

VIRGINIA

ENVIRONMENTAL LITERACY STRATEGIC PLAN

Department of Conservation & Recreation
Office of Environmental Education
Cassiopeia Camara (she|her)



OUR MANDATE FROM THE APPROPRIATIONS ACT

“...two positions in the Office of Environmental Education to provide increased opportunities for education programs on environmental issues across the Commonwealth, pursuant to § [10.1-104](#), Code of Virginia. The Office of Environmental Education shall develop and implement environmental education programs and a Virginia Strategic Plan for environmental literacy in collaboration with the Department of Education, the Science Museum of Virginia STEM program, and other relevant stakeholders.”

What do we mean by environmental education?

Environmental education (EE) is a process that allows individuals to explore environmental issues, engage in problem-solving, and take action to improve the environment, highlighting the interdependence of humans and the environment.

EE happens in:

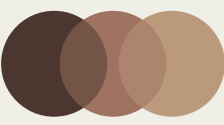
- schools
- nature centers
- museums
- parks
- backyards
- community programs

*Often hands on & experiential learning

VAK-12 ENVIRONMENTAL LITERACY STRATEGIC PLAN

What can a plan do?

Aim to equip formal and non-formal educators in providing students with the knowledge, skills, and dispositions necessary to become environmentally literate citizens who are capable of understanding and addressing the environmental challenges of the future.



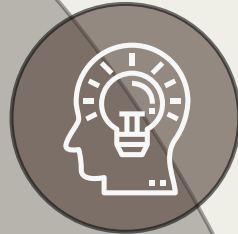
PHASES & STAGES

COMPLETED

PHASE 1: DISCOVERY

APRIL 2023 - JANUARY 2024

Discovering our purpose and our desired future. The first phase focuses on gathering information and input.



DEFINE

The goal of this stage is to acquire a contextual understanding of EL in VA, and stakeholders. ✓

IN PROGRESS

PHASE 2: DEVELOPMENT

JANUARY 2024 - DECEMBER 2024

Developing the road map & assessment tools for success, identifying priorities and strategic development. Finalizing.



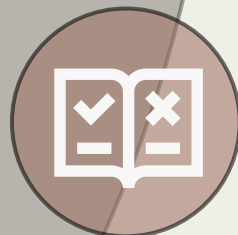
DATA

Collect in depth data and resources, synthesize information, and conduct qualitative analysis to identify themes. ✓



DEVELOP

Present data & identify priorities. Develop initiatives, objectives & strategies to move from conception to action & outline plan. ✓



DRAFTING

Produce a written SP. Completion & visualization conclude.



DELIVER

Public debut of plan

DEBUT

Begin implementation, including continuous assessment, with the 2025-2026 school year

PHASE ONE

2.2 ORGANIZATIONS



Interviews

- Across VA, individually & collectively
- Who are the players?
- What do Virginians care about?
- When do things take place?
- Where is most of the action?
- Why does EE in VA look the way it does?

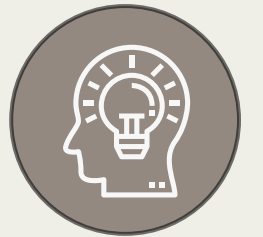
Contextual Landscape of Environmental
Education in Virginia

PHASE 1: DISCOVERY

Discovering our purpose and our desired future.
The first phase focuses on gathering
information and input.

STAGE 1: DEFINE

The goal of this stage is to acquire a
contextual understanding of EL in VA,
and stakeholders.



PHASE ONE

41 ORGANIZATIONS

The Workshop
October 2023

1. Draft high-level goals for advancing environmental literacy in VA together.
2. Gather data to inform strategies to support high-level goals.
3. Cultivate a sense of ownership for the plan, and a commitment to support implementation.



STAGE 2: DATA

Collect in depth data and resources, synthesize information, and conduct qualitative analysis to identify themes.

PHASE TWO

67 ORGANIZATIONS

85 PARTICIPANTS



JANUARY CONVENING

- Share updates
- Get feedback
- Volunteer sign up for Spring workgroups
 - Vision, Goals 1-4

PHASE 2: DEVELOPMENT

Developing the road map & assessment tools for success, identifying priorities and strategic development. Finalizing.

STAGE 1: DEVELOP

Present data & identify priorities. Develop initiatives, objectives & strategies to move from conception to action & outline plan.



PHASE TWO



SPRING WORK GROUPS

March/April 2024

Vision: The vision for Virginia is to cultivate environmentally literate K-12 students who develop a deep appreciation for their environment and emerge as stewards for their communities and beyond.

Plan Goals:

Network and Capacity Building

Educator Support

Student-Centered Approach

Resource Optimization

PHASE TWO

Content Draft Developed May 2024

Feedback Requested June -July 2024

- Larger Stakeholder Group, 67 organizations
- Advisory Team
 - Chesapeake Bay Commission, VA Soil & Water Conservation District Association, Science Museum of VA, Virginia Association of Environmental Education, National Oceanic & Atmospheric Association, Department of Education, Virginia Environmental Literacy Network
 - Addition of measurable metrics section
- DCR Leadership

PHASE 2: DEVELOPMENT

Developing the road map & assessment tools for success, identifying priorities and strategic development. Finalizing.

STAGE 2: DRAFTING

Produce a written SP. Completion & visualization conclude.



COLLABORATORS

Alliance for the Bay
Blandy Experiential Farm
Blue Sky Fund
Boxerwood Education Association
Chesapeake Bay Commission
Chesapeake Bay Foundation
City of Richmond, James River Park System
Clinch River Valley Institute
CodeVA
Collaborative Teaching and Learning Group Consulting, LLC
Department of Conservation & Recreation (multiple offices)
Department of Education (multiple offices)
Department of Forestry
Dinwiddie County Public Schools
Eastern Woodland Revitalization
Elizabeth River Project
Franklin County Public Schools
Friends of the Rappahannock
Hanover County Public Schools
Hanover-Caroline Soil and Water Conservation District
Hero Kids Foundation
James River Association
James River Soil and Water Conservation District

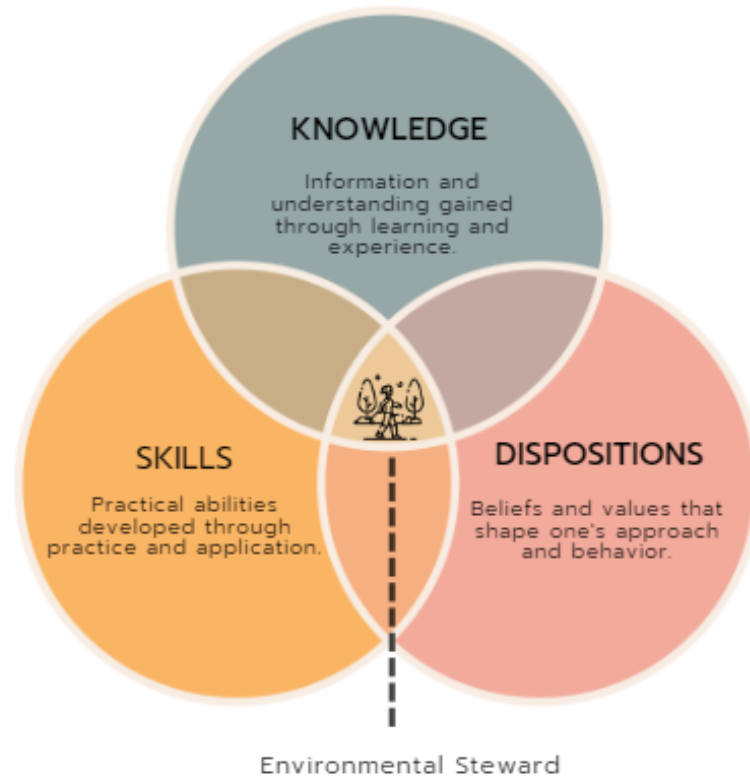
JASON
Learning for All
Local Concepts LLC
Lord Fairfax Community College
Lynnhaven River Now
Mariners Museum
Massanutten Regional Governor's School
Mattaponi Future Fund
Mattaponi Tribe
Maymont Foundation
NASA Langley Research Center (ADNET)
National Institute of Aerospace
National Oceanic and Atmospheric Administration
National Park Service
Nature Bridge
Nature By Nurture
New College Institute
North American Association for Environmental Education
Old Dominion University
Pamunkey Tribal Member
Prince William Soil and Water Conservation District
Rockingham County Public Schools
Science Museum of Virginia

Science Museum of Western Virginia
Tennessee River Basin Network
The Mariners' Museum and Park
The Virginia Commission for the Arts
University of Virginia, State Arboretum of Virginia
Virginia Association for Environmental Education
Virginia Association of Science Teachers
Virginia Association of Soil & Water Conservation Districts
Virginia Cave Board
Virginia Department of Wildlife Resources
Virginia Environmental Justice Collaborative
Virginia Institute of Marine Science
Virginia Interfaith Power & Light
Virginia Living Museum
Virginia Resource Use and Education Council
Virginia Science Education Leadership Association
Virginia Sea Grant
Virginia Tech
Washington County Public Schools
William and Mary
Williamsburg Classical Academy

CONTENT IN THE STRATEGIC PLAN

Encouraging new stakeholders with individualized and collaborative content

K-12 ENVIRONMENTAL LITERACY FRAMEWORK FOR VIRGINIA



- KNOWLEDGE**
 - Virginia Standards of Learning
 - Environmental and Sustainability concepts
 - Ecological principles
 - Environmental issues
 - Sustainability
 - Earth's social, cultural and political systems
 - Civic participation and action strategies
- SKILLS**
 - Asking questions and defining problems
 - Planning and carrying out investigations
 - Interpreting, analyzing, and evaluating data
 - Constructing and critiquing conclusions and explanations
 - Developing and using models
 - Obtaining, evaluating, and communicating information
 - Engaging in civic action strategies
- DISPOSITION**
 - Communication
 - Collaboration
 - Critical thinking
 - Creative thinking
 - Civic Engagement/Responsibility

Participants
Administrators (Principals, Superintendents, Curriculum Coordinators)
Business and Industry Partners
Community-based/Non-profit Organizations
Health Care Professionals
Institutes of Higher Education
Networks (groups of connected people that share information or resources)
Parents, Caregivers and Community Members
Philanthropy
School and Facility Operations
State and Local Government Agencies
Teachers/Formal Education

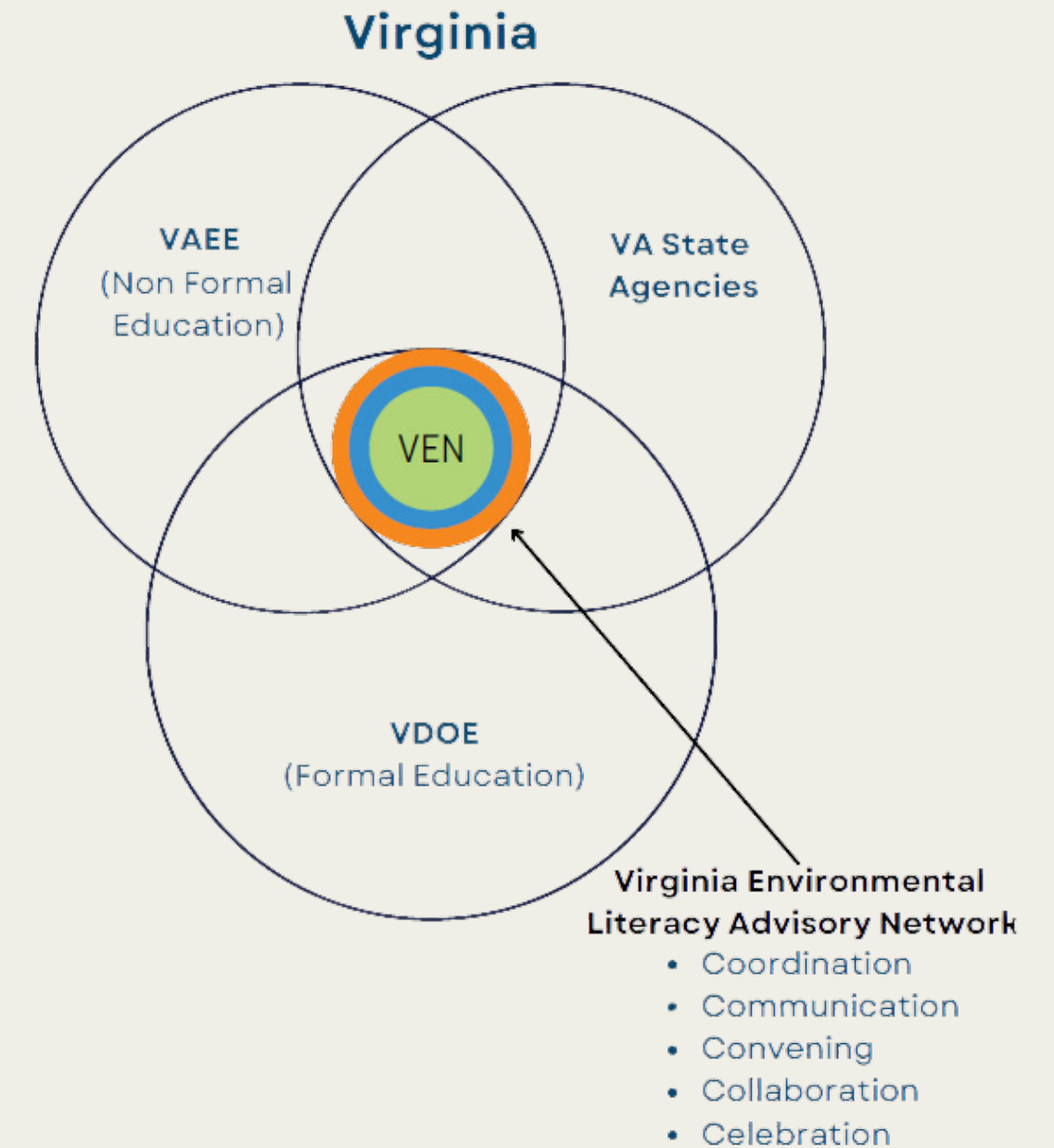
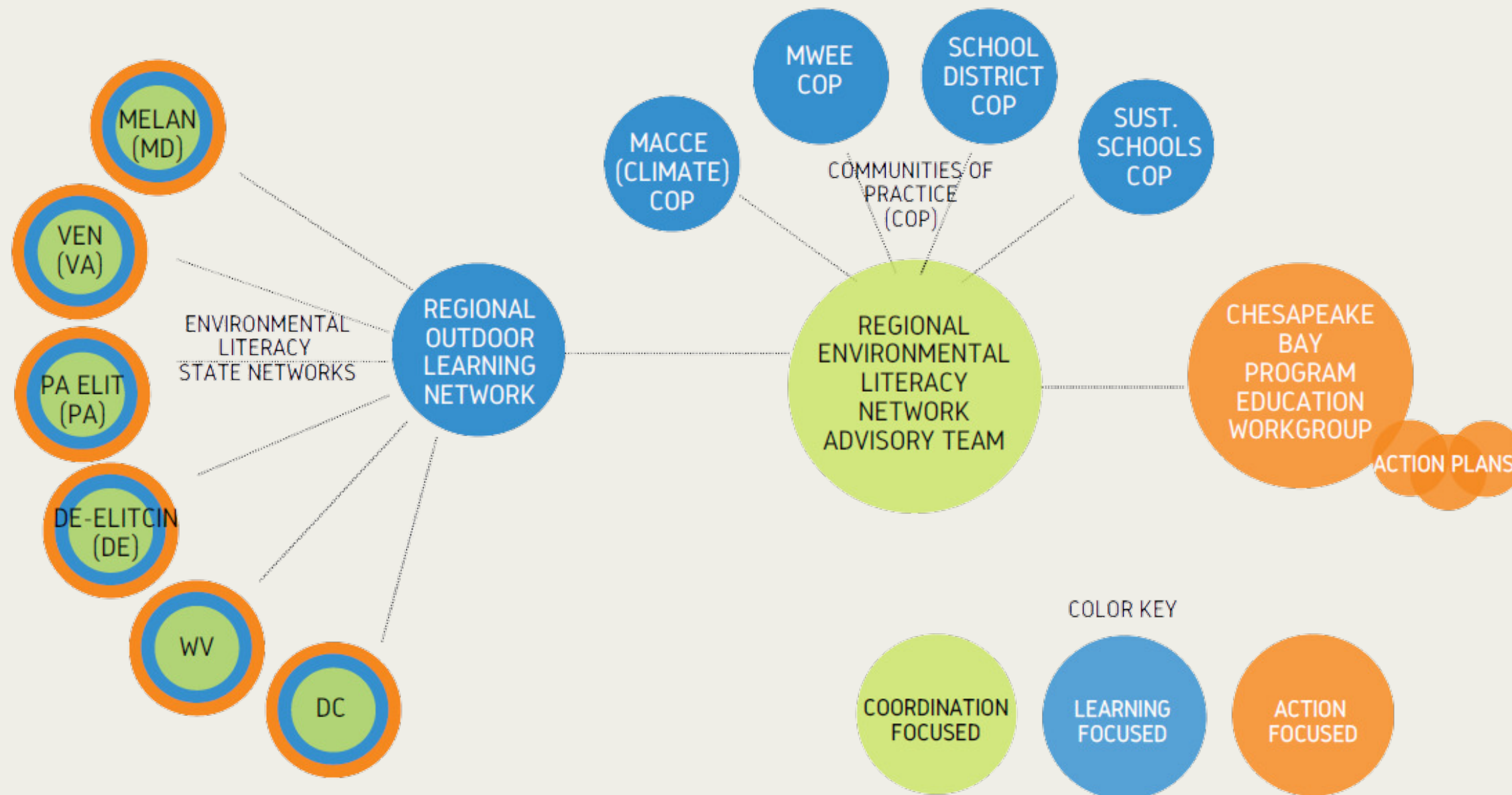
GOAL 1

Network and Capacity Building: Foster collaborations among environmental education entities with shared interests to cultivate a sustainable, interconnected network across Virginia.

Environmental Literacy Ecosystem of Networks

Mid-Atlantic Region

This diagram visualizes some of the groups and networks that are interested in environmental literacy and are operating across the region. Currently, the region is defined as Maryland, Virginia, Pennsylvania, Delaware, West Virginia, and Washington DC.



GOAL 2

Educator Support: Provide accessible and interdisciplinary professional learning opportunities in environmental education.



Outreach Opportunities

- DOE Learning Modules
- Virginia Association of Environmental Education Certification
- Project Learning Tree
- Project Wild

Services Education

- Sound practices for outdoor instruction
- Available programs
- Funding Opportunities

Partnerships State Parks

- Aligning existing programs with VA SOLs

Solving Baseline Data

- Determining methods to collect baseline data on existing opportunities to analyze future growth.

GOAL 3

Student-Centered Approach: Promote a student-centered instructional approach that includes strategies to develop the academic, physical, cognitive and emotional well-being of students and integrates outdoor learning experiences, career readiness education, and community engagement.

What is a MWEE?

MWEEs are learner -centered experiences that delve into local environmental issues, fostering informed action and civic engagement while aligning with grade-level standards.

VA Department of Education recommends MWEEs at each school level (elementary, middle, high). These experiences encompass field investigations and action projects, serving as a comprehensive platform for cultivating environmentally literate graduates.



GOAL 3 / 4 : MWEE REQUESTED FUNDS

FY25

\$ 1,052,062M

FY24

\$ 700,500

FY23

\$ 260,829

Budget

250 k

Increased Requests

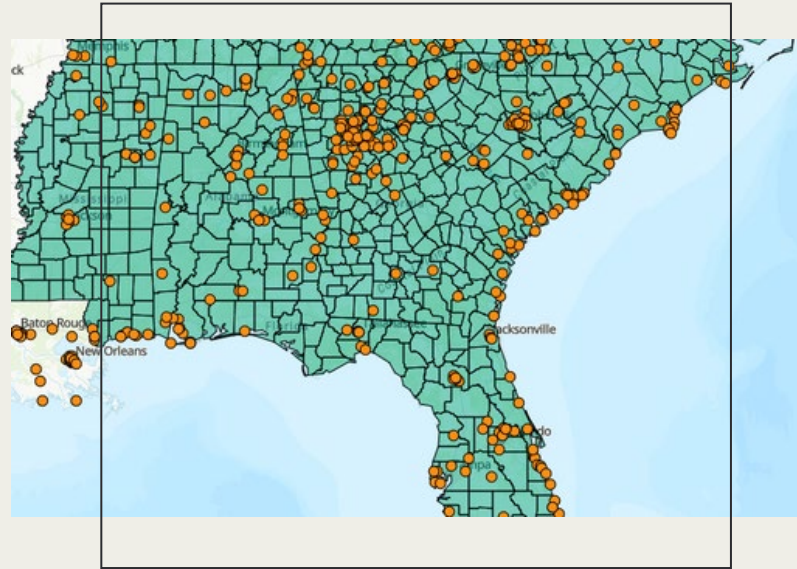
- Financially
- Geographically

Data

New data avenues

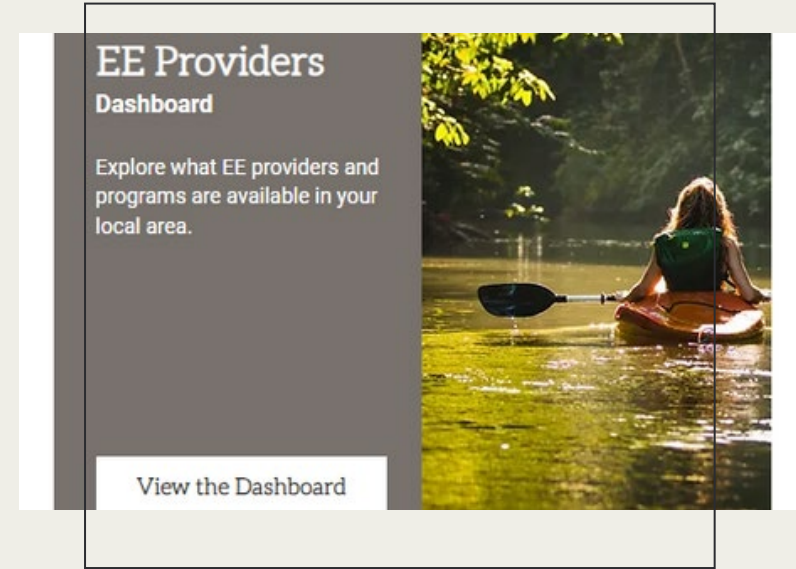
GOAL 4

Resource Optimization: Ensure sustainable promotion and optimization of resources to achieve equitable access to environmental education for all students statewide.



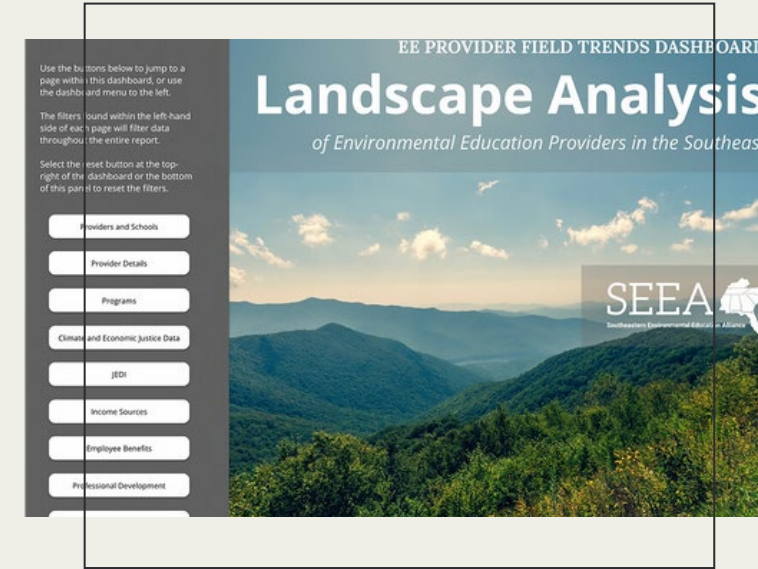
Interactive Map
GIS

- Facilitates the mapping of environmental education service providers.
- Enables detailed data collection to visualize the distribution of resources across Virginia.
- Provides a dynamic tool for educators to explore and engage with local and statewide offerings.



Dashboard
Directory

- Establishes a comprehensive directory of environmental education resources.
- Enables users to search and locate resources based on their geographic location and specific requirements.
- Fosters collaboration by connecting educators with resources that align with their teaching objectives. (SOL's)



Landscape Analysis
Data Collection

- Systematically collects data on environmental education service providers.
- Identifies specific needs and areas with potential gaps in resources.
- Empowers providers to assess the environmental education landscape on both local and statewide scales.

iSEE VA

INTERACTIVE
SOURCE FOR
ENVIRONMENTAL
EDUCATION

OUR NUMBERS

1 year
in operation

67
organizations

94
individuals

12
rounds of feedback

Collaborators Represent

Businesses

Government Agencies

Higher Ed Institutions

Non-Governmental Organizations

School Systems

Tribal Nations



Thank you!

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