

## Minnesota GreenCorps Program Impact Evaluation Service Years 2017–2020

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## **Executive summary**

Every year since 2009, Minnesota GreenCorps places AmeriCorps members at host sites around Minnesota, where they serve for 11 months on locally defined environmental stewardship projects. A program of the Minnesota Pollution Control Agency (MPCA), Minnesota GreenCorps preserves and protects Minnesota's environment while training a new generation of environmental professionals.

MPCA is required to conduct and submit an evaluation with its application for renewed federal funding to sustain the program. MPCA contracted with Management Analysis and Development (MAD) to conduct an independent evaluation of the program for service years 2017–2018, 2018–2019, and 2019–2020.

MAD's primary objective with this evaluation was to answer the following research questions:

- 1. To what extent do structures served by GreenCorps members in the area of air pollutant reduction demonstrate reductions in energy usage as a result of member support?
- 2. Does Minnesota GreenCorps build capacity at host site organizations?

## Energy-efficiency retrofits supported by Minnesota GreenCorps members reduced energy usage

To answer the first research question, MAD analyzed electrical energy consumption data for five buildings across two host sites where Minnesota GreenCorps members' service had included supporting retrofits to increase energy efficiency. Although MAD was only able to analyze monthly electrical energy consumption data from a limited number of structures, all five buildings showed at least some reduction in electrical energy usage in the twelve months following the retrofit projects, when compared with each site's own baseline of historical energy data. The overall annual change varied widely, from a 7 percent reduction in energy consumption at one building to almost 75 percent at another. The three other sites experienced a reduction of about 10–15 percent in energy consumption following their retrofits.

## Minnesota GreenCorps members do build capacity at host site organizations

To answer the second research question, MAD conducted pre-participation and post-participation surveys of host site supervisors across two service years. MAD also conducted focus group interviews with host site supervisors at the end of each of those service years.

Overall, after having a Minnesota GreenCorps member serve with them, a statistically significant increase of host site supervisors rated their own organizational capacity as very or extremely able to:

- Assess local conditions using data collection, benchmarking, and best practices.
- Engage the community and provide education, training, and technical assistance to promote environmental stewardship.
- Implement or catalyze implementation of environmental stewardship projects.

Host site supervisors also reported that their organization is more effective at addressing the environmental problem at the heart of their Minnesota GreenCorps program following their member's service year. Statistically significant increases were found on additional organizational capacity factors, including:

- Developing and providing education
- Evaluating the impact of their efforts
- Measuring, collecting, and reporting data
- Staffing
- Collaborating with community members
- Having necessary skills and expertise
- Having necessary communication tools

In addition to increased organizational capacity, host site supervisors reported statistically significant increases on their community's readiness to understand or acknowledge the problem at the heart of their Minnesota GreenCorps project, and that their community had developed additional knowledge and skills to address the problem.

## Introduction

## Purpose and background

Minnesota GreenCorps is a program coordinated by the Minnesota Pollution Control Agency (MPCA). The 2020–2021 service year will be Minnesota GreenCorps' twelfth. Minnesota GreenCorps aims to "preserve and protect Minnesota's environment while training a new generation of environmental professionals."<sup>1</sup> Each year, Minnesota GreenCorps places approximately forty corps members at host sites around Minnesota, where they serve for eleven months on projects related to environmental stewardship.

MPCA is required to conduct and submit an evaluation with its application for renewed federal funding. MPCA contracted with Management Analysis and Development (MAD) to conduct an independent evaluation of the Minnesota GreenCorps program, with specific attention to the program's outcomes and impacts during service years 2017–2018, 2018–2019, and 2019–2020.<sup>2</sup>

<sup>2</sup> Outcomes, as defined by the Corporation for National and Community Service (CNCS), are "results or effects of a program" that measure "program beneficiaries' changes in knowledge, attitude(s), and/or behavior(s) that result from a program over a specific period of time." *Impacts* are defined as "a quantitative estimate of the causal effects of programs or policies." CNCS Metadata Glossary, CNCS Evidence Exchange (March 2016), accessed October 5, 2020, <a href="https://www.nationalservice.gov/sites/default/files/documents/GLOSSARY-">https://www.nationalservice.gov/sites/default/files/documents/GLOSSARY-</a>

Metadata%20Categories%20Definitions%20for%20Publication.pdf.

<sup>&</sup>lt;sup>1</sup> Minnesota GreenCorps, "About," <u>https://www.pca.state.mn.us/waste/minnesota-greencorps</u>, October 5, 2020.

Appendix A: Evaluator qualifications provides a summary of MAD's organization and the evaluator's qualifications. Appendix B: Summary of previous evaluations provides a summary of findings from the previous two program evaluations conducted on the Minnesota GreenCorps program.

## **Evaluation requirements**

Minnesota GreenCorps is funded through a grant from ServeMinnesota and the Corporation for National and Community Service (CNCS). Minnesota GreenCorps, based on years of funding and amount of total funding, is required to undergo an independent impact evaluation of at least one program year and submit the evaluation with any future application to CNCS for competitive funds.<sup>3</sup>

Under CNCS requirements, evaluation "uses scientifically-based research methods to assess the effectiveness of programs by comparing the observed outcomes with what would have happened in the absence of the program."<sup>4</sup> CNCS will consider the evaluation high quality if it is "designed to provide evidence of a causal relationship between program activities and outcomes" using an experimental or quasi-experimental design.<sup>5</sup>

## **Evaluation research questions**

According to CNCS, an impact evaluation "should be guided by measurable and clearly defined research questions that identify the effect of program participation on program service recipients and/or service participants for specific outcomes."<sup>6</sup>

The following research questions for this evaluation were identified in the evaluation plan included as part of Minnesota GreenCorps' 2018 federal funding application:

- 1. **Air pollutant reduction:** To what extent do structures served by GreenCorps members in the area of air pollutant reduction demonstrate reductions in energy usage as a result of member support?
- 2. Host site capacity building: Does Minnesota GreenCorps build capacity at host site organizations?

<sup>5</sup> Frequently Asked Questions: AmeriCorps State and National Evaluations, Question 7, accessed October 5, 2020, <u>https://www.nationalservice.gov/sites/default/files/documents/ASN-Evaluation-FAQs-FINAL.pdf</u>.

<sup>&</sup>lt;sup>3</sup> Code of Federal Regulations, §2522.710, paragraph b, "What are my evaluation requirements?" accessed October 5, 2020, <u>https://www.ecfr.gov/cgi-bin/text-</u>

<sup>&</sup>lt;sup>4</sup> Code of Federal Regulations, §2522.700, "How does evaluation differ from performance measurement?" accessed October 5, 2020, <u>https://www.ecfr.gov/cgi-bin/text-</u>

idx?c=ecfr&SID=2f2c2ca7cad9962de0f240653344d8d9&rgn=div5&view=text&node=45:4.1.9.11.15&idno=45#sp45.4.2522.e.

<sup>&</sup>lt;sup>6</sup> Frequently Asked Questions: AmeriCorps State and National Evaluations, Question 7.

## Minnesota GreenCorps program

This section of the report provides information about the Minnesota GreenCorps program, including an overview and a description of the program's model and theory of change. Unless otherwise noted, the information in this section comes from program staff, program materials, or the program website (<u>https://www.pca.state.mn.us/waste/minnesota-greencorps</u>).

### **Overview**

MPCA coordinates the Minnesota GreenCorps program, which places approximately forty members with local governments, educational institutions, and nonprofit organizations across Minnesota to engage in environmental stewardship projects. Minnesota GreenCorps is an AmeriCorps program, whose federal funding comes through CNCS. ServeMinnesota is Minnesota's state administrator for federal AmeriCorps funds. Minnesota GreenCorps is one of sixteen AmeriCorps programs in ServeMinnesota's portfolio.<sup>7</sup>

Since the program began in 2009, more than 350 members have served at over 200 organizations in Minnesota. In that time, Minnesota GreenCorps estimates that members have engaged and educated nearly 200,000 volunteers in communities around the state through their service projects.

#### Members

Members spend eleven months (1,700 hours) in service to the community at their host site. Members are typically recent college graduates interested in working in an environmental field, although some members elect to serve after careers in other fields. Members currently receive a stipend of up to \$1,428 per month and an education award of \$6,195 after the successful completion of the AmeriCorps term. Members participate in a three-day orientation at the beginning of the service year, along with quarterly training from the MPCA. Members are also paired with a mentor who provides technical and professional advice related to their project and service requirements.

#### **Host sites**

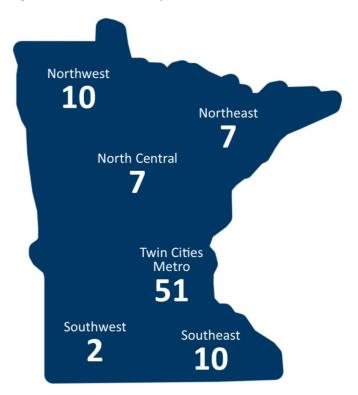
Host sites are located across Minnesota. Eligible organizations include public entities, school districts, and nonprofits, including institutions of higher education. Host sites apply for a member to be placed in their organization: they define the project goals, ensure there is sufficient organizational and community support for the work, establish a workplan for the member, and supervise the member on a day-to-day basis. Host sites provide in-kind contributions to support the member's service, including access to a workplace and all materials and resources needed to complete the project. Members are supervised by a site supervisor, who is an employee of the host site. The site supervisor's time spent managing the member is considered an in-kind contribution. Site supervisors also attend an orientation with their corps member at the start of the service year.

<sup>&</sup>lt;sup>7</sup> ServeMinnesota, "What is ServeMinnesota?" accessed October 5, 2020, <u>https://www.serveminnesota.org/what-is-serveminnesota/</u>..

#### 2017–2020 service year participants

In service year 2017–2018 there were forty member opportunities available. In both 2018–2019 and 2019–2020, there were forty-two member opportunities available. When the three service years are combined, there were 125 members who completed at least part of a service year at eighty-seven different host sites.<sup>8</sup> Thirty-nine members completed their service year in 2017–2018, forty in 2018–2019, and thirty-eight in 2019–2020. The overall retention rate for the three years was 94 percent.

The majority of unique host sites across the three service years were located in the seven counties that comprise the Twin Cities metropolitan area (Figure 1). Thirty-two organizations participated as host sites more than one year between 2017 and 2020.



#### Figure 1. Location of unique host sites for the 2017–2018 through 2019–2020 service years combined

The majority of host sites across the three service years were public entities (Table 1).

Host site category	Number of unique host sites in 2017–2018 service year	Number of unique host sites in 2018– 2019 service year	Number of unique host sites in 2019– 2020 service year	Number of total unique host sites across three service years
Public entities (e.g., cities, counties, tribes, conservation districts)	24	27	25	56

<sup>&</sup>lt;sup>8</sup> Individual sites within the University of Minnesota system were counted separately.

Host site category	Number of unique host sites in 2017–2018 service year	Number of unique host sites in 2018– 2019 service year	Number of unique host sites in 2019– 2020 service year	Number of total unique host sites across three service years
K–12 school districts	2	1	2	4
Higher-education institutions	2	4	5	9
Nonprofits	10	10	8	18

## Program model and theory of change

Minnesota GreenCorps places members with host site organizations to address a variety of statewide needs, aiming to:

- Reduce solid waste and increase recycling in Minnesota communities.
- Reduce greenhouse gases and other air pollutants.
- Reduce water runoff and improve water quality.
- Assist community members in taking eco-friendly actions.
- Increase community resilience and build local capacity to respond to the threats of climate change.
- Train new environmental professionals.

Minnesota GreenCorps is focused on environmental challenges affecting Minnesota as a state, but the program emphasizes locally identified projects and solutions to these challenges.<sup>9</sup> Host sites propose projects that are expected to lead to positive outcomes for the member, the host site itself, and the wider community.

Minnesota GreenCorps projects utilize a common set of activities to accomplish the program's environmental goals. The common set of activities are:

- Assess local conditions utilizing data collection and benchmarking best practices.
- Engage the community by providing education, training, and technical assistance on best practices.
- Implement specific, measurable environmental stewardship projects using evidence-based best practices and methods of behavioral change.

Though each project is locally driven, by engaging in these types of best practices, Minnesota GreenCorps can reasonably expect positive environmental and community capacity changes. Additionally, when Minnesota GreenCorps members gain expertise in these areas, they have demonstrable skills that can enhance their professional resume.

<sup>&</sup>lt;sup>9</sup> This local focus is supported by research: Research on community-based conservation programs suggests that projects are more successful if they are designed with specific attention to local participation and local institutions. J. Brooks, K.A. Waylen, and M.B. Mulder, "Assessing community-based conservation projects: A systematic review and multilevel analysis of attitudinal, behavioral, ecological, and economic outcomes," *Environmental Evidence* (2013), accessed October 9, 2020, <a href="https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/2047-2382-2-2">https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/2047-2382-2-2</a>.

#### Figure 2. Minnesota GreenCorps members for the 2019–2020 service year



To help steer projects toward meeting important environmental, organizational, and community outcomes, Minnesota GreenCorps has several main topic areas.

- Air Pollutant Reduction
- Community readiness and outreach
- Green infrastructure improvements
- Waste reduction, recycling, and organics management

As members serve at their host site for only one year, one intended outcome of the Minnesota GreenCorps program is to set up the host site to sustain the project efforts beyond the service year. Minnesota GreenCorps members' ability to build capacity within their host sites and the communities they serve is one of the main areas of interest for this evaluation. The other main area of interest for this evaluation is the impact of projects focused on air pollutant reduction through energy conservation. A variety of activities are conducted under projects that aim to reduce air pollutants. This evaluation aims to measure the impact of Minnesota GreenCorps projects that involved retrofitting buildings to improve energy efficiency. According to Minnesota's state profile from the US Energy Information Administration,<sup>10</sup> coal-fired power plants provide the largest share of Minnesota's electricity net generation. Therefore, a reduction in energy usage can be assumed to reduce Minnesota's reliance on energy sources that contribute to air pollution.<sup>11</sup>

<sup>&</sup>lt;sup>10</sup> US Energy Information Administration, Minnesota State Profile and Energy Estimates, accessed October 12, 2020, <u>https://www.eia.gov/state/analysis.php?sid=MN</u>.

<sup>&</sup>lt;sup>11</sup> US Energy Information Administration, "Coal explained: Coal and the environment," accessed October 12, 2020, <u>https://www.eia.gov/energyexplained/coal/coal-and-the-environment.php</u>.

## **Evaluation methodology**

## Air pollutant reduction

To assess the extent to which structures served by Minnesota GreenCorps members in the area of air pollutant reduction demonstrate reductions in energy usage as a result of member support, monthly electrical energy consumption data was analyzed from public structures that were retrofitted to increase energy efficiency as part of a Minnesota GreenCorps member project during the 2017–2018 or 2018–2019 service year.

A total of thirty-six different structures across six host sites were considered for analysis. However, several challenges resulted in just five buildings from two host sites being deemed suitable for inclusion in the evaluation. The challenges that made it impossible to include more sites included retrofits being postponed or canceled, as well as host sites not having either historical (baseline) or comparison (postretrofit) monthly energy usage data collected or recorded.

#### Selected sites and data collection methods

See Table 2 for the five buildings included in the analysis, along with the type of retrofit conducted, baseline year, retrofit period, and comparison year periodTable 1.

Building	Retrofit type	Baseline year	Retrofit period	Twelve months following completion of retrofit (comparison year)
Hennepin County— Juvenile Justice Center	LED lighting installation	May 2017–April 2018	February 2018– April 2018	May 2018–April 2019
Hennepin County— Health Services Center	LED lighting installation	February 2017– January 2018	December 2017– February 2018	March 2018–February 2019
City of Warren—City Office/City Hall	Smart thermostat installation	January 2009– December 2009*	May 2018–June 2018	June 2018–May 2019
City of Warren— Marshall County Courthouse	Boiler replacement and LED lighting installation	October 2016– September 2017	October 2017– November 2017	December 2017–November 2018
City of Warren— Warren Alvarado Oslo High School	LED lighting installation	June 2017–May 2018	June 2018– September 2018	September 2018–August 2019

#### Table 2. Buildings included in the air pollutant reduction analysis

\* Comparison year was selected in B3 Benchmarking application and could not be changed by the evaluator.

The monthly energy usage for each of the selected buildings was gathered from an application called B3 Benchmarking, which was developed by The Weidt Group for public institutions in Minnesota to track and manage utility usage in public buildings.<sup>12</sup> Several Minnesota GreenCorps projects include members gathering and recording public building energy consumption data in B3 Benchmarking to support benchmarking, identifying buildings for retrofits, and measuring the impact of energy efficiency improvements.

#### **Energy data analysis**

For each of the selected sites, a timeframe was identified by the host site during which the retrofit took place. A baseline year was selected as the twelve months preceding the implementation of the retrofit. A comparison year was selected as the twelve months following the final completion of the retrofit. Each structure's baseline monthly energy usage, as measured in kilo British thermal units (kBtu), served as its own control.

For each site, the monthly electrical energy use, as measured in kBtu, from the twelve months following completion of the retrofit (comparison) were subtracted from the baseline. The comparison year usage was weather normalized. These results were graphed. The overall total yearly electrical energy usage was also compared for the baseline year and the twelve months after the retrofit was completed to calculate the overall percentage change from baseline to comparison year, with weather normalization applied to the comparison year.

#### **Document review**

The majority of buildings where retrofit opportunities were identified in 2017–2018 as part of the Minnesota GreenCorps project were at host site Leech Lake Band of Ojibwe. A contractor implemented these retrofits in 2018– 2019. Energy control measures (ECMs) were installed by NORESCO, LLC, at twenty-two buildings across the reservation. The twelve months following the retrofits at these structures ended in summer 2020. However, because of the coronavirus pandemic, staff from Leech Lake were unable to collect and record meter readings from these sites during most of 2020. While baseline and comparison data are not available for these sites, NORESCO, LLC, provided Leech Lake with a postinstallation report at the conclusion of their project, which estimates expected energy and cost savings for the first year. The postinstallation report was reviewed and summarized to add additional insights to this evaluation.

#### Limitations

The data used in this analysis was collected and reported by the host sites, so errors in data entry are possible. Also, five sites do not provide a large sample from which to draw conclusions about the overall impact of Minnesota GreenCorps on air pollutant reduction. Additionally, while the energy usage comparison across time was normalized for weather, there are other possible confounding factors that were not controlled for in the analysis, such as overall building usage, education programs aimed to get building users to use less energy (e.g., encouraging staff to turn off lights), upgrades of other equipment or technology, or other factors. Specifically for one site, the City of Warren City Office/City Hall, the selected baseline year in B3 was several years prior to the retrofit. The selected baseline year was set in B3 Benchmarking and could not be changed by the evaluator. As a result, the chance for that site to have additional confounding factors between the baseline year and comparison year may be higher than for the other sites.

<sup>&</sup>lt;sup>12</sup> B3 Benchmarking, About, accessed October 15, 2020, <u>https://mn.b3benchmarking.com/What-is-B3</u>.

### Host site capacity building

A pre- and post-participation survey and two focus groups of host site supervisors in service years 2018–2019 and 2019–2020 were used to assess whether Minnesota GreenCorps builds capacity at host site organizations.

#### Survey

After developing the survey instruments in 2017-2018, surveys were administered to all host site supervisors at the start and end of the 2018–2019 and 2019–2020 service years. These surveys asked questions to evaluate each host site's capacity to assess, engage, and implement activities to improve environmental stewardship in their community, as it related to the problem at the heart of their Minnesota GreenCorps project.

The pre-participation survey used in both 2018–2019 and 2019–2020 can be found in Appendix C: Pre-participation survey of host site supervisors 2018–2019 and 2019–2020. The post-participation survey used in 2018–2019 can be found in Appendix D: Post-participation survey of host site supervisors 2018–2019. The post-participation survey used in 2019–2020 can be found in Appendix E: Post-participation survey of host site supervisors 2019–2020. The questions on the pre-participation survey and both versions of the post-participation surveys are substantially equivalent. Five questions were added to the post-participation survey in 2019–2020 in order to help understand the impact of the novel coronavirus pandemic on Minnesota GreenCorps projects.

The pre-participation survey was administered in person during an orientation for host site supervisors in September at the start of each service year (2018 and 2019), and the post-participation survey was administered electronically via email in July at the end of each service year (2019 and 2020).

In order to increase the sample size, survey responses from the 2018–2019 service year were combined with those from the 2019–2020 service year. Only host sites that completed both the pre- and post-participation surveys were included. A total of sixty different organizations were included across both years. Of those sixty, six participated in both the 2018–2019 and 2019–2020 service years, resulting in a total of sixty-six respondents in the data set.

In order to determine if differences from pre-participation to post-participation were statistically significant, a paired sample t-test was used on each closed-ended question to compare the mean of pre-participation responses to the mean of post-participation responses.

#### **Focus groups**

All host site supervisors from the 2018–2019 service year were invited to participate in an in-person focus group on August 16, 2019. Twelve supervisors attended. The participants were provided with lunch. The focus group protocol for 2018–2019 can be found in Appendix F: Host site supervisor focus group protocol 2018–2019

All host site supervisors from the 2019-2020 service year were invited to participate in a virtual focus group on August 7, 2020. Six supervisors attended. The focus group protocol for 2019-2020 can be found in Appendix G: Host site supervisor focus group protocol 2019–2020

An evaluator took notes on the comments made by participants during the focus groups. Following the focus groups, the notes were analyzed to identify common themes related to the topic of host site and community capacity building.

Quotes from participants were selected for inclusion in the evaluation report based on their representation of ideas that were expressed by a majority of participants.

#### Limitations

There is not a control group of organizations that did not participate in the Minnesota GreenCorps program to which the results of the participating group (treatment group) can be compared. Without a control group, we cannot say whether the host sites would have developed additional capacity even without the support of a Minnesota GreenCorps member. However, it was determined that organizations that applied to receive a Minnesota GreenCorps member but were denied were not a suitable comparison group, as there were significant reasons for the denial that made Minnesota GreenCorps program staff believe they were too different from selected organizations.

Pre- and post-participation survey design can also be affected by response shift bias, whereby over the course of the treatment, participants' frame of reference of the constructs being measured can themselves change, resulting in participants answering the questions on the post-participation survey with a different interpretation or understanding of the questions than on the pre-participation survey. For example, when taking the pre-participation survey, the host site supervisor may not know much about leadership's support or community capacity, but through the project gain more information that changes the way they answer the same question in the future.

As organizations that benefit from the services they receive from the Minnesota GreenCorps member, they may be influenced to rate the program on the post-participation survey as having made a difference for their organization if they believe it may help secure future participation in the program, despite being told their responses would not be tied to identifying information in reporting to MPCA.

Finally, there are several limitations to using focus groups to collect additional qualitative information on the questions of interest. The participants may be influenced by other group members' comments or may not express their honest personal opinions. As with the survey, participants may have been influenced to say positive things about the Minnesota GreenCorps program if they would like to participate again and believe positive responses may lend favorability to their organization or to Minnesota GreenCorps funders, despite being told their responses would not be tied to identifying information in reporting to MPCA.

## **Evaluation findings**

## Air pollutant reduction

#### Annual comparison to baseline

When comparing the annual total electrical energy usage, where the twelve months following completion of the retrofit (comparison year) is weather normalized, all five of the buildings where Minnesota GreenCorps projects focused on energy efficiency retrofits experienced a reduction in electrical energy consumption, as measured in kBtu (Table 3Table 1).

The annual change differed from about a 7 percent reduction in energy consumption at one building to almost 75 percent at another. Three of the sites experienced a reduction of about 10–15 percent in energy consumption following the retrofit project.

Buildings	Baseline year (kBtu)	Comparison year* (kBtu)	Change (kBtu)	Percent change
Hennepin County—Juvenile Justice Center	5,006,883	4,678,165	-328,718	-6.57%
Hennepin County—Health Services Center	3,816,663	3,432,089	-384,574	-10.08%
City of Warren—City Office/City Hall	387,296	332,347	-54,949	-14.19%
City of Warren—Marshall County Courthouse	2,799,622	2,462,843	-336,779	-12.03%
City of Warren—Warren Alvarado Olso High School	853,176	221,265	-631,911	-74.07%

\* -Weather normalized

#### Monthly comparison to baseline

The following several figures graph the monthly difference in electrical energy usage, as measured in kBtu, from baseline to comparison year, for the five analyzed structures. The comparison year data was weather normalized.

For two of the buildings, Hennepin County Health Services (Figure 4) and Warren Alvarado Olso High School (Figure 7), every month of the comparison year had lower energy consumption than, or consumption that was equal to, the baseline year.

For two other buildings, Hennepin County—Juvenile Justice Center (Figure 3) and City of Warren—City Office/City Hall (Figure 5), eleven of the twelve comparison year months had lower energy consumption than the baseline year.

For the fifth building, Marshall County Courthouse (Figure 6), the first four months of the comparison year had higher energy consumption than the baseline year, followed by eight months with lower consumption.

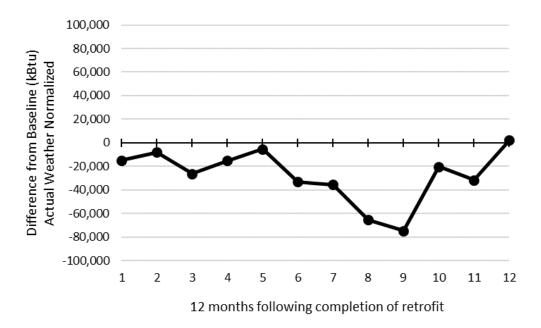
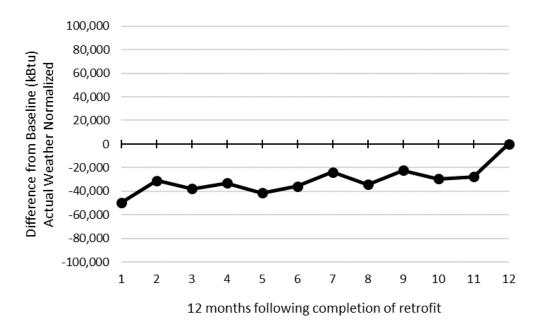


Figure 3. Hennepin County—Juvenile Justice Center electrical energy use difference postretrofit from baseline (kBtu)

Figure 4. Hennepin County—Health Services Center electrical energy use difference postretrofit from baseline (kBtu)



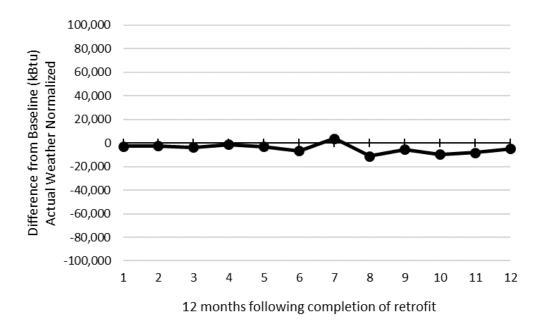
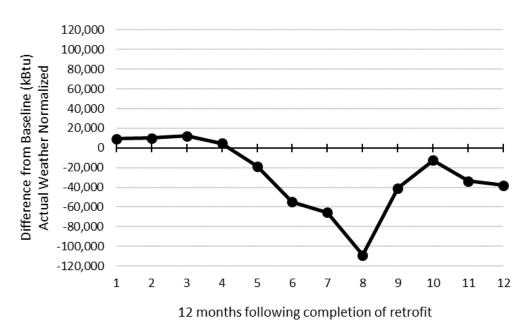


Figure 5. City of Warren—City Office/City Hall electrical energy use difference postretrofit from baseline (kBtu)

Figure 6. City of Warren—Marshall County Courthouse electrical energy use difference postretrofit from baseline (kBtu)



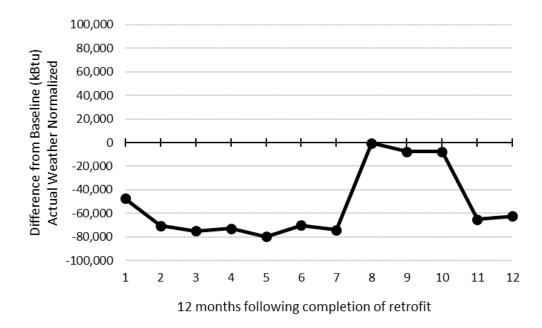


Figure 7. City of Warren—Warren Alvarado Olso High School electrical energy use difference postretrofit from baseline (kBtu)

#### **Review of postinstallation report on Leech Lake retrofits**

While the twenty-two Leech Lake Band of Ojibwe buildings did not have energy consumption data that could be used for this analysis, the contractor provided a report to the tribe following installation, which forecasted the expected electrical energy savings from ECMs installed across the reservation.

The ECMs that were expected to result in electrical energy savings in the first year included replacement of mechanical units, such as boilers and water heaters; upgrades and replacements of control systems, such as thermostats and occupancy sensors; lighting upgrades; and air handling unit replacement.

The contractor's report estimates that expected electrical energy savings in the first year would total 9,315,685 kBtu<sup>13</sup> (Table 4).<sup>14</sup>

	Electrical energy savings
ECM type	(kWh/yr)

/1	· · · · · ·
Mechanical upgrades	661,319
Water conservation measures	593,729
Controls upgrades	1,405,014
Air handling unit replacement	70,095
Total	2,730,158

<sup>&</sup>lt;sup>13</sup> 1 kWh = 3,412.14 Btu

<sup>&</sup>lt;sup>14</sup> Energy Savings Agreement Leech Lake Band of Ojibwe Post-Installation Report, NORESCO, LLC, September 30, 2019.

The contractor used different models to estimate the energy savings depending on the type of ECM. Average weather data was used from the National Oceanic and Atmospheric Association (NOAA) for weather normalization. The models were calibrated to the utility baseline created from actual utility bills.

## Host site capacity building

#### **Organizational capacity**

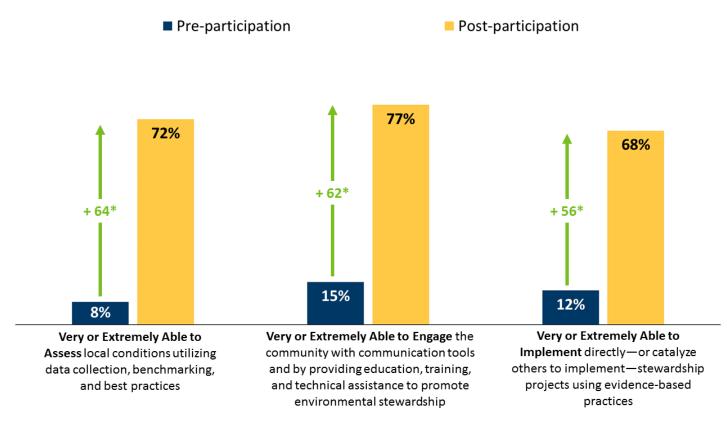
Host site supervisors were asked to rate their current organizational capacity on several activities related to their specific service year project, both before and after their Minnesota GreenCorps member served at their site. These activities included:

- Assessing local conditions
- Engaging the community to promote environmental stewardship
- Implementing or catalyzing implementation of stewardship projects

Host site supervisors were more likely to report on the post-participation survey than the pre-participation survey that their organization was very or extremely able to do each of the above activities (Figure 8). The percentage of respondents selecting "very able" or "extremely able" increased fifty-six points for ability to implement or catalyze implementation, sixty-two points for engaging the community, and sixty-four points for assessing local conditions.

The difference in the percentage of respondents selecting "very able" or "extremely able" from pre- to postparticipation was statistically significant on all three questions (p < .05).

## Figure 8. Percentage of host site supervisors reporting organizational capacity to assess, engage, and implement as "very able" or "extremely able" pre- and post-participation in the Minnesota GreenCorps program



\* The difference from pre- to post-survey was found to be statistically significant (p < .05).

One of the factors that most host site supervisors cited during the focus groups as critical to their success was the qualifications of the Minnesota GreenCorps members themselves.

## "This is my first year being a supervisor. To some degree you don't know what you're going to get... The quality of the [Minnesota GreenCorps member] added value from day one. I definitely gained something." Host site supervisor, 2019–2020.

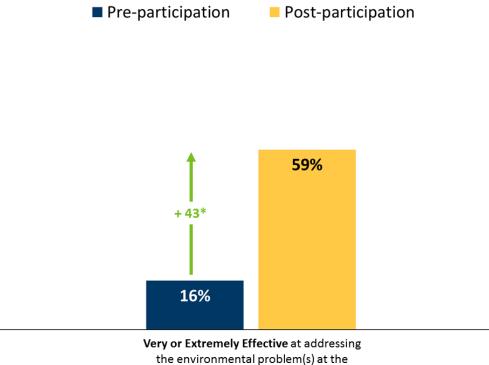
Several focus group participants also described their Minnesota GreenCorps members as very passionate about their areas of focus and environmental sustainability overall.

#### **Organizational effectiveness**

Host site supervisors were asked to rate their current overall organizational effectiveness at addressing the environmental problem(s) at the heart of their Minnesota GreenCorps project.

Host site supervisors were more likely to rate their overall effectiveness as "very effective" or "extremely effective" after participation in the Minnesota GreenCorps program than before (Figure 9). On the pre-participation survey, 16 percent of host site supervisors rated their organization effectiveness as very or extremely effective. This increased to 59 percent on the post-participation survey. The difference between pre- and postsurvey responses on this question was found to be statistically significant (p < .05).

Figure 9. Percentage of host site supervisors reporting ability to address the environmental problem at the heart of their Minnesota GreenCorps project as "very" or "extremely effective" pre- and post-participation in the Minnesota GreenCorps program



heart of the MN GreenCorps project

 $\ast$  The difference from pre- to postsurvey was found to be statistically significant (p < .05).

All host site supervisors who participated in the focus groups said their organization was better equipped to address their environmental challenges after their Minnesota GreenCorps member's service years.

"There is no position that owns the waste reduction effort. With [our Minnesota GreenCorps member] here, we had a point person... We're definitely doing a better job than we were eleven months ago. It has really shifted the culture around solid waste management. That's a really big deal. It's something we wanted to do but didn't have someone to catalyze it." Host site supervisor, 2019–2020.

#### Organizational ability to sustain project activities and measurement

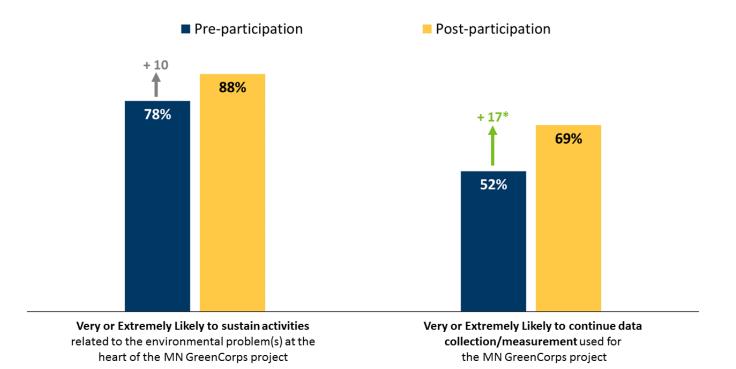
Host site supervisors were asked to rate their organization's likelihood to sustain beyond the service year the activities related to the environmental problem at the heart of their Minnesota GreenCorps project and continue the data collection or measurement used for the project. On the pre-participation survey, host site supervisors were asked to answer based on what they knew at the time.

On both questions, host site supervisors were more likely to rate their organization's ability to sustain activities and data collection/measurement as "very likely" or "extremely likely" on the post-participation survey than the pre-participation survey (Figure 10).

The percentage of host site supervisors rating their likelihood of sustaining activities related to the environmental problem(s) at the heart of their Minnesota GreenCorps project as "very likely" or "extremely likely" increased 10 points; however, this difference was not found to be statistically significant.

The change in response from pre-participation to post-participation of host site supervisors rating their likelihood of continuing data collection or measurement as "very likely" or "extremely likely," an increase of 17 points, was statistically significant (p < .05).

Figure 10. Percentage of host site supervisors reporting that the likelihood of sustaining activities and data collection/measurement as "very likely" or "extremely likely" pre- and post-participation in the Minnesota GreenCorps program



\* The difference from pre- to postsurvey was found to be statistically significant (p < .05).

In the focus groups, when asked about sustainability of their Minnesota GreenCorps project beyond their member's service year, supervisors from host sites where their member developed a new process or created something that could easily be used in the future were the most likely to say the work was sustainable.

Several host site supervisors said their ability to sustain the work was aided when Minnesota GreenCorps members left detailed documentation of a process they created, as it was less of a burden for staff to continue after the service year.

"Our [Minnesota GreenCorps] member was able to create educational resources and left step-bystep instructions for sustaining her work. Once it's created it's easier to maintain versus creating it yourself." Host site supervisor, 2018–2019.

A few host site supervisors said having the Minnesota GreenCorps member allowed them to make a case to leadership in their organization that additional resources were needed to continue the work started by the member. In one case, a site has hired a number of Minnesota GreenCorps members into full-time positions after their service years.

#### Other organizational factors related to addressing environmental problems

Thinking about the environmental problem(s) at the heart of their Minnesota GreenCorps project, host site supervisors were asked to review several statements and rate how well each described their organization both pre-participation and post-participation.

Host site supervisors were more likely to say statements related to the following factors described their organization to a "moderate extent" or "large extent" post-participation in the Minnesota GreenCorps program than pre-participation, differences that were all found to be statistically significant (p < .05) (Figure 11):

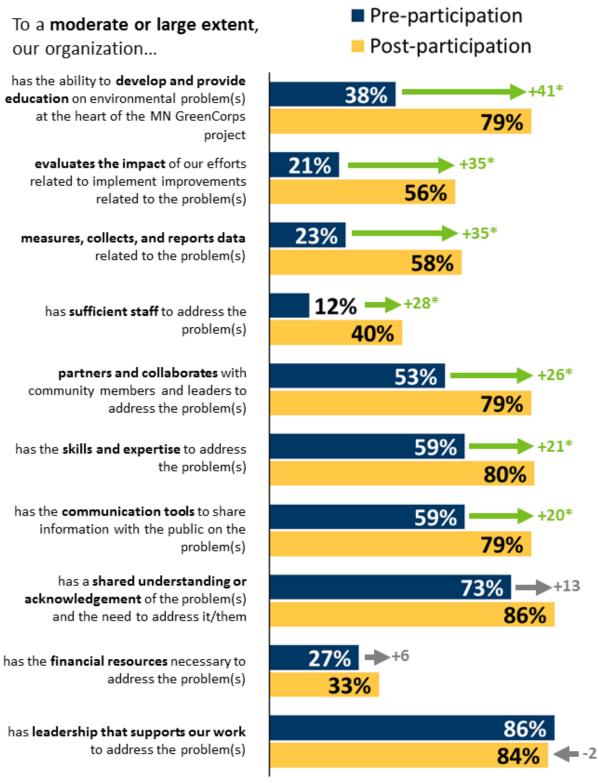
- Developing and providing education on the environmental problem(s) at the heart of their project
- Evaluating the impact of efforts related to the problem(s)
- Measuring, collecting, and reporting data on the problem(s)
- Having sufficient staff to address the problem(s)
- Partnering and collaborating with community members to address the problem(s)
- Having the skills and experience to address the problem(s)
- Having the communication tools to share information with the public on the problem(s)

Host site supervisors were more likely to say statements related to the following factors described their organization to a "moderate extent" or "large extent" post-participation, but these differences were not statistically significant:

- Having shared understanding or acknowledgement of the problem(s)
- Having the financial resources necessary to address the problem(s)

Host site supervisors were slightly less likely to say the statement about leadership supporting their work to address the problem(s) described their organization to a "moderate extent" or "large extent" post-participation, but this difference was not statistically significant.

Figure 11. Percentage of host site supervisors reporting that positive statements about their organization's ability to address the environmental problem(s) at the heart of the Minnesota GreenCorps project described them to a "moderate" or "large" extent pre- and post-participation in the Minnesota GreenCorps program



\* The difference from pre- to postsurvey was found to be statistically significant (p < .05).

#### **Community readiness**

Thinking about the environmental problem(s) at the heart of their Minnesota GreenCorps project, host site supervisors were asked to rate their local community's readiness to address the problem(s) on several factors.

Host site supervisors were more likely to rate their community as "very ready" or "extremely ready" on the following two factors post-participation in the Minnesota GreenCorps program than pre-participation, differences that were all found to be statistically significant (p < .05) (Figure 12Figure 11):

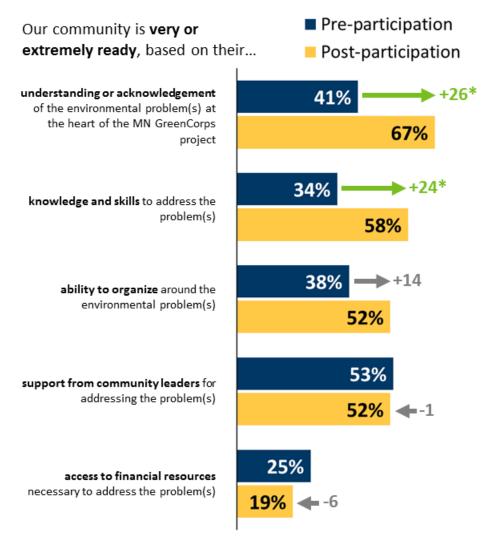
- Understanding or acknowledgement of the problem(s) at the heart of their Minnesota GreenCorps project and the need to address it
- Knowledge and skills needed to address the problem(s)

Host site supervisors were more likely to rate their community's readiness as "very ready" or "extremely ready" on ability to organize around the environmental problem(s) post-participation in the Minnesota GreenCrorps program than pre-participation, but this difference was not statistically significant.

Host site supervisors were less likely to rate their community as "very ready" or "extremely ready" on the following two factors post-participation in the Minnesota GreenCorps program than pre-participation, but these differences were not found to be statistically significant:

- Support from community leaders for addressing the problem(s)
- Access to financial resources necessary to address the problem(s)

Figure 12. Percentage of host site supervisors reporting that their community is "very" or "extremely" ready to understand, address, organize, and support the environmental problem(s) at the heart of their Minnesota GreenCorps project pre- and post-participation in the Minnesota GreenCorps program



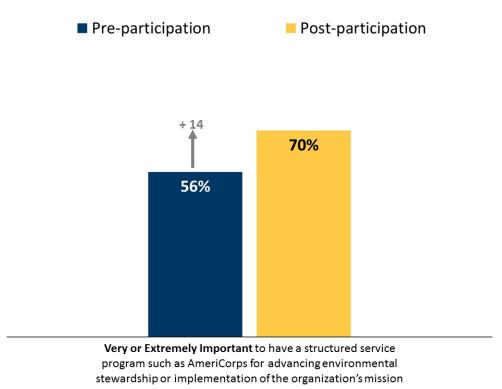
\* The difference from pre- to postsurvey was found to be statistically significant (p < .05).

#### Importance of structured service programs

Host site supervisors were asked how important structured service programs such as AmeriCorps have been to advance environmental stewardship in their organization or the implementation of its mission.

Host site supervisors were more likely post-participation in the Minnesota GreenCorps program than pre-participation to say that structured service programs were "very important" or "extremely important" to advancing environmental stewardship or implementing their organization's mission(Figure 13). However, this increase was not found to be statistically significant.

Figure 13. Percentage of host site supervisors who reported that it is "very" or "extremely" important to have structured service programs like AmeriCorps for advancing environmental stewardship or implementing their organization's mission pre- and post-participation in the Minnesota GreenCorps program



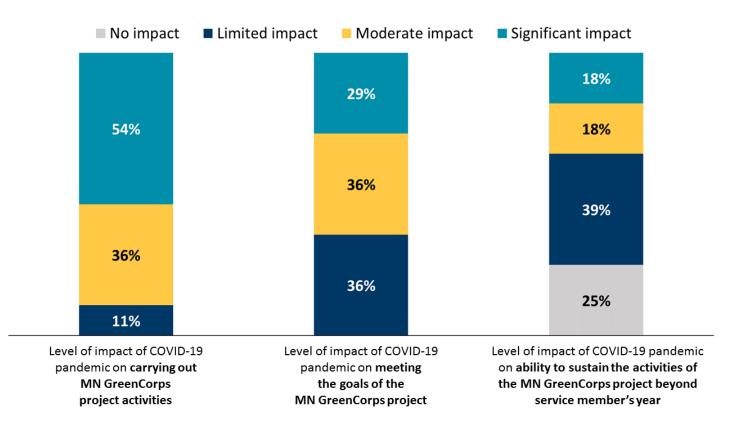
There was strong agreement among host site supervisors who participated in the focus groups that their Minnesota GreenCorps members' contributions to their organizations were invaluable. Host site supervisors said that the work accomplished by their members or with member support would not have been possible otherwise.

#### Impact of coronavirus pandemic

Host site supervisors whose organizations participated in the Minnesota GreenCorps program in the 2019–2020 service year were asked some additional questions on the post-participation survey to gauge the impact of COVID-19 and the pandemic response on their project.

The largest percentage of site supervisors (90 percent) reported that COVID-19 and the pandemic response had a "moderate impact" or "significant impact" on carrying out their MN GreenCorps project activities (Figure 14). A smaller percentage (65 percent) reported a "moderate impact" or "significant impact" on their ability to meet the goals of their project. The smallest percentage (36 percentage) reported a "moderate impact" or "significant impact" or their ability to sustain the activities beyond their service member's year.

Figure 14. Ratings from host site supervisors in 2019–2020 on the impact of the COVID-19 pandemic on different aspects of their Minnesota GreenCorps project



During the focus group that took place at the end of the 2019–2020 service year, host site supervisors who participated did cite some challenges with the transition to having their Minnesota GreenCorps members switch quickly to remote work as a result of Executive Orders from the Governor of Minnesota. However, all of them said their member's work was still beneficial to the organization. A few even said their Minnesota GreenCorps member was pivotal in figuring out how to still fulfill project goals, including utilizing technology or coming up with innovative solutions that would comply with orders to socially distance.

"For our tree sale, [our Minnesota GreenCorps member] designed ways to work around that with social distancing, so that we could still have them. Double lanes for tree sales, twice as many volunteers, and got it done twice as fast. Everyone understood the rules and the procedures that were in place. Everything went smoothly. We'll continue that dual-lane and double-up on everything next year, even without COVID." Host site supervisor, 2019–2020. Figure 15. Minnesota GreenCorps member and another volunteer volunteering at an essential supply drive with Anoka County 4-H<sup>15</sup>



<sup>&</sup>lt;sup>15</sup> Posted to Minnesota GreenCorps' Twitter account, accessed October 16, 2020, <u>My Data Sources</u>.

## **Appendix A: Evaluator qualifications**

### **Management Analysis and Development**

Management Analysis and Development (MAD) is a fee-for-service management consulting practice housed in Minnesota Management and Budget, the State of Minnesota's management and budget agency. MAD has 35 years of experience helping public sector managers improve and enhance their organizations and programs. MAD has conducted analytical studies, program evaluations, performance measurement consulting, and other research for state agencies, the Minnesota Legislature, and other public sector organizations. MAD is an independent evaluator; MAD staff have no formal or personal relationship with, or stake in, the administration, management, or finances of CNCS, ServeMinnesota, or the Minnesota GreenCorps program.

### **Evaluator qualifications**

Lizzie McNamara has several years of experience in research, evaluation, and data analysis. Her work specializes in quantitative data analysis, participatory methods, and data visualization. Her evaluation experience includes mixed method evaluations of the impacts of a national teacher development program, school improvement efforts in an urban public school system, and youth participatory evaluation programming. She also has experience with program audits, including developing the methodology to estimate fare evasion rates on an open light rail system. Lizzie earned a master's degree in public policy from the Humphrey School of Public Affairs, with a focus on advanced policy analysis methods. She has a bachelor's degree in English from Macalester College.

## **Appendix B: Summary of previous evaluations**

## Findings from 2013 evaluation

MPCA contracted with The Improve Group to conduct an independent evaluation of the Minnesota GreenCorps program for its first four service years (2009–2010, 2010–2011, 2011–2012, 2012–2013). The evaluators reviewed program information and conducted interviews, focus groups, and surveys with participants, staff, and other stakeholders of the program.

The evaluators made the following findings based on their research regarding the Minnesota GreenCorps program:

- Program structures and practices support program goals.
- The program achieves impact on communities and the environment.
- The program cultivates the next generation of environmental professionals and sustainability-conscious citizens.
- Program structure and design has resulted in a ripple effect of connections and partnerships that encourage and support positive environmental outcomes.

## Findings from 2017 evaluation

MPCA contracted with MAD to conduct an independent evaluation of the Minnesota GreenCorps program for service years 2013 through 2017 (2013–2014, 2014–2015, 2015–2016, and 2016–2017). MAD conducted a literature review as well as a review of comparable service programs. MAD also conducted a review of relevant program information and program measurement data, in addition to conducting surveys, interviews, and ripple effect mapping.

Overall, MAD found that Minnesota GreenCorps demonstrates positive environmental stewardship impact. The program makes positive contributions to host sites as they address environmental challenges and to members as they develop into environmental professionals.

In particular, this evaluation identified the following key findings regarding Minnesota GreenCorps:

- Projects are driven by local needs to address environmental challenges, are diverse in nature, and show persuasive data on direct environmental impacts.
- Members gain and maintain employment in the environmental field ("green jobs") after finishing the program.
- Members gain transferable professional skills, particularly communication and project management.
- Host sites increased organizational capacity, particularly by allowing organizations to perform activities or provide services they otherwise would not have and increasing effectiveness at addressing environmental problems.
- The majority of host sites sustain at least part of the work after a member has left.
- The biggest challenges to sustainability of the work are financial resources and staffing.

## Appendix C: Pre-participation survey of host site supervisors 2018–2019 and 2019–2020

Your name:

Organization name:

#### Minnesota GreenCorps Host Sites—Pre-Participation Questionnaire

The Minnesota Pollution Control Agency (MPCA) has contracted with Management Analysis and Development (MAD) to conduct an independent evaluation of the Minnesota GreenCorps program for a three-year funding cycle. Part of this evaluation involves gathering information and perspectives from host sites to further improve the program.

MAD consultants will analyze the information from this questionnaire, and they will use the information in their evaluation. They will provide a summary report to MPCA, but they will not share information that connects specific responses to individual organizations. Any private information that you provide is protected under the Minnesota Data Practices Act, Minnesota Statues §13.64.

You are not required to answer the following questions, but your participation will be very helpful. If you need to submit your answers electronically, please scan and email them to: <u>Lizzie.McNamara@state.mn.us</u>.

The questions will ask you to think about the project that you anticipate your incoming GreenCorps member will work on during the next service year (2019-20) and the environmental problem at the heart of that project. When considering your answers, think about the <u>current state</u> of your organization or the work, <u>without</u> a GreenCorps member.

1. Please rate your organization's current capacity—without the Minnesota GreenCorps member—to do the following activities as they relate to your specific Minnesota GreenCorps 2019-20 service year project. Please check the box under the applicable rating:

Activities	1 Not at all able	2 Not very able	3 Moderately able	4 Very able	5 Extremely able
Assess local conditions utilizing data collection, benchmarking, and best practices					
<b>Engage</b> the community with communication tools and by providing education, training, and technical assistance to promote evidence-based, environmental stewardship best management practices, including methods for implementing them and the importance of behavioral change					
<b>Implement</b> directly—or catalyze others through training or behavioral change to implement—specific, measurable, environmental stewardship projects using evidence-based practices					

2. Thinking about the **environmental problem(s) at the heart of your Minnesota GreenCorps project**, to what extent do the following statements describe your organization **currently**? Please check the box under the applicable rating:

Organizational Factors	1 Not at all	2 To a little extent	3 To some extent	To a moderate extent	5 To a large extent
Our organization has a shared understanding or acknowledgement of the environmental problem(s) and the need to address it					
Our organization's leadership supports our work to address the environmental problem(s)					
Our organization has sufficient staff to address the environmental problem(s)					
Our organization has the skills and expertise to address the environmental problem(s)					
Our organization has the ability to develop and provide education to clients or community members on the environmental problem(s)					
Our organization has the financial resources necessary to address the environmental problem(s)					
Our organization has the communication tools—such as social media, press releases, and website updates— to share information with the public on the environmental problem(s)					
Our organization partners and collaborates with community members and leaders to address the environmental problem(s)					
Our organization measures, collects, and reports data, such as outputs and outcomes, related to the environmental problem(s)					
Our organization evaluates the impact of our efforts related to the environmental problem(s) to implement improvements					

- 3. Thinking about your organization's work overall, how would you rate your organization's **current** effectiveness at addressing the environmental problem(s) at the heart of your Minnesota GreenCorps member's project? Please select the rating that best applies:
  - □ 1—Our organization is not at all effective at addressing this particular environmental problem
  - □ 2—Our organization is not very effective at addressing this particular environmental problem
  - □ 3—Our organization is moderately effective at addressing this particular environmental problem
  - □ 4—Our organization is very effective at addressing this particular environmental problem
  - □ 5—Our organization is extremely effective at addressing this particular environmental problem

- 4. **Based on what you know now**, please rate your organization's likelihood to sustain activities related to environmental problem at the heart of your Minnesota GreenCorps project beyond the member's service year. Please select the rating that best applies:
  - □ 1—We are not at all likely to continue the project's activities
  - □ 2—We are not very likely to continue the project's activities
  - □ 3—We are moderately likely to continue the project's activities
  - □ 4—We are very likely to continue the project's activities
  - □ 5—We are extremely likely to continue the project's activities
- 5. **Based on what you know now**, please rate your organization's likelihood to continue the data collection/ measurement used for your Minnesota GreenCorps project beyond the member's service year. Please select the rating that best applies:
  - □ 1—We are not at all likely to continue the data collection/measurement
  - □ 2—We are not very likely to continue the data collection/measurement
  - □ 3—We are moderately likely to continue the data collection/measurement
  - □ 4—We are very likely to continue the data collection/measurement
  - □ 5—We are extremely likely to continue the data collection/measurement
- 6. Thinking about the environmental problem your Minnesota GreenCorps project seeks to address, please rate **your community's current readiness** to address the problem(s), based on the following factors. Please check the box under the applicable rating:

<b>Community Readiness Factors</b> Understanding or acknowledgement of the problem(s) and the need to address it	1 Not at all ready	2 Not very ready	3 Moderately ready	4 Very Ready	5 Extremely ready	Don't know
Knowledge and skills to address the problem(s)						
Ability to organize around the environmental problem(s)						
Support from community leaders for addressing the problem(s)						
Access to financial resources necessary to address the problem(s)						

- 7. If MPCA had not selected your organization to host a Minnesota GreenCorps member this year, what would be the likely impact on your specific project? Please select the option that best describes the possible impact:
  - □ We would not do the project, and that would have a substantial negative impact on our organization
  - □ We would not do the project, but that would not substantially impact our organization
  - □ We would carry out some aspect or portion of the project
  - □ We would postpone the project to a later year and then reapply for a Minnesota GreenCorps member
  - □ We would find other resources to do the project this year
  - □ We would find other resources to do the project in a later year
  - □ Some other organization would do the project instead
  - Other:\_\_\_\_\_

- 8. Up to this point, how important have structured service programs such as AmeriCorps been to advancing environmental stewardship in your organization or the implementation of its mission? Please select the rating that best applies:
  - □ 1—Not important at all
  - □ 2—Not very important
  - □ 3—Moderately important
  - □ 4—Very Important
  - □ 5—Extremely important
- 9. What else would you like to add?

#### THANK YOU!

# Appendix D: Post-participation survey of host site supervisors 2018–2019

Your name:

Organization name:

#### Minnesota GreenCorps Host Sites—Post-participation Questionnaire

Last fall, we asked you, as a Minnesota GreenCorps host site, to complete a short pre-participation questionnaire. We are now asking you to complete a similar post-participation questionnaire. **Please return your completed questionnaire** to <u>lizzie.mcnamara@state.mn.us</u> by July 29, 2019.

Thank you in advance for your participation! The Minnesota Pollution Control Agency (MPCA) has contracted with Management Analysis and Development (MAD) to conduct an independent evaluation of the Minnesota GreenCorps program for the current three-year funding cycle. Part of this evaluation involves gathering information and perspectives from host sites to further improve the program.

MAD consultants will analyze the information from this questionnaire, and they will use the information in their evaluation. They will provide a summary report to MPCA, but they will not share information that connects specific responses to individual organizations. Any private information that you provide is protected under the Minnesota Data Practices Act, Minnesota Statutes §13.64.

#### Other surveys

This survey is separate from the MN GreenCorps end-of-year survey and other end of term tasks outlined on the checklist. If you are a returning host site, you may have been asked to complete a similar survey last summer. This survey is separate from that survey and specific to your experience in 2018–2019.

You are not required to answer the following questions, but your participation will be very helpful.

1. Please rate your organization's current capacity—since having the Minnesota GreenCorps member—to do the following activities as they relate to your specific Minnesota GreenCorps 2018–19 service year project. Please check the box under the applicable rating:

Activities Assess local conditions utilizing data collection,	1 Not at all able	2 Not very able	3 Moderately able	4 Very able	5 Extremely able
benchmarking, and best practices					
<b>Engage</b> the community with communication tools and by providing education, training, and technical assistance to promote evidence-based, environmental stewardship best management practices, including methods for implementing them and the importance of behavioral change					

	1	2	3	4	5
	Not at all	Not very	Moderately	Very able	Extremely
Activities	able	able	able		able
<b>Implement</b> directly—or catalyze others through training or behavioral change to implement—specific, measurable, environmental stewardship projects using evidence-based practices					

2. Thinking about the **environmental problem(s) at the heart of your Minnesota GreenCorps project**, to what extent do the following statements describe your organization? Please check the box under the applicable rating:

	1	2	3	4 To a	5
Organizational Factors	Not at all	To a little extent	To some extent	moderate extent	To a large extent
Our organization has a shared understanding or acknowledgement of the environmental problem(s) and the need to address it					
Our organization's leadership supports our work to address the environmental problem(s)					
Our organization has sufficient staff to address the environmental problem(s)					
Our organization has the skills and expertise to address the environmental problem(s)					
Our organization has the ability to develop and provide education to clients or community members on the environmental problem(s)					
Our organization has the financial resources necessary to address the environmental problem(s)					
Our organization has the communication tools—such as social media, press releases, and website updates— to share information with the public on the environmental problem(s)					
Our organization partners and collaborates with community members and leaders to address the environmental problem(s)					
Our organization measures, collects, and reports data, such as outputs and outcomes, related to the environmental problem(s)					
Our organization evaluates the impact of our efforts related to the environmental problem(s) to implement improvements					

- 3. Thinking about your organization's work overall, how would you rate your organization's current effectiveness at addressing the environmental problem(s) at the heart of your Minnesota GreenCorps member's project? Please select the rating that best applies:
  - □ 1—Our organization is not at all effective at addressing this particular environmental problem
  - □ 2—Our organization is not very effective at addressing this particular environmental problem
  - □ 3—Our organization is moderately effective at addressing this particular environmental problem
  - □ 4—Our organization is very effective at addressing this particular environmental problem
  - □ 5—Our organization is extremely effective at addressing this particular environmental problem
- 4. Based on what you know now, please rate your organization's likelihood to sustain activities related to environmental problem at the heart of your Minnesota GreenCorps project beyond the member's service year. Please select the rating that best applies:
  - □ 1—We are not at all likely to continue the project's activities
  - □ 2—We are not very likely to continue the project's activities
  - □ 3—We are moderately likely to continue the project's activities
  - □ 4—We are very likely to continue the project's activities
  - □ 5—We are extremely likely to continue the project's activities
- 5. Based on what you know now, please rate your organization's likelihood to continue the data collection/measurement used for your Minnesota GreenCorps project beyond the member's service year. Please select the rating that best applies:
  - □ 1—We are not at all likely to continue the data collection/measurement
  - □ 2—We are not very likely to continue the data collection/measurement
  - □ 3—We are moderately likely to continue the data collection/measurement
  - □ 4—We are very likely to continue the data collection/measurement
  - □ 5—We are extremely likely to continue the data collection/measurement
- 6. Thinking about the environmental problem your Minnesota GreenCorps project seeks to address, please rate **your community's** current readiness to address the problem(s), based on the following factors. Please check the box under the applicable rating:

Community Readiness Factors	1 Not at all ready	2 Not very ready	3 Moderately ready	4 Very Ready	5 Extremely ready	Don't know
Understanding or acknowledgement of the problem(s) and the need to address it						
Knowledge and skills to address the problem(s)						
Ability to organize around the environmental problem(s)						
Support from community leaders for addressing the problem(s)						
Access to financial resources necessary to address the problem(s)						

- 7. Up to this point, how important have structured service programs such as AmeriCorps been to advancing environmental stewardship in your organization or the implementation of its mission? Please select the rating that best applies:
  - □ 1—Not important at all
  - □ 2—Not very important
  - □ 3—Moderately important
  - □ 4—Very Important
  - □ 5—Extremely important
- 8. What else would you like to add?

#### THANK YOU!

# Appendix E: Post-participation survey of host site supervisors 2019–2020

Your name:

Organization name:

#### Minnesota GreenCorps Host Sites—Post-participation Questionnaire

Last fall, we asked you, as a Minnesota GreenCorps host site, to complete a short pre-participation questionnaire. We are now asking you to complete a similar post-participation questionnaire. **Please return** your completed questionnaire to <u>lizzie.mcnamara@state.mn.us</u> by July 31, 2020.

Thank you in advance for your participation! The Minnesota Pollution Control Agency (MPCA) has contracted with Management Analysis and Development (MAD) to conduct an independent evaluation of the Minnesota GreenCorps program for the current three-year funding cycle. Part of this evaluation involves gathering information and perspectives from host sites to further improve the program.

MAD consultants will analyze the information from this questionnaire, and they will use the information in their evaluation. They will provide a summary report to MPCA, but they will not share information that connects specific responses to individual organizations. Any private information that you provide is protected under the Minnesota Data Practices Act, Minnesota Statutes §13.64.

#### Other surveys

This survey is separate from the MN GreenCorps end-of-year survey and other end of term tasks outlined on the checklist. If you are a returning host site, you may have been asked to complete a similar survey last summer. This survey is separate from that survey and specific to your experience in 2019-2020.

You are not required to answer the following questions, but your participation will be very helpful.

1. Please rate your organization's current capacity—since having the Minnesota GreenCorps member—to do the following activities as they relate to your specific Minnesota GreenCorps 2019-2020 service year project. Please check the box under the applicable rating:

				4	
	1 Not at all	2 Not very	3 Moderately	Very able	5 Extremely
Activities	able	able	able		able
Assess local conditions utilizing data collection, benchmarking, and best practices					

				4	
	1	2	3	Very	5
Activities	Not at all able	Not very able	Moderately able	able	Extremely able
<b>Engage</b> the community with communication tools and by providing education, training, and technical assistance to promote evidence-based, environmental stewardship best management practices, including methods for implementing them and the importance of behavioral change					
<b>Implement</b> directly—or catalyze others through training or behavioral change to implement— specific, measurable, environmental stewardship projects using evidence-based practices					

2. Thinking about the **environmental problem(s) at the heart of your Minnesota GreenCorps project**, to what extent do the following statements describe your organization **currently**? Please check the box under the applicable rating:

				4	
	1 Not at all	2 To a little	3 To some	To a moderate	5 To a large
Organizational Factors	Not at an	extent	extent	extent	extent
Our organization has a shared understanding or acknowledgement of the environmental problem(s) and the need to address it					
Our organization's leadership supports our work to address the environmental problem(s)					
Our organization has sufficient staff to address the environmental problem(s)					
Our organization has the skills and expertise to address the environmental problem(s)					
Our organization has the ability to develop and provide education to clients or community members on the environmental problem(s)					
Our organization has the financial resources necessary to address the environmental problem(s)					
Our organization has the communication tools— such as social media, press releases, and website updates—to share information with the public on the environmental problem(s)					
Our organization partners and collaborates with community members and leaders to address the environmental problem(s)					

				4	
	1	2	3	То а	5
	Not at all	To a little	To some	moderate	To a large
Organizational Factors		extent	extent	extent	extent
Our organization measures, collects, and reports data, such as outputs and outcomes, related to the environmental problem(s)					
Our organization evaluates the impact of our efforts related to the environmental problem(s) to implement improvements					

- 3. Thinking about your organization's work overall, how would you rate your organization's **current** effectiveness at addressing the environmental problem(s) at the heart of your Minnesota GreenCorps member's project? Please select the rating that best applies:
  - □ 1—Our organization is not at all effective at addressing this particular environmental problem
  - □ 2—Our organization is not very effective at addressing this particular environmental problem
  - □ 3—Our organization is moderately effective at addressing this particular environmental problem
  - □ 4—Our organization is very effective at addressing this particular environmental problem
  - □ 5—Our organization is extremely effective at addressing this particular environmental problem
- 4. Based on what you know now, please rate your organization's likelihood to sustain activities related to environmental problem at the heart of your Minnesota GreenCorps project beyond the member's service year. Please select the rating that best applies:
  - □ 1—We are not at all likely to continue the project's activities
  - □ 2—We are not very likely to continue the project's activities
  - □ 3—We are moderately likely to continue the project's activities
  - □ 4—We are very likely to continue the project's activities
  - □ 5—We are extremely likely to continue the project's activities
- 5. Based on what you know now, please rate your organization's likelihood to continue the data collection/measurement used for your Minnesota GreenCorps project beyond the member's service year. Please select the rating that best applies:
  - □ 1—We are not at all likely to continue the data collection/measurement
  - □ 2—We are not very likely to continue the data collection/measurement
  - □ 3—We are moderately likely to continue the data collection/measurement
  - □ 4—We are very likely to continue the data collection/measurement
  - □ 5—We are extremely likely to continue the data collection/measurement
- 6. Thinking about the environmental problem your Minnesota GreenCorps project seeks to address, please rate **your community's current readiness** to address the problem(s), based on the following factors. Please check the box under the applicable rating:

Community Readiness Factors	1 Not at all ready	2 Not very ready	3 Moderately ready	4 Very Ready	5 Extremely ready	Don't know
Understanding or acknowledgement of the problem(s) and the need to address it						
Knowledge and skills to address the problem(s)						
Ability to organize around the environmental problem(s)						
Support from community leaders for addressing the problem(s)						
Access to financial resources necessary to address the problem(s)						

- 7. Up to this point, how important have structured service programs such as AmeriCorps been to advancing environmental stewardship in your organization or the implementation of its mission? Please select the rating that best applies:
  - □ 1—Not important at all
  - □ 2—Not very important
  - □ 3— Moderately important
  - □ 4—Very Important
  - □ 5—Extremely important

We know that the COVID-19 pandemic has likely impacted your organization and your Minnesota GreenCorps project. These additional questions will help us better understand that impact, if any.

8. Thinking about the **impact that COVID-19 and the pandemic response has had on your Minnesota GreenCorps project**, please rate the level of impact on the following project aspects:

GreenCorps Project Aspects	1 No impact	2 Limited impact	3 Moderate impact	4 Significant impact	Don't know
Carrying out the project activities					
Meeting the goals of the project					
Ability to sustain the activities beyond the service member's year					

- 9. Please describe the ways that the COVID-19 pandemic impacted your Minnesota GreenCorps project:
- 10. Please describe any ways that you anticipate the ongoing pandemic response may impact your ability to sustain the project activities:

11. What else would you like to add?

#### THANK YOU!

# Appendix F: Host site supervisor focus group protocol 2018–2019

For the purposes of the evaluation, your comments will remain confidential, and nothing you say will be directly attributed to you in our reporting. Your participation in this next activity is completely voluntary, and you can leave the room at any time, or choose not to answer any of the questions. We've got about five big questions to talk through, and I might ask some follow-up questions for clarity. Feel free to respond to, disagree with, and build off of one another's comments. I'll also encourage you to be mindful of your air time, and help us ensure that everyone gets a chance to voice their opinion, if they want to.

- 1. How easy or difficult has it been to sustain the work that your corps member was doing or focused on?
  - a. What has made it easier? What has made it more difficult?
- 2. In what ways is your organization better equipped to address environmental challenges?
  - a. What barriers persist?
- 3. What could the Minnesota GreenCorps program have done or do, if anything, to better equip you to sustain your corps members' work after their year of service?
- 4. What are some of the challenges, if any, that you faced as a Minnesota GreenCorps host site?
- 5. What are some of the successes, if any, that you faced as a Minnesota GreenCorps host site?

# Appendix G: Host site supervisor focus group protocol 2019–2020

For the purposes of the evaluation, your comments will remain confidential, and nothing you say will be directly attributed to you in our reporting. Your participation in this next activity is completely voluntary, and you can leave or choose not to answer any of the questions. We've got about six big questions to talk through, and I might ask some follow-up questions for clarity. Feel free to respond to, disagree with, and build off of one another's comments. I'll also encourage you to be mindful of your air time, and help us ensure that everyone gets a chance to voice their opinion, if they want to.

- 1. What are some of the successes you had this past year as a Minnesota GreenCorps host site?
- 2. What are some of the challenges that you faced as a Minnesota GreenCorps host site?
- 3. How easy or difficult do you think it will be to sustain the work that your corps member was doing or focused on?
- 4. In what ways is your organization better equipped to address environmental challenges after this year?
  - a. What barriers persist?
- 5. What could the Minnesota GreenCorps program have done or do, if anything, to better equip you to sustain your corps members' work after their year of service?
- 6. If you had the opportunity to be a host site again, would you?
  - a. Why or why not?