

# BIENNIAL STRATEGY REVIEW SYSTEM

## Chesapeake Bay Program



### Logic and Action Plan: Post Quarterly Progress Meeting

#### Environmental Literacy - Students – 2018-2019

[NOTE: make sure to edit **pre-** or **post-** in the text above, to tell the reader whether this logic and action plan is in preparation for your quarterly progress meeting or has been updated based on discussion at the quarterly progress meeting.]

**Long-term Target:** Continually increase the number of schools in the region that reduce the impact of their buildings and grounds on their local watershed, environment and human health through best practices, including student-led protection and restoration projects

**Two-year Target:** Not established

<b>Instructions:</b> Before your quarterly progress meeting, provide the status of individual actions in the table below using this color key.
Action has been completed or is moving forward as planned.
Action has encountered minor obstacles.
Action has not been taken or has encountered a serious barrier.

Additional instructions for completing or updating your logic and action plan can be found on [ChesapeakeDecisions](#).

Factor	Current Efforts	Gap	Actions	Metrics	Expected Response and Application	Learn/Adapt
<i>What is impacting our ability to achieve our outcome?</i>	<i>What current efforts are addressing this factor?</i>	<i>What further efforts or information are needed to fully address this factor?</i>	<i>What actions are essential (to help fill this gap) to achieve our outcome?</i>	<i>What will we measure or observe to determine progress in filling identified gap?</i>	<i>How and when do we expect these actions to address the identified gap? How might that affect our work going forward?</i>	<i>What did we learn from taking this action? How will this lesson impact our work?</i>
<b>State Education Agency Leadership for Environmental Literacy</b>	Encouraging the adoption of a new Education Directive	High level engagement from state DOEs	<b>2.5 NOTE: there is no 2.5</b>			
<b>Local Education Agency Implementation of</b>	Create State level Policy drivers; Use ELIT to track MWEs and needs	Urgency at the school district level to conduct MWEs	<b>2.3 <a href="#">Improve the ability of regional and state networks to efficiently and</a></b>	Yes. ELIT survey collects data.		

<b>MWEEs (with partners)</b>			<p><a href="#">effectively disseminate information about environmental literacy programs and practices.</a></p> <p><b>2.4 NOTE: there is no 2.4</b></p>			
<b>Education Reform/Curriculum Alignment</b>	Work with states and school districts to integrate MWEEs into curriculum to reduce perceived burden	Understanding that MWEEs are not add-ons	<p><b>1.1</b> <a href="#">Create an online MWEE training hub on Bay Backpack based on the MWEE Guide that includes both regional and state-specific training modules and information about in-person training opportunities</a></p> <p><b>1.2</b> <a href="#">Consider alternative methods for monitoring, targeting BMP implementation</a></p> <p><b>1.3</b> <a href="#">Increase the number of standards aligned environmental literacy professional development opportunities that support MWEE implementation.</a></p> <p><b>1.4</b> <a href="#">Collect a set of exemplary Environmental Literacy Models (ELMs) that include scope and sequence and student work; and</a></p>	Yes. ELIT tracks districts that have integrated curriculum		

			<a href="#">broadly distribute to professional development providers and educators.</a>			
<b>Funding/Staffing</b>	Pursue private and innovative funding	Adequate funding for teacher training, transportation, and action projects				
<b>School community (teachers, principals, staff) awareness and readiness (NEW)</b>	Train “Ambassadors” using the new MWEE Guide to support the development of more and better MWEEs; Create online training and maintain resources on Bay Backpack	Principals (administrators) need to encourage MWEEs and line up the staff to support them. Teachers need to be trained to deliver them.	<p><a href="#">1.1 Create an online MWEE training hub on Bay Backpack based on the MWEE Guide that includes both regional and state-specific training modules and information about in-person training opportunities</a></p> <p><a href="#">1.2 Consider alternative methods for monitoring, targeting BMP implementation</a></p> <p><a href="#">1.3 Increase the number of standards aligned environmental literacy professional development opportunities that support MWEE implementation.</a></p> <p><a href="#">1.4 Collect a set of exemplary Environmental Literacy Models (ELMs) that include scope and sequence and student work; and</a></p>			

			<a href="#">broadly distribute to professional development providers and educators.</a>			
<b>State agency and partner coordination (NEW)</b>	Ensure that there are staff to drive MWEE development and implementation		<b>2.5 NOTE: there is no 2.5</b>			

### ACTIONS – 2018-2019

Action #	Description	Performance Target(s)	Responsible Party (or Parties) / Partner Org.	Geographic Location	Expected Timeline
<b>Management Approach 1:</b> Increase professional development opportunities for educators (pre-service, teachers, and non-formal) to support the development and implementation of MWEEs					
<b>1.1</b>	Create an online MWEE training hub on Bay Backpack based on the MWEE Guide that includes both regional and state-specific training modules and information about in-person training opportunities	Complete series of videos explaining the elements of the MWEE.	NOAA / CBF, CBT, UMCES, Washington College, MSDE	Region	Aug 2018
		Develop and post a new MWEE e-learning training on Chesapeake Exploration platform.	NOAA / CBF, CBT, UMCES, Washington College, MSDE	Region	Sept 2018
		Develop state-specific modules to be included as part of the MWEE e-learning training.	NOAA / CBF, MSDE, CBT, VRUEC, DDOE, OSSE, Stroud Water Research Center	MD, DC, VA, DE, PA	Course developed by Dec 2018; pilot it in 2019.
		Migrate lessons/activities/environmental literacy plans to Bay Backpack once they have been approved through a vetting process.	VDOE / VRUEC, VAEE, VSELA, VAST, CBF, DGIF, DOF, SWCD, DEQ, DCR, SAV, VCE	VA	Dec 2019

## ACTIONS – 2018-2019

Action #	Description	Performance Target(s)	Responsible Party (or Parties) / Partner Org.	Geographic Location	Expected Timeline
<b>1.2</b>	Consider alternative methods for monitoring, targeting BMP implementation	Present on MWEEs at state EE conferences.	NOAA / CBF, CBT, PAEE, MAE	MD, VA, PA, DE	Ongoing
		Promote "MWEE Ambassador" program to formal educators as a source of teacher recertification points. Promotion to occur through Science Update and Teacher Direct.	VDOE / CBF	VA	Ongoing
		Promote "MWEE Ambassador" program to informal educators through VRUEC and regional environmental teams.	VRUEC / DGIF, VDOF, SWCD, DCR, DEQ. VCE, VAEE	VA	Ongoing
		Develop MWEE Programming and disseminate through the NOAA Environmental Literacy Capacity Building Task Force.	PA DEP / PA PDE, DCNR, DEP and Stroud Water Research Center	PA	2020
		Present at state science teachers associations annual conferences.	State DOEs / NOAA	DE, PA, VA, DC	2019
		Establish and support implementation of a structure for professional development statewide for key audiences that will promote and help to achieve systemic Environmental Literacy that ultimately reaches every student with standards-based MWEEs. Use the regional MWEE training hub as the basis to develop a Maryland-specific version as part of a strategic approach, with coordinated content, support system / network, and plan for training more EE providers and formal educators to use standards- based MWEEs as a tool to achieve Environmental Literacy.	Project Green Classrooms / MSDE, CBF, NOAA, CBT, others	MD	Course developed by Dec 2018; pilot it in 2019.
<b>1.3</b>	Increase the number of standards aligned environmental literacy professional development opportunities that support MWEE implementation.	Fund systemic MWEEs that include standards aligned environmental literacy professional development.	NOAA, CBT /	Region	Sept 2018; Sept 2019
		Work with Professional Standards Teacher Education Board (PSTEB) to influence the	Project Green Classrooms /	MD	2019

## ACTIONS – 2018-2019

Action #	Description	Performance Target(s)	Responsible Party (or Parties) / Partner Org.	Geographic Location	Expected Timeline
		Council for the Accreditation of Educator Preparation (CAEP) standards implementation in Maryland to include environmental literacy. Submit recommendations to consider e-lit preparation for pre-service teachers; work with MSDE to guide/influence implementation of new professional standards; explore other opportunities to increase EE experiences in undergraduate teacher education.	MSDE, Montgomery County Public Schools, MD Higher Education Commission, PSTEB		
		Organize and host an NAAEE Guidelines workshop for nonformal education partners.	DCEEC / OSSE	DC	2018
		Promote high quality PD for implementation of EE Standards and Science, Technology and Engineering Standards aligned to the proposed 2018 Science Standards of Learning.	VDOE / VRUEC	VA	Ongoing
		Design and implement high quality PD aligned with EE and Science standards using BWET and Title II funds.	VDOE / VAEE, CBF, DGIF, DOF, SWCD, DEQ, DCR, SAV, VCE	VA	Ongoing
		Maintain professional development for PA State Park staff at existing levels.	DCNR / DCNR	PA	2019
		Develop a plan to provide professional development to all providers as a means to advance MWEE implementation.	PDE / PDE, PA DEP, DCNR, EEAC	PA	2019
		Promote high quality MWEEs.	PA DEP / PDE, DCNR, PA DEP, and Stroud Water Research Center	PA	2020
		Provide PD for watershed education professionals and traditional K-12 educators.	PA DEP / PA PDE, DCNR, DEP, and Stroud	PA	Ongoing

## ACTIONS – 2018-2019

Action #	Description	Performance Target(s)	Responsible Party (or Parties) / Partner Org.	Geographic Location	Expected Timeline
			Water Research Center		
		Provide PD to increase MWEEs implemented in schools.	PA DEP / PA PDE, DEP, DCNR, PAEE, CBF and Stroud Water Research Center	PA	2020
		Provide regional PD for providers of services to incorporate MWEEs and align to EE Standards.	EEAC / PDE, PA DEP, DCNR, EEAC	PA	Ongoing
		Communicate PD opportunities through Teaching Green, Science Matters, SAS, and other STEM communication channels.	PDE, DEP / PDE, PA DEP, DCNR, EEAC	PA	Ongoing
		Collaborate with PACTE to incorporate MWEEs and EE Education in pre-service programs.	PDE / PDE, PACTE, PAEE	PA	2020
		Post 5th, 8th, and Biology MWEE units on Schoology site for teachers to use.	DNREC / DOE	DE	Jun 2018
		Provide MWEE Workshop in Delaware to introduce Delaware Teachers to MWEEs.	Delaware Children in Nature / Delaware Children in Nature, DDOE, Delaware State Parks, DAEE	DE	Jun 2018
		Develop and implement MWEE PD for teachers in WV Bay Counties that ties to existing WV CSO's and WVDE priorities.	Cacapon Institute / Experience Learning	WV Bay Counties	Dec 2018
<b>1.4</b>	Collect a set of exemplary Environmental Literacy Models (ELMs) that include scope and sequence and student work; and broadly distribute to professional	Post example ELMs on Bay Backpack.	CBP / CBF, VDOE, PA DEP, MSDE	Region	Dec 2018
		Include example ELMs in online MWEE training.	NOAA / NOAA	Region	Sept 2018

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Action #	Description	Performance Target(s)	Responsible Party (or Parties) / Partner Org.	Geographic Location	Expected Timeline
	development providers and educators.	Contribute examples from MD, collected through a project funded through NOAA, working with school system curriculum writers and EE partners.	Univ. of Maryland Center for Environmental Science, Appalachian Lab (UMCES) / MSDE, MD DNR, CBF	MD	Dec 2019
		As part of state-wide effort to build an open education resource, create an environmental education repository that would be a platform for formal and non- formal educators to share environmental instructional plans, lessons, activities, professional development opportunities, etc.	VDOE / VAEE, CBF, DGIF, DOF, SWCD, DEQ, DCR, SAV, VCE, VIMS, VRUEC	VA	Dec 2019
		Request district/grade level and non-formal educator instructional plans that integrate all components of MWEE to serve as exemplars for distribution.	VDOE / VAEE, CBF, DGIF, DOF, SWCD, DEQ, DCR, SAV, VCE, VIMS, VRUEC	VA	Dec 2018
		Use the NOAA PA Environmental Literacy Capacity Building Task Force to collect and disseminate resources, including ELM models.	PA DEP / PA PDE, DCNR, DEP, and Stroud Water Research Center	PA	Dec 2019
		Create repository of resources to be utilized by formal, non-formal, and preservice educators.	PA DEP / PA PDE, DCNR, DEP, PACTE and Stroud Water Research Center	PA	Dec 2019
<b>Management Approach 2:</b> Increase the visibility and adoption of MWEEs as an educational best practice.					
		Continue DAEE/DCIN Awards for Excellence as an annual award program.	DAEE/DCIN / DAEE/DCIN	DE	Dec 2018



## ACTIONS – 2018-2019

Action #	Description	Performance Target(s)	Responsible Party (or Parties) / Partner Org.	Geographic Location	Expected Timeline
2.1	Maintain environmental education awards programs to maintain visibility and excitement	Organize and host the annual Anacostia Environmental Youth Summit for grades 4-8.	DOEE / DCEEC	DC	Ongoing
		Broadly engage Potomac Highlands communities in stormwater runoff pollution mitigation BMP's including schoolyard-based BMP's tied to MWEE's.	Cacapon Institute / Experience Learning, WVDEP, WVCA, WVDOP	WV Bay Counties	Nov 2019
2.2	Create marketing and instructional materials that showcase the importance of the MWEE and connect it to existing education initiatives (e.g. Next Generation Science Standards, Project Based Learning, Workforce Development, etc.).	Complete 90 second promotional video on MWEE.	NOAA /	Region	Aug 2018
		Complete formatting of High School Environmental Science instructional sequences, which were developed by District teachers to support teaching NGSS through the 5E instructional model. Post on the OSSE website and involve teachers in professional development opportunities.	OSSE / DCEEC	DC	2018
		Develop exemplar MWEE performance assessments aligned to Virginia Science Standards of Learning for 4th, 6th, Earth Science and/or Biology courses.	VDOE /	VA	Dec 2019
		Develop new videos promoting MWEEs through the framework of PDE's Environment and Ecology Standards as part of the NOAA PA Environmental Literacy Capacity Building Grant.	PA DEP / PDE, DEP, DCNR, Stroud Water Research Center	PA	2020
		Incorporate 3D Teaching and Learning in all MWEEs and instructional materials.	PDE / PDE, EEAC, DEP, DCNR	PA	2020
		Provide resources and training for after school programs.	PDE / PSAYDN, CSIU, PDE, EEAC, DEP, DCNR	PA	2020
		Promote summer-based programs.	PDE / PSAYDN, CSIU, PDE,	PA	2020

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Action #	Description	Performance Target(s)	Responsible Party (or Parties) / Partner Org.	Geographic Location	Expected Timeline
			EEAC, DEP, DCNR		
2.3	Improve the ability of regional and state networks to efficiently and effectively disseminate information about environmental literacy programs and practices.	Compile a concise set of pertinent research links and articles related to best practices and outcomes (e.g. academic achievement, stewardship ethic, enthusiasm for learning, 21st century skills, etc.) of the MWEE essential elements to inform program development, marketing, and growth.	CBP / Project Green Classrooms	Region	Ongoing
		Maintain presence on Facebook & Twitter, and maintain the education workgroup listserve; look for opportunities to cross-post to national and state social media sites	CBP /	Region	Ongoing
		Strengthen the partnership between Delaware Association for Environmental Education and Delaware Children in Nature, increasing DAEE's leadership role in DCIN.	DAEE/DCIN /	DE	May 2019
		Set up a network system to disseminate information to teachers electronically and through social media.	Delaware Teachers of Science / DOE, DAEE, and others	Dover	Ongoing
		Create environmental repository (open education resource) that would be a platform for formal and non- formal educators to share environmental instructional plans, lessons, activities, professional development opportunities, etc.	VDOE / VAEE, CBF, DGIF, DOF, SWCD, DEQ, DCR, SAV, VCE, VIMS	VA	Dec 2019
		Compile a concise set of resources on the website (hosted by MD DNR), and link this to Bay Backpack and partners.	Project Green Classrooms / DNR, MSDE, etc.	MD	Dec 2018 / ongoing
		Disseminate information through "Teaching Green," Science Matters, SAS Learning Communities, Pennsylvania STEM Coalition,	PA DEP / PA DEP / PA DEP	PA	Ongoing

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Action #	Description	Performance Target(s)	Responsible Party (or Parties) / Partner Org.	Geographic Location	Expected Timeline
		State Systems of Supports Workgroup and other relevant communication channels.			
		Promote and implement the Pennsylvania Environmental Literacy Plan on both the state and mid-Atlantic levels for Environmental Education in Pennsylvania as outlined by the 2014 Chesapeake Bay Watershed Agreement (“CBA”) to the extent practicable.	PDE / PDE, DEP, DAG, DCNR / PDE, DEP, DAG, DCNR	PA	Ongoing