative duties with actual project work, making it difficult for them to scale up with current staffing levels.
- Landowner engagement is a critical aspect of advancing voluntary projects, and landowner outreach requires a specific set of expertise that can be curated through experience but that can be lost with staff turnover (for example, the ability to understand landowner priorities and interests, to build and maintain those relationships, and to talk to landowners about potential projects). This is in addition to losing the specific landowner connection/relationship when a staff member leaves. Participants mentioned that being better able to retain staff would improve the landowner outreach and cultivation needs for more project development.

Participants mentioned a lack of organizational funds as a limiting factor for their organization's ability to manage additional funding and/or grow – whether it's not having enough funding to hire new staff and pay more staff salaries, to retain existing

staff by offering competitive salaries, or take on more projects or do more complex and large projects.

- In the case of volunteer organizations or even staffed organizations without a staff position dedicated to fundraising, any fundraising work they do diminishes their capacity for project development and implementation. Overhead funding from project-based grants is not sufficient to cover all personnel and general operating costs, so additional fundraising is necessary for many organizations.
- Organizations need funding not only to cover personnel and project development, but also for project costs like landowner compensation for conservation easements and maintenance in order to expand current efforts.
- There is some concern that relying on volunteer time, whether it's non-profit board members or other unpaid labor and time, is not sufficient to achieve Act 76 goals. Both watershed organizations and NRCDs cited a need for more staff capacity in order to develop and install more projects, and many were interested in hiring additional staff without having to double the number of grants they take on in order to have enough overhead funding to fund a new staff person.
- The project-by-project model leaves organizations who depend on CWIP's grant programs as one of their main funding sources at risk of not being able to keep and pay their staff if they don't get enough projects. Many organizations prefer the block grant funding model because they are easier to administer, and it better enables them to develop more projects and cover staff time in the process.
- Some interviewees said they want more flexibility and autonomy in the project development stage to enable them to alter/adapt project plans more easily and efficiently.

Interventions Identified

3. Provide funding for staff time that isn't directly tied to project deliverables. Participants that receive this type of capacity funding attributed it to the reason they are able to continue to exist and grow compared to similar organizations.

Core Question 3 – What tools/capacities/resources do partners need to be able to make a smooth transition under new funding mechanisms? What gaps are introduced under these new funding mechanisms? Which of these needs are most prevalent amongst many of the partners?

Capacity Needs

As mentioned under Core Question 2, participants said they would need more administrative support to manage additional funding, but they would also need more administrative time and support to manage new duties under the new funding

mechanisms. For example, partners will need more administrative time to manage Basin Water Quality Council work and CWSPs will need to allocate more administrative time to managing subgrants.

Under the new funding mechanisms, CWSPs need to develop processes for subgrants and clean water partners throughout the State will need to learn and adapt to these new processes. Participants noted concerns about each of the individual CWSPs establishing their own grant application processes and sub granting protocols because organizations operating Statewide or in multiple basins will have to learn multiple new processes to apply for funding. This would result in increased administrative costs and requirements for partner organizations, particularly if organizations are applying for funding in more than one basin.

Participants said that it would be helpful for CWSPs and CWIP to provide additional outreach and communications to their partners, such as providing them with a clear summary of what the new funding model looks like, how it might impact them, and how they can best participate under the new funding mechanisms. In addition to more communication about new processes, participants said it would be helpful for partners to receive formal training on the new funding processes after the funding protocols for each CWSP are established. It was suggested that CWIP host training(s) geared towards the perspective of different types of partners, for example, tailoring training for RPCs differently than training for non-profits or consultants.

- Currently, there are geographic gaps in where the focus and funding is because of the process of rolling out the CWSP model, so the other areas of the State are very unsure of how things will play out for them or what their funding streams will look like.

Funding gaps identified during the interviews include:

- Inadequate funding put towards project identification and development in the formula grant target formula.
- Private road associations don't qualify for the same grants that watershed organizations do, and CWIP currently only funds projects on private property for agriculture or lakefront property. This leaves a lot of private land contributing to phosphorus pollution ineligible for funding mechanisms needed to address the pollution.
- There is not enough funding dedicated to forestry conservation easements.
- The dam removal funding that is available is barely enough for one project this year. Many organizations mentioned their interest in scaling up their involvement in this work or doing more/bigger dam removal projects. If CWIP wants this to continue, there would need to be more funding in this pot to support it.

- There is very little funding or focus on working forest land contributions of phosphorus pollution. Historically, forestry and clean water work have been very siloed even though they are related.
- Maintenance is not currently funded by CWIP, and it is not clear if there will be a mechanism for this in the new grant programs. Some participants said project maintenance can often exceed the cost of the original grant for project implementation, particularly if replanting or other significant adaptive management work is needed.
- The work crew grant only funds project implementation, but not clean water training for the crews.
- There is no grant funding to replace septic systems, only loan programs.

Specifically for the new CWSP model, participants mentioned opportunities for additional information sharing and training including:

- Facilitating a statewide coordination mechanism for CWSPs, and hosting meetings with partners in that way rather than only going to individual basin meetings. CWSPs can still have local meetings but interviewees said it would be nice to have an overarching effort to pull it all together and coordinate on the statewide level.
- Collaborating with statewide organizations to decide who sits on what basin water quality council, because they're being asked to sit on all of them.
- Instituting common templates, common decision-making processes, and one website where organizations applying to clean water grants can go that has timelines and coordinated information about all of the CWSPs.
- Completing all chapters of the CWSP guidance as soon as possible with partner input. Some partners said that not having all chapters of the guidance complete before starting with the CWSP process was cause for concern, and that it would be better to have a draft of the complete guidance that is open for public comment rather than the current piecemeal approach.
- Hosting training on the new CWSP model tailored to specific users (RPCs, engineers and consultants, watershed groups, etc.)
- Using the Tactical Basin Planning existing quarterly meetings as an opportunity for CWSPs to update partners on recent and upcoming available funding.
- Collaborating with watershed organizations and NRCDs familiar with voluntary clean water projects to increase CWIP and CWSP understanding of voluntary project development and how it differs from regulatory and enforceable projects and permits.
- Providing an opportunity for clean water partners to sit down with CWIP staff at the beginning of project development to determine how to maximize public benefit. This would be helpful to operationalize things like incorporating public

access, resilience strategies, and habitat considerations in water quality-focused projects.

Interventions Identified

4. Establish consistent grant processes and protocols across all CWSPs.

5. Provide training geared toward different stakeholders involved in the new CWSP model.

6. Expand the block grant model to other CWIP grants to increase flexibility for sub-grantees and enable them to cover more staff time with CWIP funding.

7. Complete all chapters of the CWSP guidance as soon as possible with partner input.

8. Increase funds available for project maintenance.

9. Increase funds available for project identification.

10. Increase funds available for dam removal.

11. Increase funds available for forest conservation easements and forestry-sector projects.

12. Fund clean water projects on residential property and on private roads and driveways.

Core Question 4 – Are there capacity or workforce gaps specific to a given sector (e.g., stormwater or forestry), clean water project type (e.g., dam removals or river corridor easements), or clean water project life stage (e.g., education, engineering, or maintenance)?

Capacity Needs

Participants identified workforce and capacity gaps within specific project types and stages and mentioned limitations in the availability of certain types of contractors and resources for projects as well. Gaps identified by participants include:

- There are technical assistance positions within DEC that have remained vacant or there are not enough of, limiting the capacity of volunteer-based and less-resourced organizations that rely on those DEC staff for site visits, project development, and project design. For example, lake and pond associations are entirely volunteer-based and rely heavily on the expertise of DEC lake and pond staff, particularly for scientists to do site visits, but there are over 800 lakes and ponds in the state with very few DEC staff to manage them, greatly limiting the technical assistance that lake associations' need to implement projects. Interviewees also identified insufficient DEC enforcement staff as another capacity

gap, as that is a role that partner organizations do not have the jurisdiction to take on.

- Participants are struggling to attract qualified applicants when they're hiring – not all groups are looking to hire for entry-level positions, and instead would prefer to hire more experienced technical staff, particularly where higher-level legal knowledge or landowner negotiation skills are required.
- Participants mentioned the need for more support and funding for project maintenance to ensure better stewardship of projects involving tree plantings, particularly after the first few years. Groups like parks departments that end up being responsible for maintenance already lack capacity and maintaining clean water projects is not their top priority.
- Working with seasonal staff makes training on installation and maintenance challenging, since it takes time and experience to learn planting techniques, the implications of site variability, site-specific maintenance needs, and site-specific design for projects like rain gardens. Relevant training by DEC like the Natural Shoreland Erosion Control Certification (NSECC) currently happens at the end of field season which is beneficial for returning staff members to prepare for the following year but doesn't help new staff who are hired in February or March.
- Participants that hold conservation easements struggle to find attorneys with enough capacity to complete the title work needed for easements in a timely manner. Some organizations are waiting one month to up to two months after a project is developed for title work to begin, which becomes the most significant impediment to conservation projects moving forward. However, those organizations can't afford to hire an attorney in-house to be responsible for the title work, so they are continually searching for more capacity in this project sector.
- Participants identified the need for an investment in the equipment to do more invasives control and to remove bushes and trees.
- Participants noted that there is a need for project managers who have the skills and experience needed to oversee project installation and manage subcontractors, and that it's difficult to recruit that skill set for the wages that nonprofit organizations are able to pay.
- Areas without watershed groups are lacking in capacity for project identification and development. In areas where there are no watershed groups, NRCDs and other entities end up fulfilling the project development role in addition to their other responsibilities as NRCDs, limiting their capacity overall.

Participants also noted gaps in the available contractors and supplies needed for project design and installation, particularly for larger, more complex projects. The gaps mentioned include:

Analysis of Data Collection Findings

- A lack of project designers, even for conceptual design projects that don't require complex engineering. This gap is particularly prevalent within the Northeast Kingdom and in general for floodplain restoration projects. Participants said they only had one contact for design for certain types of projects, and they were hesitant to share that contact with other groups for fear of competition for services. For example, one participant said there was only one engineer in the State who can do dam removal design, and out-of-state designers are significantly more expensive. As another example, one participant's organization had to go through procurement for engineering and design work multiple times to find qualified applicants to design and implement a single project.
- There are clean water education and training gaps in the heavy machinery contractor workforce that is preferred for project installation. Clean water practitioners are hesitant to recommend all of the available contractors because they don't think they have adequate awareness of best practices for clean water work.
- There is potential for competition for engineers with regulatory vs. voluntary projects. For example, if every town in the Lake Champlain basin is trying to meet new 3-acre permit with stormwater projects, that may affect engineer availability for voluntary projects. It's not clear how this will influence projects engineers decide to work on at this time.
- There is a Statewide tree nursery shortage that presents challenges for scaling up projects involving tree plantings. Related to this gap, participants noted a lack of trained botanists that know how to properly raise and transplant trees needed for projects involving plantings.
- There has been some difficulty sourcing materials for hardscape stormwater projects and services, such as geotechnical boring services for bridge and culvert projects, large rock and specialized stormwater project components like swirl separators, concrete, and manhole components.
- Participants who have focused on hiring more entry-level staff rather than more technically experienced personnel are experiencing growing pains where they have many inexperienced staff but not enough middle management and organizational infrastructure to sustain further growth.
- While surveyors have been able to keep up with the current workload for clean water projects, any ramp up of clean water work may result in a capacity gap for projects that require surveyors.
- More people coming on board with clean water work as a result of increased funding will eventually increase competition for funding again, and with the limited number of designers, engineers, etc. there could be competition for those resources as well.

Interventions Identified

13. Create a project design training series to enable more clean water practitioners able to develop that skill set.

14. Hire a law firm for DEC to assist conservation organizations with the title work necessary for easements, in order to expand the capacity of land trusts and easement holders statewide.

15. Support and fund the expansion of tree nurseries to increase the inventory available for clean water project plantings.

16. Provide botany training to provide individuals with skill sets needed to operate tree nurseries.

Core Question 5 – What is the potential for developing new partners in Vermont's clean water work? How do we ensure equity and inclusion in this effort?

Capacity Needs

Participants noted that there are areas in the State that are lacking in watershed organizations, but that it can be difficult to establish new watershed organizations if the community members do not have the time, interest, or funds to dedicate to the effort.

Among non-traditional interview participants, there is a general lack of awareness about CWIP grant programs and funding opportunities, but there is interest. Participants mentioned the following opportunities for CWIP to engage with new partners:

- Engaging more with forestry-sector organizations and providing them with more opportunities to participate in clean water project funding opportunities
- Incorporating and considering new technology for removing Phosphorus in best management practices, for example, biochar and fungi
- Partnering with lakes and ponds organizations
- Increasing co-benefit considerations

Participants that are affiliated with non-traditional partners of CWIP mentioned that their organizations' missions include water quality more broadly, but their projects are not set up to specifically target phosphorus reduction. These organizations implement projects that contribute to water quality improvements, either directly or indirectly, and there is potential for CWIP to develop partnerships with these organizations by fostering projects that have clean water co-benefits that contribute to ecosystem health outside of reducing phosphorus, for example, terrestrial habitat restoration projects, biodiversity enhancement projects, shore adjacent projects, upland forest area projects, and forest conservation projects.

Predictable, dedicated funding is key for enabling new partners to participate in clean water work. Both new and existing partners that are mission-driven are deeply committed to their work as opposed to making a profit, but they would still need assurance that if they were to engage with CWIP in this work, their organizations can confidently make the financial and staffing commitments needed to do so.

There is an opportunity to establish new clean water partners via programs and mechanisms that are focused on increasing and broadening community access to public water resources, such as waterways and lakes, through initiatives like boat rentals, swimming lessons, covering beach fees, and working with students. Broadening access to public water resources to people and communities who don't live on a lake or own a boat also presents an opportunity for organizations to engage more intentionally with underrepresented, under-resourced, or Environmental Justice focused communities in support of the State's DEI goals within the clean water field.

Interventions Identified

17. Fund paid staff positions at volunteer-based organizations to introduce consistency and retain institutional knowledge.

18. Invest in Vermont Technical College and technical centers at high schools by funding the development of relevant programs or partner with those institutions to provide trainings to bring more people to the clean water field.

19. Consider DEI co-benefits in grant criteria and analysis of projects.

Core Question 6 – Are there barriers to participation in clean water funding initiatives for historically underrepresented communities or for non-traditional clean water partners?

Capacity Needs

A barrier to participation in clean water funding initiatives for non-traditional partners and historically underrepresented communities is a general lack of awareness about said initiatives, as mentioned in Core Question 5.

Barriers to Diversifying the Existing Workforce

Challenges associated with landowner outreach during project development was identified as a barrier to engagement with clean water projects. Participants said some people in the target audience for clean water project outreach, including small farmers and marginalized communities, have a natural and well-founded distrust of government-scale initiatives. In order to overcome this barrier, clean water partners need messengers and outreach staff who are integrated with the local community, who understand people's priorities, and who know how to connect clean water goals to other co-benefits.

Participants said it would be difficult to recruit and retain qualified staff at the rate they can afford to pay, and the lack of affordable housing across the state makes it even more challenging. External factors such as the lack of affordable housing make it difficult to utilize programs like AmeriCorps that can fill some capacity gaps, and also exacerbates the issue of all clean water staff (particularly NRCDs and watershed organizations) being underpaid and less able to afford the cost of living in the state.

Participants mentioned no longer participating in the Eco AmeriCorps program because the positions don't pay enough, and only those with other means of support could afford to take an AmeriCorps position. Participants mentioned a lack of diversity in the state as a whole as another barrier to diversifying staff.

Barriers to Non-Traditional Partner Engagement

Participants are interested in implementing strategies to overcome the barriers to involvement in clean water work. To improve the engagement with underrepresented communities and non-traditional partners, participants want to prioritize outreach to and collaboration with the Abenaki community and other indigenous communities. Participants suggested inviting residents of affected communities to volunteer at project sites and providing stipends to incentivize participation on boards from community members who would not otherwise be able to join, with an aim of making the board more representative of the community they serve.

Stakeholder audiences targeted for clean water project outreach are often limited to those currently engaging with waterways which can include hunters, anglers, lakefront property owners, or landowners with significant acreage. However, this group is not representative of all people in the state who would benefit from clean water projects. In order to engage with underrepresented communities in the state, partners would need more staff time to allocate to that engagement because the type of outreach and education they do for these non-traditional partners will look different than those already engaged in clean water work. For example, not everyone is going to attend a public workshop, so the outreach may consist of something more time-intensive like knocking on doors to bring awareness to local water quality issues and how community members can get involved.

Socioeconomic considerations are a common theme and barrier to both diversifying the clean water workforce and engaging new or underrepresented communities in clean water work. Participants indicated that they do not always know what relevant resources and points of contact are available to address socioeconomic considerations or concerns that arise when implementing clean water projects. Participants also acknowledged that some of the barriers and equity concerns cannot be addressed at the project-level, and that broader policy changes would be more appropriate solutions.

Clean water projects in Vermont rely heavily on the donation of easements by property owners. As a result, only wealthy individuals can access conservation, which is a barrier to participation and an equity concern. To address this problem, participants identified the need for financial incentives for landowners to implement conservation easements. Other barriers include an unwillingness on the part of some landowners to restrictions on their property that would enable clean water projects to move forward. For example, for farmers to take working land out of production for conservation or restoration purposes, programs like Trees for Streams have specific requirements regarding what the landowner can do on their property for the duration of the contract. Clean water partners working with landowners to implement these projects have encountered resistance to these types of restrictions and indicated that landowners in some cases would prefer for someone to purchase their land for conservation easements and projects rather than enter into one of these contracts.

Rural settings and small organizations also present unique challenges for recruiting new staff outside of the traditional clean water channels. A more remote location is not always going to be the best fit for those seeking to enter the clean water workforce, and this is something that companies and organizations operating in rural areas have to be conscious of when recruiting. Smaller organizations want to prioritize reaching out to underrepresented communities and recruit more diverse staff, but some emphasized that they don't have the capacity to do so or don't know where to start. Additionally, they already have trouble recruiting qualified applicants so diversifying the pool of applicants is less of a priority than finding qualified staff. Because of this and the funding limitations that limit recruitment opportunities, partners often don't solicit applicants outside of the traditional channels.

Interventions Identified

20. Offer more direct education and outreach to non-traditional partners about clean water grant funding opportunities.

21. Dedicate funding to specifically support and build existing outreach and engagement with indigenous communities.

22. Dedicate more funding for conservation easements to make the practice more inclusive of landowners who are not able to donate their land for easements.

23. Dedicate more funding to co-benefit considerations to better engage with non-traditional clean water partners.

24. Assess whether policy changes can address systemic issues with diversifying the clean water workforce.

25. Clarify the State's DEI goals and definitions and communicate those goals and definitions with clean water partners to inform their work in this space.

26. Take more of a leadership role on the State's DEI goals and initiatives.

27. Increase stipends for participation on committees and commissions.

28. Offer scholarships at the University of Vermont with associated agreements for the student to remain in the state for 1-2 years after graduation working for a local engineering firm.

29. Collaborate with other New England states to recruit a more diverse clean water workforce and partner with umbrella groups like the American Council of Environmental Consultants to coordinate this effort across multiple states.

Core Question 7 – What types of capacity support currently exist around the State and are there gaps that create challenges in organizational success or inequity state-wide?

Capacity Needs

While many clean water partners rely on indirect rates charged to CWIP grants to cover a portion of their overhead expenses[8], there are other sources of capacity support that have contributed to participants' success.

Participants that utilize the AmeriCorps program for capacity support mostly use those individuals for fieldwork. Some tasks participants use AmeriCorps members for include supporting surface water planning maps on new farm projects, riparian buffer planting plans, tree planting logistics and procurement, tree planting volunteer recruitment and coordination, tree planting maintenance and stewardship, easement monitoring, coordinating college work/learn partnership crews, outreach and education, invasive species removal, and working in plant nurseries.

While AmeriCorps can be a useful workforce development program, AmeriCorps positions are only one year in duration, so organizations have to spend time re-training new people each year which can be time consuming for staff. Some organizations share the same AmeriCorps person. For example, there are some host organizations that take the lead responsibility for the AmeriCorps person (i.e., managing the associated paperwork, training, reporting, and general oversight) who lend a certain percentage of their AmeriCorps person's time to other organizations.

Concerns noted about the AmeriCorps program include the timing of the program being aligned with the academic school year, which does not always align well with the field

[8] These are expenses that can't be allocated to a specific project and are associated with running the organization as a whole, such as administrative salaries, rent, and office supplies.

season, and equity concerns regarding how much they are paid compared to the cost of living.

Participants that receive modest annual capacity funding support, such as from the US Forest Service or the Lake Champlain Basin Program, said that makes a significant difference in their ability to continue operating and growing as an organization and allows them to pursue more grants.

Vermont's Agency of Agriculture Food and Markets (AAFM) has provided multi-year funding to at least one interview participant for landowner outreach and cultivation, and another has been able to hire dedicated administrative and outreach personnel to focus on Ag CWIP projects which frees up other staff members' time to focus on DEC CWIP work. In order to increase the capacity of project implementers, in the past, Vermont Fish and Wildlife Service directed work to local engineers to build up their clean water work expertise, providing intentional capacity building in the engineering world. The agency eventually did the same with contractors, helping them learn what it means to replace culverts and install woody debris in streams.

Gaps identified through the interviews that affect organizational success include:

- Dedicated bookkeepers, since the complexity of dealing with multiple state and federal grants requires dedicated bookkeeping time and expertise. As discussed in Core Question 2 and 3, many existing staff need to take on administrative and bookkeeping duties in addition to their project work.
- Dedicated funding for clean water partners, particularly volunteer organizations, to hire personnel to represent their organization and manage projects. Organizations struggle to hire new staff because they either have to find a grant source to fund the entire position or wait until they have enough money from past grants to fund the new position.

Interventions Identified

30. Fund landowner outreach, project management, and administrative support (to include bookkeeping) staff positions.

31. Institute predictable, multi-year funding to enable clean water partners to plan their budgets accordingly.

32. Transition the AmeriCorps schedule from academic year to calendar year and offer host organizations the option of hiring on a quarterly basis.

Core Question 8 – What internal (within the State of Vermont) changes or additional information sharing should be considered that would assist partners in activating clean water funding? Does the State present certain bottlenecks or barriers that could be improved?

Capacity Needs

Participants identified DEC grant program administrative requirements as a significant bottleneck.

- DEC's administrative grant requirements were described as being outsized compared to other State and federal funding sources, and that administrative work takes staff time away from project work.
- Participants said DEC's high level of involvement in project development phase is burdensome and makes it unnecessarily complicated to accomplish town and landowner outreach. DEC's level of involvement during the project development phase would be more appropriate during project implementation.
- Some participants said their organizations are no longer applying for DEC funding because the administrative costs are high relative to the amount of funding for projects and reporting requirements are overly burdensome.
- DEC's regulatory sign-off required at each phase of each project hinders overall project progress.

Participants said they are facing challenges from vacant DEC staff positions and an insufficient number of certain DEC positions which can present a barrier to project development and implementation. Inadequate DEC staff resources have resulted in long wait times for responses, project delays, loss of landowner interest following delays, and lack of enforcement of the Shoreline Protection Act. Statewide organizations mentioned inconsistencies in processes and guidelines on project eligibility from DEC staff across different regions of the State, which leads to uncertainty when developing projects.

The lack of clarity around project priorities and eligibility is a barrier to some organizations applying for CWIP funding. Interviewees said they need more direct and specific communication from CWIP about which projects are eligible for CWIP funding and what areas of the state CWIP is prioritizing for project development and implementation. Organizations have limited ability to expend general funds and staff time on developing projects without assurance that they are DEC priorities and will be funded.

Participants said that the requirement to seek other funding sources for projects before applying to CWIP for funding adds additional steps to the grant application process and impedes their ability to implement more clean water projects.

The reimbursement model is a challenge for clean water partners with smaller operating budgets and results in project implementation problems such as delayed payments to sub-contractors which can negatively affect those relationships. The reimbursement model is also a barrier for less-resourced organizations that are interested in taking on more complex and expensive projects because they cannot afford to make large up-front financial commitments while waiting to be reimbursed.

Participants said they will not apply for clean water funding to implement projects that will have water quality benefits and other ecosystem co-benefits if funding programs have a sole focus on reducing phosphorus reduction.

Training and information sharing opportunities identified by interview participants include:

- Training on how to integrate different sources of water quality data into an overall watershed assessment. Participants said that the biological monitoring arm of DEC has great data but it's not user friendly. They requested that biological monitoring data, Vermont agricultural and environmental lab data, and GIS layers be integrated into a user-friendly tool.
- Invite more input from experienced professionals in the clean water field on training for the existing watershed projects database to make sure both the training and the format of the projects database meet the needs of clean water partners.
- Collaborate with Fish and Wildlife Service or Parks and Recreation department biologists in criteria and selection process for clean water projects that have more ecosystem co-benefits.
- Improve consistency and understanding of regulatory sign-off requirements for each project phase within DEC, since participants said that DEC staff did not always understand why they were being asked to sign off on something before a project had reached the permitting phase.
- Work with non-traditional clean water partners who have missions more focused on habitat restoration and other ecological co-benefits to model the benefits of ecologically focused projects and incorporate those in the grant program co-benefit analysis.

Interventions Identified

33. Transition to more grants on a rolling basis rather than RFP only in order to better align with how project development occurs and reduce wait times for funding to come through when a landowner has agreed to collaborate on a project.

34. Remove the requirement for identifying dates and dollar values for each deliverable in work plans after a grant has been awarded. Use the approved budget submitted with

the grant application to track project progress rather than having to come up with another document.

35. Transition to end-of-year annual reporting structure instead of quarterly reports for smaller grant awards to reduce administrative requirements for small organizations.

36. Consider past performance and successful collaboration with other clean water partners to even the playing field for organizations not solely focused on nutrient reduction and allow more non-traditional partners to get involved.

37. Increase DEC staff capacity to provide technical assistance on more complex projects or for volunteer organizations by filling open positions and adding more technical assistance staff positions.

Core Question 9 – What workforce development opportunities would be beneficial to partners in implementing clean water projects? Likewise, what workforces exist that may be underutilized?

Capacity Needs

Participants noted that it would be beneficial to provide water quality training to the contractor workforces involved in heavy-machinery, road crews, landscape architecture, earth-moving, excavation, and similar entities that might be involved in clean water project implementation. It was noted that it might be beneficial to consider a clean water training program to certify contractors and increase their knowledge of clean water, biodiversity, and flood resilience, while recognizing the potential capacity challenges to implement and manage such a certification program. Developing training for this audience is both a workforce development opportunity to aid the clean water practitioners currently implementing projects, as well as an opportunity to improve and expand those workforces by attracting more customers for their services.

While clean water workforce training presents the potential for developing new partners, participants pointed out that it will be difficult to retain those individuals after they are trained if they aren't offered competitive salaries in Vermont's clean water workforce.

Participants identified the following workforce development opportunities:

- Yestermorrow Design/Build School is involved in a pilot program to train and certify the next workforce generation of clean water practitioners. There is an opportunity for the school to build out the curriculum to include earthmovers, landscape architects, and realtors over the next few years.
- The existing Rivers and Roads training offered by DEC is a potential option to reach more contractors and other collaborators on clean water projects and landscape architecture work.

- VTrans is supporting a year-long training program with 15 training sessions coupled with video resources for the new transportation resilience planning tool, and clean water partners that work on transportation projects see this investment in training in addition to funding development of the tool as a step towards reaching more practitioners with the knowledge and best practices the tool aims to support.
- Another existing training that practitioners find helpful is the NSECC training offered by DEC in November each year, but the timing of this training does not benefit new staff at the beginning of the field season in the spring. If an additional training could be added for new field staff at the start of the field season, this would better align with practitioners' project installation timing and ensure that new members of the clean water workforce are being trained towards the start of their first field season rather than the end.
- Further training on the projects database for new staff was also something interviewees would find helpful and having a coordinator at DEC keeping track of everything in the watershed projects database and ensuring they continue to move through the development and design process would help clean water partners as well.
- Engineers could benefit from higher-level interdisciplinary training, such as on hydraulic modeling and dam safety courses that have been hosted in the past. The University of Vermont has an applied projects engineering course that gives students firsthand experience in how clean water projects are designed and installed; in order to bring more people into the clean water workforce in Vermont, and further diversify the workforce, the state could provide scholarships for engineering students to go through these interdisciplinary programs to benefit the clean water workforce in the long term and ensure companies and organizations that are looking to grow to meet the increase in clean water funding have qualified applicants to recruit. To address the shortage of engineers and designers for clean water projects, DEC could engage with this program to increase the number of qualified project designers in Vermont and limit the need to look out of state at more expensive engineering and design firms.
- There is an opportunity to grow the workforce at entry-level positions, with a conservation corps model to deploy work crews across the state as needed. This would benefit the state's goals by having a dedicated corps to install projects, and also increase the number of trained, skilled workers entering the clean water workforce once they complete their service with the conservation corps. Increased, sustained investment in the Vermont Youth Conservation Corps could lay the groundwork for this strategy, and relying on groups like Serve VT that already have corps workforce infrastructure to recruit corps members from local communities would increase opportunities for younger generations.

Interventions Identified

38. Create a water quality training or certification program for project implementation contractors.

39. Align the schedule of training for field staff with the start of their field season rather than the end, so new staff members have the knowledge and skill set they need to be effective in their work.

40. Create a scholarship program for engineering students to pursue interdisciplinary training at the University of Vermont.

41. Increase and sustain the investment in organizations like the Vermont Youth Conservation Corps and Northwoods Stewardship Center to develop the future clean water workforce and collaborate with an organization like Serve VT to develop additional corps workforce capacity so there are more boots on the ground to install projects.

Core Question 10 – What opportunities exist to increase collaboration versus competition amongst partners?

Capacity Needs

Participants noted that recognizing the different backgrounds and skill sets that partner organizations have within different sectors and project types can help promote more successful partner collaboration. For example, historically, watershed groups and NRCDs have long-standing backgrounds and experience with the necessary aspects of implementing voluntary clean water projects, such as coordinating with private landowners. Those skills can be leveraged by the CWSPs, which are for the most part RPCs that have more of a historical background in regulatory or municipally led clean water projects.

Participants said project demonstration days where practitioners could watch and participate in project installation and speak with engineers, designers, and site workers to get an understanding of a clean water project would help with information sharing and partner collaboration and would be particularly helpful to non-traditional clean water partners.

Participants said the Tactical Basin Planning work has been beneficial for implementing projects, that it has helped to establish and solidify regional partnerships, and that it promotes inclusive collaboration among partners.

There was an opportunity mentioned to improve communication and project alignment between organizations working with the same landowner on different projects. For example, if an organization is working with a landowner that has conserved land with

another entity, they should coordinate with one another to align potential projects with conservation easement requirements.

The competitive bid process can result in more exclusivity in the entities that receive funding, as opposed to building collaboration among other partners that could help implement projects. A watershed and/or locally oriented bidding process as opposed to a competitive process would better enable engagement among less-resourced organizations.

- In some instances, RPCs and other well-resourced entities have to provide a lot of support to emerging nonprofits or volunteer-based groups, which reduces their ability to grow their own organization's capacity and focus on their own project development and implementation.
- The dynamic between RPCs and other clean water partners can leave some entities feeling marginalized within the clean water project process and like they are not respected clean water partners. This makes collaboration more challenging.

Interventions Identified

42. Host quarterly calls within watersheds or basins to provide an opportunity for clean water partners to share project updates, learn about what other groups are working on, and facilitate a networking opportunity with more structure to identify opportunities for further collaboration.

43. Facilitate an opportunity for clean water partners to problem-solve together and provide opportunities for training new staff.

44. Transition CWIP's bid process to be more watershed and locally focused rather than competitive across the state to promote capacity building and development for smaller, less resourced groups and contractors.

45. Find ways to develop more workforce infrastructure through something like a conservation corps in order to ensure there are more qualified practitioners in the field overall to eventually reduce competition for those experts and contractors.

46. Support development of watershed organizations where none exist to assist with project identification and development capacity gaps in those regions or target more funding and support to existing organizations like NRCDs to fulfill that role.

47. Fund a planner who works across multiple town governments in a quasi-regionalism model to provide additional administrative and planning support or fund a water quality outreach role to start watershed groups in areas that need them as mentioned above.

48. Incorporate criteria for partner collaboration into grant processes to incentivize new partnerships.

49. Collaborate with forestry-focused groups to achieve water quality benefits from forestry practices and install more projects in upland forest areas.

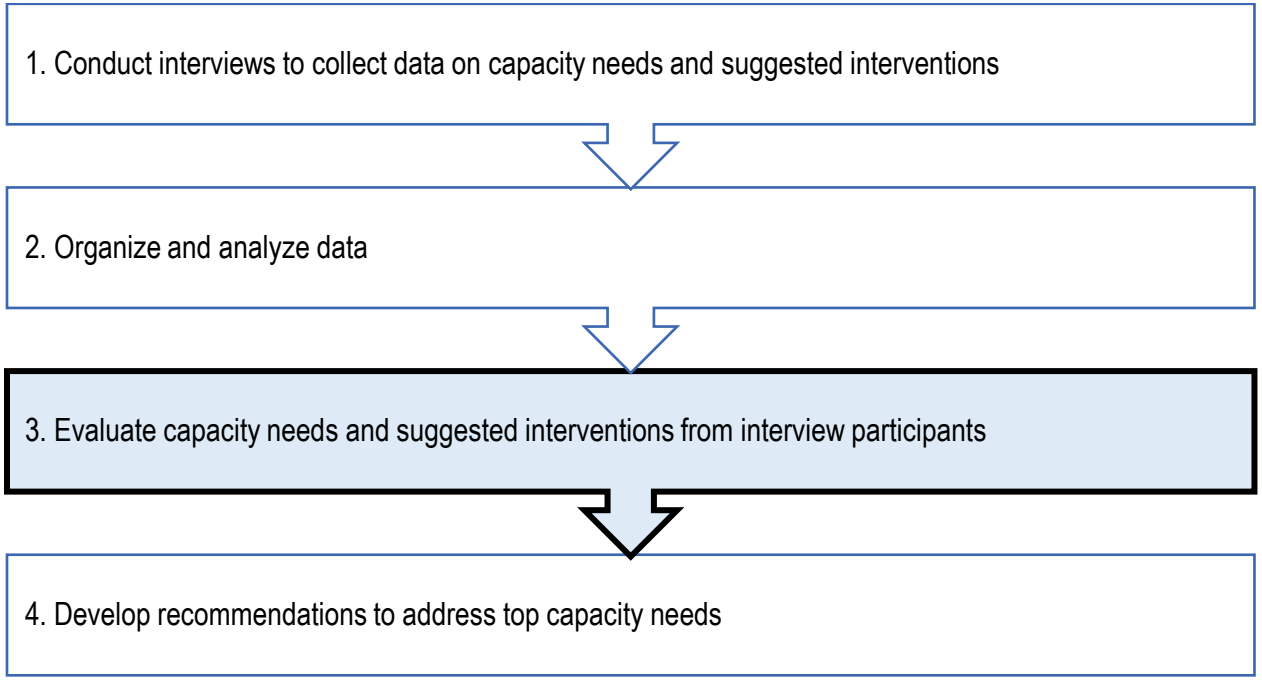
Core Question 11 – Which types of interventions would most efficiently and equitably enhance capacity and address any identified barriers or bottlenecks?

This core question is addressed in **Contractor Recommendations for Phase 2**.

Evaluation and Prioritization of Suggested Interventions

Figure 5 below is a visual representation of the data collection, analysis, evaluation, and recommendation process. This section of the report describes Step 3: Evaluate capacity needs and suggested interventions from interview participants.

Figure 5. Data Collection, Analysis, Evaluation, and Recommendation Process: Step 3



The suggested interventions identified by participants through the data collection process are listed in Table 2 below evaluated against CWIP's **Considerations for Priority Interventions**:

1. Which interventions will address the most pervasive capacity needs and/or bottlenecks or barriers across the network of partners? (Noted in the table as, "Address Needs/Barrier")
2. Which interventions are most likely to accelerate voluntary clean water project adoption and implementation? (Noted in the table as, "Accelerate Projects")
3. Which interventions support the sustainability of capacity improvements in the absence of future funding? (Noted in the table as, "Support Sustainability)

Evaluation and Prioritization of Suggested Interventions

4. Which interventions are the most cost-effective and have the greatest impact given the funding available for Phase 2? (Noted in the table as, "Cost-effective)
5. Which interventions address capacity gaps or needs not otherwise addressed by other funding initiatives? (Noted in the table as, "Address funding gap")
6. Which interventions can be deployed in complement to the State's goals around diversity, equity, and inclusion? (Noted in the table as, "DEI")
7. Which interventions are best suited for the short-, medium-, and long-term time horizons? (Noted in the table as, "S / M / L")

Table 1. Evaluation of Identified Interventions

C. Q.	Suggested Intervention	Considerations for Priority Interventions						
		Address Need/Barrier	Accelerate Projects	Support Sustainability	Cost-effective	Address funding gap	DEI	S / M / L
1	Introduce more unrestricted funding (not directly tied to project deliverables) into the CWIP granting models to provide organizations opportunities to increase the capacity of their existing staff or hire additional personnel to fill specific needs and expand capacity.	X	X		X	X		M
1	Dedicate more resources to developing river corridor plans and similar assessments in regions that do not already have them in order to aid in project development in those areas.		X	X	X	X		S
2	Provide funding for staff time that isn't directly tied to project deliverables.	X	X		X	X		S
3	Establish consistent grant processes and protocols across all CWSPs.	X	X	X	X	X		S
3	Provide training geared toward different stakeholders involved in the new CWSP model.	X	X	X	X	X		S
3	Expand the block grant model to other CWIP grants to increase flexibility for sub-grantees and enable them to cover more staff time with CWIP funding.	X	X	X	X	X		S
3	Complete all chapters of the CWSP guidance as soon as possible with partner input.	X	X	X	X			S
3	Increase funds available for project maintenance.	X	X			X		S

Evaluation and Prioritization of Suggested Interventions

C. Q.	Suggested Intervention	Considerations for Priority Interventions						
		Address Need/Barrier	Accelerate Projects	Support Sustainability	Cost-effective	Address funding gap	DEI	S / M / L
3	Increase funds available for project identification.	X	X			X		S
3	Increase funds available for dam removal projects.	X	X					M
3	Increase funds available for forestry conservation easements and forestry-sector projects.		X					M
3	Fund clean water projects on residential property and on private roads and driveways.	X	X			X		M
4	Create a project design training series to enable more clean water practitioners to develop that skill set.	X	X	X	X	X		M
4	Hire a law firm to assist conservation organizations with the title work necessary for easements.					X		M
4	Support and fund the expansion of tree nurseries to increase the inventory available for clean water project plantings.	X		X				L
4	Provide botany training to provide individuals with the skill sets needed to operate tree nurseries.	X		X		X		M
5	Fund paid staff positions at volunteer-based organizations to introduce consistency and retain institutional knowledge.	X	X			X		M
5	Invest in Vermont Technical College and technical centers at high schools by funding the development of relevant programs or partnering with those institutions to provide training to bring more people to the clean water field.					X	X	L
5	Consider DEI co-benefits in grant criteria and analysis of projects.						X	M
6	Offer more direct education and outreach to non-traditional partners about clean water grant funding opportunities.		X	X	X	X	X	S
6	Dedicate funding to specifically support and build existing outreach and engagement with indigenous communities.					X	X	M

Evaluation and Prioritization of Suggested Interventions

C. Q.	Suggested Intervention	Considerations for Priority Interventions						
		Address Need/Barrier	Accelerate Projects	Support Sustainability	Cost-effective	Address funding gap	DEI	S / M / L
6	Dedicate more funding to co-benefit considerations to engage specifically with non-traditional clean water partners.						X	M
6	Assess whether policy changes can address systemic issues with diversifying the clean water workforce.			X		X	X	L
6	Clarify the State's DEI goals and definitions and communicate that with clean water partners to inform their work in this space.			X	X		X	S
6	Take more of a leadership role on DEI at the State-level.						X	M
6	Increase stipends for participation on committees and commissions.						X	L
6	Offer scholarships at the University of Vermont with associated agreements for the student to remain in the state for 1-2 years after graduation working for a local engineering firm.	X				X	X	L
6	Collaborate with other New England states to recruit a more diverse clean water workforce and partner with umbrella groups like the American Council of Environmental Consultants to coordinate this effort across multiple states.			X		X	X	L
7	Fund landowner outreach, project management, and administrative support staff positions.	X	X		X	X		S
7	Institute predictable, multi-year funding to enable clean water partners to plan their budgets accordingly.	X	X		X			M
7	Transition the AmeriCorps schedule from academic year to calendar year and offer host organizations the option of hiring on a quarterly basis.			X				M
8	Transition more grants to a rolling basis rather than RFP only.	X	X					S
8	Remove the requirement for identifying dates and dollar values for each deliverable in work plans after a grant has been awarded.	X	X	X	X			S

Evaluation and Prioritization of Suggested Interventions

C. Q.	Suggested Intervention	Considerations for Priority Interventions						
		Address Need/Barrier	Accelerate Projects	Support Sustainability	Cost-effective	Address funding gap	DEI	S / M / L
8	Transition to end-of-year annual reporting structure instead of quarterly reports.	X	X	X	X			S
8	Increase DEC staff capacity by filling open positions and adding technical assistance staff positions.	X	X	X	X	X		S
9	Create a water quality training or certification program for project implementation contractors.		X	X		X		M
9	Align the schedule of training for field staff with the start of their field season rather than the end.			X		X		S
9	Create a scholarship program for engineering students to pursue interdisciplinary training at the University of Vermont.			X		X		L
9	Increase and sustain the investment in organizations like the Vermont Youth Conservation Corps and collaborate with an organization like Serve VT to develop additional corps workforce capacity.	X		X		X	X	L
10	Host quarterly calls within watersheds or basins to facilitate a networking opportunity with more structure to identify opportunities for further collaboration.			X		X		S
10	Facilitate an opportunity for clean water partners to problem-solve together and provide opportunities for training new staff.			X		X		M
10	Transition CWIP's bid process to be more watershed and locally focused rather than competitive across the state to promote capacity building and development for smaller, less resourced groups and contractors.			X	X	X	X	M
10	Find ways to develop more workforce infrastructure through something like a conservation corps in order to ensure there are more qualified practitioners in the field overall to eventually reduce competition for those experts and contractors.	X	X				X	L

Evaluation and Prioritization of Suggested Interventions

C. Q.	Suggested Intervention	Considerations for Priority Interventions						
		Address Need/Barrier	Accelerate Projects	Support Sustainability	Cost-effective	Address funding gap	DEI	S / M / L
10	Support development of watershed organizations where none exist to assist with project identification and development capacity gaps in those regions or target more funding and support to existing organizations like NRCDs to fulfill that role.	X	X	X	X			L
10	Fund a planner who works across multiple town governments in a quasi-regionalism model to provide additional administrative and planning support or fund a water quality outreach role to start watershed groups in areas that need them.	X	X		X			L
10	Incorporate criteria for partner collaboration into grant processes to incentivize new partnerships.			X		X	X	M
10	Collaborate with forestry-focused groups to achieve water quality benefits from forestry practices and install more projects in upland forest areas.			X				L

Top Ranked Suggested Interventions

The interventions listed below address at least 4 of the Considerations for Priority Interventions, shown as Xs in the table above. The interventions listed below are organized by the #7 Consideration for Priority Interventions #7 (Which interventions are best suited for the short-, medium-, and long-term time horizons?).

Short-Term Time Horizon

- Dedicate more resources to developing river corridor plans and similar assessments in regions that do not already have them in order to aid in project development in those areas. Include a set of conceptual project designs in the plans to streamline the process
- Provide funding for staff time that isn't directly tied to project deliverables.
- Provide training geared toward different stakeholders involved in the new CWSP model.
- Complete all chapters of the CWSP guidance as soon as possible with partner input.
- Expand the block grant model to other CWIP grants to increase flexibility for sub-grantees and enable them to cover more staff time with CWIP funding.
- Offer more direct education and outreach to non-traditional partners about clean water grant funding opportunities.
- Fund landowner outreach, project management, and administrative support staff positions.
- Remove the requirement for identifying dates and dollar values for each deliverable in work plans after a grant has been awarded.
- Transition to end-of-year annual reporting structure instead of quarterly reports.
- Increase DEC staff capacity to provide technical assistance on more complex projects or for volunteer organizations by filling open positions and adding technical assistance staff positions.

Medium-Term Time Horizon

- Introduce more unrestricted funding (not directly tied to project deliverables) into the CWIP granting models to provide organizations opportunities to increase the capacity of their existing staff or hire additional personnel to fill specific needs and expand capacity.
- Create a project design training series to enable more clean water practitioners to develop that skill set.
- Incorporate criteria for partner collaboration into grant processes to incentivize new partnerships.

- Transition CWIP's bid process to be more watershed and locally focused rather than competitive across the state to promote capacity building and development for smaller, less resourced groups and contractors.

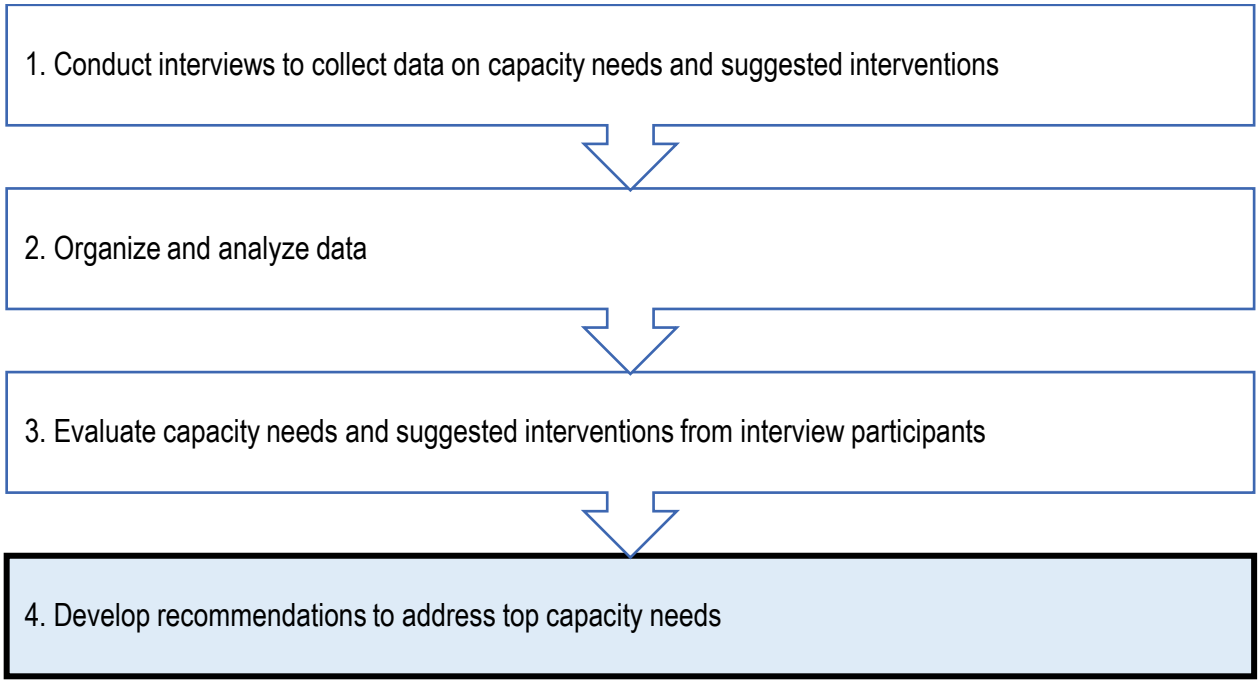
Long-Term Time Horizon

- Increase and sustain the investment in organizations like the Vermont Youth Conservation Corps and collaborate with an organization like Serve VT to develop additional corps workforce capacity.
- Support development of watershed organizations where none exist to assist with project identification and development capacity gaps in those regions or target more funding and support to existing organizations like NRCDs to fulfill that role.

Contractor Recommendations for Phase 2

Figure 6 below is a visual representation of the data collection, analysis, evaluation, and recommendation process. This section of the report describes Step 4: Develop recommendations to address top capacity needs.

Figure 6. Data Collection, Analysis, Evaluation, and Recommendation Process: Step 4



The following recommendations were developed by the TCG team to help inform Phase 2 of this initiative. To develop these recommendations, the TCG team utilized the data collected during interviews, identified top capacity needs, and reviewed and evaluated interventions suggested by interview participants to address those needs against CWIP's Considerations for Priority Interventions. These recommendations intend to address the most prevalent capacity needs identified by participants in order to enable them to accelerate the adoption of clean water projects. While the TCG team considered the interventions suggested by interview participants in developing recommendations, it should be noted that there is a distinction between the TCG team's recommendations and the interventions suggested by interview participants.

Each of the recommendations below are followed by their rationale and problems addressed by implementing the recommendation.

Strengthen Partner Network

Recommendation 1: CWIP should establish a multi-year capacity-building grant program with broad eligibility of staff, infrastructure, systems, contract, or other

expenses directly or indirectly demonstrated by grant applicants to increase their capacity.

Recommendation 2: Work with the Clean Water Board to establish a baseline commitment of funding, based on predictable funding sources, for capacity-building grant program to enable partners to plan and budget, and commit to hiring and investing in staff. Identifying an amount of funding in year 1 that can be sustained will allow the building of a simple model to identify how many entities can be supported in each for a given budget.

Rationale: Dramatic increases in funding and investments in standing up the CWSPs have outpaced the ability of clean water partners to meet that demand. CW partners are diverse, from nonprofits with a large staff to all volunteer run organizations, and their needs are diverse. A flexible capacity-grant program has the potential to address a number of issues identified by respondents such as staffing, administration, systems, subcontracting and board development that are currently constraining non-profit partners. This recommendation is modeled on a successful capacity building program operated for many years by Ben and Jerry's which provided $30K a year in flexible funding over a three-year period. By providing a flexible grant program that allows the organization to define their capacity building needs and the impact on their project development and implementation capacity, CWIP will be able to identify the most effective investments.

In situations where staffing is needed, either for administrative and support functions or for project related positions, organizations need to be able to guarantee employment and have enough time to grow the number of projects they take on which in turn will support full-time employees. For example, staffing may require $30K in year one to create a new position, with funding of $20k and $10k in subsequent years. A systems investment may require $15K in the first year with $5K to ensure training and implementation in year 2 and funds for maintenance and continued training in year 3. Funding should be greatest in year 1 and tail to year 3. The grant award should commit funding in years 1, 2 and 3 with a report due to confirm deployment of funds before payments are made in years 2 and 3.

Given CWIP's uncertainty about future funding, the number and size of awards in the first year should be based on reasonable certainty that second and third year funds can be allocated within the CW budget. For example, if $240K can be identified this would support 8 entities at $30K in Year 1, or if $200K can be identified this would support 8 entities at $25K in Year 1. Depending on the amounts requested by the entities in each year, an estimated 3-5 new entities can be supported each year within an identified budget.

CWIP can further target and increase the impact of these funds by directing a portion of funding to underserved areas (see recommendation to clearly define and identify underserved areas).

Problem(s) being addressed: The lack of organizational capacity relative to the influx of clean water funds, and challenges to recruit and retain qualified staff. Right now, there is a certain number of FTEs who are working with partners that have limited capacity to expand their volume of project work. Partners need these available funds to grow their number of FTEs. Over time, they can grow their portfolio of projects, and then more FTEs can be paid for by project work. These recommendations will align the capacity of nonprofit partners with the volume of funds available and support the ability of partners to recruit and retain needed skills, expertise, and staff.

Clean Water Service Provider Operations

Recommendation 3: Ensure that all protocols related to granting procedures, reporting requirements, and funding mechanisms are aligned across CWSPs to ensure that the capacity of partners working across watersheds is not depleted by the need to track, apply for, and manage multiple new funding mechanisms.

Recommendation 4: Established a shared responsibility between CWSP and Tactical Basin Planners/Watershed Planners to host regular calls for clean water partners to enhance collaboration, problem-solving, project identification and development, and to network. Consult with current and potential partners to identify a frequency and schedule that aligns with the project development cycle and seasonality.

Rationale: Interviewees expressed concerns that the roll-out of the clean water service provider model is adding complexity to an already complicated granting landscape. Partners operating in more than once CWSP territory will need to understand and keep track of different grant application, timing, and reporting requirements. Greater alignment of CWSP grant programs and opportunities to improve coordination and network is anticipated by partners to increase their ability to access and deploy available funding.

Problem being addressed: Lack of confidence in funding sources and ability to participate in CWSP grants.

Grant Process

Feasible with short-term benefits

Recommendation 5: Transition more grants to a rolling-basis to better align with project development cycles. Respondents did not identify specific grant programs but did speak

to the misalignment of grant programs with project schedules. Rolling grants either direct from the granting agencies or within block grants can alleviate this constraint.

Rationale: Project development timelines are variable, and the ability to apply for funding in a timely manner when landowners are engaged, when the seasons allow for implementation, and when contractors and resources are available was identified as an advantage by clean water partners interviewed. It should be noted that while this may add challenges for CWIP's administration to ensure funds are available throughout the year, it builds on the practice of objective scoring of project applications rather than comparative scoring the CWIP has utilized for a number of years.

Recommendation 6: Continue to expand block grant type grants wherever feasible. Respondents identified block granting as a successful mechanism to reduce grant administrative overhead and direct more capacity to projects.

Rationale: Block grants were identified as a successful mechanism for addressing issues related to project administration, and also have the potential to address the proposed intervention of rolling grant applications in Recommendation 5.

Recommendation 7: Replace quarterly grant reports with reporting at the end of each major phase of a project. Identify specific project types, for example in a lower technical or risk category, and identify a lower tier of grant size (for example lowest 20% of project cost) to pilot reduced reporting requirements. Track successful project completion and impact on grantee capacity to evaluate if pilot should continue and if expansion is warranted.

Rationale: Interviewees identified grant reporting requirements and in particular quarterly review requirements as an administrative burden. Identifying project types and lower cost projects for pilot projects will allow CWIP and partners to explore reducing this burden with a measured and measurable approach.

Recommendation 8: Establish a cost-based trigger for budget review. CWIP should identify a standard trigger point, such as a change in budget +/- a certain percentage, or with a floor or ceiling dollar threshold for smaller or larger projects, that will trigger a budget review during the grant timeline. Utilizing the approved budget, the grantee tracks project progress, and is responsible for notifying the state when the trigger point is reached and a budget review is required. This means the grantee would not submit budget updates until such time as the trigger threshold is reached. Respondents identified frequent budget reviews as a drain on capacity, and the approach recommended here is based on commonly used budget review triggers.

Rationale: Respondents identified frequent budget reviews as a drain on capacity, and the approach recommended here to address these issues is based on commonly used budget review triggers.

Medium-term, additional study/analysis needed

Recommendation 9: Convene a small study group to make recommendations for changes to the annual grants schedule, to include notification of funding opportunities, application due dates, application review dates, work plan development, contract execution, and reporting and monitoring requirements. The goal of the schedule should be to align with and take the greatest advantage of the project development cycle, seasonality, and other partner organizational management obligations.

Rationale: Respondents identified a number of areas where streamlined DEC granting processes could free up current partner capacity for projects. Recommendations included here are those where the perceived barriers to implementation are lower, and where additional study may identify additional feasible, short to medium term benefits. Other interventions identified such as replacing the reimbursement model with upfront payments should be explored by CWIP but are perceived to require either a longer timeframe or to have more substantial barriers to overcome.

Problem being addressed: Reducing administrative burdens for grant applications and grant management can increase the capacity of existing partners and lower barriers of entry for potential partners.

Training

Recommendation 10: Increase the number of training sessions on DEC tools, Act 76 funding, the CWSP model, and integrate trainings from other grantor organizations.

Rationale: Increased access to training and coordinating training with other grantor organizations can increase partners confidence in applying for funding and increases the ROI of time spent attending training is multiple grantors provide coordinated training.

Recommendation 11: Identify other organizations and entities who can host DEC training, or where DEC can present at conferences hosted by other entities – in particular to bring awareness and education to non-traditional partners.

Rationale: To increase the likelihood that non-traditional partners will apply for grants, DEC needs to take the training to these new audiences. Efficiencies can be gained where DEC participates as an invited trainer, leveraging the investment made by other groups in hosting and recruiting participants.

Recommendation 12: Convene a small study group to recommend an annual training schedule that will align with the project development cycle, seasonality, seasonal, part-time and contract staffing, and other partner organizational management obligations.

Rationale: With constrained capacity, clean water partners are reluctant to attend trainings that conflict with project development and implementation, or that conflict with

other organizational obligations. By collaborating and establishing a 12–18-month training calendar, CWIP and partners will be in a better position to recruit participants and to schedule time to attend training.

Problem being addressed: Lack of knowledge of clean water funding sources and changes to funding programs from any grantor organization.

Inter-Agency/Entity Collaboration

Recommendation 13: Establish a working group of grantor organizations, from state agencies, federal agencies, and private sources to identify overlap and unmet needs, with the goal of establishing a 3-year strategic roadmap for the development, retirement, and evolution of grant programs.

Rationale: With multiple agencies and entities working in the clean water space, the 'lane' that each is operating in can become murky. Where similar funding is offered by multiple agencies, grant applicants will migrate toward the less complex processes, and when agencies are expected to take action in a space, for example capacity grants as discussed in Recommendation 1, other entities hold off on taking action. Coordinating activities at a strategic level will aid granting organizations in proactively identifying and addressing gaps and overlap.

Problem being addressed: Lack of knowledge of and certainty in availability of funds and funding sources. Recommendation is intended to give partners the confidence to hire and expand capacity.

Diversity, Equity, and Inclusion of the Clean Water Network

Recommendation 14: Develop an equitable mechanism to identify underserved areas – the gap between partner capacity and project potential by watershed, identifying areas of the state that are underserved by the current network of clean water partners, and where an investment in capacity building and training can increase the number of projects developed and implemented. Tactical basin plans provide the best source of potential project information at this current time. In the absence of a robust project database for a watershed CWIP may need to utilize a landscape scale analysis to identify where potential projects may not yet have been identified, and to target capacity building funds to nonprofits willing and able to docs on these watersheds.

Recommendation 15: Establish clear definitions and measurable targets to accelerate progress towards advancing DEI goals.

Recommendation 16: Coordinate with organizations working with targeted populations to identify employment opportunities.

Recommendation 17: Provide financial support to clean water partners to cover the increased costs of bringing on less-well-prepared hires (mentoring, supervision, training, etc.). The Vermont Training Program model can be utilized as an example to follow.

Rationale and problem being addressed: These recommendations are all intended to help advance the State's goals concerning DEI.

Recommendations Specific to Workforce Development

Recommendation 18: Focus on Project Management as a key skill set needed in the sector overall. Identify training programs that are specifically designed for individuals involved in project management. Make these funds available to entities working in clean water. The funds would be used for training new hires as well as for up-skilling incumbent workers. Coordinate with the Vermont Department of Labor on this effort as they are familiar with and work with all of the training and education providers in the state. Consider modeling the distribution of funds generally along the lines of how the Vermont Training Program (run out of ACCD/Economic Development) grants funds to employers and education/training programs.

Rationale: Numerous interviewees expressed the need for (and deficiency of) this skill set. These funds enable organizations to recruit new talent that needed training in this area, as well as provide up-skilling of incumbent workers. This need is especially important in a tight labor market. Moreover, training helps address barriers for entry into a job and working one's way up a career path for those targeted in DEI workforce strategies. Effective project management is core to the productivity and overall success of any clean water project; interviewees indicated the need in this area.

Problem being addressed: The immediate need for more and better-trained project managers for organizations. This recommendation is tended to build the skill-base throughout the system of clean water work.

Recommendation 19: Increase support for volunteer initiatives. This is both a capacity issue as well as a workforce issue. Increased financial support to organizations would enable them to build capacity to organize and oversee volunteer-based projects. Fund paid positions for coordinators of local volunteer-staffed projects. These positions can be connected with a larger host/umbrella entity or be part of the volunteer-based initiatives. Include funds for the recruitment and training of these coordinators.

Rationale: Numerous organizations utilize volunteers to carry out their work. While interviewees were not specifically asked whether it would be more effective to use paid workers versus volunteers, deploying volunteers is an established model of carrying out water quality initiatives in communities. Interviewees specifically indicated that they

needed the ability to hire individuals who lived within the targeted communities, as these were the most effective leaders of volunteer activities.

Problem being addressed: The limited capacity of volunteer-led organizations, or organizations that rely on volunteers for project work. This recommendation is intended to expand and provide on-going support to locally based volunteer initiatives.

Recommendation 20: Expand the pool of engineers working on clean water projects. To approach this issue, DEC should first coordinate with other state agencies that work with engineers. Also, reach out to engineering organizations to further understand the underlying reasons for this shortage. These reasons might include pay scales in Vermont too low; State supported demand for engineers too sporadic; engineers in the state don't have the skills needed for clean water initiatives but might utilize professional development if it were financially supported; or other reasons. This must be explored in more depth before a policy response can be implemented.

1. Inventory the educational programs in Vermont that grant degrees in engineering that are relevant to water projects.
2. Identify the number of engineers currently in the state whose work can or could include clean water activities.
3. Investigate whether the shortage of engineers is a result of too few educational programs or due to other causes (e.g., graduates leaving the state, education programs not focusing on clean water work, engineers not choosing clean water projects due to pay levels).
4. Fund training to incentivize engineers to expand their skills to include clean water work.

Rationale: This deficit was clearly identified in the interviews, therefore necessitating action.

Problem being addressed: Insufficient pool of trained engineers for clean water projects. This recommendation is intended to expand pool of trained engineers for projects.

Recommendation 21: Do outreach to and fund training for boards and key staff within organizations (both non-profits as well as businesses) working on clean water initiatives. Leverage training models such as Common Good Vermont which provides nonprofit education and certification programs to Vermont nonprofits. Identify priority skills-development to increase the managerial, financial, grant writing, and governance expertise of clean water partners. Fund training for governing boards of non-profit organizations that receive clean water dollars.

1. Identify and/or develop those training programs. include in the training: water project priorities in the state; best practices for those projects; funds available for projects; how to coordinate/collaborate with other entities.

2. Leverage other training models such as Common Good Vermont which provides nonprofit education and certification programs to Vermont nonprofits. Identify priority skills development to increase the managerial, financial, and governance expertise of clean water partners. Provide training for board members and staff leaders to increase the financial and administrative grant literacy of partners.

Rationale: The State has an interest in incentivizing and supporting existing organizations to be more responsive to current and changing state policies and opportunities around clean water initiatives.

Problem being addressed: Deficits in organizations' ability to effectively participate in clean water initiatives. This recommendation is intended to increase the ability of clean water partners to participate in these initiatives.

Recommendation 22: Better utilize AmeriCorps as a source of clean water workforce. Where requested by organizations (likely the smaller ones) follow the model currently being jointly used by the Regional Planning Commission and The Lake Champlain Maritime Museum: The RPC (the larger organization) hosts the AmeriCorps volunteer. That volunteer spends a percentage of their time assigned to the LCMM. The LCMM praised this method as it provided them with a helper with no administrative burden attached.

1. Identify a host organization that can be the employer of record for AmeriCorps workers. This host organization will place the workers in other smaller organizations that do not have the capacity for training, administration, and mentoring of the individuals.
2. Fund experiences and training for AmeriCorps volunteers that accelerate their work productivity and connect them with the broader clean water effort, leading to the next step in their careers.

Rationale: AmeriCorps volunteers are a valuable low-cost contribution to the clean water workforce. But they don't work when the administrative/supervision burden outweighs the benefit to the host organization. AmeriCorps positions help individuals who don't already possess the skills and competencies to compete for the job develop their resume.

Problem being addressed: The lack of workers in the clean water workforce. This recommendation is intended to accelerate the learning curve of new hires and create a pipeline of workers in the clean water system.

Recommendation 23: Expand the number of college student internships involved in clean water work. Provide funds for organizational capacity to manage the interns and to pay wages to the interns. Confer and work closely with the Vermont Department of Labor on this effort.

Contractor Recommendations for Phase 2

1. Provide administrative support to host organizations to allow them to take on interns.
2. For academic unpaid internships, identify and fund other supports that the academic institutions need to increase these opportunities.

Rationale: College interns are valuable workers (thereby increasing organizational output) when they are managed well. Internships create the pipeline of workers that are connected to and trained in the work of Vermont organizations. Internships increase the likelihood that the student will choose Vermont as their home post-graduation. Interns bring valuable learning back to their schools, thereby increasing the matching of the education being delivered in Vermont to the work being performed in the community. Internships can significantly reduce the life and skills experience-gaps between students of backgrounds with more advantages and those with fewer advantages (the DEI objective). This mitigates the negative impact noted by one interviewee - that is, the low pay for AmeriCorps volunteers precludes access to the opportunity by those of limited means.

Problem being addressed: The need for more workers in the clean water workforce. This recommendation is intended to expand pipeline of workers in the system and increase likelihood that Vermont students will develop Vermont-based relationships and will remain in Vermont post-graduation.

Recommendation 24: Increase financial support to organizations for staff pay; provide that support over multiple years.

Rationale: Entities need to be able to better compete for and retain talent. Entities expressed strongly that their budgets preclude paying competitive wages, thus making recruitment and retention of skilled staff difficult. Furthermore, the short-term nature of the commitment to the hire (limited-period state grants) deters applicants from accepting the positions.

Problem being addressed: Challenges with recruiting and retaining skilled staff as a result of non-competitive wages.

Recommendation 25: Identify and develop industry-recognized credentials in the clean water field. Turn to the Vermont Department of Labor to guide and coordinate this effort with the State and the education/training providers in the state. Also reach out to the Vermont Agency of Education and the Regional Technical Centers, as well as the Vermont Agency of Commerce and Community Development.

Rationale: The VDOL is involved in an initiative to develop industry recognized credentials that will support Vermont's workforce. Make participating in the clean water workforce in Vermont a career path, thus incentivizing individuals to seek this arena and providing providers with the skilled workforce needed to carry out the work.

Contractor Recommendations for Phase 2

Problem being addressed: Unclear pathways into the clean water workforce and lack of consistency in training and expertise among contractors and other service providers used by clean water partners. This recommendation is intended to better identify career paths in clean water work and improve project outcomes through credentialed contractors.

Some program models in the state that could be followed and worked with (to varying degrees) in the disbursement of these funds:

- Follow the basic model of the Vermont Training Program that is run out of Economic Development in ACCD. Non-profit entities engaged in clean water work, as well as education/training providers, can apply for funds to pay for training when workers with the specific skills and competencies needed are not available. This training would be for both incoming and incumbent workers.
- Apprenticeship program run out of VDOL.
- Internship grant program run out of VDOL.
- Summer youth and other training programs run out of VDOL.
- Former Linking Learning to Life program placing and supporting school youth in employment.
- Vermont Youth Conservation Corps and Northwoods Stewardship Center model of employing and working with youth on conservation projects.

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Appendix: Interview Questions

Interview Questions for Traditional Partners

1. **What are the kinds of clean water projects that your organization is currently pursuing or prioritizing and what does the process look like for how your organization identifies clean water projects to pursue or prioritize?**
    a. What projects receive Board support? Why?
    b. How does your organization's mission influence the projects you pursue?
    c. How do finances influence projects that you pursue?
    d. Do opportunities to reduce nutrient loading levels influence projects that you prioritize?
    e. How do staffing levels and skills influence projects that you pursue?
    f. Are there other external factors that influence projects that you pursue or don't pursue?
    g. How does the size of projects influence what you pursue?
2. **How is your organization's work funded?**
    a. Where are there existing needs that are still not addressed with current or new funding opportunities?
        i. Are these needs widespread across organizations in VT, or are they specific to your organization?
        ii. What would help address existing needs?
    b. How might the new funding programs make it easier to do more clean water projects? [9]
    c. How might the new funding program make it more challenging to do more clean water projects?
    d. Do you currently utilize AmeriCorps to address any of your capacity needs? If yes, what are your reflections on this resource?
3. **Is your organization interested in growing to meet the increased demand for clean water projects? Why or why not?**
    a. If yes, in what ways do you envision growing? Would this include performing new types of clean water project work/services? [10]
    b. If yes, what are the additional/new skills or resources you might need to best utilize increased clean water funding? [11]

[9] ARPA, IIJA, Act 76 Formula or Enhancement grants
[10] Number of staff, more staff hours for existing staff, size/scale of projects, types of projects, geographic region
[11] Number of staff, more staff hours for existing staff, size/scale of projects, types of projects, geographic region

c. Are there any other skills or resources that are needed to carry out the work for your group or organization that are particularly difficult to recruit or retain? Why?
    i. What would be the most practical/efficient/ideal ways to address these capacity needs? [12]
    ii. How would addressing these capacity needs allow your organization to better engage in clean water work?
d. Where do you currently get your contractors and suppliers? [13]
    i. Are you currently facing any barriers to obtaining contractors or suppliers?
e. How do you recruit staff?
    i. When hiring, what experience level and skills do you look for, and what skills are more options that you would be able to train people internally?
f. What education and training does your organization provide to staff?
    i. Are education and training done internally or externally?
    ii. Are you interested in offering more education and training for staff?

4. Who are some of your clean water project partners?

a. How do you work together?
b. What skills/services do you provide one another?
    i. Do you exchange information with one another to accelerate project development?
c. How are your partners integral to your organization's ability to implement clean water projects?
    i. If yes, for all projects, or for particular sectors, types, or scales?
d. Are you looking for new partners?
    i. If yes, to provide you with what, or for you to provide them with what?
    ii. Which services or materials are hard to source?
e. Would it be appropriate for/easier for your organization to hire those skills/services in-house?
f. Are there any obstacles to collaboration with other partners in clean water work?
g. Are there instances where competition among partners is counterproductive?
h. What opportunities exist to encourage collaboration among partners and how would this advance clean water project implementation?

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[12] Resources/manuals, trainings, shared staff, etc.
[13] Engineering/design/drawing, gravel deliveries, species of trees

5. **CWIP wants to learn from its partners about opportunities to help advance environmental justice, equity diversity, and inclusion.**
    a. Do you know of any other organizations in VT that might be interested in engaging with clean water work? What are the barriers preventing them from doing so?
    b. What challenges does your organization experience with equity and/or inclusion in its work on clean water projects?
    c. What skills or resources might your organization need to recruit a more diverse workforce or volunteer base, and to foster an inclusive clean water work culture?
    d. What skills or resources might your organization need to work more intentionally with underrepresented, under-resourced, or Environmental Justice-focused communities when advancing clean water projects?
    e. Do you have other recommendations to support environmental justice, equity, diversity, and inclusion in the clean water workforce?
6. **What kinds of support[14] from DEC have been the most helpful for your organization or the clean water network in the past? Is there support that you would like to see more from DEC?**
    a. Do you get support from outside of DEC to help you accomplish clean water work? [15]
    b. What gaps do you see in currently available capacity assistance for your organization specifically?
    c. What gaps do you see in currently available capacity assistance for the broader clean water network? Are there access inequities you're aware of?
    d. What have you seen in your interactions with DEC that have seemed like a bottleneck?
    e. What changes to grant processes, policies, or timelines could help your organization, or smaller, less resourced organizations increase access to DEC and other funding and how would these changes advance clean water project implementation?
7. **What else should we be considering in this capacity development initiative for both internal organizational needs and the broader clean water network?**

[14] Trainings, guidance documents/materials, technical project assistance, workshops, partnership assistance, or tools
[15] Capacity support may be programs such as nonprofit training offered by CommonGoodVT and others, or if could be funding, and if funding it could be public grant funding, it can also be private grant funding (VCF), and private donors at times give to build capacity.

Interview Questions for Non-Traditional Partners

1. **What are the kinds of projects your organization is currently pursuing or prioritizing and what does the process look like for how your organization identifies work to pursue or prioritize?**
    a. How does your organization's mission influence the projects you pursue?
    b. How do finances influence projects that you pursue?
    c. How do staffing levels and skills influence projects that you pursue?
    d. Are there other external factors that influence projects that you pursue or don't pursue?
    e. Does the size of projects influence what you pursue?
2. **If your organization is new to or unfamiliar with clean water work, do you have any interest in pursuing opportunities that contribute to implementing clean water projects in VT, given the increased demand and funding?**
    a. Why or why not?
    b. If yes, what types of work would best leverage your existing expertise?
    c. If yes, what would you need to grow into this field?
    d. If no, what are some barriers to your participation in clean water work? [16]
    e. Do you know of any other organizations in VT that might be interested in engaging with clean water work?
        i. What are the barriers preventing them from doing so?
3. **Who are some of your organization's partners?**
    a. How do you work together?
    b. What skills/services do you provide one another?
    c. Do any of your current partners do clean water work?
    d. Are you looking for new partners?
        i. If yes, to provide you with what, or for you to provide them with what?
        ii. Which services or materials are hard to source?
    e. Would working with a partner who is engaged in clean water work influence your organization's interest/ability/capacity to pursue opportunities that contribute to implementing clean water funding in VT?
4. **CWIP wants to learn from its partners about opportunities to help advance environmental justice, equity diversity, and inclusion.**
    a. Do you know of any other organizations in VT that might be interested in engaging with clean water work? What are the barriers preventing them from doing so?

[16] Alignment with mission/purpose, technical assistance, background

b. Do you have other recommendations to support environmental justice, equity, diversity, and inclusion in the clean water workforce?

5. **What else should we be considering in this capacity development initiative for both internal organizational needs and the broader clean water network?**

Appendix: Review and Consideration of Other Capacity Initiatives

TCG contacted the point of contact at several organizations identified by CWIP to learn more about their existing capacity building initiatives and grants. TCG spoke with representatives from some of these organizations prior to developing the data collection methodology and interview questions, and reviewed relevant materials found online or provided by organization representatives. TCG also reviewed the information collected by CWIP prior to Phase I of this initiative through interviews with AAFM, LCBP, and a broader focus group of clean water partners.

Capacity Initiatives Provided by CWIP

The Nature Conservancy (TNC) hosts roundtables with clean water partners who are scaling up or getting more involved in dam removals. TNC is drafting a strategic plan and a targeted capacity assessment for dam removals and determining the next steps based on their findings.

The **Natural Resources Conservation Council (NRCC)** conducted a survey of the capacity needs of Natural Resource Conservation Districts (NRDCs) across Vermont to identify capacity and funding gaps. Through the Phase I interviews, the Contractor learned that the Vermont Association of Conservation Districts secured increased base funding for NRCDs in Vermont, which may address the gaps identified in the NRCC survey results.

Watersheds United Vermont (WUV) is a network of watershed groups across the state that administers CWIP's block grants. They focus on local groups and emphasize the value of local expertise and commitment to restoring local watersheds. WUV fulfills essential roles in capacity building for watershed organizations across the state. The organization facilitates collaboration between watershed groups and other stakeholders such as technical assistance providers and NRCDs. WUV's efforts support CWIP's priority of enhancing collaboration and developing new partnerships in the clean water field.

CWIP facilitated a **Fall 2021 Focus Group** before Phase I of this initiative to inform the development of the RFP and Core Questions. The focus group communicated the same priorities as Phase I interviewees; base funding is essential for clean water partners to hire and keep qualified staff, each organization needs to identify its strengths and role to develop and install projects, and DEIJ and climate resilience considerations can and should impact DEC's capacity building approach. The focus group's contributions informed the timeline framework for the Contractor's recommendations and prioritized identifying capacity gaps in geography, project phase, and workforce as a whole.

CWIP interviewed representatives of the **Vermont Agency of Agriculture Food and Markets (AAFM) and the Lake Champlain Basin Program (LCBP)** before the start of Phase I of this initiative. LCBP and AAFM identified similar challenges and capacity needs through their capacity-building initiatives as those identified through the Phase I interviews. These included a need for more administrative capacity and a desire to hire more staff. LCBP and AAFM funding programs allow groups to buy software and equipment and fund strategic planning and staff training. LCBP also funds the monitoring of field-based projects and provides match funding for AmeriCorps volunteers. Both entities were aware of the need to cut administrative costs.

The **Green Infrastructure Collaborative** (GIC) facilitated by Lake Champlain Sea Grant works to build capacity to identify, design, and install more stormwater projects and green infrastructure practices in urban and suburban areas of Vermont. A steering committee of project implementers and clean water partners with direct experience in this space leads the GIC. The goals and metrics outlined in the GIC's strategic plan align with CWIP's efforts to meet the goals of Act 76. The GIC coordinator wants to increase collaboration among clean water partners working in different sectors and compile more online resources on the GIC webpage. The results of CWIP's Phase I capacity assessment will inform further development of the GIC's online hub. Some of the capacity gaps in this sector are already identified by CWIP and the Lake Champlain Sea Grant training.

In the newest iteration of the GIC's strategic plan, they identified a need to update the 2017 Vermont Stormwater Manual. DEC's stormwater program does not have the capacity to update the manual, so the GIC is incorporating recent research into a guidance document to help. The GIC's strategic plan also identifies a need for capacity building to support the new three-acre stormwater permit. They also identified the need for more capacity to oversee maintenance work, which relates to the interviewee's request for dedicated funding and work crews for maintenance work.

Based on TCG's findings from review of the known capacity-building initiatives identified by CWIP, the following capacity needs emerged to be addressed by CWIP through the Phase 1 interviews and findings:

- Need for improved staff recruitment and retention, with multi-year base funding identified as a potential intervention.
- Enhanced collaboration among clean water partners, particularly cross-sector communication.
- Need for more staff capacity to fulfill administrative requirements.

Capacity-Building Funds Identified by CWIP

Lake Champlain Basin Program's Organizational Support grant program funds tasks and outcomes to achieve the goals in LCBP's *Opportunities for Action* management plan. Funds can cover personnel costs, fringe benefits, travel, supplies, and professional services, as well as indirect overhead costs not to exceed 10% of direct costs. These Organizational Support grants, paired with LCBP grants for project identification, development, and implementation, provide more capacity to fund and sustain staff positions needed to manage other clean water grants needed to pursue clean water projects. However, the eligibility requirements for this grant program are narrow, since applicants must be 501(c)(3) organizations with a focus on water quality in the Lake Champlain basin. This aids organizations in this particular basin but may leave geographic gaps in capacity funds in other areas of the state. The grant amount is also limited to $4,000 annually per organization.

LCBP also offers a Watershed Association Professional Development mini grant of up to $500 annually per organization to cover training and workshop expenses that will expand organizational capacity. This supports one of CWIP's goals of enhanced collaboration among clean water partners.

Vermont Agency of Agriculture Food and Markets offers Agriculture Clean Water Initiative Program Grants (Ag-CWIP) which can fund organizational capacity development in addition to education and outreach, technical assistance, and surveys for conservation practices. The organizational capacity development activities covered under the Ag-CWIP grant support grantees in more effectively serving farmers in their area. Many of the activities covered by this grant reflect capacity needs communicated by Phase I interviewees, particularly funding for staff time for program management and administration. The Contractor also heard that at least one interviewee was able to hire administrative support staff with this specific grant source, freeing up more time for other staff to work on DEC CWIP initiatives.

The **Vermont Housing and Conservation Board** (VHCB) is primarily focused on community development and land use challenges and offers Organizational Capacity grants for nonprofit organizations in the state. VHCB prioritizes funding technical assistance and attempts to avoid funding multiple organizations in the same region, which may impact the dynamic of collaboration and competition among clean water partners. The board offers start-up grants to create new organizations for housing or conservation work in areas where organizations don't already exist, or for existing organizations their work in those sectors. This grant provides two years of funding to 501(c)(3) organizations, after which point the grant recipient must apply for VHCB's core operating support grant rather than re-applying to the start-up grant.

The core operating support grant requires cash match from the applicant, and the organization must already have a strategic plan and financial plan and systems in place. Organizations applying for core operating support must have already completed two projects, which implies they must have existing funding from other sources to be eligible. VHCB indicates that this tiered approach of granting is designed to reduce applicants' reliance on VHCB funding over time, but the grant requirements may present barriers for those new to clean water work in Vermont.

In addition to these state agency funding sources, CWIP also identified a number of private foundations that have capacity-building programs or provide operating support.

The **Windham Foundation** funds nonprofit organizations and public entities located in Vermont, with environmental enhancement and agricultural preservation named as two focus areas for their grants. The foundation funds both operating support and capacity building. The foundation requires at least a 50% match for their grants, and applicants can apply for up to $10,000 per year. Their grant program encourages collaboration among nonprofit organizations and only requires reporting for grants $5,000 or more. Windham accepts grant applications each quarter rather than once per year.

The **Lintilhac Foundation** identifies water quality as one of its focus areas and provides funds for both project support and general operating support to nonprofit organizations in Vermont. University research and advocacy are two specific focus areas for the foundation, which is unique to this funding source compared to others that CWIP identified. Grants are typically between $5,000 and $30,000 and organizations are limited to one grant proposal per year. Applicants provide annual reports on project progress as well as a final report when the project is complete.

The **Castanea Foundation** focuses on funding projects that involve environmentally sustainable agriculture practices, primarily in the Lake Champlain basin, Southwest Vermont, and the Hoosic River and Batten Kill watersheds. Coupled with Ag-CWIP funds offered by AAFM, this funding may provide additional capacity support for organizations working at the intersection between land conservation and agricultural practices used to protect and improve water quality.

Other Capacity Initiatives and Sources of Capacity-Building Funding

Many interviewees need more unrestricted funds to support new and existing staff in administrative work and project management, particularly grant management and landowner outreach. To build upon the resources provided by CWIP at the start of Phase 1, TCG reviewed additional sources of capacity-building funding and relevant capacity-building initiatives in Vermont, neighboring states, the Appalachian region, and the

Chesapeake Bay watershed to get a broader understanding of potential recommendations for CWIP's capacity-building efforts and funding.

The **New Hampshire Charitable Foundation** community grants program provides unrestricted funding to nonprofit organizations in New Hampshire, as well as parts of Vermont and Maine. These are multi-year grants up to $60,000. This grant program asks applicants to identify the specific impact of unrestricted funding on their organizational and programmatic capacity. This is an example of applicants assessing their own capacity gaps, as many have done prior to and during Phase I of CWIP's capacity assessment and determining the best capacity-building solutions.

The **Western New York Foundation's** Capacity Building Grant Program is open to 501(c)(3) organizations in the seven New York counties they serve. The grant focuses on small to midsize organizations with annual budgets between $250,000 to $6 million. Applicants can only reapply for funding for two years after an initial grant award. The grant program increases organizations' reach to more constituents and collaboration with more partners, supports specific components from an organization's strategic plan to better sustain the organization long-term, and expands revenue streams to attract new funders. Despite funding limitations in geographic scope and pool of applicants, the flexibility in the goals of the program enables applicants to fund their existing strategic plans and objectives, rather than coming up with new deliverables for the purposes of a grant.

According to the **Appalachian Regional Commission**, READY Appalachia's capacity initiative is a multi-state tiered model that begins with a 10-week learning track followed by unrestricted, match-free funding opportunities for participants to scale up their existing work or start implementing new ideas developed during their 10-week training. The funding can also leverage additional outside investments. Nonprofit organizations, foundations, local governments, and local development districts can take part. This combined capacity-building training and funding source provides participants with the skills and knowledge they need to successfully expand and strengthen their organization and then provides unrestricted funding to execute the solutions identified through the training.

The **Chesapeake Bay Trust** hosts the Capacity-Building Initiative for the Chesapeake Bay watershed, with many components addressing different scales of capacity needs. One fund is an annual grant program focused on capacity-building for individual organizations of up to $30,000 each year. This grant supports organizational assessments, strategic planning, finance or donor software, training opportunities, website design,

materials for membership drives, and other organizational needs. This grant program supports network development, funding administrative support shared among many organizations, and organizational mergers.

The regional capacity-building initiative focuses on increasing the grassroots capacity of local and cross-sector networks and sustaining capacity long-term. Faith-based nonprofits, community associations, civic groups, municipalities, counties, public agencies, NRCDs, and public universities are all eligible. This will be a multi-year funding source of up to five years depending on availability. This is an example of funders building the capacity of non-traditional clean water partners across a target geography and acknowledging the need for multi-year support to grow and sustain new capacity. A host of training sessions and tools complement these funding sources to support grant recipients and the broader clean water workforce in the Bay watershed. These resources address specific capacity needs such as DEIJ goals and project management capacity for restoration efforts

The organization **Common Good Vermont** provides mission-driven organizations across the state with affordable resources to ensure the nonprofit sector is efficient and effective. They offer free training videos and resources, cohort learning opportunities, consultant references, a jobs board, and reports on the economic impact of Vermont's nonprofit sector. During Phase I of CWIP's capacity assessment, Common Good Vermont embarked on its own survey to learn about nonprofits' experience with contracts or grants from the state and federal government. This survey is broader than CWIP's Phase I assessment and is open to all nonprofit organizations in the state of Vermont. It will assess multiple state and federal agencies' granting processes. The results of Common Good Vermont's survey can further inform CWIP's implementation of the Contractor's recommendations and will speak to similar capacity gaps and workforce challenges in the state.

Through analysis of these capacity-building grants identified by CWIP and TCG, some relevant themes that CWIP could adopt in their granting mechanisms include:

- Unrestricted funding for existing strategic plans or self-identified capacity needs, rather than requiring applicants to adapt to funder-driven deliverables.
- Variable funding levels over multi-year time frame, which allows organizations to leverage significant initial support into more diverse funding sources over time.
- Focusing capacity-building funds in areas and sectors that are not currently covered by the funders identified above.
- Minimum grant award threshold for reporting requirements and transitioning to an annual reporting requirement to increase existing staff capacity.

- Coupling training programs with capacity-building funds, particularly for non-traditional clean water partner organizations, so those organizations can identify their role and capacity needs in clean water work.

TCG's recommendations to CWIP address the capacity needs identified during this preliminary analysis as well as additional capacity needs identified through the Phase 1 interviews. TCG incorporated some of the above themes into the contractor recommendations for Phase 2 based on which of the previously identified themes aligned with what TCG heard from interviewees. This approach considered what has already been successful for other capacity-building funding initiatives, any funding gaps that CWIP could fill, and what interviewees identified as being most helpful for their needs.

Appendix: Pre-Interview Primer

VT Clean Water Workforce Capacity Development Initiative
Interview Primer

Introduction

Thank you for agreeing to an interview! You were invited for an interview because we believe that you can provide valuable insight to inform CWIP's upcoming investments in the clean water workforce. Interviewees were selected to represent diverse backgrounds across professions, geographies, and extent of previous engagement with CWIP. This document will help you prepare for the interview.

Table of Contents

How to Prepare for Your Interview

1. Schedule your interview

If you haven't already, please schedule your interview date/time using this Calendly link. Please select your date/time as soon as possible. We are planning to complete all interviews by August 12. You can contact Jess Wymer from The Clark Group if you need assistance with scheduling your interview.

- Phone: 802-917-0584
- Email: jesswymer@clarkgroupllc.com

If you aren't available for an interview but would still like to participate, you can submit written responses to the interview questions by email. If you are submitting written responses, contact Jess Wymer by July 11 to let us know. Written responses to interview questions must be submitted by email to Jess Wymer by August 5.

2. Complete the pre-interview survey in Survey Monkey

The pre-interview survey can be found here. The pre-interview survey asks questions about your organization's current clean water projects, geographic focus, and basic structure. The pre-interview survey also includes questions about your preferences on recordings, compensation, and method for conducting the interview. You can complete this pre-interview survey any time up until your scheduled interview.

- **Recordings:** The Clark Group will plan to record the interviews unless the participant requests otherwise. Interview notes will be shared with CWIP, but The Clark Group will remove identifying information to allow for anonymity to the extent feasible. The interview notes will be used to develop the final report for this project including recommendations to accelerate the implementation of clean water projects across the state. All of this information will be stored on The Clark Group's SharePoint drive.
- **Compensation:** We are offering to provide compensation for your time for up to $100 (per interview participant). Following your interview, we will mail your compensation in the form of a check.

- **Conducting the interview:** We can conduct the interview via phone call, virtual video call, or in-person. Please indicate your preference along with any other details about how you would prefer to conduct the interview.

3. Review the interview questions and supplementary material

The interview questions are on page 3 for you to review ahead of time. You may invite your colleagues to share their own thoughts with you in preparation for this interview, time and interest permitting.

Supplementary Material

For those who are new to clean water work, or who aren't sure what "clean water work" means, check out the Examples of Clean Water Projects on page 7 for more context.

The Process Map on page 6 depicts some basic concepts in the clean water project process. We intend to use this during the interview as a visual aid to prompt discussion about the aspects that influence how clean water projects get done. Feel free to print out, annotate, write notes, and/or make your own edits.

Pages 10-11 include a diagram of the components of organizational capacity and an explanation of the diagram. We will not use this during the interviews. We provide it in advance in case it is helpful for you when thinking about the types of capacity challenges your group or organization faces.

Here are some things to keep in mind for your interview:

- The types, sizes, and scale of clean water (or other) projects your organization does
- The factors that influence how your organization identifies, prioritizes and pursues projects
- The sector(s) that your organization works in (developed lands, natural resources, forestry, agriculture)
- Your organization's project partners, contractors, and suppliers
- How your organization and your projects are funded
- How changes to clean water grant programs might impact, better enable, provide opportunities, or present challenges for implementing projects for your organization and for VT as a whole

- The range of organizational resources and structures that can contribute to or detract from your capacity to do clean water work.

Interview Questions

1. **What are the kinds of projects that your organization is currently pursuing or prioritizing and what does the process look like for how your organization identifies work to pursue or prioritize?**

2. **If your organization is new to or unfamiliar with clean water work, do you have any interest in pursuing opportunities that contribute to implementing clean water projects in VT, given the increased demand and funding?**
   (a) Why or why not?
   (b) If yes, what types of work would best leverage your existing expertise?
   (c) If yes, what would you need to grow into this field?
   (d) If no, what are some barriers to your participation in clean water work?
   (e) Do you know of any other organizations in VT that might be interested in engaging with clean water work?
      a. What are the barriers preventing them from doing so?

3. **Who are some of your organization's partners?**
   (a) Do any of your current partners do clean water work?
   (b) Are you looking for new partners? If yes,
      a. To provide you with what, or for you to provide them with what?

4. **What else should we be considering in this capacity development initiative for both internal organizational needs and the broader clean water network?**

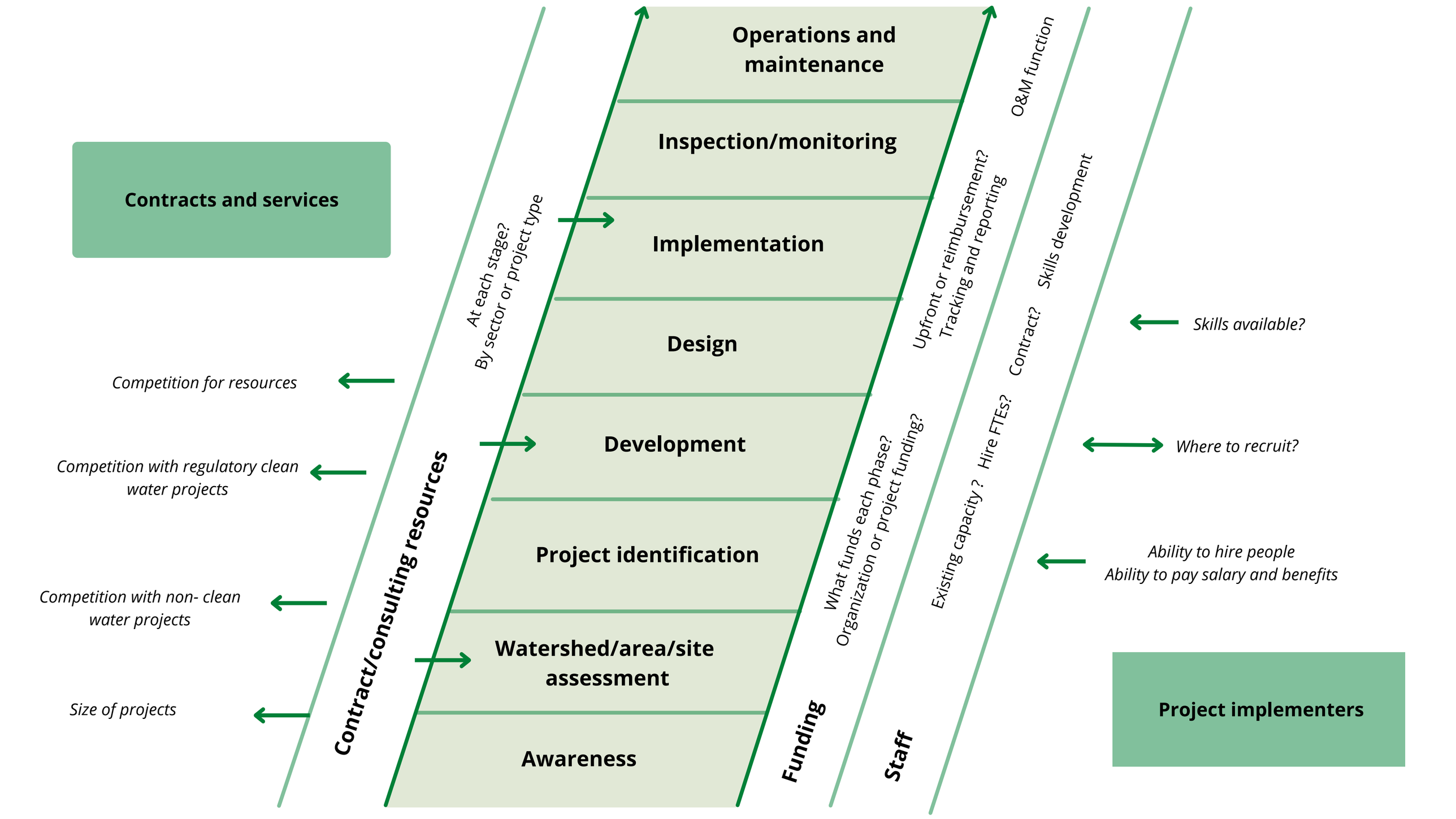
Supplementary Material

Explanation of the Clean Water Project Process Map

The process map includes the different stages of clean water projects as defined by CWIP. These stages are listed below along with some of their associated activities. The process map also recognizes some of the other aspects needed to accomplish these different stages, including the ability to identify and secure funds, recruit and train qualified staff, and obtain necessary services from contractors and suppliers. We recognize this may not perfectly represent your experience in clean water work, please use it simply as a guide to prompt ideas and discussion.

Project development, design, and implementation stages are defined below to clarify the distinction between the three:

- **Project development** includes work needed to ready a prioritized project for design. This typically includes reviewing project plans or other project identification tools, conducting site visits, refining project scope, developing conceptual maps and designs, estimating pollutant reduction benefits, confirming landowner interest, identifying the responsible Operations and Maintenance party, and determining project budget and permit needs, natural resource constraints, co-benefits, and other project considerations in advance of design.
- **Project design** is a general term that captures all the work needed to ready a scoped/developed project for implementation. For simpler projects like a riparian buffer planting, this may just involve drafting and finalizing a planting plan and executing an operations and maintenance landowner agreement. For more complex projects, like an underground stormwater infiltration basin, this may involve finalizing complete engineering and landscape designs stamped by a P.E., securing a range of local, state, and federal permits, and completing other assessments or plans as required to meet these permit requirements (for example, an historical and archeological resources assessment and historical resources mitigation plan).
- **Implementation/construction** describes the mobilization of effort to install the clean water project. It includes steps like putting the work out to bid for contractors, securing all remaining permits, sourcing materials like tree stock, and installing the project in alignment with designs, permits, and other programmatic guidance.


Contracts and services
Competition for resources
Competition with regulatory clean water projects
Competition with non- clean water projects
Size of projects
Contract/consulting resources
At each stage?
By sector or project type
Operations and maintenance
Inspection/monitoring
Implementation
Design
Development
Project identification
Watershed/area/site assessment
Awareness
Funding
What funds each phase?
Organization or project funding?
Upfront or reimbursement?
Tracking and reporting
O&M function
Staff
Existing capacity ?
Hire FTEs?
Contract?
Skills development
Skills available?
Where to recruit?
Ability to hire people
Ability to pay salary and benefits
Project implementers

Examples of Clean Water Projects

Clean water projects are those that, once installed, help protect or improve the quality of our rivers, lakes, and wetlands. Projects can do that in a lot of ways. Maybe it's capturing pollution from a parking lot before the rain brings it to our rivers, or restoring a wetland to slow fast-flowing water and protect our stream banks, or planting river-side habitat with native trees and shrub, or even improving how people and animals cross our creeks. CWIP provides funds to our clean water partners to do these sorts of projects.

The figure below shows how we can categorize clean water projects into different "land uses" for specific objectives and co-benefits. To learn more visit https://dec.vermont.gov/water-investment/cwi

Land Use	Clean Water Project Objectives and Example Project Images	Additional Benefits
AGRICULTURE	Addresses runoff and soil erosion from farm production areas and farm fields. 	• Cost-effective • Leverages federal funds • Supports agricultural economy • Supports regulatory compliance
NATURAL RESOURCES	Restores functions of "natural infrastructure"—river channels, floodplains, lakeshores, and wetlands 	• Cost-effective • Leverages federal funds • Increases flood resilience • Improves habitat • Enhances recreation
STORMWATER	Addresses stormwater runoff from developed lands, such as parking lots, sidewalks, and rooftops 	• Increases flood resilience • May enhance aesthetic appeal • Supports regulatory compliance
ROADS	Addresses stormwater runoff and erosion from roads 	• Cost-effective • Leverages federal funds • Increases flood resilience • Reduces future road maintenance costs • Supports regulatory compliance
WASTEWATER	Decreases nutrients (phosphorus and nitrogen) through enhanced wastewater treatment and addresses aging infrastructure 	• Protects public health and safety • Leverages federal funds • Supports regulatory compliance

More About the VT Clean Water Workforce Capacity Development Initiative

The Vermont Department of Environmental Conservation's (DEC) Clean Water Initiative Program (CWIP) funds projects that improve water quality. The success of CWIP's funding relies on a coordinated network of clean water partners that are numerous, diverse, well-trained, and well-resourced. These partners develop and oversee clean water project design, installation, and maintenance, and engage the public in celebrating our collective achievements.

Through this Clean Water Workforce Capacity Development Initiative ("Initiative") CWIP is poised to provide financial and technical assistance to our partners to improve their ability to accelerate the implementation of clean water projects state-wide.

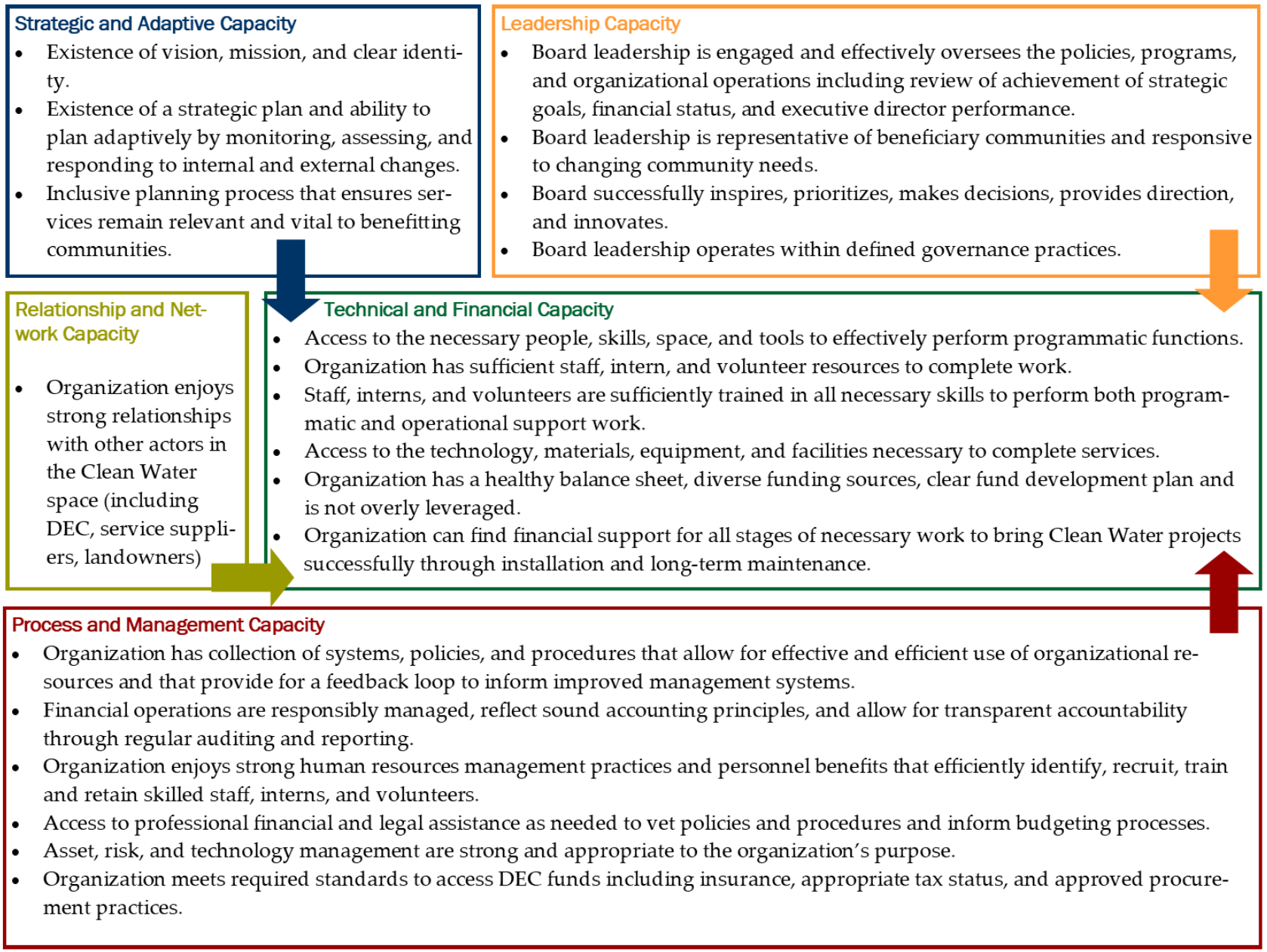
CWIP is conducting interviews with a variety of partners to gather information on:

- How partners already engaged in clean water work can grow to increase the size, scale, and number of clean water projects they can accomplish, and the tools and resources they need to do so;
- Whether there are restraints for increasing the implementation of clean water projects that are specific to a given sector (e.g., stormwater or forestry), project type (e.g., dam removals or river corridor easements), or project stage (e.g., education, engineering, maintenance);
- How to engage with new partners that can help implement clean water projects, and how to address the potential barriers they might face;
- Existing workforces, resources, and support that partners rely on to accomplish clean water projects, and how the State can help address any gaps; and
- How the State can support and advance environmental justice, equity, diversity, and inclusion in clean water funding programs.

This phase of the Initiative will focus on identifying what partners need to accelerate the implementation of projects. **The results will be used to inform how CWIP will invest funds to address those needs.**

Explanation of Components of Organizational Capacity Diagram

Technical and Financial capacity refers to an organization's access to the necessary people, skills, space, tools, and funding to perform the work needed to advance clean water projects. While this capacity category is clearly central to growing a skilled and well-resourced workforce, CWIP recognizes it can be heavily influenced by other capacity types including Strategic and Adaptive Capacity, Leadership Capacity, Relationship and Network Capacity, and Process and Management Capacity (see diagram below). Interviewees are encouraged to consider gaps and needs across the many types of organizational capacity and how these capacities might interplay when trying to do clean water work. CWIP does not guarantee all gaps identified will be eligible for CWIP funding.


Strategic and Adaptive Capacity
• Existence of vision, mission, and clear identity.
• Existence of a strategic plan and ability to plan adaptively by monitoring, assessing, and responding to internal and external changes.
• Inclusive planning process that ensures services remain relevant and vital to benefitting communities.
Leadership Capacity
• Board leadership is engaged and effectively oversees the policies, programs, and organizational operations including review of achievement of strategic goals, financial status, and executive director performance.
• Board leadership is representative of beneficiary communities and responsive to changing community needs.
• Board successfully inspires, prioritizes, makes decisions, provides direction, and innovates.
• Board leadership operates within defined governance practices.
Relationship and Network Capacity
• Organization enjoys strong relationships with other actors in the Clean Water space (including DEC, service suppliers, landowners)
Technical and Financial Capacity
• Access to the necessary people, skills, space, and tools to effectively perform programmatic functions.
• Organization has sufficient staff, intern, and volunteer resources to complete work.
• Staff, interns, and volunteers are sufficiently trained in all necessary skills to perform both programmatic and operational support work.
• Access to the technology, materials, equipment, and facilities necessary to complete services.
• Organization has a healthy balance sheet, diverse funding sources, clear fund development plan and is not overly leveraged.
• Organization can find financial support for all stages of necessary work to bring Clean Water projects successfully through installation and long-term maintenance.
Process and Management Capacity
• Organization has collection of systems, policies, and procedures that allow for effective and efficient use of organizational resources and that provide for a feedback loop to inform improved management systems.
• Financial operations are responsibly managed, reflect sound accounting principles, and allow for transparent accountability through regular auditing and reporting.
• Organization enjoys strong human resources management practices and personnel benefits that efficiently identify, recruit, train and retain skilled staff, interns, and volunteers.
• Access to professional financial and legal assistance as needed to vet policies and procedures and inform budgeting processes.
• Asset, risk, and technology management are strong and appropriate to the organization's purpose.
• Organization meets required standards to access DEC funds including insurance, appropriate tax status, and approved procurement practices.

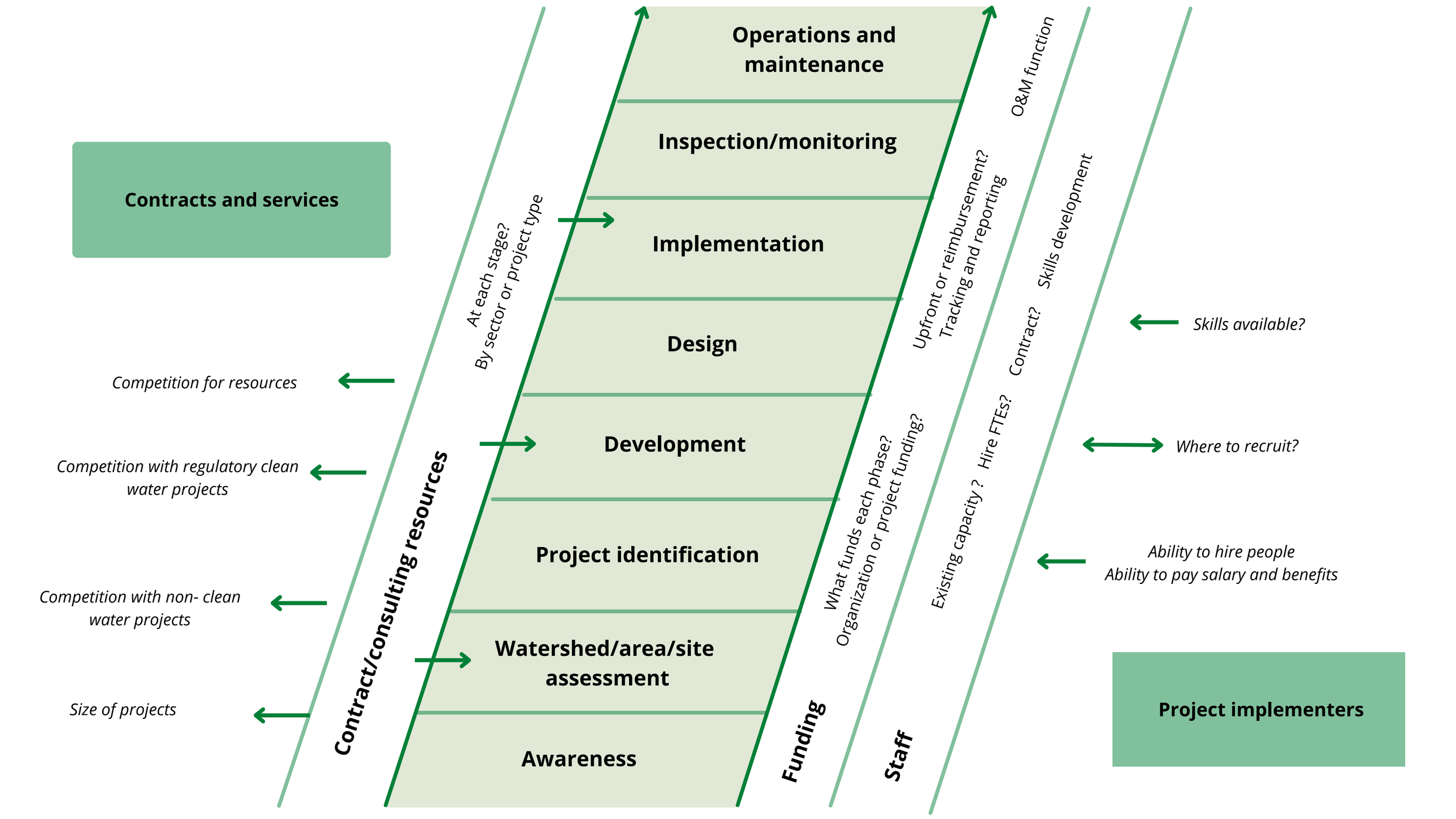
Appendix: Pre-Interview Survey Questions

Pre-Interview Survey Questions

1. Name
2. Position title
3. Name of group or organization
4. Type of group or organization
    - Volunteers
    - Part-time staff
    - Board members
    - Interns or seasonal staff
    - Full-time staff
5. What is the number of people involved in your organization's efforts?
6. Type of clean water project services your organization currently supplies (check all that apply)
    - Project identification, scoping, development, and planning
    - Engineering and design
    - Project management, oversight, and partner coordination
    - Grant writing and fundraising
    - General contracting and construction
    - Landscaping or plantings
    - Operations and maintenance
    - Education, outreach, and advocacy
    - Volunteer recruitment, training, and management
    - We don't currently provide any clean water project services
    - Other (please specify)
7. What project sector(s) does your work fall within?
    - Stormwater from developed lands and roads
    - Natural resource restoration
    - Agricultural water quality practices
    - Other (please specify)
8. What is the geographic area that your work covers in Vermont?
    - Southeast
    - Southwest
    - Central East
    - Northwest
    - Central West
    - Northeast Kingdom
    - Statewide
    - Other (please specify)

9. Please let us know who your check for compensation should be made to and where it should be mailed to.
10. Can we record your interview to assist with note taking?
11. How would you like to conduct your interview?
    - Phone
    - Virtual (video call)
    - In person
    - Written responses via email

Appendix: Clean Water Project Lifecycle Process Map


Contracts and services
Competition for resources
Competition with regulatory clean water projects
Competition with non- clean water projects
Size of projects
Contract/consulting resources
At each stage?
By sector or project type
Operations and maintenance
Inspection/monitoring
Implementation
Design
Development
Project identification
Watershed/area/site assessment
Awareness
Funding
What funds each phase?
Organization or project funding?
Upfront or reimbursement?
Tracking and reporting
O&M function
Staff
Existing capacity ?
Hire FTEs?
Contract?
Skills development
Skills available?
Where to recruit?
Ability to hire people
Ability to pay salary and benefits
Project implementers