Duration: One-Day Workshop, 6 hrs

### **Workshop Preparation:**

- Update Google Slides slides need to be edited and altered for each workshop depending on topics, facilitators, and workshop location. <a href="https://docs.google.com/presentation/d/1WDCw8N13mpyo1VMGeTTrwe5XRX1jxXPeq\_Q2pQHGB8/edit">https://docs.google.com/presentation/d/1WDCw8N13mpyo1VMGeTTrwe5XRX1jxXPeq\_Q2pQHGB8/edit</a>
- 2. See list of items to bring.

#### **MWEE Ambassador Workshop**

Use <u>MWEE 101 online course</u> as a pre-workshop assignment for both virtual and in-person PD. Provide copies of MWEE Think Cloud (one version for classroom teachers, one version for non-formal educators) for participants to write down ideas.

This agenda was designed to be used for a one-day, six-hour workshop (6 hrs of Act 48 available for Pennsylvania certified teachers) to certify Pennsylvania Meaningful Watershed Educational Experience (MWEE) Ambassadors. Participants will be asked to complete the MWEE 101 online course ahead of time (3 additional hrs of Act 48 available for Pennsylvania certified teachers). Facilitators should structure the workshop to include a refresher on MWEEs, application/planning for MWEE implementation, and two hands-on, skill-building activities (e.g., one activity in the morning and one in afternoon) designed for K-12 audiences. Facilitators should model activities that the new MWEE Ambassadors could use to engage their own students in MWEEs and related watershed education topics, with the MWEE Ambassadors actively participating. If possible, use prizes to encourage on-time return from lunch and breaks.

### To do in AM before workshop start:

- 1. Make coffee & set up snacks
- 2. Set up registration table, PA Major Watershed Basins Map activity, LCD projector/laptop, PPT, and speakers. Test all technology!
- 3. Set up for workshop, including tables and chairs, registration table, food/coffee table, swag or giveaway table, and 4+ exhibit tables for participating partners or sonspors. (If space allows, each facilitator should have their own exhibit table.)
- 4. Set up for activities. If applicable for today's activities, grab local water sample from tap, river, or stream.
- 5. Prepare flip chart for Four MWEE Essential Elements activity.
- 6. Put the following on each participant table: MWEE Guide + agenda for each person, PA Watershed Issue Cards, MWEE Think Cloud, post-its, toys, tabs, etc
- 7. Check Google Slides or presentation for any last-minute edits to flow, grammar, etc.
- 8. In the AM, make sure someone is covering the registration table at all times.
- 9. Review facilitator agenda and assignments with all facilitators.

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### **MWEE Facilitator Agenda**

Section		Description/objectives
While arriving Facilitators: ALL	Materials: Sign-in sheet, name tags + sharpies, Act 48 sign-in PPT displayed w/ WE Basin map + instructions Slide#	<ul> <li>Participants grab refreshments &amp; check-in</li> <li>If substitute costs are needed, complete substitute reimbursement form</li> <li>If certified teachers, sign Act 48 form</li> <li>Make their own name tag (name, title, &amp; worksite)</li> <li>Grab post-it flag, write their name on it, &amp; place it where they live or work on the Major PA River Basins map (http://www.watersheded.dcnr.state.pa.us/maps/)</li> </ul>
Welcome & Introduction Introduction of facilitators & facilitators' organizations  Workshop Goals & Objectives  Overview of schedule  Vision  Facilitator(s): Steve then other facilitators introduce themselves	8:30 - 8:45 am  Slide #s  Show short MWEE  Promo video while on slide # (navigate to Bay Backpack homepage.)	<ol> <li>Welcome to site (whoever is hosting)</li> <li>Goals for workshop: Participants become trained as MWEE Teacher Ambassadors (?)         Objectives: Participants will         a) Gain understanding and comfort with MWEE as a framework for watershed education         b) Increase the intent of non-formal educators to partner with and support K-12 watershed education         c) Create connections across the state for watershed education resources and partners     </li> <li>Vision for MWEE Ambassadors What may a MWEE Ambassador look like at your organization?</li> <li>A MWEE is a framework. It is not a lesson plan or a curriculum. You can use a curriculum as part of a MWEE, but it is only a piece. A MWEE ties back to water and watersheds, but the lesson does not have to primarily be on water because everything ties back to water. As a MWEE Ambassador, you do not have to facilitate the entire MWEE. You are the MWEE Promoter, the MWEE Supporter, and the MWEE Champion!</li> </ol>
PA Major Basins Map Icebreaker Activity #1 Tammie PA Watersheds/Issues Facilitators: Steve	8:45 - 9:30 am  Materials: PA Basins  Map + post-it tags, easel, etc.  Slide #s	PA Major River Basins Icebreaker - outside (if possible)  ❖ Mapping activity - Review Facilitator locations & names on PA Basin Map. Then, each person introduces themselves.  ❖ Intro. To PA Watersheds (change Google Slides & focus depending on workshop audience & location)  PA Watersheds and Issues - slides and Issue Cards  ❖ Overview of PA watersheds & issues slides - foundational knowledge  ❖ Examine and discuss PA watershed issues in small groups
4 Essential Elements of MWEEs  Facilitators: Introduction = Tammie	9:30 - 10:15 am Slides #s	What are the essential elements of the MWEE and how do they 'work' individually and collectively to support environmental literacy, student achievement, and stewardship?

Small groups =		5-10 min: Introduce NOAA MWEE online course modules - general
<ol> <li>Issue Definition -</li> <li>Outdoor Field         Experiences -</li> <li>Synthesis and         Conclusions -</li> <li>Stewardship &amp;         Civic Action -</li> </ol>	Materials: MWEE guide (1 for ea. Person, flip chart markers, pre-made flip chart)	and state specific. Also introduce Bay Backpack as a site for additional resources about MWEEs.  https://cbexapp.noaa.gov/course/view.php?id=5555 http://baybackpack.com/  Interactive session designed to develop deep understandings of the 4 elements of the MWEE and how each functions individually and collectively to advance student achievement and stewardship.  1. 5 min organizing groups & splitting off w/ leader  2. 10 - 15 min MAX - 4 element groups - why is each MWEE element essential? How might you fit this element into your practice? Each group writes their ideas on flip charts.  a. Issue Definition - Kammas b. Outdoor Field Experiences - Steve c. Synthesis and Conclusions - Tammie d. Stewardship & Civic Action - Paul e. 20 min (5 each) - Groups each share their understanding of the element - define it, the importance of it, what are you already doing that fits into this element of a MWEE, etc.  3. Return as one group for sharing  Facilitators: Lead Fac. sets up the activity but each facilitator joins a group and helps support the whole-group interactive share-out
Break	10:15 - 10:30 am	
WE Activity #1 OUTSIDE	10:30 - 11:30 am	Activities - These activities can vary from workshop to workshop.
(if possible)  Make sure to tie back to MWEE Framework!  Lead: Mary, Steve, Myriah	NO SLIDES	Choose an activity that fits the audience, workshop topic, location, equipment, & facilitators. Make sure the lesson plans and resources will be provided to participants in some way.  Activity Ideas:  Water Chemistry Stations (need local water sample) & equipment  Stations (DO & Temp; Phosphate & Nitrates (Ag); & pH & Turbidity  On the ground (not in an actual stream) demo of how to set up for physical stream monitoring (calculating slope, etc.)  Demo of gear needed for water quality monitoring & how to use it  Demo of tech that can be used for water quality monitoring (probes, iPads, Infrared scanners, etc.  Stream habitat and restoration

Connecting MWEEs to PA	11:30 - 12:00 pm	PA Watershed Education Connections to Academic Standards,
Teaching and Learning Requirements	Slides #s	STEM teaching and learning, careers and workforce development, etc
Facilitator(s): Paul & Tammie  Leader sets it up but each facilitator joins a group and helps support the whole-group interactive share-out  Note that the purpose here is NOT to answer the questions, but rather to further engage participants, to get a sense of where they are coming from, and to engage them in thinking about points of confusion that they and others may face.		What are our current thoughts, understandings, and questions about outdoor learning, student action, and their role in formal academic programs?  PA Environmental Literacy Plan - PDE efforts to support MWEE implementation  PDE Resource Availability and Standards Integration throughout the MWEE Process  Career and Workforce Development  STEM Connections - Slides from Judd  Environmental Justice & Educational Equity  Green Ribbon Schools - student led projects & action plans  Role(s) of EE providers in working with a school implementing a MWEE?  Interactive session to engage existing understanding about any or all of the following questions:  watershed education  the role of field-based learning in 'formal' academic/classroom learning  and how action projects can be used in
Lunch	12:00 - 12:30 pm	applications of field-based learning  Lunch - Catered by Daddy O's Restaurant
Lead: Steve	Slide #	Time of food arrival is 11:45 AM
"MWEE Supporting Practices" - Examples of 4 MWEE Elements w/ discussion Facilitator: Tammie	12:30 - 12:45 pm Slides #s	Introduce "Supporting Practices" of a MWEE  Reinforcing 4 MWEE Elements - Participants provide examples from their schools and discuss barriers and connections to what is already done in their schools, for planning for success.  Group activity (error analysis): Participants provided w/ examples of MWEE projects and barriers or issues that resulted (these are real MWEEs and issues that our mentors have shared); identify the issue and possible solutions; discussion
Finding Partners  Facilitator(s): Steve or Kammas	12:45 - 1:00 pm  Slides #s  Navigate to PAEE.net to show "Find EE Near Me"	Progress so far What EE Providers are there across the state and how can they partner with schools to plan and implement MWEEs?  Show www.PAEE.net "Find EE near Me" search tool, including which EE providers have been trained as MWEE Ambassadors.  IF TIME, EE Providers have partnered with schools.  PA State Parks Community Connections program. Chesapeake Bay Foundation's B-WET grant with southcentral PA school districts. Stroud Water Research Center and West Chester Area School District. etc.

Activity #2	1:00 - 2:00 pm	Activities - These activities can vary from workshop to workshop.
Facilitator(s): Mary, Steve, Myriah	Slides #s	Choose an activity that fits the audience, workshop topic, location, equipment, & facilitators. Make sure the lesson plans and resources will be provided to participants in some way.  Activity Ideas:  Stormwater BMP tour  Rain to Drain, Watershed Decisions, Ag. runoff activities (Penn State Extension)  DCNR's PA Land Choices Aerial Maps activity  Macroinvertebrate ID w/ preserved specimens  Intro. To WikiWatershed Toolkit & Model My Watershed activity  USDA Soil Activity  Project WET Activities:  A Drop in the Bucket  Germ Busters  8-4-1, One for All  Super Sleuths  Sum of the Parts
Finding Funding & Other Resources	2:00 - 2:20 pm	Hitting the Mark  Bert with some slides from others about other grants and resources also)DEP EE Grants, other funding, other resources
Facilitator(s): Tammie & Kammas	Slide #s	<ol> <li>DEP EE Grants</li> <li>NOAA B-WET Grants (Chesapeake &amp; Great Lakes)</li> <li>Chesapeake Bay Trust (CBT)</li> <li>Other Grants and places to find them - NAAEE EEPro,</li> <li>Lots of resources from PA agencies and other EE Providers will be included in follow-up email after the workshop.</li> <li>New PA MWEE awards</li> <li>Federal US Dept of Ed funding - Slides from Sarah Bodor at NAAEE</li> </ol>
Putting the MWEE to Work for us! Applying MWEEs to Your School Setting	2:20 - 2:45 pm  Handouts: MWEE	Putting the MWEE to work for us: How can MWEEs help support the work that I do?
Facilitator(s): Steve	Think Clouds (MWEE think cloud pages in back of MWEE Guide), MWEE Checklist  Slide #s	An interactive session in which participants apply a "MWEE lens" to the educational programs that they provide  • Work through MWEE guide exercises at the back of the book (use Think cloud)  This could be done individually, in small groups, etc. Groups can go outside, stay inside, etc.
		Implementation ideas: Emphasize partnering with a non-formal organization and the environmental and civic action plan. Participants write action plans about how they could partner and implement the MWEE model with a school in their local area (work individually or in groups)
		Individual and/or collective 'ambassador' action plans How will you move forward as a MWEE Ambassador at your organization and in your region of the state?

		Facilitator(s): All facilitators spread out to groups to guide and discuss ideas as participants are writing in Think Clouds.
Conclusion & Wrap Up Facilitator(s): Steve	2:45 - 3:00 pm Slide #s	THANK YOU!     *Distribute MWEE Certificates to participants     *Resources and workshop survey will be sent electronically
		after the workshop via Qualtrics