



State Environmental Literacy Plans 2014 Status Report



naaee

North American Association
for Environmental Education

State Environmental Literacy Plans 2014 Status Report



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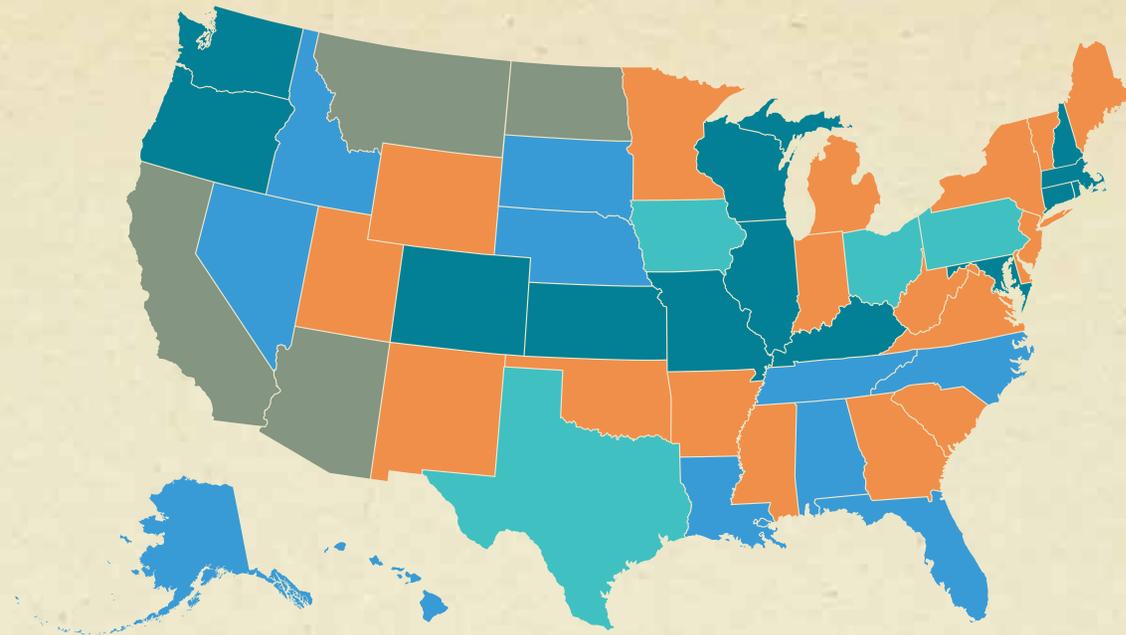


Introduction



ELP Stages by State

- **Have not yet begun ELP development:**
AZ, CA, MT, ND
- **Drafting stage:**
AR, DE, GA, IN, MA, MI, MN, MS, NJ, NM, NY, OK, SC, UT, VA, VT, WV, WY
- **Completed but not adopted:**
AK, AL, DC, FL, HI, ID, LA, NC, NE, NV, SD, TN
- **Adopted but not implemented:**
IA, OH, PA, TX
- **Adopted and implementation begun:**
CO, CT, IL, KS, KY, MD, ME, MO, NH, OR, RI, WA, WI



Across the nation, states are making significant progress in advancing our national educational goals by creating and implementing plans to enrich the curriculum with environmental education.

These plans to integrate environmental education into the K–12 curriculum will give teachers and students new opportunities to take learning outside; explore their communities; analyze issues; learn about connections between our economy, society, and environment; support economic growth; and become engaged citizens.

Part of the No Child Left Inside initiative, state Environmental Literacy Plans (ELPs) lay out a roadmap to achieving environmental literacy in each state (the next section of this report provides an overview of ELPs and their connection to NCLI). In 2012, the North American Association for Environmental Education (NAAEE) launched the first-ever effort to gauge states' progress in developing ELPs. NAAEE administered a national survey online and through phone interviews, and published the information in a 2013 status report.¹

This second status report provides an update to that initial report. Data was gathered during the early part of 2014, from all 50 states and the District of Columbia, through an updated online survey and follow-up telephone interviews. This report details the current status of ELP development throughout the U.S., highlights several states with exemplary ELPs, and gives recommendations for successful ELP development based on the findings.²

¹ NAAEE's State Environmental Literacy Plans: 2013 Status Report. Available here: http://www.naaee.net/sites/default/files/us/affiliates/SELP_final.pdf

² Note: Since the survey was completed in 2014, many states have moved forward with their ELPs. For example, California is currently working on a Blueprint for Environmental Literacy. NAAEE's website (<http://eelinked.naaee.net/n/elp>) contains up-to-date information.

Environmental Literacy Plans Overview



We now have an annual EE Symposium and a state affiliate—neither of which we had before we started work on the ELP. Federal funding from the USFS, State DLNR support, solid leadership, and a common goal of developing a state-wide ELP were instrumental in advancing environmental literacy.

—Survey respondent

To develop an environmentally literate population that is able to solve the environmental and social challenges we will face this century, environmental education must be part of our nation's K–12 curriculum. In the *Framework for Assessing Environmental Literacy* (2011), the North American Association for Environmental Education (NAAEE) defines environmental literacy as:

“An environmentally literate person is someone who, both individually and together with others, makes informed decisions concerning the environment; is willing to act on these decisions to improve the wellbeing of other individuals, societies, and global environment; and participates in civic life.”

Despite this immense need, integrating environmental education into schools across the United States has proved challenging. For example, as a result of the No Child Left Behind Act,³ teachers have been limited in the amount of time spent on environmental education and science in order to focus more on the testing standards required for math and language arts. Other barriers to integration include lack of professional development opportunities for teachers, limited time and resources for field trips and outdoor activities, and widespread cuts to education funding in general.

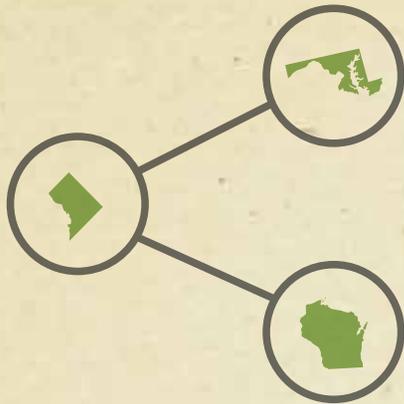
Recognizing the importance of environmental literacy, the No Child Left Inside (NCLI)⁴ initiative was launched in 2007 to advance the integration of environmental education in schools throughout the United States. The NCLI Coalition has attracted support from more than 2,200 organizations with diverse interests—including business, health, youth, faith, recreation, the environment, and education—representing more than 50 million Americans. The Coalition's goal is to support legislation, sponsored by Representative John Sarbanes of Maryland and Senator Jack Reed of Rhode Island, to ensure that every student achieves basic environmental literacy as part of their elementary and secondary educational career.

The NCLI Act would amend No Child Left Behind to include environmental education as a graduation requirement for the first time in U.S. history. The legislation would provide new funding for environmental education, particularly to develop rigorous standards, train teachers, and to develop and implement state environmental literacy plans. NCLI defines these environmental literacy plans (ELPs) as comprehensive frameworks that will support school systems in expanding and improving environmental education programs. The NCLI Act also proposes access to additional funding for states that develop ELPs. In anticipation of passage of the NCLI Act, several states have already begun developing ELPs.

³ The No Child Left Behind Act is a reauthorization of the Elementary and Secondary Education Act and was introduced by President George W. Bush in 2001. Under the act, all public schools receiving federal funding must administer a statewide standardized test to all students each year. Each state must set “one high, challenging standard” of performance on the test, which applies to every student in the state. Schools are expected to make adequate yearly progress (AYP), meaning that test scores must improve each year. Schools that do not achieve AYP are subject to restructuring. (<http://www.ed.gov/esea>)

⁴ Currently, the Chesapeake Bay Foundation houses the site for NCLI. (<http://www.cbf.org/ncli/landing>)

Environmental Literacy Plans Overview



NAAEE is supporting states in the development and implementation of their environmental literacy plans by providing resources and networking opportunities so that states can learn from one another. NAAEE developed national guidelines for K–12 environmental education, *Excellence in Environmental Education: Guidelines for Learning (K–12)*, which some states are using to review existing content standards and as a starting point for the development of new environmental literacy learning strands. In addition, NAAEE created *Developing a State Environmental Literacy Plan*, a short publication outlining the required components for an ELP (as defined by NCLI), to provide further guidance to states in the ELP development process. The NAAEE website hosts an ELP page,⁵ which provides information on each state's progress, downloads of finalized ELPs, and contact information for ELP representatives for each state. At NAAEE's annual conference, several sessions are dedicated to ELP development and the discussion of environmental literacy.

⁵ <http://eelinked.naaee.net/n/elp>

Environmental Literacy Plans

Environmental literacy plans (ELPs) are state-specific comprehensive frameworks that support school systems in expanding and improving environmental education programs. ELPs:

- Ensure that environmental education activities are aligned with student graduation requirements and help achieve state education goals
- Integrate environmental education fully, efficiently, and appropriately into formal education systems
- Align teacher professional development opportunities in environmental education with student achievement goals in environmental literacy
- Ensure consistency, accuracy, and excellence in environmental content knowledge
- Engage underserved communities through an inclusive process so that all stakeholders are beneficiaries of environmental education in schools

- Involve nonformal environmental education providers, state natural resource agencies, community organizations, and other partners in environmental education activities in schools
- Serve as a necessary component of a comprehensive state environmental education program

States have taken different approaches in the development and implementation of their ELPs, but the NCLI Act stipulates that an ELP must include:

- 1) Specific content standards, content areas, and courses or subjects where instruction will take place
- 2) A description of how high school graduation requirements will ensure that graduates are environmentally literate
- 3) A description of programs for professional development of teachers to improve their environmental content knowledge, skill in teaching about environmental issues, and field-based pedagogical skills
- 4) A description of how the state education agency will measure the environmental literacy of students
- 5) A description of how the state education agency will implement the plan, including securing funding and other necessary support

Status Update & Survey Analysis

In 2012, NAAEE reviewed the status of ELPs to assess progress and identify how states might improve the development and implementation of ELPs. The results were reported in State Environmental Literacy Plans: 2013 Status Report.

This report provides an update of the status of individual states' ELPs as summarized by NAAEE staff between January 2nd and May 20th, 2014. Representatives⁶ from all 50 states and the District of Columbia completed online surveys or were interviewed over the phone about the development and implementation progress of their state's ELP. Questions were updated for the 2014 survey based on a review of responses to the 2012 survey, with the goal of taking a deeper look at the ELPs' development process. In addition, members of the NAAEE Affiliate Network⁷ provided input on the questions.

At the time of survey completion, states reported the following as the status of their ELP development and implementation process (Figure 1):

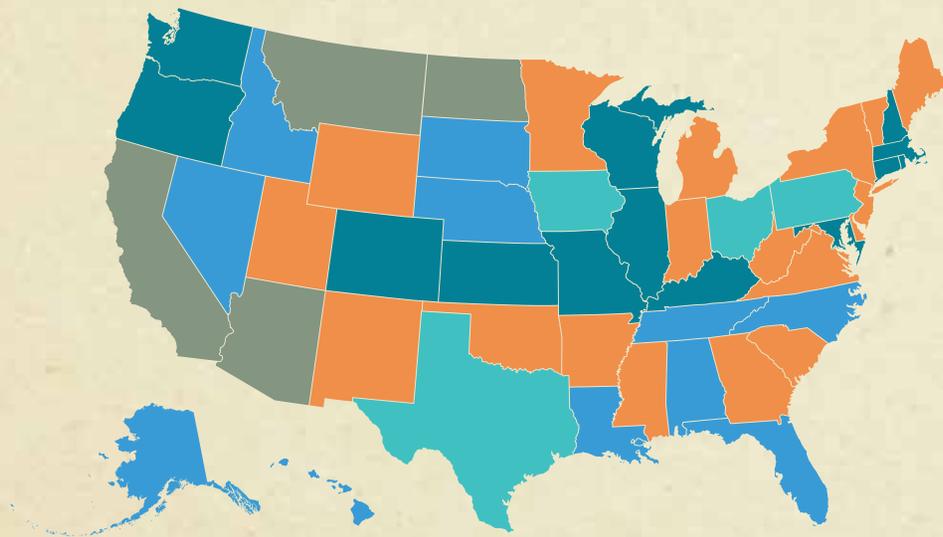


Figure 1

13 states have completed ELPs that have been adopted and implemented by state departments of education, state legislatures, governors, and other decision-making entities, according to each state's adoption process

4 states have completed ELPs that have been adopted but not yet implemented

12 states have completed ELPs that have not yet been adopted

18 states are in the planning and writing phase of their ELPs, 4 of which have completed drafts that are out for review

4 states have not yet begun ELP development.

Although exact comparisons to the 2012 data are difficult (due to the revised questions used), recent improvement in ELP status is evident. Four more states have completed plans since the earlier survey, bringing the total to 29, or 57% of the states.

⁶ Survey respondents are heavily involved in each state's ELP process, and represent diverse institutions such as environmental education associations, universities, and state agencies that were involved in developing the state's ELP.

⁷ An NAAEE affiliate organization is a state, territorial, provincial, or regional environmental education association whose purpose is to promote and enhance environmental education. Affiliates have chosen to affiliate with NAAEE and have been approved by the Affiliate Network Steering Committee.

Status Update & Survey Analysis

Figure 2

What role is your state's environmental education association (NAAEE Affiliate) playing in ELP efforts?

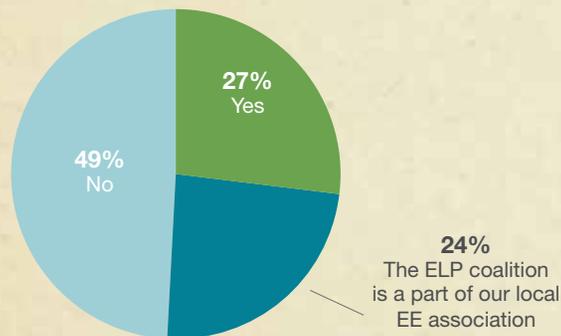


The Role of State Environmental Education Associations:

The majority of states surveyed (92%) reported that their state environmental education association is playing some role in the development and implementation of their ELP, with 61% of states reporting that the state association is the lead organization behind ELP development (Figure 2). State agencies (such as departments of natural resources, departments of education/public instruction, etc.), universities, aquariums, environmental nonprofits, and other organizations are also either the leading organization or are heavily involved in state ELP processes. Indeed, ELPs tend to provide opportunities for many organizations within each state to collaborate, and collaboration has emerged as a key factor to the success of the ELP process (see State Spotlight: Colorado).

Figure 3

Is there an ELP coalition for your state that is supporting the passage of the plan?

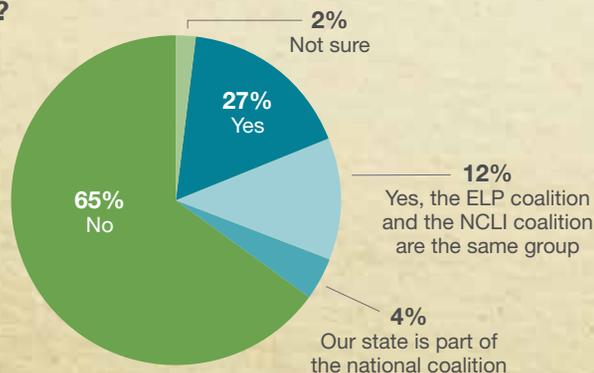


Use of Coalitions:

Some states are receiving support for their ELP development from coalitions for environmental education in their state (Figures 3, 4). Fifty-one percent of states have a coalition dedicated to developing the ELP that has helped or is helping to support the passage of their plan. Most states (65%) report that they do not have a separate coalition focused solely on promoting NCLI, but 17% of states do have a separate NCLI coalition, and 16% of states either belong to the national NCLI coalition or their ELP and NCLI coalitions are the same group.

Figure 4

Is there a No Child Left Inside (NCLI) coalition for your state?



The most positive aspect has been the collaboration between so many individuals and organizations that have a shared vision for advancing EE in Alaska. In fact, the ELP Working Group was recognized last year by the Department of the Interior and received the Partners in Conservation Award for its effectiveness as a partnership.

—Survey respondent

Status Update & Survey Analysis

Figure 5

Did your state use NAAEE's Developing a State Environmental Literacy Plan as a resource?

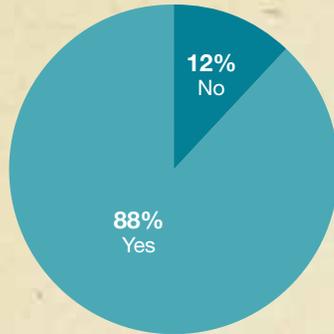


Figure 6

Has anyone on the planning team participated in an NAAEE workshop on developing ELPs?

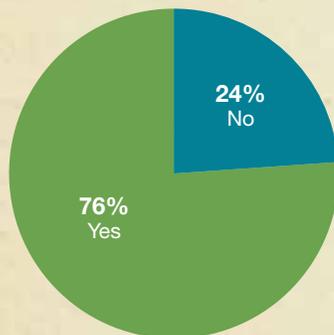
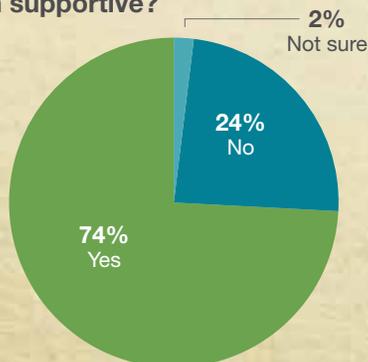


Figure 7

Is your state's Department of Education/Public Instruction supportive?



Role of NAAEE:

NAAEE provides support for ELP development in a number of ways, including providing resources, maintaining an up-to-date online record of state ELP progress and contact information, and offering workshops and sessions focused on ELP development at the annual NAAEE conference. Eighty-eight percent of survey respondents cited that they are using NAAEE's *Developing a State Environmental Literacy Plan* as a resource to write their ELP (Figure 5). Additionally, 76% of states surveyed reported participating in an NAAEE workshop on developing ELPs (Figure 6).

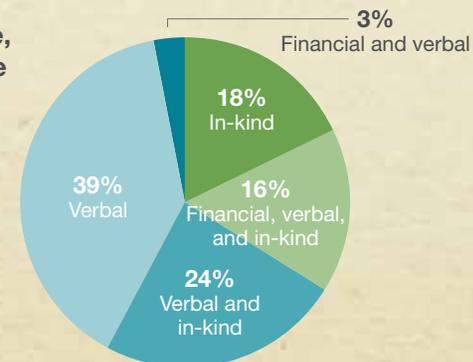
Role of State Departments of Education:

Seventy-four percent of states reported receiving support from their state's Department of Education or Department of Public Instruction (Figure 7). Of those states, 39% received verbal support and 18% received in-kind support (type was not specified). Twenty-seven percent received two forms of support (either financial and verbal or verbal and in-kind), and 16% received all three forms of support (Figure 8).

Support from state Departments of Education/Public Instruction may be related to whether the state was mandated (either by legislation or executive order) to create an ELP. For example, in Washington, D.C., where there has been a great deal of political support for environmental literacy, the Department of Education is supportive in numerous ways (see State Spotlight: Washington, D.C.).

Figure 8

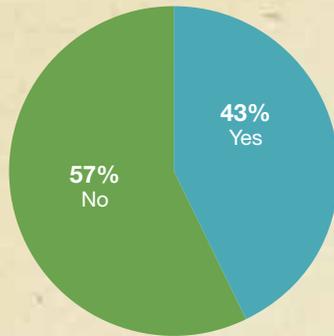
If your state's Department of Education/Public Instruction is supportive, what type of support are you receiving?



Status Update & Survey Analysis

Figure 9

Does your state have an anticipated timeline for ELP development and implementation?



Timelines for Developing ELPs:

About half of states (43%) have timelines established to track milestones in ELP development and implementation (Figure 9). Some timelines include fundraising plans, but many states are hopeful that the NCLI Act will pass and provide federal funding for their ELPs, despite the fact that NCLI legislation has been presented several times (2007, 2009, 2011, and 2013) without successful passage. However, many states (73%) are moving forward with the development and/or implementation of their ELPs without waiting for the passage of the NCLI Act (Figure 10).

Funding ELPs:

Many states are struggling to find funding to support creation, adoption, implementation, and/or assessment of their ELPs. Sixty-three percent of states have no funding at all; 35% have partial funding; and only 2% have full funding to support their ELPs (Figure 11).

It should be noted that even the environmental literacy plans highlighted in the State Spotlights are experiencing challenges and barriers to implementation. States identified funding and capacity as key issues. In addition, many states have not yet started to create assessment tools and methods to evaluate the impact of their plans on environmental literacy in their states. Funding and training will be crucial in helping states implement ELPs and review their impact. Although most states are not waiting for NCLI legislation, the potential funding provided by the act will be vital in ensuring successful implementation and evaluation of the ELPs.

Figure 10

Is your state waiting for the passage of a No Child Left Inside (NCLI) Act before moving forward with the ELP development and/or implementation?

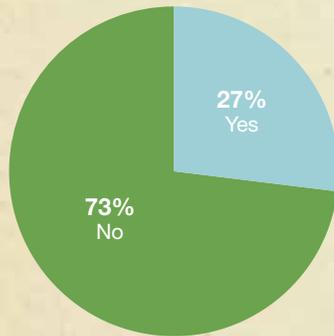
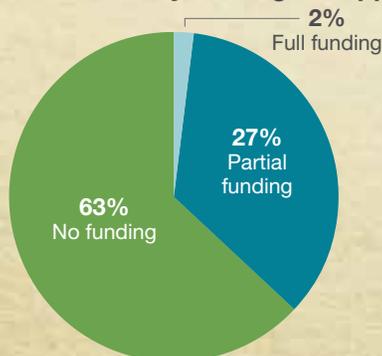


Figure 11

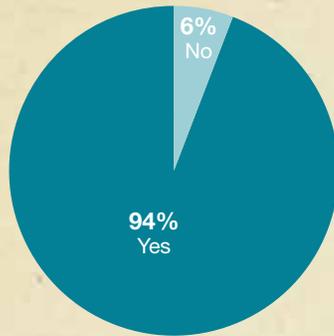
Does your state have any funding to support your ELP?



Status Update & Survey Analysis

Figure 12

Does your plan support both formal and nonformal environmental education efforts?



Role of the Nonformal Sector:

Although the proposed NCLI legislation focuses on K–12 school-based education, 94 percent of states support both formal and nonformal environmental education efforts (Figure 12). Washington’s plan incorporates nonformal education with an emphasis on lifelong learning (see State Spotlight: Washington). Maryland lays out a specific strategy for nonformal environmental education to promote environmental literacy (see State Spotlight: Maryland). The Maryland ELP includes professional development training for naturalists, enhancement of state trail systems, and leveraging the state’s Civic Justice Corps programs as methods to improve environmental education and reach underserved communities in nonformal settings.

Integrating Environmental Literacy into the Curriculum

For the most part, state ELPs are intended to be integrated across core school subjects, rather than adding yet another requirement for teachers (see State Spotlights: North Carolina and New Hampshire). Integrating environmental concepts across curricula provides many benefits, such as increasing student retention and engagement, getting students outside, exposing students to green careers, and inspiring an environmental ethic. States are addressing standards for environmental literacy in several different ways, from creating separate environmental literacy standards (State Spotlight: Maryland), to environmental literacy graduation requirements (see State Spotlight: Oregon), to cross-walking existing standards to environmental literacy concepts (see State Spotlight: North Carolina).

Environmental concepts are particularly synergistic with the teaching of STEM (Science, Technology, Engineering, and Mathematics). With the current movement toward improving and increasing STEM education in the United States, aligning environmental education with STEM concepts (E-STEM) may help bolster support for ELPs.



What makes an ELP successful?



As a follow up to the survey, we reviewed the 29 completed ELPs, looking at key factors that influenced successful development and implementation of the plans. Here are some of the highlights from that analysis:

- **Collaboration among agencies**, school districts, teachers, nonformal educators, etc.
- **Government mandates** to develop ELPs through legislation or executive orders
- **A strong history of environmental education** in the state that offers a foundation for ELP development
- **Extensive background research** to ensure the ELP is organized, well written, and thorough

Ten exemplary ELPs were chosen as State Spotlights in order to take a closer look at what makes an ELP successful.

Many of the ELPs highlighted in the State Spotlights contained more than one (if not all) of the above factors. However, for the purposes of this report, the focus is on the unique attributes of each ELP that have resulted in exceptional plans.



Colorado—Collaboration is key

Creation of Colorado's environmental literacy plan was mandated by the Colorado Kids Outdoors Grant Program Legislation (HB10-1131), which was signed into law in May 2010. The plan was completed in 2011, and subsequently adopted by the State Board of Education. The plan is currently being phased into schools, but the entire plan has yet to be implemented due to funding and resource constraints.

One of the main goals of the plan is to enhance collaboration between key members of the environmental education community, including school districts, government agencies, recreation organizations, and business and community representatives. Collaboration was key in developing the plan: Representatives of the Colorado Department of Education, Department of Natural Resources, and the Colorado Alliance for Environmental Education worked together to develop the plan.

Collaboration continues to be essential in implementing and managing the plan. The Colorado Environmental Education Leadership Council (CEELC)—made up of representatives from businesses, nonprofits, and government agencies—was created to manage the plan (including revising and monitoring progress) and advise the Department of Education and Department of Natural Resources on implementation. Regional Leadership Councils have also been created.

While Colorado has yet to establish methods to assess the success of ELP implementation, they are developing an evaluation plan that will list specific indicators for environmental literacy. They created an online directory for communities to track data on environmental education programs in schools, and are piloting an addition to this directory that includes a report card demonstrating which schools, grade levels, etc. received programming and where gaps are located. Colorado will also track the number of programs in the directory, and they are developing a map that will track teachers and schools engaged in environmental education.

We have a strong relationship with the Department of Education now and it helped support the adoption of the Green Ribbon Schools Program in Colorado, which further built relationships with the Colorado Chapter of the US Green Building Chapter. It re-established the need for our affiliate in our state and helped build support among our members.

—Survey respondent



Hawaii—A focus on local culture and values

Environmentalism and sustainability have long been a part of Hawaiian culture. Hawaiians have a unique perspective on environmental literacy because they inhabit the most isolated islands on earth. As a result, conserving natural resources and caring for the environment take on accelerated urgency in Hawaii. And most Hawaiians—93% of citizens surveyed—agree that environmental education should be taught in the state's public schools.

The Hawaii Environmental Education Alliance, working with the Hawaii Department of Land and Natural Resources and the Hawaii Department of Education, created Hawaii's Environmental Literacy Plan (HELP) in 2012 to address environmental education and environmental literacy in Hawaii's schools. The plan has been finalized and is being phased in, but it has yet to be formally adopted.

Following in the footsteps of several other states, Hawaii's ELP recommends integrating environmental literacy content into other courses to enhance the teaching of required subjects. Incorporating Hawaii's unique landscape and natural resources while teaching not only enhances students' sense of place, but will help close achievement gaps between students in Hawaii and the rest of the country, and stimulate the next generation to join Hawaii's growing green economy workforce.

HELP also acknowledges that environmental education supports the Hawaiian values of intergenerational learning and respecting elders. By highlighting intergenerational learning, HELP leverages the value of elders' knowledge and supports a traditional cycle of learning from one's elders.

HELP skillfully builds off the previous work of other states and NAAEE, while making the final product distinctively Hawaiian. It sets specific goals and objectives, and incorporates the unique needs, strengths, and culture of the state.

The collaboration and excitement as folks work together to see this plan happened—renewed excitement that we can make a change statewide!

—Survey respondent



Kentucky—Early planning for NCLI funds

Kentucky was a relatively early adopter of environmental education. Legislation in 1990 mandated the creation of the Kentucky Environmental Education Council (KEEC), with volunteer members who serve four-year terms and are appointed by the governor. The KEEC is tasked with creating an environmental education plan, establishing a system of grants, raising funds, and monitoring and reporting on the status of environmental literacy in the state. Kentucky first developed an environmental education plan in 1999, and has since updated it twice. The Kentucky Board of Education adopted the ELP in 2011, and implementation is occurring alongside other statewide educational reforms.

While the plan primarily supports formal education efforts, it also explicitly incorporates nonformal environmental education. Nonformal education is especially highlighted within the professional development guidelines, where the ELP outlines standards-based professional development for nonformal environmental educators. Indeed, one of the highlights of the plan development process, as identified in the survey responses, was collaboration among state agencies and nonformal environmental educators.

Although Kentucky was an early adopter of environmental education and environmental literacy efforts, funding has been, and continues to be, a major constraint. While funding sources are sought, hope remains that the No Child Left Inside (NCLI) Act will pass and provide federal funding. By starting the process early, Kentucky has positioned itself well to receive NCLI funds upon passage of the legislation.

Throughout development of the ELP, numerous presentations have been given at key conferences, summits, and workshops, which has built awareness of using the environment as an integrative context among many educators that may not have otherwise been exposed to the concept.

—Survey respondent



Maryland—Extensive research helped create a well-informed plan

Maryland places a high value on environmental education. Even before the development of the state's ELP, environmental education existed in both formal settings (for example, the state has a service learning graduation requirement, with many students choosing environmental projects) and nonformal settings (for example, the state is home to the Chesapeake Bay Trust). In addition, the Maryland Association for Environmental and Outdoor Education (MAEOE) is a long-standing, well-established organization. But what sets Maryland's plan apart from the others is the extraordinary amount of research and baseline data collection that went into development of the plan. This research resulted in a well-informed and comprehensive plan.

Building off this foundation, it is not surprising that Maryland's ELP includes several of the factors that contribute to a strong plan. For example, the ELP was created as a result of a government mandate (Executive Order 01.01.2008.06), and it incorporates nonformal environmental education (including enhancement of interpretive programs and trail systems in state and local parks). Maryland is also a leader in creating environmental literacy standards and requirements for high school graduation, and in reaching out to underserved communities.

The plan was developed by the Partnership for Children in Nature (created by the governor in 2008) and led by the Department of Natural Resources and the Department of Education. In preparation for the plan, the Partnership reviewed current efforts and prepared gap analyses in each of the key areas stated in the Executive Order. In addition, an environmental literacy working group conducted a review of current environmental education efforts in Maryland schools. Finally, the Partnership administered two surveys to establish baseline levels for the objectives in the Executive Order and to collect data on public support for outdoor learning relative to other pressing environmental issues.

Because the plan was based on extensive research, it was tailored to Maryland's unique needs, as well as to the priorities and concerns of its citizens. This makes smooth implementation and integration likely, and it also streamlines the process of creating metrics for evaluation. Currently, the Partnership is focused on developing a system to assess the outcomes and impacts of the ELP in all of Maryland's K–12 schools.



New Hampshire—Leveraging NAAEE resources

In 2009, NAAEE led a workshop for the six New England states (New Hampshire, Connecticut, Maine, Vermont, Massachusetts, and Rhode Island), sponsored by the New England Environmental Education Alliance (NEEEA). The workshop focused on developing environmental literacy plans for each of the New England states. After the workshop, the states held monthly conference calls to provide support to one another throughout the ELP development process.

While the New Hampshire Environmental Literacy Plan Working Group (comprised of New Hampshire Environmental Educators and the New Hampshire Children in Nature Coalition) saw the NAAEE workshop (and subsequent collaboration with the New England states) as invaluable, they also leveraged other NAAEE resources in developing their plan. They used NAAEE's *Excellence in Environmental Education: Guidelines for Learning (K–12)* and the state's frameworks in science and social studies to determine environmental education's overlap with existing standards. The result was a comprehensive table of desired student competencies at three stages in a student's academic career—at the completion of grades 4, 8, and 12.

Teachers and administrators can use this table as a reference to ensure environmental literacy is achieved through teaching required subjects and courses. New Hampshire's extensive mapping of environmental concepts to the core subjects of science and social studies is an example of how environmental education can be used as a platform to enhance the teaching of all subjects.

Having a group of educators from across the state come together and express formally the importance of getting students outside and educating them about the natural world and the impact that humans have on it.

—Survey respondent



North Carolina—Using environmental literacy to meet existing standards

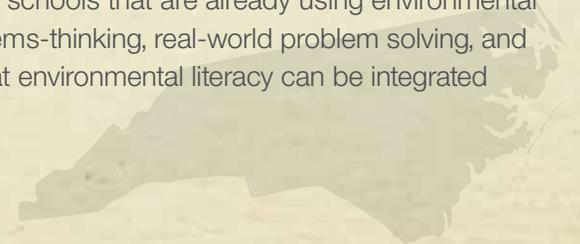
Prior to establishing the North Carolina Environmental Literacy Plan Working Group (comprised of representatives from the Department of Public Instruction, the Department of Environment and Natural Resources and stakeholders from the environment and education communities) to write the state's ELP, North Carolina had an Environmental Education Plan (now in its third edition; the first edition was released in 1995) and an Office of Environmental Education in the Department of Environment and Natural Resources.

The main objective of the Environmental Education Plan (EEP) was to promote environmental literacy at all ages. It is therefore not surprising that the state's ELP aligns closely with the goals and objectives of the EEP. Both plans include formal and nonformal education, but the ELP focuses only on PreK–12, while the EEP includes adult education.

In addition, the ELP states that environmental literacy need not be another requirement of often already overburdened teachers. Instead, the plan emphasizes that environmental literacy concepts and environmental education should be used to enhance teaching of core subjects such as science, social studies, language arts, and mathematics.

By advocating the use of environmental education to enhance teaching of all subjects, the ELP aligns well with the educational priorities in the state. The Department of Public Instruction has incorporated environmental literacy into its Essential Standards for Science and Social Studies. The Department recognizes that integrating environmental education is important for meeting state and national standards, while also developing critical thinking and citizenship skills. Furthermore, the ELP also supports North Carolina's STEM (Science, Technology, Engineering, and Mathematics) Education Strategy's goals and key priorities.

Finally, the ELP goes one step further by providing snapshots of schools that are already using environmental literacy concepts to meet curriculum goals and encourage systems-thinking, real-world problem solving, and workforce skills. These examples further enhance the notion that environmental literacy can be integrated across subjects by demonstrating the idea in practice.





Oregon—Environmental literacy graduation requirements

The No Oregon Child Left Inside Act passed in 2009 and mandated the development of an environmental literacy plan for the state. The 11-member Oregon Environmental Literacy Task Force (comprised of various state agencies, the state environmental education association, and representatives from the Oregon University System) developed the ELP together. The Legislature outlined specific components for the ELP to address, including content standards, courses, how to measure student environmental literacy, professional development programs for teachers, and the ELP's relationship to state graduation requirements.

While other states have addressed graduation requirements in their ELPs, Oregon created the following Environmental Literacy Strands to be incorporated into the state graduation requirements:

- Systems thinking
- Physical, living, and human systems
- Interconnectedness of people and the environment
- Personal and civic responsibility
- Investigate, plan, and create a sustainable future

The literacy strands have been aligned with Oregon Academic Standards, so educators can identify where existing standards support environmental content. In addition, the language used in the Environmental Literacy Strands is the same found in national and local standards and the strands may be incorporated across subjects and curricula.

In addition to demonstrating proficiency of the environmental literacy strands, students must show that they acquired these skills outdoors. By adding the outdoor learning requirement, Oregon's ELP ensures students' environmental literacy, and that they are getting outside—connecting with nature and living healthier, more active lives.



Washington—Building on a long history of environmental education

Washington has a long history of environmental education dating back to the 1930s when Seattle Public Schools began a conservation education program. The Governor’s Conference on Environmental Education in the 1960s created an environmental education advisory group, and in the 1970s the Office of Superintendent of Public Instruction (OSPI) created the first environmental education guidelines. Legislation in the 1990s created legal authority for environmental education, conservation education, and natural resources education.

Looking toward the future, Washington is building on its rich history of environmental education. The state’s environmental literacy plan—created by the OSPI and the Environmental Education Association of Washington (now called E3 Washington)—provides the following vision to be achieved by the year 2021 (after ten years of implementation):

Excellent and relevant environmental and sustainability education for each student, in and outside of school, at all grades.

This vision specifically mentions education outside of school, because the plan supports both formal and nonformal environmental education—with an emphasis on lifelong learning. The plan builds upon significant work already done by E3 Washington, and positions the state to receive federal funding upon passage of the No Child Left Inside Act. However, despite Washington’s strong network of organizations and agencies across the state and its long history of environmental education, the plan suffers from a lack of funding. Passage of the NCLI Act and the subsequent funding it will provide may be the critical piece in achieving the ELP’s 2021 vision.

The work to create the ELP brought together pro-industry, diverse nonprofits, state and federal agencies and tribes to define and develop a framework for environmental literacy.

—Survey respondent



Washington, D.C.—Political backing of environmental literacy

Washington D.C. had systems in place to aid integration of environmental education in schools prior to development of the District's environmental literacy plan. Many D.C. Public Schools (DCPS) already had school gardens and were categorized as green schools. A community service graduation requirement existed, synergistic with environmental service learning. Finally, science was part of the D.C. Comprehensive Assessment (an end-of-year exam measuring student academic proficiency in certain subject areas).

However, despite the strong foundation provided by these mechanisms, environmental education was not incorporated broadly into D.C. Public Schools. In a survey conducted by the D.C. Environmental Education Consortium (DCEEC) in 2001, teachers identified several barriers to environmental education integration, including limited school time, funding, lack of instructional materials, instructor knowledge, liability, and transportation. And although environmental education program providers (nonprofit organizations) were able to work directly with some teachers to overcome these barriers, environmental education was not incorporated district-wide.

In the last several years, environmental literacy in D.C. has received political support across many platforms. The ELP was mandated by the Healthy Schools Act (2010) and was a component of Mayor Vincent Gray's 2012 Vision for Sustainability—a framework for D.C. to become a “healthier, cleaner, and greener city.” In addition, recognizing the need for an education component in the 2013 Sustainable D.C. Act, the ELP was leveraged as a platform for sustainability education. This has enabled the District Department of the Environment (DDOE)—leading the ELP process alongside the DCEEC—to successfully compete for funding to implement the ELP. Although the ELP has not been formally adopted, the acquisition of funds has allowed DDOE to implement a pilot project so that when the plan is adopted and there is authority to implement widely, the ELP will be meaningful and successfully integrated into the school system.

The pilot phase, political support, and available funds will certainly aid the DDOE in successful integration of environmental education into D.C.'s schools. However, lack of available staff time and leadership to drive the process may be problematic, especially in determining methods to evaluate environmental literacy goals. D.C. strives to develop non-test-based methods for evaluating environmental literacy, and will likely build off of existing programs that showcase student work, such as annual youth summits and school garden weeks.



Wisconsin—Expanding existing environmental education requirements

Note: Wisconsin has two plans pertaining to environmental literacy; this spotlight focuses on the Plan to Advance Education for Environmental Literacy and Sustainability in PK-12 Schools, which is a detailed addendum to Wisconsin's Plan for Environmentally Literate and Sustainable Communities which includes all ages and both formal and nonformal education.

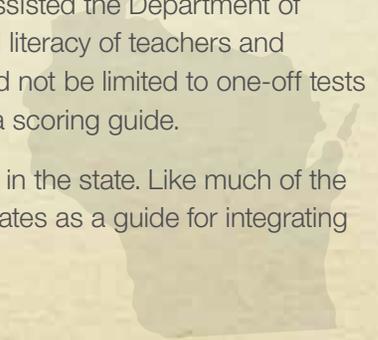
Wisconsin has an extensive history in conservation and environmental education. Highlights include legislation in 1935 requiring training in natural resources conservation for public school teacher certification in science and social studies. Following that precedent, the state expanded the requirement in 1985 to include agriculture, early childhood, and elementary/middle school teachers. In 1990, the Wisconsin Environmental Education Act was passed. The ELP builds off this and other previous legislation as a means to position Wisconsin for receipt of federal funds should the No Child Left Inside Act pass.

The Wisconsin ELP was created by the Wisconsin No Child Left Inside Coalition steering committee and working group, and was coordinated through a partnership between the Wisconsin Center for Environmental Education (WCEE) and the Wisconsin Environmental Education Foundation. The plan was officially released in 2011. Components are organized around the goals and recommendations outlined in the NCLI legislation and are primarily targeted toward PreK–12 formal education.

The plan incorporates standards from the 1998 Wisconsin Administrative Code stating that every school district must develop and implement a written plan integrating environmental education into all subject areas. However, the ELP goes one step further by recommending that the existing environmental education standards be updated when standards in other subject areas are updated. The plan also recommends broadening the environmental education requirement to include sustainability education.

Even before the ELP, the Wisconsin Center for Environmental Education has assisted the Department of Public Instruction in periodically assessing and reporting on the environmental literacy of teachers and students. Again, the ELP goes even further, indicating that assessments should not be limited to one-off tests or surveys, but should incorporate student work, and be evaluated based on a scoring guide.

Wisconsin's ELP is yet another step forward in ensuring environmental literacy in the state. Like much of the state's past environmental education legislation, it can be looked to by other states as a guide for integrating environmental literacy concepts into public school systems.



Conclusion

Many states have made significant progress since the 2012 report. In the past two years, four more states have completed ELPs and are either in the adoption or implementation phase. While the NCLI Act has yet to pass, most states are continuing to move forward with their ELPs and are phasing in aspects as possible.

- **Collaboration:** Collaboration increases awareness of environmental literacy and environmental education across each state. Collaboration between state agencies, environmental education associations, nonprofits, and schools increases coordination of formal and nonformal environmental literacy efforts.
- **Government mandates:** Legislation or executive orders mandating ELPs improves public agencies' (such as Departments of Education/Public Instruction and Departments of Environment and Natural Resources) support for environmental literacy initiatives.
- **History of environmental education:** States with a long history of environmental education have a foundation on which to build their environmental literacy plans, creating more effective and comprehensive plans. Also, states with a strong history are likely to spend less time convincing stakeholders of the value of environmental literacy.
- **Background research:** States that completed extensive background research for their ELPs have more comprehensive plans. In addition, states that conducted baseline studies will have a basis for comparison when conducting impact assessments.

While many states have developed exemplary plans that others can learn from, virtually every state faces significant challenges in funding their plans and understanding how implementation success should best be measured. Future assessments of progress in ELP development and implementation should more closely examine barriers and opportunities in funding and capacity building in environmental education.

NAAEE will continue to support states in developing and implementing ELPs because these plans represent a significant opportunity to infuse environmental literacy into K–12 curriculum, build long-term collaborative relationships among key education providers in states, improve the quality of public education in the U.S. for all students, and lay a foundation for lifelong environmental literacy for all citizens.

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State Environmental Literacy Plans 2014 Status Report



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There is nothing in a caterpillar that tells you it's going to be a butterfly.

— R. Buckminster Fuller

