

National Environmental Education Advisory Council Meeting
December 13 and 14, 2012
Washington, DC
SUMMARY

On December 13 and 14, 2012, members of the National Environmental Education Advisory Council (NEEAC), a Federal Advisory Committee (FACA) to the U.S. Environmental Protection Agency (EPA), and staff of the EPA Office of Environmental Education (OEE) met at EPA's offices in Ariel Rios North, Room 3530, in Washington, DC.

Attendees at the 2-day meeting were as follows:

NEEAC members:

- Kay Antúnez de Mayolo
- Angie Chen
- Vidette (Kiki) Corry
- Kenneth Gembel
- Richard Gonzales (Vice-Chair)
- Dr. Kelly Keena (Chair)
- Dr. Mark Kraus
- Caroline Lewis
- Dr. Edna Negrón-Martinez

EPA Staff Members:

- Mustafa Ali, EPA Office of Environmental Justice (OEJ)
- Javier Araujo, Designated Federal Officer (DFO), EPA OEE
- Cynthia Jones-Jackson, EPA Office of Federal Advisory Committee Management and Outreach (OFCAMO)
- Mark Joyce, EPA OFCAMO
- Stephanie McCoy, EPA OFCAMO
- Stephanie Owens, Deputy Associate Administrator, Office of External Affairs and Environmental Education (OEAE)
- Bob Perciasepe, Deputy Administrator, EPA
- Dr. Dale Perry, Acting Director, EPA OEE
- Toni Rousey, EPA OFCAMO

Other:

- Shukurat Adamsh-Faniyan, National Wildlife Federation
- Andrea Falken, U.S. Department of Education and *ex officio* member
- Diane Wood, National Environmental Education Foundation (NEEF), President and external advisor

The following NEEAC members were unable to attend:

- Scott Frazier
- Cara Gizzi

DECEMBER 13, 2012

Call to Order and Introductions

Mr. Javier Araujo, the DFO of the NEEAC, called the meeting to order, welcomed all attendees and thanked everyone for attending. Mr. Araujo then asked all members to introduce themselves to the group.

Welcome and Overview of Agenda

Ms. Stephanie Owens, Deputy Associate Administrator, OEAAEE, also thanked everyone for attending. She said that EPA was excited to reconvene this council, noting that the last time the NEEAC was seated was in 2005. Ms. Owens noted that in April 2012, EPA hosted the first White House Summit on Environmental Education (EE). She explained that the purpose of the Summit was to bring together stakeholders who are not typical environmental educators but who instead represent a variety of fields such as environmental literacy, science, technology, engineering and mathematics (STEM), climate, labor, and industry. The purpose of the Summit, Ms. Owens said, was for the federal government to broaden EE, adding that one of Administrator Lisa Jackson's seven priorities is to "broaden the conversation." She noted that EPA recognized that it could not broaden the conversation alone.

Ms. Owens discussed that the Federal Interagency Task Force on EE, which consists of representatives of 14 agencies, was also reconvened during 2012. She explained that the purpose of the task force is for the federal agencies to work together to figure out how to better coordinate and support what is happening in the EE community and decide on the best use of federal resources.

Ms. Caroline Lewis asked Ms. Owens to identify the 14 agencies participating in this task force. Ms. Owens indicated that the agencies include the Department of Education, Department of Interior (DOI), Department of Agriculture, EPA, National Oceanic and Atmospheric Administration (NOAA), Council on Environmental Quality (CEQ), Tennessee Valley Authority, National Science Foundation, Department of Energy, Department of Health and Human Services, Department of Housing and Urban Development, Department of Labor, National Aeronautics and Space Administration, Small Business Administration, Department of Transportation, U.S. Army Corps of Engineers, Office of Science and Technology Policy, Department of Commerce and any other federal agency that wants to be part of the group.

Mr. Richard Gonzalez asked how often the Federal Interagency Task Force plans to meet. Ms. Owens replied that the first meeting was held on December 10, 2012; the deputies will meet quarterly and the working group supporting the deputies will meet monthly. She also indicated that the EPA is trying to move EE forward using an integrated and interdisciplinary approach,

commenting that the federal government should integrate its own work similar to the private sector.

Ms. Owens said that the NEEAC has several roles, including creating by December 2014 a report to the Administrator on the state of EE in the U.S. The report, she confirmed, will be shared with Congress, adding that the last report was developed in 2005. Some of the recommendations in the 2005 report are still activities that need to be done, she said. Ms. Owens expressed her hope that EE is integrated into a larger framework so that the report is successful. Mr. Kenneth Gembel asked whether there were formal comments from Congress or the Administrator in response to the 2005 report. Ms. Owens said that she was not aware of comments, and Mr. Araujo responded that he would confirm a definitive answer.

Ms. Owens mentioned several other reports that may be of interest to the group:

- (1) Environmental Research and Education Needs – National Council for Science and the Environment, 2008
- (2) Education for a Sustainable and Secure Future – National Council for Science and the Environment, 2003.

Ms. Owens then proceeded to review the agenda for the remainder of the day.

Group Discussion on EE

Ms. Owens invited the group to discuss what everyone is doing in the field off EE and to identify pressing needs.

- Ms. Edna Negrón-Martínez mentioned that she thinks that there are too many isolated efforts, the public is confused about all of these efforts and all EE efforts need to be integrated. She also mentioned that there needs to be a better connection of health to the environment.
- Ms. Kay Antúnez de Mayolo noted that she has seen the progression of EE over the years and believes there needs to be a push forward past all the differences in definitions and to collaborate. She mentioned that teachers are still underprepared to teach EE.
- Dr. Mark Kraus asked whether there are any opportunities for various agencies to pull together resources on EE. In response, Ms. Owens said that the Federal Interagency Task Force is tasked to look into this issue on how to leverage the resources of each agency.
- Ms. Lewis indicated that one of her biggest concerns is the public's acceptance of the credibility of climate science. She mentioned that she is pushing for a public service and awareness campaign on climate science.
- Mr. Gembel commented that he is amazed at the difference in how EE is perceived in Mexico compared with the United States, noting that older students do not know much about EE in the United States.
- Mr. Gonzalez shared his concern that that it is important to understand what is happening in EE in the rest of the world and to find commonalities to help the U.S. become more effective.

Dr. Dale Perry noted that EPA holds a monthly EE stakeholder call, and on the last call, concerns about the lack of a central place for EE resources were discussed. She went on to mention that

much information and educational resources are available on EE, but they need to be put in a place where everyone can find them.

Ms. Owens then asked the group for ideas about ways to conduct informal EE. Ms. Lewis said that informal science centers, such as gardens, zoos, aquariums, and science centers, are doing a good job. Dr. Kraus stated his view that really hard scientific facts have become political and no one wants to accept fact. Mr. Gonzalez, mentioning that students should use cell phones in the classroom to conduct research and look up information, commented that there needs to be a mix of social and contemporary science. Dr. Kelly Keena noted that there is an interesting tension between encouraging kids to get outside and encouraging kids to use technology for education.

Ms. Owens said that OEAE includes all external offices within EPA, noting that EPA struggles every day with how to make information consumable and how to take findings and turn them into a consumable message. She acknowledged that this challenge is part of the EE disconnect. She also said that two of the great commonalities are health and the economy, and EE needs to be linked to them to make it consumable to the audiences.

Environmental Education at EPA

Dr. Perry provided an orientation to EPA, describing how EPA is structured, and provided a detailed overview of OEE. She provided background information about EPA's OEE and discussed key accomplishments of OEE, how OEE is funded and its key programs. Dr. Perry also provided an overview of the new vision for EE and implementation for that vision, highlights and future plans for the office.

Dr. Perry also provided key highlights of the first White House Summit on EE held in April 2012. Participants at the Summit, she said, consisted of a diverse group. During the Summit, senior leaders called for strengthening, broadening, and diversifying EE and better public-private partnerships. As a result of the Summit, OEE was charged with a vision from the Administrator to create a "new vision for EE" to make EE look different at EPA. Dr. Perry indicated that the first goal is to do a better job of integrating EE across the agency and across the program offices; the second goal is to strategically create and sustain national partnerships. Part of implementing the vision is to integrate EE across the agency. She mentioned that the overall goal is for program offices to view EE as a valuable tool for environmental protection. EPA is working on a memorandum of understanding (MOU) with the North American Association for Environmental Education (NAAEE) to create a training program for program offices. Dr. Perry mentioned that EPA is working on being more available to stakeholders and more communicative.

Dr. Perry also highlighted the OEE grant program and the emphasis on funding proposals that can be model programs. She mentioned that OEE may ask NEEAC members for advice on the grant program and to review grant proposals (as highlighted in the charter).

Presentation of Charge

Mr. Bob Perciasepe thanked everyone for participating in the NEEAC. He began by highlighting the importance of education and stating that the entire agency needs to participate in EE. Mr.

Perciasepe indicated that, although EPA is not the lead agency in EE, the Agency plays a large role. He noted that the Federal Interagency Task Force on EE, co-chaired by EPA, DOI, and the Department of Education, will conduct a reasonable assessment on the available assets of EE among the various agencies.

Mr. Perciasepe reviewed the charge, highlighting specifics required of the NEEAC. He provided several suggestions for developing the report to Congress, including encouraging conversations with stakeholders, looking at what is developed in the interagency process, and developing a qualitative view from everyone's perspectives that pulls together diverse life experiences and expertise.

Mr. Gonzalez suggested that NOAA be equally important in the Federal Interagency Task Force as DOI and the Department of Education because of NOAA's work in estuaries, oceans and watershed policies.

Dr. Keena asked about the timeline for the Federal Interagency Task Force. Mr. Perciasepe indicated that the timeline for the first product, the assessment of assets, is one year, but he anticipates that some information will be available by the White House Summit on EE. Mr. Perciasepe mentioned that he sees the Federal Interagency Task Force playing a role in the NEEAC report and offered his support and availability in the development of the report. Ms. Lewis thanked Mr. Perciasepe for meeting with the group and forming the Federal Interagency Task Force. She suggested that the report should be consumable, that education should never be isolated from engagement, and that the participants should encourage engagement opportunities to further education. Mr. Perciasepe expressed his appreciation for what the group is doing.

Discussion about the Report to Congress

Ms. Owens reviewed the expectations of the report, confirming that the report is due in December 2014, 24 months from the day the group is seated. She also reviewed the second item of the charge, explaining that the NEEAC may form a subcommittee of external stakeholders to provide advice and recommendations to the NEEAC. Other subcommittees may be formed as well.

Ms. Antúñez de Mayolo asked how the work of the NEEAC will get done. Ms. Owens replied that the report and associated work will get done in whatever way the group decides to approach the tasks; she also mentioned that EPA's OEE staff may provide assistance. She then reviewed Section 3 of the Charge, which highlights items that have to be included in the report, per the statute. She suggested that the group consider holding regional listening sessions, review other reports, and determine what other resources are available. She also reminded the group that the working sessions for the remainder of the meeting will be dedicated to figuring out how to complete the work. Ms. Wood mentioned that NEEF is compiling a survey of surveys on environmental attitudes and behavior and the data will be available to the group to review.

Ms. Owens also told the group that the Administrator of EPA and members of the Federal Interagency Task Force will receive the report, so it is important to keep them in mind as the audience and decide what to convey to them.

Mr. Gembel asked whether the group may use a blog internally to communicate and who would be allowed to create the blog. Ms. Owens said she would look into this question and get back to the group. Mr. Gembel also suggested it would be good to bring Ms. Elaine Andrews, the past chair of the NEEAC, to speak to the group. In response to Ms. Chen's question about whether there are resources to help pull the report together, Ms. Owens mentioned that EPA staff can help pull the pieces of the report together.

The group then adjourned for lunch.

Overview of the National Environmental Education Foundation (NEEF)

Ms. Wood, President of NEEF and external advisor to the NEEAC, provided a presentation about NEEF. Ms. Wood thanked EPA for including her in the meeting and mentioned that she was honored to be part of the group. She praised the exceptional engagement with the EPA over the past four years. Ms. Wood provided an overview and background information about the organization, explaining that NEEF was created in 1990 to advance environmental literacy and facilitate public-private partnerships. NEEF provides EE to "people who reach people" such as teachers, meteorologists, public land managers, and health care providers. She highlighted NEEF's new proposed vision statement: "by 2022, 300 million Americans actively use environmental knowledge to ensure the well-being of the earth and its people." Four portals to reach 300 million people are through weather, land, education and health, said Ms. Wood. Ms. Wood then described examples of programs that NEEF is conducting in each of these four areas, including the Earth Gauge program, National EE Week, and Prescribing Nature and Public Lands Every Day, a partnership with Toyota.

Mr. Gonzalez asked whether a NEEAC member's nonprofit organization could apply for a NEEF grant. Ms. Owens replied that she would have to look into this question and get back to the group.

Ms. Wood went on to discuss two important current initiatives. NEEF, she explained, had received support from the U.S. Forest Service to update the report, "Environmental Literacy in America." Updating the report includes compiling surveys on environmental attitudes and behaviors. Ms. Wood indicated that she would send the template of the report to the NEEAC group. She discussed another effort to be launched this spring, "My Earth Changing Moments" – a crowd-sourcing effort to invite people from all over the country to submit their stories of their moment when EE had an impact on them. She also mentioned that NEEF will be conducting a national public service announcement to inspire personal responsibility in the environment.

Overview of the Green Ribbon Schools Program

Ms. Andrea Falken, Director of the Green Ribbon School Program, U.S. Department of Education, provided an overview of and background information about the Green Ribbon School Program. Ms. Falken announced that the Department of Education awarded the first 78 green ribbon schools in spring 2012. Schools are nominated through the state education agency, which requires the state education agency to work with other state partner agencies and to develop

committees. Ms. Falken confirmed that the award is recognition, not a grant, and that each school can apply only every three to five years. She mentioned that EPA, CEQ and the Department of Education reviewed the applications.

Ms. Falken also provided highlights about EE efforts under way in the Department of Education, including a search for interagency continuity, regular stakeholder calls and weekly webinars on a variety of topics with other agencies presenting resources.

Afternoon Working Session

Dr. Keena, NEEAC chair, kicked off the afternoon working session by letting the group know that she is excited and energized about leading the group. Mr. Gonzalez added that he feels honored to serve as the vice-chair and be a part of this diverse group. Dr. Keena said that one of the most urgent tasks laid out in the charge is the need to determine how to begin to work with the stakeholders. She then asked the group to brainstorm thoughts and ideas as discussed early in the day. Dr. Keena reminded the group that the National Environmental Education Act was written in 1990, and that the NEEAC charge came from the Act. She encouraged the group not to limit themselves to the information in the Act.

Observations made by the participants included:

- Mr. Gonzalez indicated that one of the topics of consideration is to summarize major obstacles and barriers that affect EE.
- Ms. Antúnez de Mayolo added that one of the obstacles is the lack of skill in areas of collaborative leadership.
- Ms. Lewis noted that another barrier is the absence of scientific fact and knowledge in the broad public mind.
- Ms. Chen, noting that there are many recommendations from the 2005 Report to Congress that may not have been successfully addressed, suggested that it may be useful to review the report to identify what kind of progress has been made or lost.

The group then proceeded to review some of the “Recommendations for Action” and discussed how much progress has been made on each recommendation. In particular, the group discussed at length number 3, “Improve the quality, accessibility, and dissemination of EE materials and programs.” Ms. Owens pointed out that it is important to think about “what is quality?” The discussion then transitioned to a talk about environmental justice (EJ) and the need for EE to try to replicate the work that the EJ community is doing and to integrate EJ into EE. Dr. Keena concluded that work still needs to be done on the first three recommendations in the report.

Commenting that one of the things she has noticed about the field of EE is its connection to many social issues and objectives, Ms. Chen noted that she thinks that there is not a strong theoretical base and no great research that EE has all of these benefits. As a result, she said, it is difficult to measure the outcomes. Ms. Wood said that NEEF is struggling with a similar issue on how it will reach the 300 million people identified in the vision statement, questioning how to measure someone’s mindset. Ms. Corry stated that determining what can be measured and cannot be measured is a task in itself, as well as what is an objective and what is not an objective. Ms. Chen indicated that she feels EE is still a poorly defined field and recommended that the

NEEAC help frame what EE is and why people need it. Ms. Owens mentioned a document that the Department of Energy prepared on energy literacy to broaden specific definitions into themes and offered to share it with the group. Mr. Gonzalez suggested integrating the science of economics and the science of ecology to help define EE.

Dr. Keena concluded the afternoon discussion with a review of the agenda for the following day. She indicated that the group will need to start identifying stakeholders, reports and resources that they need access to and next steps for what the group needs to do. She asked the group to individually look at the last set of recommendations on “Celebrating Successes” in the 2005 report and provide any thoughts. She summarized the discussion by noting that the group needs to define obstacles, better define EE, conduct a gap analysis, consider integration of fields within EE, and think about “who is an environmental educator.”

Public Comment Period

Mr. Araujo then opened up the meeting to public comment. He read aloud to the group an email from a member of the public, Ms. Judy Kramer, who suggested that the group review the resource, “Discovering Connection – your environment/your help.” He confirmed that the message will be entered into the public record. Mr. Araujo adjourned the meeting.

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Dr. Keena called the meeting to order and began with a review of the agenda for the day. Referring to the previous day’s conversation about the Report to Congress, she reminded the group of the importance of its audience, which includes the EPA Administrator, and its purpose to provide recommendations to Congress. She encouraged everyone to think about what is tangible and how to make the report usable. Dr. Keena then reviewed highlights of the previous day’s discussion, divided into several topics:

- Stakeholders – who do we want to hear from and talk with?
- Reports and resources – what do we need to inform the group in terms of data?
- Definitions – how do we want to define EE?

Dr. Keena then explained that the morning session would be focused on a discussion about “norms” for the group, requesting that each NEEAC member identify their reasons for participating in NEEAC. During the afternoon session, she said, participants would be divided into subgroups to discuss the three topics identified above.

The group discussed the format of the Report to Congress. Dr. Perry reminded the group that the document must incorporate items A through E of the NEEAC charge, adding that the group can be creative with how the information collected is prepared into a product.

“Why are you here?”

Dr. Keena asked all the NEEAC members to explain their interest in joining the NEEAC:

- Mr. Gonzalez represents the nonprofit and multicultural sector and is interested in bridging stakeholders to NEEAC and exploring issues surrounding underrepresented communities.
- Ms. Antúnez de Mayolo is representing the networks between state government and other entities that conduct EE; she is particularly interested in shared and collaborative leadership.
- Ms. Lewis spoke about her interest in the urgency of climate change and the gap between scientists and the public.
- Dr. Negrón-Martínez noted her interest in the integration between EE and environmental health, commenting about gaps between the two disciplines. She also noted that she thinks the definition of EE should be revised to be more inclusive.
- Dr. Keena expressed her view that there is a disconnect between formal education and non-formal education and research, commenting that she would love to see a better connection between all three and making EE research more consumable.
- Ms. Chen is new to EE and has a personal passion for programs that serve urban youth.
- Mr. Gembel stated that he is here to create a robust and usable document.
- Ms. Wood said she is vested in NEEF’s relationship with EPA and that she believes in EE nationwide, noting in particular that EPA is the best agency to deliver EE.
- Dr. Kraus indicated that EE is not a special interest but a national and public interest and that the NEEAC needs to bring the population of this country “on board.”
- Ms. Corry observed that she stands firmly in both formal and informal education worlds and loves drawing connections between the big picture and the small picture.

Ground Rules/Norms

Dr. Keena asked the group for suggestions for ground rules and norms that each individual should follow to work productively in a group. The group compiled a list that includes:

- Humor
- Feedback
- Remain on topic
- Respectfulness
- Safe space for creativity
- Group and individual deadlines
- Timeliness
- Clear direction
- Shared vision/consensus
- Kindness
- Shared concept on process
- No single voice overpowering the rest
- Clear roles/responsibilities
- Flexibility
- Boundaries
- Limits
- Personal responsibility

Dr. Keena then combined the ideas into four main “norms,” including: (1) focus (for the task, Charge and time together), (2) respect (of the process, of each other, and of ourselves), (3) boundaries/responsibility, and (4) communication. Dr. Keena tasked the group to be willing to

support these norms, review them often, and try to kindly confront any action in violation of them.

Dr. Keena asked the members of the group to keep in mind EPA's seven priorities as they are doing their work. Mr. Gonzalez suggested collaborating with some of the other FACAs at EPA, and mentioned that there are 23 other FACAs at EPA with a goal similar to the NEEAC to convey information to the public. Dr. Negrón-Martinez suggested inviting members from the other FACAs to talk to the group. Ms. Owens confirmed that she would provide a list of all the other FACAs to the group, and Mr. Araujo mentioned that he would find out the process for contacting the other FACAs.

EPA's Seven Priorities:

- Taking action on climate change
- Improving air quality
- Assuring the safety of chemicals
- Cleaning up our communities
- Protecting America's waters
- Expanding the conversation on environmentalism and working for environmental justice
- Building strong state and tribal partnerships

Overview of EPA's Office of Environmental Justice

Mr. Mustafa Ali, Associate Director, EPA's OEJ presented information about EPA's involvement in EJ and provided an overview of EPA's OEJ. Mr. Ali thanked Ms. Owens and Dr. Perry for inviting him to participate. He shared background information on the history of EJ at EPA and an overview of several key ongoing projects at EPA, including:

- Plan EJ 2014 – a roadmap that will help EPA integrate EJ into the Agency's programs, policies, and activities.
- Federal IA Workgroup on EE – composed of 15 agencies to guide, support, and enhance federal environmental justice and community-based activities.
- EJ Small Grants Program — awarded more than \$24 million in funding to 1,466 community-based organizations and local and tribal organizations working with communities facing environmental justice issues.
- EJ Showcase Communities – supported 10 showcase projects around the country that expand from rural to urban with an emphasis on holistically addressing EJ issues.
- Youth Workshops — hosts workshops to promote youth participation in the environmental decision-making process.
- National Environmental Justice Advisory Council (NEJAC) – OEJ's FACA that allows various stakeholders to be a part of the process (including 25 to 30 people); has produced approximately 27 major recommendations and reports.
- EJ Listserv — the listserv notifies individuals about EPA's programs, projects, grants, public input opportunities, and EJ activities at other agencies.
- EJ Hotline – provides an option for people to call in with issues they are dealing with and a means to monitor trends to provide to EPA senior management.
- EJ View — a mapping tool that allows users to create maps and generate detailed reports based on the geographic areas and data sets they choose.

Mr. Ali concluded by mentioning some of the social media initiatives the office is undertaking, specifically the EJ video series and the "EJ in Action" blog available via EPA's OEJ website.

FACA Essentials: Roles and Responsibilities

Staff from EPA's Office of Federal Advisory Committee Management and Outreach (OFACMO) presented an overview of FACA roles and responsibilities. EPA staff included Cynthia Jones-Jackson, Mark Joyce, Stephanie McCoy, and Toni Rousey. They began by providing background information about EPA and an overview of the Federal Advisory Committee Act. Ms. Jones-Jackson made a point to mention to the group that OFACMO works closely with EPA's Office of General Counsel and invited the NEEAC members to contact OFACMO regarding any questions or issues that may come up. The OFACMO staff also provided information regarding many of the FACA requirements related to the charter and membership and roles and responsibilities of FACA members. Mr. Joyce highlighted that all members should participate fully and the group should try to reach a consensus; he also added that the chair needs to make sure all work is done in a timely manner. He also pointed out that all drafts that are reviewed by the entire group must be open to public comment. A working group, he explained, is defined as less than 50 percent of the members and is not subject to FACA requirements.

The OFACMO staff also discussed the importance of ethics, specifically mentioning that members may not lobby Congress in their capacity as advisory committee members. Other topics addressed included committee limitation, specifically regarding rules and what is allowed for subcommittees, and travel rules and guidance for the FACA members.

After the OFACMO presentation, the group adjourned for lunch.

Afternoon Working Session

Dr. Keena opened up the afternoon working session by dividing the group into three subgroups to focus on definitions, stakeholders, and data (reports and resources). The goal for each subgroup was to determine next steps. She reminded the group that "the wheel does not need to be reinvented" and emphasized the importance of thinking about what is already available and how it can be brought into these new ideas. Dr. Keena also reminded the group to keep focused on the purpose and audience.

Dr. Kraus asked for some additional structure on where the group is heading with the brainstorming, asking specifically what type of product will be produced. Mr. Gonzalez suggested a workbook approach for the final product. Ms. Corry replied that she found it difficult to conceptualize a workbook because the Administrator is the audience, but suggested that one of the recommendations could be a workbook. Dr. Keena, answering Dr. Kraus' initial question, mentioned that she thinks the breakout sessions for the subgroups will help determine what the outcome and type of product may be.

The participants then reviewed the "Celebrating Successes" recommendations from the 2005 report. Ms. Chen commented that she believes the group should address progress made since the previous report, but also suggested not focusing too much time on the 2005 report. She also

pointed out that the recommendations in the 2005 report are too “micro,” suggesting that the new recommendations be more high level.

Dr. Keena reviewed Recommendation No. 7 in the report, “Develop assessment-based professional development programs for formal and non-formal educators to improve their ability to teach environmental concepts and skills to learners of all ages.” Dr. Keena then suggested that NEEAC identify professional development, and not create professional development. Ms. Antúnez de Mayolo recommended an assessment on the success of using the NAAEE guidelines. The group decided to add guidelines, STEM and next generation science standards to the discussion of the definitions subgroup.

Recommendation No. 8 was then reviewed, “Build public understanding of the value of environmental education and increase the number and diversity of talented young people pursuing environmental careers.” Ms. Chen noted that NEEF is already working on the first part of the recommendation to build public understanding of EE and mentioned that it is important to think about the level of recommendations on career orientation.

The group then divided into the following three subgroups:

- Stakeholders – Mr. Gonzalez, Dr. Kraus, Ms. Lewis
- Reports/Resources – Ms. Chen, Mr. Gembel, Dr. Keena
- Definitions – Ms. Antúnez de Mayolo, Ms. Negrón-Martinez-Martinez, Ms. Corry

After each brainstorming session, one member from each group joined a different session to share and provide additional ideas about the specific topic for each group.

Subgroup Report Out

Dr. Keena asked each subgroup to review key decisions and highlights discussed by each group.

Stakeholders – Mr. Gonzalez announced that the group decided to conduct two surveys using Survey Monkey: (1) Members of the other EPA FACAs, and (2) EE stakeholders - as identified by the group and expanded to include outdoor recreationists such as bike riders, rock climbers and divers. He discussed the timeline for the survey to be as follows:

- January 30 – Develop initial survey design
- February 15 – Acceptance by the NEEAC
- 4 to 8 weeks for EPA review and approval
- May – Conduct survey
- June – Preliminary analysis

The group also decided there was a need to conduct listening sessions. Ms. Lewis added that all NEEAC members should serve as listeners in each region and conduct listening sessions.

Reports/Resources – Ms. Chen indicated that this group brainstormed sources and reports for more information, and specifically mentioned the survey of surveys NEEF is conducting on the environmental attitudes and environmental literacy levels. She suggested that the subgroup put together a database of compiled resources and reports, noting that each person could comment on

which reports they think are the most valuable. Ms. Chen also mentioned discussion of convening a group of academics to appoint as an expert subcommittee or working group. She also mentioned a suggestion of Mr. Gembel's to look outside of traditional EE data sources such as teacher data and other non-traditional places (Home Depot or Wal-Mart). Dr. Keena summarized the two main actions for this group:

- Develop database to compile and share resources
- Develop subcommittee of researchers and experts (experts could also speak at the next meeting).

Definitions – Ms. Corry relayed that the group decided that it should not redefine definitions, since many terms have been defined before, but instead to identify common language on EE. She said that doing so would require a thorough literature review of existing definitions— for example, how many different ways has EE been defined? Ms. Corry suggested that the members develop a list of principles as part of the definition and a glossary of common language and recommend that this common language be used. She also mentioned that the subgroup decided to develop a set of talking points about EE.

Next Steps and Timeline

Dr. Keena focused the remainder of the meeting on next steps, timeline, and what the product is going to look like. The group reviewed next steps for each of the three subgroups:

- Stakeholders:
 - Ms. Chen mentioned that she has a research associate in her office, Julia Nagle, who can assist with development of the survey.
 - The group decided to use Survey Monkey as the tool for the survey.
 - Ms. Chen also suggested asking NAAEE send out the survey. Mr. Araujo confirmed that he would do research about the rules for how the survey can be conducted.
 - Dr. Perry mentioned that she would send to the group a link to the summary information from the 2012 EE summit.
 - Ms. Chen asked whether the group can use the 2013 EE summit in April as a platform for the listening session. Ms. Owens suggested developing a plan for the listening sessions in February or March so that the summit in April can be a working and decision-making avenue.
 - Next steps/timeline:
 - Have survey designed by the end of January
 - Determine how to do the listening sessions by February or March
 - Mr. Gonzalez, Dr. Kraus and Ms. Lewis will form the subgroup.
- Reports/Resources:
 - The group reviewed next steps for the reports/resources subgroup:
 - Develop subcommittee of researchers (fewer than 10).
 - Develop electronic library and database of reports and resources to be set up through an intranet site. Dr. Perry mentioned that OEE would help figure out the details for creating and accessing the intranet site.

- Ms. Chen, Mr. Gembel, and Dr. Keena will form the subgroup.
- Definitions:
 - The group reviewed next steps for the definitions subgroup:
 - Gather language used to describe EE (can use EJ model).
 - Create principles of EE (can use EJ model).
 - Develop glossary of common language (can use EJ model) – will serve as a product.
 - Develop talking points about EE (can be gathered from the listening sessions).
 - Ms. Corry, Ms. Antúnez de Mayolo, and Ms. Negrón-Martínez will form the subgroup.
- Ms. Chen and Ms. Antúnez de Mayolo agreed to take the lead to help with the structure of the EE Summit and sessions at the Summit.

Timeline of next steps:

- January 28, 2013 – Next group meeting (conference call)
- January 2013 – First draft of survey
- February/March 2013 – Determine how to conduct listening sessions
- April 2013 – Next face-to-face meeting in conjunction with the April Summit and launch survey
- Report Development:
 - March 2014 – All data collected
 - June 2014 – First draft
 - October 2014 – Final draft
 - December 2014 – Report is published

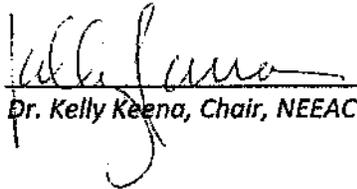
Dr. Keena asked the group to begin thinking about the structure of the report. Ms. Owens reminded the members that if they decide to meet as a group, a notice of the meeting must be published 2 weeks in advance in the *Federal Register*. She also encouraged the subgroups to meet more frequently than the monthly conference calls.

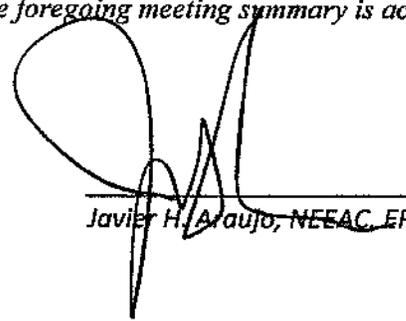
Dr. Keena then reviewed the agenda for the next conference call on January 28, which includes an update on the survey design and listening sessions, an update from each subgroup, and an update from OEE on the April 2013 Summit. Dr. Keena mentioned that she will work with Mr. Araujo to schedule subsequent conference calls.

Mr. Araujo thanked everyone for attending the meeting and also thanked Dr. Perry and Ms. Owens for being the driving force behind the reformation of this group. Dr. Keena officially adjourned the meeting.

We hereby certify that, to the best of our knowledge, the foregoing meeting summary is accurate and complete.

Submitted by:


1-28-2013
Dr. Kelly Keena, Chair, NEEAC


1-28-2013
Javier H. Araujo, NEEAC EPA DFO