

Minuteman Vocational High School

Massachusetts Envirothon 2023 Community Engagement Award Research & Action Checklist

The Community Engagement Award recognizes your team's research and action related to the [Envirothon Current Issue](#). To meet the standard for the award, your team must show that you have been creative and resourceful in using a range of research strategies. Your team must also show that you have taken new ideas and connections based on your research and put them to work to benefit your community.

There are three parts to this checklist:

1) RESEARCH. Your team must complete a list of recommended community research tasks. You may decide to pursue your own tasks that take you deeper, or in different directions. If your team departs from this checklist, be ready to explain why you believe you still qualify for the award.

2) ACTION. Your team must provide a description of the action project you are undertaking, and some form of evidence of your work (for example, a letter from a community partner)

3) REFLECTION. These items -- accompanying each research and action item -- are your team's opportunity to show the ideas, local savvy, and informed opinions you gained from your research and action experiences. Consider all the items throughout the checklist and **respond briefly to at least five** that resonate most with your experience. You can also devise your own. Be ready to talk to your Envirothon reviewers about any of the items listed.

Name of your School/Organization/Team

Minuteman Vocational High School

RESEARCH

1. COMMUNITY: This is how we are defining the geographic area of our "community" for this year's Envirothon Current Issue (Use a map or verbal description. What areas of which municipalities are your focus?):

The community that we were helping were the families and citizens of Bolton. These were the people who used the public spaces and would benefit from more fields and spaces.

REFLECTION: We found that placing these boundaries on our "community" were (or were not) helpful in considering solutions to climate issues. For example:

We found that placing boundaries on our community were not helpful because they limited our thinking, and prevented us from looking at the problem as one that affects everyone, instead drawing a line arbitrarily as to the people we would protect.

REFLECTION: We discovered the following Environmental Justice issues represented within our community:
Senior citizens were an important Environmental Justice community.

2. STATE PROGRAMS ASSISTING LOCAL COMMUNITIES: We became familiar with how our community has taken climate action through the [Massachusetts Municipal Vulnerability Preparedness Program](#) and the [Massachusetts Green Communities Program](#). (Talking with local people who have been involved with these programs, and reviewing reports and plans online, will put you on the fast track to understanding much about your community's climate priorities, goals, and accomplishments so far). This is the program that was most useful for our research interests:

We worked with the Climate Resilience program in Bolton and Clinton, within the MMVPP program.

This community person was especially helpful to us as we explored the work of these programs:

Name

Rebecca Bucciaglia

Organization

Town of Bolton Conservation Commission

REFLECTION: We believe that community planning and participation in these programs could be expanded and improved in these ways:

More context and explanation as to the goals of collaborative projects, to improve the effectiveness of the final results.

3. PEOPLE (firsthand connections): We interviewed (at least) THREE people concerned with climate change in our community. (More people = more complete perspective on the issue. ONE of these people may be listed in (2) above, ONE may be listed in (4) below, and ONE may be listed in (7) below. Interviews may be in person or via video link. Collect the following information about each person):

Name #1

Patti Girkin

Organization (if any)

Council on Aging: Bolton Council on Aging

Concern/expertise related to climate

Concerned Citizen

Name #2

Bob Roemer

Organization (if any)

Council on Aging: Bolton Council on Aging

Concern/expertise related to climate

Conservation Commissioner and Open Space Planner

Name #3

Jim Newman

Organization (if any)

Linnean Solutions

Concern/expertise related to climate

Climate Planner

Name #4 (This is beyond the requirement. Bravo!)

Peter Kelleher

Organization (if any)

Minuteman Horticulture Teacher

Concern/expertise related to climate

Turf Grass Expert

REFLECTION: We think this group is especially effective (e.g. influencing decisions and/or taking action) around climate issues in our community, and this is why:

The council of aging for Bolton is especially effective in dealing with climate related issues because they are leading many of the municipal regulatory checks, and understand what needs to happen for any change to occur.

REFLECTION: We think this person (or group) has power to make change (or to block change) around climate issues in our community, and this is why:

The council of aging has the power to make change because they are on many of the boards and groups responsible for making progress. The council is also credited for similar results in several parks that mirrored our goals.

REFLECTION: We think this group is especially effective at mobilizing missing voices around climate issues in our community, and this is why:

They already have a perspective as a group that isn't given the same amount of respect, and they hold a substantial amount of local municipal power.

REFLECTION: We were inspired by this example of HUMAN RESILIENCE in our community:

We were inspired to interview the council because they pushed through any doubts from the community and enacted substantial and concrete change. They showed us that any group of people is capable of creating positive ecological change.

REFLECTION: We encountered this genuine, honest difference of opinion on climate action needed in our community:

Many of the people on the council of aging disagreed on the measures that should be taken to address climate change. Despite the opposing views, through discussion and rational debate, progress could still be made.

4. PLACES (firsthand experiences): We visited (at least) THREE different places with significance for climate change in our community (Use a mapping app on a cell phone to get latitude/longitude information. If you had someone to guide you on your visit, include that person's name and contact information):

Place name #1

Forbush Field

Latitude:

42.446

Longitude:

-71.649

Significance for climate change:

This park is the only barrier between the ecologically important Riparian zone, so protecting it was integral to maintaining the local ecology.

Name of guide who accompanied you, if any:

N/A

Guide contact phone or email:

N/A

Place name #2

Lime Kiln Creek

Latitude:

42.439

Longitude:

-71.567

Significance for climate change:

This is another important passage place for water, so any pollution or compromise to its capabilities would have significant encompassing consequences.

Name of guide who accompanied you, if any:

Jim Newman

Place name #3

Bolton Town Commons

Latitude:

42.434

Longitude:

-71.609

Significance for climate change:

This was an important community success that served as a role model for our planning efforts and showed off the potential results of projects like ours.

Name of guide who accompanied you, if any:

N/A

Place name #4 (This is beyond the requirement. Bravo!)

Council on Aging

Latitude:

42.4301

Longitude:

-71.6008

Significance for climate change:

Large 240+ unit Apartment Complex Being Constructed next Door.

Name of guide who accompanied you, if any:

Lisa D'Eon

REFLECTION: We found the best example of natural resources (soil, water, forest, wildlife) affected by climate change here:

The best example of natural resources effected by natural resources was the Forbush river that passed through the park. We could already see some early signs of potential issues in the water that need to be addressed through community action.

REFLECTION: We were inspired by this example of NATURAL RESILIENCE in our community:

The planning efforts seen in the Bolton Commons showed us that it is possible to create pleasant parks that are ecologically resilient through community measures and work.

REFLECTION: This is the best example we found in our community of a NATURE BASED SOLUTION that is ALREADY WORKING WELL (natural or human-made):

At the Forbush field we saw how the few trees lining the border between the street and the park was very effective at preventing street pollution from getting into the field, which served as important inspiration for the rest of our project.

REFLECTION: This is the best idea we heard about for a NATURE BASED SOLUTION that should be CONSTRUCTED OR DEVELOPED in our community:

The best idea is to change the watering schedule for turf fields, as making it more intense and less regular, this promotes healthier and more robust root development.

REFLECTION: This is a place that we really want to PROTECT in our community, and this is why:

We want to protect Forbush Field, as it is an important park to citizens of the town. We saw how much different groups of people enjoyed and savored the public space in different ways.

5. MEDIA & WEB RESOURCES (These are secondary sources; use them to broaden your understanding. Please save versions of these pieces - e.g. paper copies, permanent links, or pdfs - to share, and be ready to explain their importance):

We found these **THREE websites** to offer especially good resources for well-presented, accurate information relevant to climate change. We have evaluated these using [C.A.R.S criteria](#) and recommend them as background for people planning to take climate action in our community (Provide urls to take the reader to the particular page you most recommend as a resource):

Website/page #1 URL:

<https://planting.itreetools.org/>

Ten words on how it is valuable/useful:

Modeling the potential results served as an invaluable tool

Website/page #2 URL:

[Northeast conservationists offer climate-smart garden guide highlighting native New England plants | UMass System \(massachusetts.edu\)](#)

Ten words on how it is valuable/useful:

Explains benefits of natives versus non-native plants in climate change

Website/page #3 URL:

["Regional Invasive Species & Climate Change Management Challenge: Are you up to the challenge?" by Ayodelé O'Uhuru, Audrey Barker-Plotkin et al. \(umass.edu\)](#)

Ten words on how it is valuable/useful:

Information about the species we need to be aware of.

We found this **recent NEWS STORY about our community** that relates to the climate topics we investigated:

Headline or Title:

[Lilac, Hemlock, Maple: How Climate Change Is Transforming New England Plant Life](#)

News Source and URL:

[Lilac, Hemlock, Maple: How Climate Change Is Transforming New England Plant Life | WBUR News](#)

Date:

3/2015

This **FEATURE ARTICLE** or **BOOK** really helped us understand climate issues:
Massachusetts State Hazard and Climate Mitigation Plan

News Source and URL:
[SITE INVESTIGATION \(mass.gov\)](#)

Date: 1/6/2023

REFLECTION: We found this **OPINION PIECE** related to climate issues to be particularly persuasive:
Headline or Title:

New England is warming faster than the rest of the planet, new study finds

News Source and URL:
Boston Globe: <https://www.bostonglobe.com/2021/12/30/science/new-england-is-warming-faster-than-rest-planet-new-study-finds/>

Date: 12/30/2021

REFLECTION: We had concerns about the facts and/or arguments presented in this media item and believe that it qualifies as **CLIMATE MISINFORMATION**:

Headline or Title:

TUCKER CARLSON: Climate change experts' bullying is not about helping the Earth, it is about controlling us

News Source and URL:
FOX News: <https://www.foxnews.com/opinion/tucker-carlson-climate-change-experts-bullying-helping-earth-controlling-us>

Date: 3/16/2023

6. LEGISLATION. We learned about this proposed new law (a bill that has been introduced into the Massachusetts legislature) and believe that it would help address the climate issues our community faces (Contacting your state representative or senator, and advocacy groups, plus the [Legiscan](#) and the [Mass Legislature](#) searchable databases, can help you):

Bill number and name:
N/A for this project. This project was addressing a funding bill already passed and being put into action, which we are assisting with as an in-kind match contribution for grant purposes.

A URL that provides more information:

Briefly describe how this proposed law would help to address the climate crisis (Describe the intended effect of the law. Would it change everyday life in some way? Would it make it easier for people to do the right thing for the climate? Who would be affected most?)

REFLECTION: We found the following group(s) advocating for (or against) this change, and these are the main reasons they give for their position(s):

REFLECTION: We found another proposed new law that we think will make the climate crisis worse, and this is why (include bill number and URL):

7. BUDGETS AND TIMEFRAMES. As we developed our recommendations, we found this resource (perhaps a conversation with a person, or a website, or a document) to be especially helpful in explaining the planning, time, and funding considerations that would be important to make our recommendations a reality (Provide enough information on the resource so someone else could find it):

Saray Saydun, Linnaean Solutions

REFLECTION: We were surprised to learn about this obstacle to making the changes we recommend:
This plan is not limited right now by money, it is a visioning exercise.

8. SUMMARY OF OUR RESEARCH AND RECOMMENDATIONS (OUR ENVIROTHON PRESENTATION). Below is a summary of the main point(s) of our Mass Envirothon 2023 Current Issue presentation in 3-4 sentences:

~~Our mass Envirothon presentation is the creation of an action plan to address concerns for the Forbush field in Bolton. We researched the effects that are likely to occur over the next several decades, and used this to start thinking about how to prevent street runoff from increased ice. We took our collected ideas and discussed them with the Bolton Council of Aging for their input on what we had. Finally we merged all of the experiences that we had gotten so far and used them to make a final plan.~~

REFLECTION: AUDIENCE: These are the specific interests and groups - who have the power to make the changes we recommend - that we are addressing in our presentation:

The local municipal groups as well as Linnean Solutions, an important organization that this plan is intended to advise

REFLECTION: AN UNEXPECTED FIND! We were surprised at how important and valuable this person, place, or other resource is for our community's response to climate change:

We were surprised as to the amount of information that the Council of Aging could provide us. We underestimated the value that seniors have in the community, as they did most of the municipal oversight.

REFLECTION: UNEXPECTED HOPE! Of all the people, places, and online research we did, this is the thing we found that gave us the most hope (Tell us why!):

Seeing the success that the Council of Aging had in making the Bolton Commons showed us that concrete change is achievable

REFLECTION: OTHER QUESTIONS we would like to answer about our research:

What are the next steps that we can take with this project to achieve more success and potentially put it into action?

ACTION!

9. THIS IS HOW WE ARE SHARING AND/OR TAKING ACTION BASED ON WHAT WE HAVE LEARNED:

- Best approach: Write and attach a brief news release about your project and/or provide a link to photos and other documents about the work.
- At least: Write a paragraph below presenting the basic facts of your project: who, what, when, where, how, and why.

The Minuteman Envirothon Team created a researched action plan for Forbush Field in Bolton. Over the course of several months the group interviewed community members and environmental consultants as well

REFLECTION: OUTCOMES. We see these results (planned and unplanned, in ourselves and in the community) from our research and action:

~~With some original plans for trees, we have learned that trees would actually be a problem, and swapped for bushes.~~ We found out that the town does not strictly control the field, and that the sports ultimately control what happens. The town simply mows the field. This means that pesticides and fertilizers may be being added, even if they are not allowed. This means that if we want to effectively collect any runoff pollution, we would need to figure out the main pathways water takes down to the stream and plant some absorbant plants there.

REFLECTION: TEAMWORK. These are the ways we worked best as a team, and these are the ways we could improve:

Our group worked well as a group as we delegated responsibilities so that everyone's success could be fully taken advantage. Unfortunlity we had a hard time staying on task, as we are a close group of friends.

REFLECTION: OTHER QUESTIONS we would like to answer about our action:

Who exactly controls the field, besides the town. For example, the sports groups that use it, and control the rest of the aspects of the field.

10. EVIDENCE OF OUR COMMUNITY ENGAGEMENT.

- EITHER (best approach): Provide a copy of a letter or email from a community partner outside our school about the action we have chosen to take ([Here are some tips for how to ask for a letter](#))

Letter writer's name:

Rebecca Bucciagli

Position/Organization:

Conservation Agent/ Town of Bolton Conservation Commission

- OR: Provide a different form of evidence (Please describe):

REFLECTION: SECOND CHANCES. If we were going to do this community action over again, this is what we would do the same, and this is what we would change:

REFLECTION: WHAT'S NEXT? Based on our experience, this is the next step we recommend for ourselves or other young people in this community: