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maine environmental education association

AN ADDENDUM TO THE MAINE ENVIRONMENTAL LITERACY PLAN

Prepared by the Maine Department of Education in Partnership with Maine Environmental Education Association, and Maine Governor's Office of Policy Innovation and the Future.

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2025

HE MAINE CLIMATE LITERACY PLAN is an Addendum to the Maine Environmental Literacy Plan that lays out recommendations to advance climate literacy in the State of Maine. This Plan includes strategies, recommendations, and action steps for the Maine Department of Education (DOE) and other responsible parties to consider advancing climate education. The MELP is part of Maine's Green School Initiative which supports students, educators, schools, and school administrative units throughout the state of Maine in the following areas:

1.

Build strong and lasting Green Schools Leadership—youth, educators, administrators, and community members.

Supporting the work of Maine School Districts in their desire to **increase efficiencies and reduce carbon emission** in their buildings, energy systems, transportation, food use, and landscaping.

Construct an engaging framework for environmental literacy through the sharing and networking of curricular units, projects, and outdoor activity.

Establish a seamless pathway for career exploration and skill development in climateready fields.

In 2024, the Maine DOE convened a taskforce of educators, youth, environmental organizations, school leadership, and other key parties from throughout the state to design an Addendum to the Maine Environmental Literacy Plan. This taskforce was convened by the recommendation of the Maine Climate Council in partnership with the Maine Environmental Education Association and was funded in part by the Maine Governor's Office of Policy Innovation and the Future.

Through the suggested strategies and recommendations below, the Maine Climate Literacy Plan is designed to help the Maine DOE, State Departments, Community-Based Organizations, School Administrative Units, Educators and Students to synchronize, expand, and monitor their climate literacy efforts over time.

ADDITIONAL RESOURCES:

1. 2023 Maine Won't Wait Progress Report - Page 56

Strategies



Increase Capacity Building for Advancing Climate Literacy in Maine Schools



Develop a Holistic Maine Green Schools Program



What is this plan and why is it needed?

Students, educators, and school buildings must be ready for and resilient to the impacts of climate change on communities throughout Maine.

The Maine Climate Literacy Plan lays out strategies, recommendations, and detailed pathways to support Maine schools in preparing a climate-ready and resilient generation that is able to celebrate, use, and protect Maine's resources, peoples, and communities.

This plan was designed to monitor, support, and unify efforts throughout the state around climate education in pre-K through grade 12 schools.

The Maine Climate Literacy Plan is an Addendum to the Maine Environmental Literacy Plan (MELP) and a direct result of a taskforce recommended by the Maine Climate Council. The Addendum will serve to further specify suggested action steps for climate literacy for the Maine Department of Education (DOE) and other responsible parties throughout the state to take to address the emergent climate crisis. All recommendations are designed for responsible parties at their own discretion and capacities and to support local decision-making for Maine schools. The Addendum was created by the Climate Education Taskforce, convened and facilitated by the Maine DOE, Maine Environmental Education Association, and the Maine Governor's Office of Policy Innovation and Future.

The MELP details the context, history, goals, and overall strategies to advance environmental literacy in public pre-k-12 education in Maine. The Addendum will specifically focus on climate literacy, which is a component of environmental literacy.

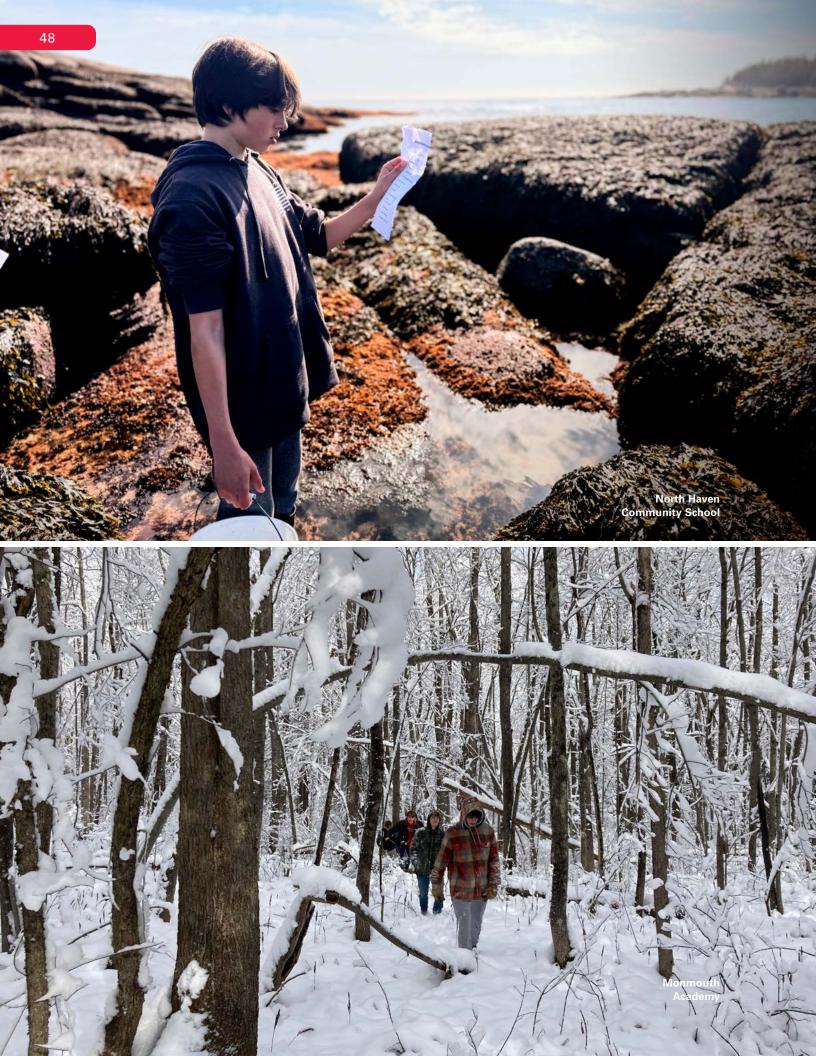
Although the terms "climate" and "environmental" are often used as synonyms, climate literacy is a component of environmental literacy. The MELP defines a component of environmental literacy as "the ability to recognize the components of healthy, natural, and human-built systems and to execute the actions necessary to maintain, restore, and improve them." The National Oceanic and Atmospheric Administration further defines climate literacy as "an understanding of how the climate system works, how human actions influence climate, and how climate influences people and other parts of the Earth system.".

Climate literacy is a crucial learning opportunity for future generations who are growing up in a world that is changing rapidly. It is imperative that schools and teachers are prepared to help students and communities acquire the knowledge, skills, and resilience necessary for the future.

Why create this taskforce

The Climate Education Taskforce was a result of a Maine Climate Council Strategy H, Recommendation 2 in the Maine Won't Wait Climate Action Plan, which was published in 2020. ("Launch a process...to engage key stakeholders including students, older youth, educators, and state leaders in next steps.")[Maine Won't Wait, page 98].

Beyond Maine, there are a number of efforts underway to design climate education from a variety of perspectives. This Taskforce and Plan were informed and influenced by some of this work including: **ClimeTime in Washington State**, **Wisconsin's Green**



& Healthy Schools program, the Aspen Institute K12 Climate Education Plan the U.S. Department of Education Green Ribbon Schools program, the UNESCO Greening Curriculum Guide and Green School Quality Standard, NOAA Climate Literacy Guide, and others linked in the Resources section.

Why is this Addendum needed

The MELP lays out four clear and long-term goals with substantial and organized strategies for environmental education throughout the state.

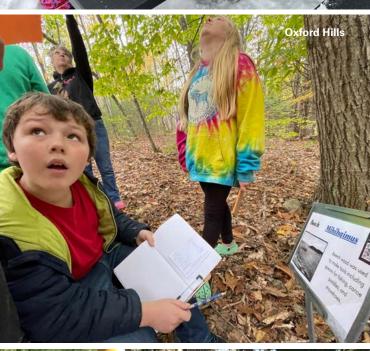
- 1. Advance Environmental Literacy in Maine Youth Through Powerful Learning Opportunities
- 2. Provide Culturally-Relevant, High-Quality, Interdisciplinary, Professional Learning to Advance Environmental Literacy
- 3. Increase Resources to Build the Infrastructure and Staff Capacity to Equitably Advance Environmental Literacy and Outdoor Learning
- 4. Advance Environmental Literacy in Early Childhood Education

This Addendum is necessary in order to define more actionable recommendations and timelines for the responsible parties throughout the state in order to create a more unified, defined, and trackable movement around climate literacy. The goals above are the foundation for the Maine Climate Literacy Plan. All of the recommendations in the Addendum meet each goal of the MELP for teachers and classrooms in Strategy 1 and schools and School Administrative Units in Strategy 2.

Process

The Maine Climate Education Taskforce was convened from April through June of 2024 for the purpose of brainstorming and selecting recommendations for this Addendum. The Taskforce was composed of parties from throughout the state with a wide range of roles and perspectives. The Taskforce, along with other focus groups throughout the drafting process, contributed their expertise and lived experience to generate this plan's strategies, recommendations, and supporting information. Additional information about the Taskforce, the process, and additional perspectives can be found in Appendix A. ■







Strategies and Recommendations Overview

STRATEGY -

Overall categories for recommendations.

Suggested steps for responsible parties to take with a timeline, purpose, and direction. The party should work to move forward with the recommendation based on capacity and mission alignment.

RECOMMENDATION

LINK

Supporting information and action steps to be included in the Literacy Plan to provide context and additional action steps.

Increase Capacity Building for Advancing Climate Literacy in Maine Schools

With support from the Maine State Legislature, School Administrative Units, Community-Based Organizations, private funders, and others, the Maine Department of Education (DOE) should increase access to funding for professional learning opportunities for educators by permanently funding the existing Pilot Program for Climate Education Professional Development by Winter 2026. This continued development will foster new structures for equitable funding and expanded pathways, starting in Spring 2025, for Inservice Educators to learn about climate literacy for professional learning and recertification.

Community-Based Organizations in Maine, in collaboration with School Administrative Units and the Maine Department of Education (DOE), should expand access to free, online, standards-aligned, scientifically-accurate climate curriculum resources for educators and curated examples of locallyrelevant, age-appropriate, place-, project-, and play-based, standards-aligned climate education curriculum across all content areas starting in Spring 2025. Increase Professional Learning Opportunities



th School Expand curriculum resources (DOE), should accurate RECOMMENDATION #2

The Maine Department of Education should collaborate with Higher Education to support that preservice teacher training in Maine includes climate education within the next four years.

Starting in 2025, the Maine Department of Education (DOE) should work with the support of the Scientific and Technical Subcommittee of the Maine Climate Council to produce a Maine Climate Change for Schools Report, which will synthesize Maine climate data for a document accessible to schools, educators, and students.

Develop preservice training

RECOMMENDATION #3

Create local guides and scientific reports





Develop a Holistic Maine Green Schools Program

> The Maine Department of Education (DOE) in collaboration with Community-Based Organizations should create and facilitate a statewide Green Schools Network within the next four years.

The Maine Department of Education (DOE) should assess school sustainability policies in Maine and develop templates and funding for Maine schools to create specific policies and plans to support climate education and green infrastructure.

The Maine Department of Education (DOE) should re-launch and maintain the U.S. Department of Education's Green Ribbon Schools Award Program in 2025. In addition, the Maine DOE should launch a state-specific recognition that is more flexible to the local needs of Maine. This recognition program, along with the aforementioned network, will collect and communicate success stories across the state. Facilitate statewide a Green Schools Network

RECOMMENDATION #1

Advance school sustainability policies

RECOMMENDATION #2

Launch Green Schools awards and celebrate schools

RECOMMENDATION #3

Recommendations



Increase Capacity Building for Advancing Climate Literacy in Maine Schools

INCREASE PROFESSIONAL LEARNING OPPORTUNITIES Recommendation #1

Recommendation

With support from the Maine State Legislature, School Administrative Units, Community-Based Organizations, private funders, and others, the Maine Department of Education (DOE) should increase access to funding for professional learning opportunities for educators by permanently funding the existing Pilot Program for Climate Education Professional Development by Winter 2026. This continued development will foster new structures for equitable funding and expanded pathways, starting in Spring 2025, for Inservice Educators to learn about climate literacy for professional learning and recertification.

Supporting Information

The Climate Education Professional Development Pilot Grant Program that passed in resolve LD **1902** established a three-year pilot program with \$1.8 million in funding to support professional development in public schools on climate change throughout the state. This program aims to increase access to climate education for underserved communities through interdisciplinary, ageappropriate education by supporting collaboration among schools and community partners. The Maine DOE should recommend congressionally-directed funding for an improved permanent program, based upon lessons learned from the pilot. The continuation of this program should include more pathways and structures for equitable access for schools that do not have the personnel or resources for a reimbursement grant to this program.

This program created a new position at the Maine DOE to advance Climate Education, the Climate Education Specialist. The Maine DOE should also ensure that this position is maintained at the department.

The Climate Education Professional Development Pilot Grant Program is the first state-funded program for Inservice Educators to participate in Climate Education training. The grant program should not be the exclusive pathway for climate literacy professional learning. The Taskforce recommends implementation of the action steps listed below, which pertain to both the program and broader efforts that can reside within or outside the program design and administration (depending on the continuation of the grant program).

Recommendation #1 Action Steps

The Maine Department of Education should:

- Support pathways, in the grant application, for community-based organizations to host professional learning opportunities that are free for teachers to attend and that provide either a stipend or certification credits.
- Increase the reach of this program to include Career and Technical Education programs around green economy workforce development opportunities.
- 3. Provide resources and assistance applying for grants if a position to do so is not filled in the applicant school or district.
- 4. Increase communication before and during grant application windows by non-profit network organizations to increase knowledge of the program and understanding of the process for applying to the program through storytelling and outreach efforts.
- 5. Offer recertification or stipends for training and clearly communicating ahead of training.
- Train teachers to lead climate education teachers/coaches in their schools to incorporate statewide information and knowledge into the local context and unique school demands.
- Develop and support regional summer training opportunities for teachers or cohorts of teachers with local knowledge, ongoing networking, and recertification hours or stipends in order to reduce barriers to entry.
- Develop a climate education micro-credential program, or "climate badge", in partnership with the University of Maine and/or the Maine Environmental Education Association.

- Demonstrate climate literacy assessments aligned with Next Generation Science Standards. (Maine Environmental Literacy Plan – Page 27).
- 10. Use the Aspen Institute K12 Climate Action Plan, the UNESCO Greening curriculum guidance, and the NOAA Climate Literacy Guide as guidelines for this recommendation.

Increase Capacity Building for Advancing Climate Literacy in Maine Schools

EXPAND CURRICULUM RESOURCES Recommendation #2

Recommendation

Community-Based Organizations in Maine, in collaboration with School Administrative Units and the Maine Department of Education (DOE), should expand access to free, online, standards-aligned, scientifically-accurate climate curriculum resources for educators and curated examples of locallyrelevant, age-appropriate, place-, project-, and play-based, standards-aligned climate education curriculum across all content areas starting in Spring 2025.

Supporting Information

Educators throughout the state need easy and direct access to free, online, standards-aligned, scientifically-accurate climate curriculum resources. Community-based organizations may have the capacity and organizational flexibility to be responsible for this recommendation and the subsequent action steps.

This recommendation addresses the two central challenges identified by the Climate Education Taskforce: breadth of resources available and equitable access to these resources. Both challenges are addressed in the action steps below. There is a continuous need for the creation of highquality, locally-based, standards-aligned climate curriculum and resources for grades pre-K-12. There is also a need for structures to effectively gather and communicate content that is already available. Much of the resources that teachers state they need do exist, however, there is a need for easier pathways for educators to learn about, access, and use high-quality curricula.

Recommendation #2 Action Steps

Maine Community-Based Organizations will:

- Compile and effectively communicate resources and curricula statewide. This compilation should be designed similarly to the TeachMeOutside resource for outdoor education organizations and should be free and accessible and support schools, teachers, and students.
- Expand knowledge of and access to the Maine Climate Education Hub, developed by Subject to Climate, by increasing pathways for greater curriculum depth, vetting flexibility, and creating stronger links to the organizations or individuals that created the curriculum highlighted in the Hub.
- Collaborate with the Wabanaki Framework and Wabanaki Studies Specialist at the Maine Department of Education to expand access and connection between climate education and Wabanaki studies.
- Collaborate with Early Childhood Centers and leaders in Maine to develop more ageappropriate, play-based early childhood climate literacy resources.
- Develop a Climate Badge for vetted resources that have passed through a standard climate education process.
- Support Workforce Development tools, guides, and network connections for schools, Career and Technical Education, Extended Learning Opportunities, and informal education programs.
- Create regional and local assessment tools for organizations, individuals, and schools to gauge climate action and education needs in their particular area.

- Increase access for students by providing transportation, outdoor access funding, and access and agency on online climate education curriculum, including the Maine Online Open-Source Education modules and the Maine Climate Education Hub.
- 9. Expand access and resources centered on Climate Justice.

Resources should be supported by examples of how teachers are implementing climate education throughout the state. These examples should be gathered and disseminated in an ongoing and engaging format. Examples should provide a strong foundation for statewide climate education.

AREAS THAT SHOULD BE COVERED BY THESE CURATED EXAMPLES:

- 1. PreK-12 (with a wide range of subject matter and curriculum complexity)
- Interdisciplinary, project-based, place-based, play-based, Maine Solutionaries Project models of instruction.
- 3. Green job/career exploration in traditional and Career and Technical Education classrooms.
- 4. Wabanaki Studies and climate education interwoven, Maine Climate Science Portal with Two Eyed Seeing.
- 5. Technology and Computer Science
- 6. Multilingual learners
- 7. Social Emotional Learning

Increase Capacity Building for Advancing Climate Literacy in Maine Schools

DEVELOP PRESERVICE TRAINING

Recommendation #3

Recommendation

The Maine Department of Education should collaborate with Higher Education to support that preservice teacher training in Maine includes climate education within the next four years.

Supporting Information

In order to successfully support the integration of climate education in schools, at all grade levels, new educators training to join Maine schools should have exposure to climate education in their preservice teacher training programs. Early professional learning has a foundational impact on a teacher's career and their integration of climate literacy and associated concepts into their classrooms. Professional learning for preservice teachers can also aid in building resilience to climate anxiety that has a negative impact on both teachers and students in the classroom.

Recommendation #3 Action Steps

The Maine Department of Education should:

- Convene a statewide meeting with engaged education professors to share and discuss the latest pre-K-12 curricular resources that can be integrated in teacher preparation courses including Next Generation Science Standards.
- 2. Create a micro-credential that links Wabanaki Studies and Climate Education that Maine preservice educators can access.
- 3. Engage with teacher training programs in higher education institutions throughout the state of Maine to understand their current climate education practices and identify areas for growth and support. Use teacher training models for guidance, such as New Jersey Preservice Teacher Education Training Modules.
- Explore standards decisions under Rule Chapter 114.
- 5. Partner with the University of Maine, including the Farmington Graduate Certificate in Climate Education, Climate Change Institute, and others, along with additional community-based, sciencefocused organizations throughout the state and higher education institutions, to ensure that Maine-based resources for educators are being created and distributed to teacher training programs.

Increase Capacity Building for Advancing Climate Literacy in Maine Schools

CREATE LOCAL GUIDES AND SCIENTIFIC REPORTS Recommendation #4

Recommendation

Starting in 2025, the Maine Department of Education (DOE) should work with the support of the Scientific and Technical Subcommittee of the Maine Climate Council to produce a Maine Climate Change for Schools Report, which will synthesize Maine climate data for a document accessible to schools, educators, and students.

Supporting Information

The Scientific and Technical Subcommittee of the Maine Climate Council is tasked with creating a "Scientific Assessment of Climate Change and Its Effects in Maine". That group's latest report was published in Spring 2024. It details the climate change effects in Maine, including sections on Climate, Human Dimension, Sea Level and Coastal Hazards, Marine, Agriculture, Biodiversity, Freshwater, Forests and Forestry, and Hope. This extensive document is an invaluable resource to aid in understanding the impacts of climate change in Maine. This report creates a strong foundation of data and scientific findings that should be used in classrooms throughout the state. This up-to-date data can be used to understand local environmental change and then as a springboard in classrooms to empower action projects and clear local direction for school and student sustainability efforts.

Recommendation#4 Action Steps

The Maine Department of Education should:

- Lead the development of an educator-, student-, and classroom-specific report, based on the full scientific assessment report with the support of the Scientific and Technical Subcommittee (STS). This report will be designed to ensure the most up-todate climate information/data for the state is accessible to teachers and students using the STS and associated reports. This will entail synthesizing and sharing relevant information that is succinct and high-schoolage appropriate. New Jersey Teachers Guide for Climate Change Data will additionally be used as a guide.
- Include ways that the data can be effectively used in the classroom for a wide variety of grade levels and content areas.
 - 2a. The report may be expanded or modified to fit different age ranges and classrooms.
- 3. Released and updated annually to be used in classrooms the following academic year.

Develop a Holistic Maine Green Schools Program

FACILITATE STATEWIDE A GREEN SCHOOLS NETWORK Recommendation #1

Recommendation

The Maine Department of Education (DOE) in collaboration with Community-Based Organizations should create and facilitate a statewide Green Schools Network within the next four years.

Supporting Information

The Maine Green Schools Network can be a connection hub for schools, teachers, students, and others around climate education, school yard greening, sustainability, and school-based energy efficiency projects. The network will engage with members through in-person events, coaching, and digital communication tools, including online resources and email engagement. The direction of this network will be coordinated by the Maine DOE's Director of Green Schools. communitybased organizations are effective partners to assist in flexibility and communication in developing and supporting this network with the Maine DOE.

Recommendation #1 Action Steps *The Maine Green Schools Network should:*

- 1. Serve as the central location for all Green School Program communications outside of the Maine DOE, as well as regularlytimed communication emails around all the efforts and work in the Climate Literacy Plan. This Network serves the crucial role of breaking down the siloed nature of this work throughout the state. This Maine Green Schools Network website, communication, and storytelling may be modeled after the work of Washington State ClimeTime, **Maryland Green Schools, Green Schools** National Network, Green Schools Alliance, **Center for Green Schools, Green Schools** - Project Learning Tree, Kentucky Green Schools, North American Association for **Environmental Education Thriving Schools** Roadmap, and more.
- Host network gatherings co-hosted with community-based organizations, the Maine DOE, and higher education institutions. These convenings will effectively welcome, coach, and celebrate green schools' efforts around the state and bring together teachers and youth and the broader community to share challenges and successes.

- 3. Develop tools, connections, and resources that provide a centralized place for schools and teachers to understand the availability of funding for education and infrastructure work, receive technical assistance in applying for funding, develop and measure progress on climate plans in their schools, receive coaching to improve school efforts, connect with other schools that might be working on similar efforts to share successes and challenges, and celebrate and share the innovative work happening in schools and districts around the state.
- 4. Integrate with Green Schools Recognition Program.
- 5. Share existing training and opportunities in STEAM (science, technology, engineering, art, and mathematics), Wabanaki Studies, environmental and outdoor education, Connected Learning Ecosystems, and more with Maine schools and school administrative units to support the implementation of district climate literacy and action plans.

Develop a Holistic Maine Green Schools Program

ADVANCE SCHOOL SUSTAINABILITY POLICIES Recommendation #2

Recommendation

The Maine Department of Education (DOE) should assess school sustainability policies in Maine and develop templates and funding for Maine schools to create specific policies and plans to support climate education and green infrastructure.

Supporting Information

To advance climate literacy, Maine schools should develop plans and policies that support the sustainable advancement of climate education and green school infrastructure work. Schools are a crucial component of every Maine community. Schools serve as a community hub for learning and connecting all ages, as well as a physical space for community events from sports to theater to emergency aid. Furthermore, schools are large municipal buildings that contribute a significant amount to a town or city's carbon footprint and energy expenditures. Schools are a critical part of any community and should be given more consideration in the larger municipal climate planning processes.

Commonly, a significant amount of climate literacy and green infrastructure work in schools is created and supported by a small set of individuals. Therefore, schools' efforts are vulnerable to individuals leaving the school or school administrative unit (SAU). By developing climate action plans, the school and/or SAU would help to create longevity and sustainability of green infrastructure/climate literacy efforts. This planning process is also an opportunity to bring together a wide range of members of the school community and school leadership and to link schoolbased efforts to municipal climate action planning. Through collaboration and tracking progress over time, schools and/or SAUs will be able to move toward their climate goals.

Overall, climate and green action projects in schools will increase the health of the campus/building, while reducing long-term costs. Effective planning creates the foundation for the greatest impact, coordination, and long-term viability of these efforts.

Recommendation #2 Action Steps

- The Maine DOE's Director of Green Schools and their team should conduct an assessment of existing school sustainability/ climate plans and policies, as well as their methods, barriers, and scope. The information that is collected can be used to inform the development of planning and policy guides that will be made accessible to all schools in Maine.
- 2. The Maine DOE should develop guides to effectively help schools and districts execute climate education and green infrastructure planning. These guides will create a framework to align administration, school boards, and staff to local needs and give examples of actions at the appropriate scale for a wide range of schools and communities throughout the state. While creating a Green Schools Action plan for schools and/or SAUs will not be mandated, this guide will make the planning process easier for Maine schools and SAUs that are working to advance climate literacy and green infrastructure development. The sustainability/climate resiliency/green school plans and policies guides will:
- 2a. Share templates to support planning processes in a wide range of school types encompassing different starting places and center around the three pillars created by the U.S. Department of Education's Green Ribbon Schools Program. (More information can be found in Strategy 2, Recommendation 3. Launch Green Schools Awards & Celebrate Schools). Guides should also draw from the UNESCO Green Schools Quality Standard and the Aspen Institute K12 Climate Action Plan.
- 2b. Support reachable goals within reasonable timelines.
- 2c. As a result of the assessment of existing policies, a variety of examples should be provided. Examples of these are Portland Public School Sustainability Policy and Five Towns CSD Strategic Plan.
- 2d. Encourage revisions and continued monitoring after goals are first achieved.
- 2e. Create, provide, and/or support the use of progress tracking tools. An example is the Wisconsin Green and Healthy School Survey and The START tool.

- 3. Climate literacy plans will be encouraged to include the following processes:
 - 3a. Participation from: teachers, administrators, superintendent or assistant superintendent, school board buy-in at some level of awareness, facilities manager, students, parent/ caregiver community, and additional staff depending on school to create the plan.
 - 3b. Trained facilitators and/or individuals to help schools or SAUs facilitate this planning process during the course of an academic year.
 - 3c. Coordination with municipality and state leaders to ensure that education and schools are included in municipal climate planning processes.
- 4. The planning process will clearly define the benefits of climate action/literacy in schools, including but not limited to:
 - 4a. Savings as a result of investing in more efficient infrastructure development.
 - 4b. Increase in health benefits with green schoolyards projects (i.e. more shared places for physical movement, storm water runoff, habitat creation, temperature control with heat pumps, and increased air quality).
 - 4c. Contribution to meeting the state's climate action goals.
 - 4d. Links to the Whole Student Framework, Social Emotional Learning, student agency, and resilient schools and communities.

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Develop a Holistic Maine Green Schools Program

LAUNCH GREEN SCHOOLS AWARDS & CELEBRATE SCHOOLS

Recommendation #3

Recommendation

The Maine Department of Education (DOE) should re-launch and maintain the U.S. Department of Education's Green Ribbon Schools Award Program in 2025. In addition, the Maine DOE should launch a state-specific recognition that is more flexible to the local needs of Maine. This recognition program, along with the aforementioned network, will collect and communicate success stories across the state.

Supporting Information

In order to share innovation and increase motivation, it is essential to celebrate progress and tell stories about the climate literacy and green infrastructure work happening in Maine schools. This will be accomplished through the following three methods: the reinstatement of a federal award program, launching a state award program, and developing a storytelling initiative. These three components will be effectively integrated with the Green Schools Network recommendation as the Network develops.

Recommendation #3 Action Steps

The Maine Department of Education should:

- Relaunch Maine's participation in the U.S. Department of Education Green Ribbon Schools Award. This award program is facilitated by states electing to nominate local schools to receive the national prize. The program is centered around the following three pillars:
 - Reduced Environmental Impact and Costs
 - 1b. Improved Health and Wellness
 - 1c. Effective Environmental and Sustainability Education
- 2. Launch a state recognition tiered program that aligns with the national Green Ribbon Schools Award program. This approach is recommended by the U.S. Department of Education and is used by several states (including California and Wisconsin) to create a more flexible and easier entry point for schools into the program. The recognition application should be structured in a survey in order to inform school process, if schools engage with the program annually, and help the Maine DOE effectively support schools. The state recognition program in Maine will be designed to include the three pillars with increased flexibility for schools to be focused on only one or two areas to be recognized. Additional areas that should be considered part of this state-level recognition program are Wabanaki education, green careers, and natural resource industry-based programs like forestry, fishing, aquaculture, and agriculture. The Taskforce recommends that the recognition program be titled in a state specific manner, as well as one that shifts emphasis from traditional climate change

words like Green, Sustainability, etc. to Healthy and Resilient Schools. Additionally, this recognition could include a flag for the school to celebrate and show the success to their community.

- Explore Distinguished Educator Model for specific roles: Teacher, Facilities Manager. etc.
- 4. Effectively connect with the Maine Environmental Education Association Environmental Education Awards.
- 5. Collect and disseminate case studies of green school programs and efforts with support from community-based organizations and schools. The storytelling opportunity is paramount to encouraging additional efforts by new schools and growth in awarded schools. The program will link with the Green Schools Network in Recommendation 2 to effectively collect and communicate stories from schools across the state.

North Haven Community School

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What now?



The Maine Climate Literacy Plan is an essential tool to catalyze climate efforts throughout the state to create more sustainable and resilient schools for all Maine students. Maine has a wide variety of schools, organizations, and experts already working on this critical effort, and this plan would increase the coordination and implementation of these efforts in Maine schools and districts.

Timeline

This plan is designed to be supportive and does not mandate nor hinder existing efforts nor interfere with local decision-making regarding these topics in schools throughout the state. The objective of the Maine Climate Literacy Plan is to fully implement all recommendations within the next four years. As a result, the Maine Department of Education (DOE) will convene another taskforce to review and update the plan on a four-year timeline. The Maine DOE will provide updates on the progress of each recommendation on an annual basis by January 1 of each year. The Maine DOE serves as the coordinator for this plan but is not solely responsible for oversight, enactment, or funding of any of these recommendations. The Maine DOE will collaborate with responsible parties throughout the state to help to enact and monitor the progress of these recommendations at the discretion of department staff and the Commissioner of Education.

Conclusion

Building a future for Maine that is climate resilient starts with supporting every school, teacher, and student to develop the tools, curriculum, and plans necessary to meet our changing future. Today, Maine schools need support and encouragement to incorporate action that transitions existing infrastructure to embrace more efficient and healthy solutions and to incorporate a holistic approach to building climate literacy. The Maine Climate Literacy Plan builds a four-year actionable roadmap of climate literacy recommendations for the Maine Department of Education and other responsible collaborating parties throughout the state to enact. This addendum to the Maine Environmental Literacy Plan supports all four of the goals detailed in the 2022 Plan, while providing further specific direction on how to advance climate education and literacy. The Maine Climate Literacy Plan Addendum will aid in coordinating efforts and supporting decision-makers, as they work to build healthier and more resilient schools for our future. Each recommendation in the Plan has clear actions within a bounded timeline, as well as flexible suggestions for which parties will collaborate to enact the actions. Ultimately, the Plan's intent is to support Maine schools and school administrative units (SAUs) to design and implement the climate literacy actions that best fit their communities' needs, as they so choose and as they see fit. If this plan is successfully implemented, it will result in a significant increase in climate literacy and green infrastructure in schools and SAUs across the state of Maine in the next four years.

Resources

EXECUTIVE SUMMARY

- 1. Maine Environmental Education Association
- 2. Governor's Office of Policy Innovation & Future

INTRODUCTION

- 3. NOAA Climate Literacy Guide
- 4. Maine Won't Wait
- 5. Aspen Institute K12 Climate Action Plan
- 6. UNESCO Greening curriculum guidance
- 7. UNESCO Green school quality standard
- 8. Washington ClimeTime
- 9. Wisconsin Green and Healthy Schools
- 10. U.S. Department of Education Green Ribbon Schools

SECTION 1.1

- 11. Maine Department of Education Maine Environmental Literacy Plan
- 12. Maine Climate Education Professional Development Grant Pilot Program
- 13. L.D. 1902 Resolve, To Establish a Pilot Program To Encourage Climate Education in Maine Public Schools
- 14. Maine Environmental Education Association
- 15. University of Maine System Micro-Credentials
- 16. Aspen Institute K12 Climate Action Plan
- 17. UNESCO Greening curriculum guidance
- 18. NOAA Climate Literacy Guide

SECTION 1.2

- 19. Maine Climate Education Hub
- 20. Teach ME Outside
- 21. MOOSE Climate Modules
- 22. Maine Department of Education Solutionaries Project
- 23. Maine Climate Action Now Portal
- 24. Maine Department of Education Wabanaki Studies

SECTION 1.3

- 25. University of Maine Climate Change Institute
- 26. University of Maine at Farmington Graduate Certificate in Climate Education
- 27. New Jersey Preservice Teacher Education Training Modules
- 28. Rule Chapter 114 for the Department of Education and State Board of Education
- SECTION 1.4
- 29. Scientific and Technical Subcommittee
- 30. Scientific Assessment of Climate Change and Its Effects in Maine 2024 Update
- 31. New Jersey Teachers Guide for Climate Change Data

SECTION 2.1

- 32. UNESCO Green school quality standard
- 33. Aspen Institute K12 Climate Action Plan
- 34. Portland Public Schools Sustainability Policy
- 35. Five Towns CSD Strategic Plan

- 36. MDOE Whole Student Approach
- 37. U.S. Department of Education Green Ribbon Schools
- 38. Green Schools Alliance START
- **39. Wisconsin Green and Healthy Schools**

SECTION 2.2

- 40. Washington ClimeTime
- 41. Maryland Green Schools
- 42. Gulf of Maine Research Institute Connected Learning Ecosystems
- 43. Green Schools National Network
- 44. Green Schools Alliance
- 45. Center for Green Schools
- 46. Project Learning Tree Green Schools Curriculum
- 47. Kentucky Green Schools
- 48. NAAEE roadmap
- 49. Maine Department of Education Wabanaki Studies

SECTION 2.3

- 50. U.S. Department of Education Green Ribbon Schools
- 51. Wisconsin Green and Healthy Schools
- 52. California Green Ribbon Award

APPENDIX

53. UNFCCC Talanoa Dialogue

South Portland Middle School 73

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OVERALL PROCESS

The Taskforce and this Plan were built in three phases. Phase 1 consisted of five taskforce meetings in Spring 2024 where the Taskforce drafted the initial strategies and recommendations for the Plan. For Phase 2 in Summer 2024, the taskforce facilitators synthesized the Taskforce work and drafted the Plan. The facilitators additionally met with focus groups to incorporate further perspective and input into the Plan and sought public comment and feedback. At the end of Phase 2, the taskforce reviewed and voted on the drafted Plan and components. The Taskforce used a 75% consensus voting protocol. The draft Plan was then finalized and designed in Phase 3 in Fall 2024 and published. This process and the Plan were overseen and organized by Olivia Griset at the Maine Environmental Education Association and Teddy Lyman at the Maine Department of Education (DOE). The following sections detail the process for each step along these phases.

Phase 1

Creating and Convening the Taskforce

The Taskforce was created by the Maine DOE in March of 2024. Members were selected from a public application process with a priority for teachers, school leaders, community partners, youth, and other specialists. The Maine DOE received 51 applications to join the Taskforce. The members were selected on additional criteria including region, specialties, focus/ content areas, and grade level. Selection was made to maximize perspectives. Twenty-nine Taskforce members were selected to participate. The full list of Taskforce members and any other contributors can be found on the Acknowledgements page. The Taskforce was convened from April to June of 2024 with two full -day, in-person meetings and three shorter, virtual meetings.

The members were tasked to create a set of actionable and timely steps and recommendations for responsible parties throughout the state to take on climate education, in particular and connection to the Maine Environmental Literacy Plan and Maine Won't Wait, Climate Action Plan. Additionally, the taskforce was asked to prioritize the following:

- 1. Increase and promote equitable access to climate education.
- 2. Develop local innovative climate action.
- 3. Develop and support educators and the Whole Student Approach.

The meetings opened using the **Talanoa Dialogue**. The protocol is used by the United Nations to facilitate climate conversations. The taskforce members were asked individually to envision climate education in 10 or more years in Maine. Members were then placed in small groups and asked to compile visions and begin to work backwards toward the present. As a result, members identified what climate education might look like in two years, in five years, and in 10 years. The Talanoa Dialogue provided a foundation for the taskforce to plan out the steps between those visions. The Taskforce identified two key challenges: 1. Information and resources are confusing to find and navigate and 2. Funding is challenging to access.

As a result of the future visions and present challenges, the following needs were identified following the protocol:

- Increase Teacher Training/Certification
- Access to Resources: Scope and Sequence
- Develop School or School Administrative Unit Plans that Include Sustainability/Climate Education
- Increase Funding and Grant Accessibility
- Create Connected Networks
- Support Student Programs and Engagement

The subsequent meetings of the Taskforce were designed to take these key needs and develop action steps for them at ground level. The action steps are designed to be based on a timeline with achievable pathways for the responsible parties. The Taskforce worked in small groups and breakout spaces to generate ideas. In between meetings, the facilitators grouped and synthesized group notes to refine the conversations. Action steps were also grouped into recommendations and broader strategies, both based on the original Talanoa Dialogue foundation. The taskforce meetings concluded by debating and preliminarily approving the collective strategies, recommendations, and action steps.

Phase 2 *Drafting the Plan and Adding Perspectives*

During Summer 2024, Olivia Griset (MEEA) and Teddy Lyman (Maine DOE) drafted the notes and Taskforce recommendations into structured deliverables: two overarching strategies and seven recommendations. The draft recommendations were reviewed internally for content in line with the Maine DOE's mission, priorities, and programs.

FOCUS GROUP PROCESS

Additional perspectives were consulted for the Climate Literacy Plan. The Taskforce and facilitators identified voices and perspectives that were not fully represented or available for the full Taskforce meetings. Three focus groups were held with youth (under 30 years old), workforce development, and Wabanaki and Indigenous Knowledge Sharers. These focus groups were asked to review the recommendations and met with the facilitators to provide their lived and professional expertise on the draft recommendations. These perspectives were incorporated into the recommendations and supporting information sections.

VOTING PROCESS

Once the initial drafting was completed, the Taskforce members had an opportunity to review and offer edits to the draft recommendations. Edits were further incorporated to reach the final draft phase. An asynchronous online survey was sent out to all Taskforce members to conduct the vote on both strategies and all seven recommendations. Taskforce members were able to review the final draft language in full. Members could vote For, Against, or Abstain (see further detail abpit the decision-making protocol below). All participants who voted Against either a strategy or recommendation could elect to be named as opposed to the section with their stated reasoning.



Decision-making protocol

- 1. **GENERAL STRAIGHTFORWARD DECISIONS**. We make a lot of small decisions as a Taskforce every time we work together. For the most part, these are made by asking the Taskforce for ideas or to evaluate a straw proposal (for example: "Does X sound right? Any concerns?").
 - 1a. The facilitators develop meeting agendas and steer the work of the group, and they generally are looking for broad agreement among the group.
 - 1b. In full Taskforce meetings, facilitators will suggest next steps and approaches to members and will be listening for feedback and approval.
- 2. **OPT-IN**. Some elements of our work may be opt-in for, where every member of the Taskforce is welcomed to participate but does not need to participate.
- 3. **IMPORTANT DECISIONS**. For the most important decisions, we seek consensus (100% of the group can live with an outcome) but fall back on voting approval by 75% or more of Taskforce members as a final decision threshold.
 - 3a. The Taskforce makes time for discussion and deliberation.
 - 3b. Participants in the vote.
 - i. For, they like it a lot or can at least live with it, all things considered.
 - ii. Against, they don't like this approach and cannot live with it.
 - iii. Abstain, they do not wish to cast a vote for any reason. This vote is not incorporated into the threshold for success.
- 4. The threshold for success is 75% of voting members are For.

The Taskforce will produce a public report describing the process used to develop the Climate Education Plan. The report will include a summary of key votes taken. Any member who voted against a measure adopted through a key vote may request the inclusion of a brief summary of their dissent in the report.

VOTING RESULTS

The voting survey was distributed on Monday, Sept. 23 and closed to voting on Monday, Oct. 7. Twentysix of the 29 Taskforce members voted in the survey. The results pass the decision threshold of 75% to be approved by the Taskforce for publication in the Maine Climate Literacy Plan. The results are as follows:

CONTENT	FOR	AGAINST	ABSTAIN	PERCENT FOR
Strategy 1	25			100%
Strategy 2	22	1	1	96%
Strategy 1 Recommendation 1	24	2		92%
Strategy 1 Recommendation 2	24			100%
Strategy 1 Recommendation 3	23		1	100%
Strategy 1 Recommendation 4	22		2	100%
Strategy 2 Recommendation 1	23		1	100%
Strategy 2 Recommendation 2	22		2	100%
Strategy 2 Recommendation 3	21	1	2	95%

All Against votes were allowed to be named in opposition to the section. No Taskforce members elected to be named Against any strategy or recommendation.



Phase 3 Finalizing and Designing the Plan

Following the vote, the final draft was reviewed internally by the Maine DOE and edited for consistency and clarity. The draft documents were then converted and designed by PELLE Graphic Design. The Maine DOE and the Maine Environmental Education Association funded this design. As an Addendum to the Maine Environmental Literacy Plan, it was important to work with a consistent design language to create a cohesive message and incorporate the original Plan with the Addendum. PELLE Graphic Design designed the Maine Environmental Literacy Plan and was therefore the right partner for this Plan. Final design choices were edited and finalized by the Maine DOE. =

Acknowledgements

ELP 2010

Jim Banks MAINE STATE BOARD OF EDUCATION Anita Bernhardt* MAINE DEPARTMENT OF EDUCATION Sandy Buck HORIZON FOUNDATION Mike Cline TIN MOUNTAIN CONSERVATION CENTER Sarah Cushman CUSHMAN TRANSPORTATION CONSULTING Laurette Darling MAINE SCIENCE TEACHERS ASSOCIATION Kevin Doran* MAINE DEPARTMENT OF CONSERVATION (FOREST SERVICE) Lynn Farrin MAINE MATH AND SCIENCE ALLIANCE Willie Grenier MAINE AGRICULTURE IN THE CLASSROOM John Harker MAINE DEPARTMENT OF AGRICULTURE John Keimel MAINE PUBLIC BROADCASTING NETWORK Shawn Lagasse MAINE DEPARTMENT OF EDUCATION Jessica Leahy UNIVERSITY OF MAINE David Littell MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION Roger Merchant UNIVERSITY OF MAINE COOPERATIVE EXTENSION Sarah Morrisseau GULF OF MAINE RESEARCH INSTITUTE Vicki Nemeth MAINE EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH Lynn Seeley FERGUSON FOUNDATION Emily Sherman SCARBOROUGH HIGH SCHOOL Pat Sirois MAINE SUSTAINABLE FORESTRY INITIATIVE Sheila Sullivan PORTLAND TRAILS Elizabeth Vaselli UNIVERSITY OF MAINE Linda Woodard* MAINE ENVIRONMENTAL EDUCATION ASSOCIATION Kara Wooldrik* MAINE AUDUBON * Member of the Steering Committee for the Maine Environmental

Revision 2022

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Climate Action Plan 2025

This plan was made possible by the combined efforts of educators, community partners, administrators, and youth throughout Maine and beyond.

IN COLLABORATION WITH

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