



Museums for America

Sample Application MA-256239-OMS-24
Project Category: Community Engagement

Massachusetts Audubon Society

Amount awarded by IMLS:	\$244,049
Amount of cost share:	\$244,050

Mass Audubon will work with educators in Massachusetts to develop and pilot the Climate Democracy Project: a place-based, project-based learning program on climate resilience and civic engagement for students grades 8–12 in three predominantly low-income public schools. A project manager will be hired to coordinate programming as well as develop an online toolkit and training program for high school history and social science teachers across the state. Working with the classroom teachers, a Mass Audubon educator, and an educator from local libraries or museums, students will learn about climate change and climate justice, research local impacts and solutions with mentors, lead local civic action projects, and present their projects at a public event. Mass Audubon will evaluate and share program findings through hosted gatherings for participating educators, as well as professional conferences, with the overall goal to build a statewide foundation for a more environmentally literate citizenry in Massachusetts.

Attached are the following components excerpted from the original application.

- Narrative
- Schedule of Completion
- Digital Product Plan
- Performance Measurement Plan

When preparing an application for the next deadline, be sure to follow the instructions in the most recent Notice of Funding Opportunity for the grant program to which you are applying.

Climate Democracy Project: The Intersection of Climate and Civic Education

Mass Audubon works to protect the nature of Massachusetts by connecting people with nature to instill appreciation for and stewardship of the natural world. Mass Audubon is committed to connecting everyone with the benefits of nature no matter their age, background, education level, culture, ability, or geographic location. In March of 2021, Mass Audubon's Board of Directors adopted our 2021-2026 Action Agenda – an ambitious strategic plan framed around three over-arching and interconnected goals: **protecting and stewarding resilient landscapes; creating inclusive and equitable access to nature for all people; and mobilizing to fight climate change.** The Action Agenda aims to address pressing issues of our time that are deeply affecting the health and well-being of our environment and our communities – the rapid loss of biodiversity, inequitable access to nature, and the increasing impacts of climate change.

As New England confronts the complex and layered effects of climate change, including ecological, social, economic, and psychological pressures, we will need informed adults who are prepared with both the background knowledge and civic skills to create equitable solutions. The logical place to begin this education is our high schools. In just two to five years, these students will become the adults who will join city councils, vote, lead small businesses, make purchasing decisions, and cooperate with neighbors to create more resilient cities. But they need the adults in leadership roles now, such as teachers and community leaders, to guide them – and those adults are not yet prepared to do that. Toward meeting these goals, Mass Audubon seeks support from IMLS to equip both formal and non-formal educators in Massachusetts with the tools and training to guide students through impactful civic engagement projects that lead to increased climate resilience, through the **Climate Democracy Project**. The Climate Democracy Project leverages the power of high school students' energy and knowledge of their own community, the deep expertise of classroom teachers in youth development, and the community knowledge and connections of library and museum educators to engage students in effective civic actions that increase climate resilience in their local communities.

PROJECT JUSTIFICATION

Climate Democracy Project's design is grounded in best practices in professional development, civic engagement for youth, culturally responsive teaching, and climate education with the goals of increasing the capacity of young people to respond effectively to climate threats, including economic and health impacts, and increasing civic agency among high school students. The proposed project is a climate resilience curriculum and program toolkit, paired with professional development for classroom teachers and non-formal educators – informed by and primarily serving teachers and students in low-income and majority BIPOC (Black, Indigenous, and people of color) cities in Massachusetts. This project addresses Museums for America's Community Engagement Goals to **'Support equitable engagement and inclusive collaboration with diverse and/or underserved communities;'** and **'Support community-centered planning, civic engagement, and resource sharing to address community needs.'** This project also directly aligns with Mass Audubon's strategic plan priorities to mobilize to fight climate change and create inclusive and equitable access to nature for all people, including an objective to significantly increase access for people from low-income families and disinvested communities who have been, and will continue to be, disproportionately affected by climate change. Climate Democracy Project grows directly from these Action Agenda goals and strategies.

Statement of Need. Research has documented that New England temperatures are increasing at a more rapid pace than the rest of the country, with increased precipitation, extreme weather events, significant flooding, increased immigration, and significant impacts on public health and local economies. These impacts are being felt most intensely in low-income and majority BIPOC neighborhoods that have experienced years of underinvestment.¹² A 2023 survey by North American Association for Environmental Education (NAAEE) found that only 21 percent of teachers feel "very informed about climate change" and EdWeek Research Center found that 18 percent of teachers said they do not address climate change with students because they are not informed in the science behind it³. Mass Audubon's statewide network of environmental educators has observed that the vast majority of our public-school students are graduating with extremely limited understanding of climate change, including its causes, impacts and potential solutions. Recent studies show that youth, ages 16-25, are increasingly concerned about the impacts of the climate crisis, yet most do not feel capable of doing anything about it. A 2021 study reports that 84% of the 10,000 youth that they surveyed in this age group expressed at least moderate worry about climate change; 59% reported they are extremely worried.⁴ There is a significant need to assuage this anxiety because of the well-documented, negative consequences of stress and anxiety on people's economic, social, physical, and mental health.⁵ These data underscore the need to prepare youth, especially those from marginalized

Climate Democracy Project: The Intersection of Climate and Civic Education

communities who are expected to experience the most immediate and negative impacts of climate change, with the skills, knowledge, and agency to take on local climate related challenges impacting their communities, and work with mentors at school and in the community to design and implement solutions to address them.

In Massachusetts schools, there is no requirement that students learn about climate change. Current youth climate engagement programs – including our own, called the Youth Climate Leadership Program (YCLP) – are generally not as accessible to young people from communities most impacted by climate change. Like ours, these programs tend to take place during out-of-school time when teen youth from low-income households may need to work to contribute to family financial needs, and many require transportation to get to their meetings. One solution is to create paid opportunities for youth participants, but the cost of this model considerably reduces the number of participants. **Scaling climate literacy programs in secondary schools as part of general education classes (as opposed to advanced placement or elective classes) is needed to reach all students.** The latest research from multiple organizations points to the importance of working with teachers to get to scale on climate literacy⁶. In 2022, Mass Audubon convened a group of educators, including representatives from Harvard University’s [Democratic Knowledge Project](#) and the [Massachusetts Civic Learning Coalition](#), as well as teachers, school librarians, and representatives from climate advocacy groups and science museums, to meet monthly with leaders from the [Massachusetts Department of Elementary and Secondary Education](#) (DESE). The goal of this DESE Advisory Committee on Science + Civics was to better understand how we could, collectively, support the intersection of climate and civic education. Together, we identified the newly passed Massachusetts law, [An Act to Promote and Enhance Civic Engagement \(2018\)](#), as an excellent opportunity to support this work, because student-led, non-partisan civic action projects are now required for every high school student in the state⁷. Further, the Advisory Committee found that the teachers in charge of these civic action projects – generally history or language teachers – were in need of both professional development in climate change and more training in how to guide students through a civic action project around a climate-related issue. In 2023, our state’s first-ever Climate Chief, Melissa Hoffer, released her “whole of government” report calling for changes to support climate mitigation and resilience; among those recommendations was a call for comprehensive climate education, including skills to implement climate solutions⁸. Towards that end, schools are in urgent need of curricular solutions for classroom teachers and professional development to support them implementing it.

To meet these needs and opportunities, Mass Audubon has launched the **Climate Democracy Project (CDP)** in collaboration with statewide and local partners. CDP is an educational intervention where students identify the climate resilience issues in their communities and work collaboratively with teachers, Mass Audubon educators, and community leaders and mentors to design and implement climate community action projects that attend to the socio-ecological impacts of climate change in their city and neighborhoods. Participating students will build the needed skills, knowledge, values, and ways of thinking to **be change agents** in their communities and **be active partners in supporting climate resilience**. And through a digital toolkit, an online course, a summer institute, and ongoing modeling and coaching by our educators, we aim to increase the confidence of our non-formal and formal educators in leading students through these types of climate resilience projects in the future.

CDP utilizes culturally responsive teaching – which incorporates students’ cultural identities and lived experiences into the classroom as tools for effective instruction – because the need for educators to teach in a culturally responsive way also is widely documented. Research demonstrates that “*all* students will perform better on multiple measures of achievement when teaching is filtered through students’ own cultural experiences.” (Gay 2018). Studies indicate that young people taught by teachers using this strategy show a higher likelihood to take action on behalf of the environment, and improvements in health and wellbeing (Justice Outside 2017). In 2021-2022, IMLS supported Mass Audubon’s professional development training program for all our statewide educators to become trained in effective culturally responsive pedagogical approaches. Mass Audubon seeks to build on this work in launching the Climate Democracy Project.

The Climate Democracy Project also builds on Mass Audubon’s experience working with teens on climate change and civic action through the [Youth Climate Leadership Program](#) (YCLP) over the past four years. Mass Audubon currently works with eight afterschool groups across the state who meet regularly to learn about climate change, climate justice, and climate communications, and then plan and lead Climate Summits for their peers. Thus far, Mass Audubon YCLP groups have held 31 youth-led climate summits around the state. These gatherings, planned and led by our youth leaders, bring together 30-90 local high school students for a day of learning about climate change. These groups then plan and carry out

Climate Democracy Project: The Intersection of Climate and Civic Education

action projects throughout the year. Our work with the YCLP has provided extensive experience on how best to scaffold the climate action planning process, support teen networking with community contacts, and foster action projects that are both effective and achievable. As a reference, YCLP works with approximately 50 students across the state in afterschool clubs, whereas Climate Democracy Project can reach approximately 240+ students during just the first two years of implementation, with an expectation that we will expand the work after initial launch. Moreover, where YCLP tends to work best for students who can travel to afterschool meetings, the Climate Democracy Project is designed specifically to engage students during school, as a regular part of their curriculum, to reach a much wider and more diverse audience. *As such, the Climate Democracy Project addresses the urgent need for climate change literacy for all students and teachers in Massachusetts by empowering them to examine, explore, and develop culturally responsive, youth-led strategies that reduce vulnerability to the harmful impacts of climate change in underserved communities.*

Target Groups and Beneficiaries. The target audience groups for this project include **Grade 8-12 teachers in low to moderate income schools, and non-formal educators and museums and libraries near those schools.** This pilot project will initially involve three teachers in three schools with significant percentages of high-need students as well as their students (120 estimated), three Mass Audubon educators, and four non-formal educators in libraries and community organizations near those schools, in Springfield, Worcester, and Attleboro. For this pilot, partner schools include: **Doherty Memorial High School (Worcester); Springfield Renaissance School; and Attleboro High School.** Museum and library partners for this project include **Worcester Public Library, the EcoTarium Museum of Science and Nature (Worcester, MA), Attleboro Public Library, Springfield Science Museum,** and our additional collaborators include **Massachusetts Civic Learning Coalition and MIT's Center for Energy and Environmental Policy Research,** both of whom were members of the Civics + Science advisory group who helped to identify the need for this work. The beneficiaries of this project are **students in Grades 8-12** and the **communities in which they live.** Mass Audubon is launching the Climate Democracy Project to reach a much wider group of students than we currently see in youth climate advocacy in our state: those in general education classes, and/or who are not necessarily part of an after-school environmental club.

Mass Audubon proposes to pilot this program with schools in three cities (Worcester, Springfield, and Attleboro) where our staff have longtime relationships with the schools, teachers, and communities where the majority of the population is lower income, to reach communities most impacted by the effects of climate change. Each of these cities is designated as a Gateway City in Massachusetts⁹, meaning that each one faces persistent economic and social challenges. According to DESE data, **Doherty Memorial High School** in Worcester is a Title-1 school with 59.7% of students who are low-income and 67.3% are high-need students; **Springfield Renaissance School** is a Title-1 public school with 73.5% of students who are low-income and 78.8% are high-need students; and at **Attleboro High School**, 37.4% of students are low-income and 45.7% are high-need students. These factors contribute to climate vulnerability but are also opportunities for high school students to act as critical links between city government, community organizations, and local neighborhoods in identifying risks and creating plans for an equitable, resilient future. Based on this pilot work in three cities, we will create a toolkit specifically built around the experiences and needs of lower income communities and students, for an even wider circle of students and communities beyond the scope of this grant project.

Our longer-term target audience beyond this grant period – reached through the Climate Democracy Project Toolkit – will be eighth grade and high school teachers in ALL Massachusetts schools, with a goal of reaching as many Grade 8-12 students in the state's public schools as possible. The Toolkit is anticipated to provide targeted support for history and social science teachers in environmental justice communities across the state, to whom the responsibility is most likely to fall for leading students in completing non-partisan civic action projects in order to graduate. Additionally, the Toolkit will provide guidance for informal educators such as librarians and museum staff to partner with schools, provide assistance with research, locate community resources, and “person power” to help groups of students working on climate-related projects. Through this resource, Mass Audubon aims to reach as many high school students in Massachusetts as possible, with a focus on those who attend predominantly low-income schools, regardless of race or geography. We estimate there are about 109 such high schools in Massachusetts serving approximately 72,000 students and Mass Audubon's goal is to benefit as many of these students as possible.

PROJECT WORK PLAN

Climate Democracy Project will be a structured, culturally responsive program for teachers to engage students in learning about climate change and climate justice, research local impacts and solutions with mentors, and employ the civic

Climate Democracy Project: The Intersection of Climate and Civic Education

engagement process necessary to bring about those changes. During the 2024-2025 and 2025-2026 school years, Mass Audubon seeks support to pilot the Climate Democracy Project with three teachers and their students in three schools (as listed above), including guiding classrooms through the entire process, in collaboration with library and community partner staff with longstanding relationships with Mass Audubon in each school's community. CDP engages each cohort of students and teachers for one full semester each year, with classroom sessions, field investigation activities, and the creation and implementation of community action projects at the culmination of each semester. We anticipate that the CDP pilot elements will include the following.

I. Co-Planning with Partners – Listening and Planning (September – December 2024). It is vital that the programming and Toolkit reflect the needs of the general education classes with whom we are working. While we have had success in the past working with afterschool clubs and groups of self-motivated young people on climate action, working directly with schools will provide opportunities to deeply engage students in general education classes in meaningful, community-based civic action around climate change. Mass Audubon will convene and talk to students, teachers, and community partners about the kinds of training and supports they believe they will need to be successful. Mass Audubon will partner with the three schools and school districts, libraries, museums, and community partners named earlier to collect input into the design of the program, participate in creating civic connections for the students, including mentoring opportunities; and provide input on creation of the Toolkit. This is also the stage at which our Director of Evaluation will be working with partners to design an evaluation protocol that reflects the needs of the participants.

II. Professional Development for Educators (September – December in Years 1 and 2). Mass Audubon will offer a series of online professional development (6 hours) for all participating teachers and community partners on best practices in climate education, including a focus on climate justice and civic action. These courses will occur in the fall, concurrent with the planning process, and occur virtually because teachers have told us that this format is most accessible given busy schedules. Based on robust research, this course will focus on basic principles of climate change communication in the classroom, as well as techniques to engage students in civic action around climate change. The course will also review how to apply the six-step process that the MA Department of Elementary and Secondary Education (DESE) has adopted with a climate change and climate justice lens, in order to guide students through their student-led civic action projects: *1) Examine self and civic identity; 2) Identify an issue; 3) Research and investigate; 4) Develop an action plan; 5) Take action; and 6) Reflect and showcase.*

III. Pilot Classroom/Field Trip Programming (January – May in Years 1 and 2). Mass Audubon's locally based educators will work with partner schools and community partners (named above) to provide in-class lessons to student participants, grounding them in the basics of climate change science, with a focus on local impacts and justice implications in their community. Working with the classroom teacher, a Mass Audubon educator, and an educator from the local library or museum, students will engage in the six-step process outlined in DESE's Civic Projects Guidebook¹⁰. Throughout the two-year CDP pilot, Mass Audubon's Program Coordinator will collect data via conversations, observations, photos, audio recordings, and samples of student work that will inform the creation of the Toolkit (please see below). The classwork will include these modules:

- ❖ **Six to twelve in-class lessons (9-12 hours/school).** Planning in close collaboration with classroom teachers, Mass Audubon educators will lead 45-minute to 1.5-hour lessons (lesson length and number will depend on school schedules) which will include introductions to climate change causes and local effects; exploration of the disproportionate effects on historically marginalized communities; exploration of impactful solutions and the need for collective vs. individual actions; introduction to civic engagement skills; exploration of local resources and officials; and exploration of climate-related career pathways.
- ❖ **Student-selected project themes.** Students will choose their own themes and topics for the projects, working in small groups. Potential topics chosen by students based on climate resilience issues important in their local neighborhoods could include **nature-based solutions to neighborhood flooding, addressing inequitable urban tree canopy, heat islands, equitable access to green spaces, food justice, air pollution and asthma, solar rooftops, energy-efficient transportation systems, transportation access**, and other topics chosen by students. Mass Audubon educators will co-plan with teachers to lead students through this process including providing background knowledge on the subjects chosen by students.
- ❖ **Connections to community partners and civic organizations.** Students will have a chance to meet, either virtually or in person, local officials and advocates working on climate-related issues in their communities. Mass Audubon's library and museum community partners will mentor students (in school and/or during field trips) on

Climate Democracy Project: The Intersection of Climate and Civic Education

how to use their resources, such as research methods and resources.

- ❖ **Student-led, non-partisan climate action projects.** Students will follow the six steps, with support from their classroom teacher, Mass Audubon educator and community educator, and research their chosen issues in small groups, visit relevant out-of-school sites, and create action plans demonstrating their understanding of solutions.
- ❖ **Student showcase that includes community members.** Each spring, students will showcase their action projects at a community event hosted by DESE ([more info here](#)) to share their research, recommendations, and results of their actions with family, peers, and community members. They will then create presentations that they will share with community members at their school or regional Showcases, and, if selected, will travel to the Statewide Showcase at the end of each year, held during the Summer Institutes (see below).

IV. In-Person Summer Institutes (June/August in Years 1 and 2). Mass Audubon will host two full-day summer learning institutes for all participating educators after completion of each school year. This in-person gathering will convene teachers and staff to reflect together on what worked, what needs improvement, and to gain new shared knowledge around successful civic action projects. We anticipate **presentations by youth as well as educators**, and plenty of time to reflect together and plan for the next year. There will be a focus on how to frame the lessons learned in a way that will help other educators in supporting students through these civic action projects, so that the Toolkit reflects the experiences of educators, as well as the needs of students.

V. Climate Democracy Project Toolkit (September 2026 – February 2027): Throughout the two years of the pilot in schools, Mass Audubon staff (Project Manager/Toolkit Developer, hired for this project) will collect data via conversations, observations, photos, audio recordings, and samples of student work that will inform the creation of the Climate Democracy Project Toolkit. Using these pilots as our guide, we will co-create the Climate Democracy Toolkit, envisioned as an aligned set of programming, professional development, and digital resources to support formal and non-formal educators in leading students through civic action projects around climate change. Mass Audubon plans to host the Toolkit on our own website, but also to make this resource more widely available through DESE’s [new database of civic action project artifacts and supports](#). This resource will be developed with input from all of our school and community partners, including teachers, school administrators, museum and library staff and administrators, and young people participating in the program. The Toolkit’s design is envisioned to include the following potential elements: 1) **a digital guide** that walks teachers through the six steps of the civic action process; 2) **series of “mini lessons,”** with example videos and samples of successful student action projects tied to each of the six steps; 3) **a searchable menu of possible topics relating to climate change mitigation or resilience** in the context of local neighborhoods, including examples of student-chosen topics, and local climate change impacts Massachusetts cities are facing (e.g., flooding due to increased precipitation, increased heat island effects), along with associated solution options; 4) **links to local organizations and resources** where students can connect with people working on specific issues and suggestions for how informal educators can use the guide to partner with schools; and 5) **a professional development course linked to the Toolkit** for teachers, designed to give them the background needed to successfully guide students through the process.

Risks and Risk Mitigation Strategies. Like many areas of the U.S., Massachusetts is experiencing an urgent teacher shortage in many environmental justice communities across the state, resulting in higher-than-average teacher turnover, larger classes, and teachers who are stressed with too many classes and students¹⁰. Due to these conditions, we are limiting our pilot project to schools where we have strong existing relationships and have chosen schools and teachers we have high confidence will remain for the duration of the pilot projects. We are also compensating them fairly for their time and expertise, which we hope will also support a healthy partnership. Another challenge we anticipate working in general education compared to after-school elective clubs for climate action is that many of our students will have had little or no exposure to climate change education previously and may not feel that the issue is relevant to them. Based on previous experience and research, we will use a climate justice framework to introduce the subject, focusing on the local impacts to health, economy, and quality of life^{11,12}. This has been a successful approach in the past when Mass Audubon has implemented one-time workshops or led classes on the topic in a similar setting. Following the CDP six-step process, we will also create opportunities from the beginning for self-reflection by each student about the values and topics important to them, so they can choose issues that are personally relevant. Finally, there is a risk that our Toolkit will not be embraced by teachers after it is completed. To address this challenge, Mass Audubon continues to work actively with the instructional teams at MA Department of Elementary and Secondary Education (DESE) to ensure this programming meets school priorities. We are building in multiple, structured reflection sessions so that we can listen closely to the educators participating in the project, and ensure the Toolkit is designed to meet their needs. Additionally, we are partnering with

Climate Democracy Project: The Intersection of Climate and Civic Education

the Massachusetts Civic Learning Coalition, which works closely with DESE to create and schedule the professional development offerings for teachers associated with the Civics Projects.

Key Staff and Resources Needed. The project will be led by Mass Audubon's Statewide K-12 Manager **Jennifer Feller** with oversight by Senior Director of Education and Engagement, **Kris Scopinich**. **Brittany Gutermuth**, Mass Audubon's Director of Climate Change Education, will contribute to the development of our lessons and professional development. **Michelle Eckman**, Mass Audubon's Director of Curriculum and Evaluation, will ensure that the evaluation plan is designed to support the work of the educators and students, gives Mass Audubon valuable data, and is carried out with the utmost respect for participants. Mass Audubon's **Regional Education Managers** will oversee the local pilots in Springfield, Attleboro, and Worcester, including **Dale Abrams, Education Manager, West Region; Martha Gach, Education Manager, Central Region; and Kate Anderson, Education Manager, Southeast Region**. **Regional Education Coordinators** will be leading day to day activities for the local pilots in Springfield, Attleboro, and Worcester. In Springfield, our EC is **Aemelia Thompson**, an experienced educator currently working with students in the Springfield Schools. In Worcester, **Sarah Bertrand** will lead the project. In Attleboro, **Chris Hitchener, Education Coordinator, Southeast**, will lead the Attleboro projects. Jennifer Feller, Director for School Programs, will lead the hiring of the CDP Project Manager. The CDP **Project Manager/Toolkit Developer** will be responsible for day-to-day coordination and curricular support and will also serve as principal writer of the Climate Democracy Project Toolkit. They will collaborate with the staff listed above to collect case studies, resources, and curricula to conduct planning for the development of the toolkit and will oversee the daily operations of the project.

Evaluation Plan Toward Achieving Intended Results. Assessment of the Climate Democracy Project will be carried out by Michelle Eckman, our Director of Evaluation. Culturally responsive evaluation practices will include the following: observation protocols of program implementations, using the Assessing Program Practices Tool (APT), collecting student responses during reflection activities, formative assessments including observations of student showcases using rubric-based tools, feedback from community partner meetings and professional development sessions; and student and teacher focus groups. Evaluation will also include pre- and post-assessments of students and classroom teachers to measure content knowledge and affect related to climate topics and civic agency, tied to our Project Outcomes. Michelle Eckman will conduct all analyses and interpretation of data. Evaluation approaches will mirror the values we are applying to project implementation. Mass Audubon has worked with experts in culturally responsive evaluation techniques to ensure that the evaluation activities embedded into program delivery are not transactional, but rather focus on candid feedback exchanges through diverse forms of expression. Traditional, transactional evaluation methods often do not detect student agency, one of the most important desired outcomes of this project. Accordingly, the evaluation plan itself will be developed with significant input from the project participants, including the student representatives, teachers, administrators, and community partners.

PROJECT RESULTS

The goals of the Climate Democracy Project are to: **increase student knowledge and skills** around climate change, civic engagement, and the creation of equitable climate change solutions for their communities; **increase educator confidence in teaching about climate change** in an action-oriented, solutions-focused way; **expand participation of students in climate change literacy and action projects in environmental justice communities** within schools; and **create a set of resources that will be shared widely** with Mass Audubon's statewide network of educators and partners. Outcomes, outputs, and our measurement targets include the following.

Long-Term Outcome 1. Participating students graduate with the skills to engage actively in creating systems-level climate resilience solutions in their communities.

Output 1.1: Students engage in all six steps of civic action projects focused on climate change mitigation and/or resilience.

Output 1.2: Student actions target systems-level change through civic engagement.

Output 1.3: Students can explain the steps needed to make change at the community level for at least one climate change solution, including who makes the relevant decisions and how community members can influence their decision through civic engagement.

Measurement Targets: 80% of participating students complete all six steps of the CDP project, as measured by project logs. 80% of students can articulate how decisions about their issue are made by relevant local officials, and how they can play a part in influencing those decisions.

Climate Democracy Project: The Intersection of Climate and Civic Education

Long-Term Outcome 2. Students increase their understanding of local climate change effects and potential solutions.

Output 2.1: Students demonstrate increased understanding of basic climate science, including effects and solutions.

Output 2.2: Students can articulate how climate change is affecting their own community, including differential effects based on historic systems of oppression or exclusion.

Measurement Targets: Increases in scores on pre- and post-assessments*, and by rubric-based scoring at the Civics Project Showcases. **Note that the use of pre- and post-assessments has not yet been confirmed, based on concerns about cultural bias.*

Long-Term Outcome 3. Teachers feel confident, prepared, and supported in leading student-led civic action around climate change as part of their ongoing curriculum.

Output 3.1: Teachers express confidence that they can lead student-led civic action projects around climate change and express an intention to continue leading them next year.

Measurement Targets: All participating teachers express their intention to incorporate the project into their curriculum the following year.

Long-Term Outcome 4. Informal education institutions such as libraries and museums are empowered to partner with 8th grades and high schools to support student-led civic action projects around climate change related topics.

Output 4.1: A clear set of guidance for educators leading climate-related civic action projects is co-developed by participating project members, including teachers, students, and community organizations.

Output 4.2: Mass Audubon shares this protocol in a free, user-friendly format on its website, and shares it with other informal education organizations who are able to support teachers in this work.

Measurement Targets: Multiple opportunities for feedback, both synchronous and asynchronous, are included in the development of the Toolkit. The website will include a dedicated page for the project, as well as downloadable guides for teachers. The exact format and included tools will be decided by participants.

Sustainability. Mass Audubon has 20 staffed sanctuaries and a statewide wildlife sanctuary system located in 90 Massachusetts communities, each of which has education staff eager to work with high school students. After completion of this project, we will train the rest of our own educators – those not involved in this grant project -- to offer this type of instruction to high school students statewide. Conservatively, Mass Audubon estimates it can ultimately reach at least nine districts a year, working directly with up to 500 students annually, without expanding existing staff. We will broaden capacity by offering training for non-formal educators across the state, allowing them to build on existing relationships that they have, and offer this type of guided experience to students in their communities. As a regular presenter at statewide conferences, Mass Audubon has the opportunity to share these materials widely. As a member of the DESE Advisory Group on Science and Civics, Mass Audubon regularly shares our experiences with other education groups, administrators, and teachers, and we plan to continue working with this network and many others to share our materials, experiences, and ideas for ways that they might support schools in doing similar work. Mass Audubon envisions equipping all Massachusetts high school teachers and students with the skills, confidence, and experience needed to skillfully and compassionately address the challenges associated with the climate crisis, including the intersection between socio-economic disparities, historical systems of oppression and the effects of climate change on our communities. At the same time, participating students can continue exploring environmental and conservation fields through Mass Audubon's early career programs which include the Massachusetts Climate Corps, a summer internship program, and the Environmental Fellowship Program, a 14-month fellowship, that are both designed to expand career opportunities for young professionals with identities that have been historically underrepresented in the environmental fields.

The CDP Toolkit will be available, for free, on Mass Audubon's website, which had 3.71 million sessions in 2022; as well as potentially linked from the websites of our community partners including the libraries, museums, and partners named in this proposal. Mass Audubon plans to offer multiple professional development opportunities and conference presentations aimed at high school audiences, including those with different audience members, such as administrators, social studies/history teachers, and science teachers. With the understanding that teachers value learning from the experiences of other teachers, we have also budgeted stipends for teachers' time in Year 3 so that they may share their experiences via conferences or teacher meetings, such as DESE forums on the student-led civic action projects. In addition, Mass Audubon has strong relationships with the North American Association for Environmental Education (NAAEE) and will coordinate with NAAEE on national dissemination of these materials to help us make connections to groups in other states who are equally committed to community-based civic action projects as a tool for building climate resilience in the face of climate change impacts affecting neighborhoods and local communities across the United States.

Massachusetts Audubon Society Application to IMLS-Museums for America

Climate Democracy Project: The Intersection of Climate and Civic Education

Schedule of Completion

Activities	Months											
	S	O	N	D	J	F	M	A	M	J	J	A
Project Year 1: Sept 1 2024-August 31, 2025												
Co-Planning, Design of Evaluation, Pilot Year 1												
Hiring of Project Manager/Toolkit Developer	■	■										
Completion of formal agreements as needed with project partners	■											
Online launch of project with all adult participants: classroom teachers, informal educators (community partners)		■										
Co-planning between Mass Audubon educators and classroom teachers on curriculum		■	■	■								
Online 6-hour, 3-part course for all educators establishing basic principals and goals of teaching civic-action for climate resilience		■	■									
Development of evaluation plan: external, internal evaluation experts + input from participants		■	■	■								
In-class programs begin in all three schools					■	■						
Evaluation data collection begins, as needed (e.g. focus groups or pre-surveys)					■	■						
Students researching, meeting with local officials, planning their civic action						■	■	■	■			
Students implement their action projects, including work outside of school time that is reimbursed as needed							■	■	■			
Planning for Summer Institute							■	■	■			
Spring Showcases of student projects: attended by all community partners and project participants									■	■		
Analysis of first year results for refinement purposes										■	■	
Implementation of Summer Institute for all participating educators, including community partners											■	■

Massachusetts Audubon Society Application to IMLS-Museums for America

Climate Democracy Project: The Intersection of Climate and Civic Education

Schedule of Completion

Activities	Months											
	S	O	N	D	J	F	M	A	M	J	J	A
Project Year 2: Sept 1 2025-August 31, 2026												
Pilot Year 2, Development of Toolkit												
Regional conference presentation(s) to gather additional input from educators												
Co-planning between Mass Audubon educators and classroom teachers on curriculum												
In-class instruction may begin earlier this year - schedule to be determined by teachers												
Students implement their action projects, including work outside of school time that is reimbursed as needed												
Planning for Toolkit product: Project Manager, Marketing, Videographer; input from students, school administrators and teachers												
Filming and additional documentation of process												
Data gathering, as needed, by evaluator throughout year; specific focus on action project evaluation and reflection by participants at end of year												
Development of Toolkit, based on input from all participants												
Community Showcases: attendance by all community partners, students present their projects												
National Conference to learn more about best practices for climate resilience education (date TBD)												
Second summer institute - continuation of same group of teachers into second year												
Analysis of evaluation data, full project												
Project Year 3: Sept 1, 2026-February 28, 2027												
Dissemination and Evaluation												
Refinement and rollout of Toolkit												
Presentation at NAAEE Conference or similar national forum for dissemination												
Statewide conference presentations of the Toolkit: library, social studies, and environmental education conferences												
Recruitment of new teacher and schools into ongoing project for following year; recruitment may take the form of conference presentations, outreach via DESE, Mass Audubon social media or newsletters, and/or blog posts												
Digital toolkit is posted and made available to educators statewide and shared to national audience via NAAEE.												

DIGITAL PRODUCTS PLAN

Climate Democracy Project Toolkit

TYPE

As part of this project, Mass Audubon will develop a digitally accessible Climate Democracy Toolkit for teachers and educators. This toolkit digital products plan will be adapted as needed by the Mass Audubon Marketing and IT teams to adjust digital assets to specific needs and specifications at the time of planning (fall of 2025/2026) and production (2027). This resource will be developed in collaboration with both audience and beneficiaries, so specific formats may vary depending on their input. We anticipate that we will develop:

1. A digital guide that walks teachers through the six steps of the civic action process.
2. A series of “mini lessons,” with example videos and samples of successful student action projects tied to each of the six steps.
3. A searchable menu of possible topics relating to climate change mitigation or resilience in the context of local neighborhoods, including examples of student-chosen topics, and local climate change impacts Massachusetts cities are facing (e.g., flooding due to increased precipitation, increased heat island effects), along with associated solution options.
4. Links to local organizations and resources where students can connect with people working on specific issues and suggestions for how informal educators can use the guide to partner with schools. These products will not be produced until 2027, toward the end of the proposed grant period.

The digital format we use will be determined by the specific features we need for the Toolkit but will likely be based on a simple web platform, allowing the user to access the resources most relevant to their needs in any order that suits them. Videos will be embedded on the site. The entire Toolkit will be linked via a Climate Democracy Page on our public facing website but can also be linked from other websites such as the Massachusetts Department of Elementary and Secondary Education. For any live workshops that we offer as remote learning opportunities, we will use Microsoft Teams Live Events or Zoom, depending on the workshop needs. The training course that we develop will either be a webinar that can be accessed via the Toolkit, or possibly a more interactive course hosted on an LMS, depending on the features the educators in the project feel are necessary.

AVAILABILITY

We expect to use the Mass Audubon website: www.massaudubon.org to facilitate widespread discovery and use of the Toolkit and other information about this project. Mass Audubon will aim for the materials to be fully searchable to facilitate and maximize use of the content by teachers. We will promote programs in person through conferences, workshops, and networking events. We will also utilize our public facing marketing materials including blogs, social media, and print publications to ensure that 8th-12th grade history teachers, as well as librarians and non-formal education staff, are aware of the resource. We will be using the Mass Audubon website to facilitate widespread discovery and use of our materials and information through a web section for the Climate Democracy Project. Mass Audubon’s IT department manages the integrity of the website. We will make all digital products freely and publicly available on our website for anyone to access and use. A central goal of our project is to produce useable, replicable knowledge, so we will also be disseminating information about how to access the materials via our partners’ websites and resources accessed regularly by teachers, such as the DESE artifacts library for Civic Action Projects. The document will be branded as a Mass Audubon (and partners as appropriate) product and copyrighted, but access will be free and open to all. Partners may also place any/all products on their websites as well as long as they are free and open to all.

DIGITAL PRODUCTS PLAN

Climate Democracy Project Toolkit

ACCESS

All materials will be copyrighted to Mass Audubon (and partners as appropriate) and will include Mass Audubon (and partners as appropriate) logo and branding. Users will be notified that any re-use of the materials must retain branding. We both expect and encourage individuals and organizations using our materials to share the lessons they learn in the same spirit, and to make those lessons free and open to all. Mass Audubon will not create any products that may involve privacy concerns or require obtaining permissions or rights.

SUSTAINABILITY

All webpages and materials are managed by Mass Audubon's IT department. Mass Audubon will ensure that webpages stay up to date with unbroken links for as long as the posted material is relevant and of a modern quality standard. Mass Audubon's IT department will ensure that our Climate Democracy Project section will stay up to date with unbroken links. They ensure that all digital assets are stored redundantly. To ensure the preservation and maintenance of digital products throughout and beyond their period of performance, our plan will encompass various facets such as storage systems, technical documentation, and migration planning. An inventory and classification of digital products based on their nature and importance will use a storage system based on the frequency of access for different products. Redundant and reliable storage solutions will be complemented by regular monitoring and upgrades, including scheduled and automated backups with periodic restoration testing. Cybersecurity measures will also be employed to protect against unauthorized access and cyber threats along with regular audits.

Applicant Name: Mass Audubon

Project Title: Climate Democracy Project: The Intersection of Climate and Civic Education

Performance Measure	Data We Will Collect (e.g., counts, costs, weights, volumes, temperatures, percentages, hours, observations, opinions, feelings)	Source of Our Data (e.g., members of the target group, project staff, stakeholders, internal/external documents, recording devices, databases)	Method We Will Use (e.g., survey, questionnaire, interview, focus group, informal discussion, observation, assessment, document analysis)	Schedule (e.g., daily, weekly, monthly, quarterly, annually, beginning/end)
<p>Effectiveness: The extent to which activities contribute to achieving the intended results</p>	<p>Measures of effectiveness will attempt to determine the extent that students and teachers are gaining the anticipated knowledge and skills outlined in the narrative. Specific data collected to help determine this will include:</p> <ul style="list-style-type: none"> • Student responses collected during reflection activities: Education Coordinator (the local educator who knows the students well) will collect this feedback near the end of the school year as part of their classroom work. • Rubric scores from Student Showcases: Program Manager, Director of K12 Programs, and Community Partners will assist with Showcase interviews; end of school year. • Pre- and post-program assessments of students and classroom teachers to measure content knowledge and affect related to climate topics and civic agency, tied to our Project Outcomes: to be developed by Michelle Eckman in consultation with the participating students and educators in a manner responsive to the needs of those being evaluated. <p>Michelle Eckman will conduct all analyses and interpretation of data. Mass Audubon has worked with experts in culturally responsive evaluation techniques to ensure that the evaluation activities embedded into program delivery are not transactional, but rather focus on candid feedback exchanges through diverse forms of expression. There are valid ways of gathering data on student and teacher knowledge and affective learning that uphold the goal of promoting teacher and student efficacy and agency (Safir and Dugan 2021). Traditional, transactional evaluation methods often do not detect student agency, one of the most important desired outcomes of this project. Accordingly, the evaluation plan itself will be developed with significant input from the project participants, including the student representatives, teachers, administrators, and community partners.</p>			
<p>Efficiency: How well resources (e.g., funds, expertise, time) are used and costs are minimized while generating maximum value for the target group</p>	<p>The Project Manager will assess expenses for the project on a monthly basis. Project Manager will track staff time, spending on supplies, and other expenses using our financial software programs, Financial Edge and ADP. Project Manager will report to Director of K12 Programs and our Grants team monthly with updated totals.</p>			
<p>Quality: How well the activities meet the requirements and expectations of the target group</p>	<p>Data collected in this category will center the experiences of our students and both formal and non-formal educators. Specific data collected will include:</p> <ul style="list-style-type: none"> • Observation protocols of classroom and field experiences using the Assessing Program Practices Tool (APT) 2x/participating class, per semester; observations conducted by Education Manager. This tool focuses on the experiences of teachers and students, such as the quality of the questions being asked, the topics of student conversations, the amount of higher order thinking taking place in those conversations, the degree to which students are working collaboratively towards solutions, etc. • Feedback from community partner meetings and professional development sessions (Program Manager collects monthly, during our meetings, and more comprehensively at the Summer Institute). Data will be separated into feedback from classroom vs. non-formal educators. • Student and teacher focus groups: Michelle Eckman will lead focus groups at end of both Pilot years. Classroom teachers will not be present during student focus groups. 			
<p>Timeliness: The extent to which each task/activity is completed within the proposed timeframe</p>	<p>The Project Manager will track project progress including all deliverables, the people responsible for those deliverables, and their associated timeframes will be entered into the software and shared with Mass Audubon team. Microsoft planning tools (e.g., Excel, Planner) will be used to track task completion, send reminders to team members, etc. Project Manager will track progress on a weekly basis over the course of the project.</p>			