

## NOAA Education Council Meeting

Date/Time: May 18, 2011 (1:00–4:00 pm)  
 Location: SSMC3, Room 14836  
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### Proposed future agenda items:

#### AGENDA

- 1:00 Welcome/Opening Remarks
- 1:10 Chesapeake Bay Office Executive Order – Shannon Sprague (*input request*)  
(15 min presentation/15 min discussion)
- 1:40 New NOAA Environmental Science Training Center – Bart Merrick (*input request*)  
(15 min presentation/15 min discussion)
- 2:10 Break
- 2:25 PK-20 and Connects partnership survey – Peg Steffen and Kate Thompson (*input request*)  
(15 min presentation/15 min discussion)
- 2:55 EPA environmental education grant – Pepe Marcos (*input request*)  
(15 min presentation/15 min discussion)
- 3:25 Updates & Announcements

### Upcoming Council Meetings:

June 15, 2011  
 July 13, 2011

#### Attendance

**In person:** Louisa Koch (LK), Marlene Kaplan (MK), Ron Gird (RG), Jennifer Hammond (JH), Bob Hansen (BH), Molly Harrison (MH), Luis Leandro (LL), Paulo Maurin (PM), Bart Merrick (BMe), Christos Michalopoulos (CM), Bruce Moravchik (BM), Maria Murray (MM), Frank Niepold (FN), Bronwen Rice (BR), Stephanie Richards (SR), Sarah Schoedinger (SSc), Shannon Sprague (SSp), Peg Steffen (PS), Kate Thompson (KT), Audrey Trotman (AT).

**On the phone:** Stephanie Bennett (SB), Susan Haynes (SH), Atziri Ibanez (AI), Lisa Iwahara (LI), Nina Jackson (NJ), Chelsea Lowes (CL), Pepe Marcos (PMA), John McLaughlin (JMc).

#### Announcements (MK)

- LK has done 25 briefings on the Hill and has been using the Blue Book.
- Thanks to all your efforts on the GAO survey. An OSTP survey is coming out soon. After that, there will be an IOOS survey due the end of June.

#### Chesapeake Bay Office Executive Order – Shannon Sprague (*input request*)

See PowerPoint slides.

- MK: Pepe Marcos is the incoming president of NAAEE. He has an Environmental Education and Training Partnership (EETAP) grant from EPA for building environmental education. We need to make sure that is connected with the Chesapeake Bay Executive Order (CBEO) efforts.
- FN: Who was the representative from the Dept. of Education at your kickoff meeting?
  - SSp: Brad Haas and Michael Lach are involved from Dept. of Ed.
- FN: The piece in your draft outcome for students about making informed environmental decisions is huge. Is there any research on this or people with experience measuring this?
  - SSp: We haven't gotten to that yet.
  - BMe: There will be a lot of work on the metrics.
- SSc: When you were trying to determine curricula and instructional resources, did you have criteria for selection? We have a lot of materials funded through ELG, but I don't want to throw a bunch of stuff in there that you don't need.
  - SSp: We are thinking very broadly. We are including any program that affects any of the states whose watersheds feed into the Chesapeake Bay. We are being very close for Funding/Indirect Programs and In-House Programs. We are being more broad in our approach for Curriculum and Materials and include everything.

- FN: I would assume you want to match state learning objectives with resources on the state timeline. Educators will need this mapping
    - SSp: At the strategy level, we are just trying to make the connections between groups and raise their awareness about what else is going on so that they can have these conversations.
    - FN: I'm thinking more about metadata, like grade level, that you might want (e.g., what the level of focus is).
    - SSp: This is in a draft spreadsheet that includes more specifics on each of the programs. It doesn't get down to grade level, but it does get at elementary, middle, high school levels. Right now we're focused on finding out what the universe of resources is.
  - RG: NWS has done a lot of work with AWS for teacher training. Do you want things like that, where AWS is actually doing the trainings?
    - SSp: This is the conversation I want to have. What should we include?
    - FN: All levels.
    - MK: If our resources (in-kind or funding) are being used, I think it should be included.
    - SSp: The only danger is if soft money disappears for a program, we've put in a lot of investment.
    - LK: For the candidates for curriculum, I think you should be broad and then have a screening committee to see what should be put forth. I would add EPP and some of our labs.
  - AI: I would like to hear more about your major issue of concern regarding including input from NERRS and Sea Grant.
    - SSp: The inventory has the potential to become an unmanageable size. I think we need to be thoughtful about which to include, for example: major programs versus smaller, one-shot events.
    - AI: NERRS are place-based with local connections including to the school system. This is something that might not happen for national programs.
    - SSp: An example for NERRS: We have a program the B-WET has funded for 5 years at the Virginia NERRS. It's a great program. It's likely not going to get funded and won't survive without sustained commitment from us. What does this program mean for this inventory, using it as an example?
  - PS: For curriculum & materials, is each state including their state standards and then you are looking for the match with NOAA materials?
    - SSp: Yes, we have done a crosswalk with the state standards, which all have their own flavor. Different agencies have different strengths to meet those flavors. We are trying to influence both ways.
    - PS: We have a lot of resources. Rather than just say, "here's everything," it would be good to know what the specific targets are (e.g. sea level rise).
    - SSp: It is very broad within a state. The amount of content that could be absorbed by the states is huge. We can't provide them with everything. We'd rather supply the major programs. If you have it, though, let us know about it.
  - CM: As a criterion for which programs to include, I would offer for the Council's consideration NOAA programs where the NOAA entity supports it and believes it will live for the next three years and that it will be able to be infused into the CBEO states. It is NOAA's responsibility to make sure these resources/programs are infused. OMB is interested in knowing what we contribute to systemic change. This is our chance to demonstrate this.
  - LK: The bar of a NERRS program that has been sustained for years by B-WET, but might not survive without additional funding might be a bit too high. I agree with CM's proposal. It seems more reasonable.
  - CM: As a specific example, we have been considering working with NASA to establish a local GLOBE partner. We have a lot of in-house things we can do without funding. We will work with NASA. GLOBE is well suited to contributing to CBEO implementation in each of the states. I would love to talk to you about making this a reality. It won't cost a lot of money. We can have a big influence and be able to take credit on behalf of NOAA using little resources.
    - FN: Those resources are mapped already to state standards. It's much easier to provide you that information in a way that makes sense. Another would be the CLEAN program from the Climate Portal. There are some things that are easier to ingest because the crosswalk with standards has already been done.
  - CL: All the state Sea Grants contributed to the data call. I don't think they should be excluded just because we can't demonstrate what portion was accomplished with federal dollars. Everything that AI said about the NERRS applies to Sea Grant. They are on the ground and have the local connections already.
    - SSp: We don't want to take these activities out, we just need to figure out how to include them. I resonated with CM's suggestion. If we believe it's sustainable and can make a direct contribution to Chesapeake Bay states is a good criteria. For curriculum and materials, please send us everything you have.
    - LK: What would that mean for Sea Grant and NERRS?
    - SSp: I think it would mean applying the filter CM suggested. I would talk to CL.
    - CM: The commitment would come from the originating office.
    - LK: I think that makes a lot of sense.
  - AI: I second what LK just said and offer any help I can provide.
  - KT: I was going back to your outcomes. It seems like there are a lot of inputs across the states for their standards. How do you assess the outcome for the whole region when there are so many differences across states?
    - SSp: Largely, we can't do this. There are some things we can assess.
    - KT: Can we, as NOAA, try to push a small set of standards to reach these outcomes?
    - SSp: There is an effort to come up with a crosswalk of the different literacy principles and standards to figure out which are the most important ones.
    - AI: I think we need to look at this outcome and focus on making environmental decisions with the scope of environmental literacy.
    - SSp: These slides should have read Draft GOALS, not outcomes. There are outcomes under this goal.
  - LK: Kudos to SSp for her excellent leadership.
  - SSp: I will send an input form if you have contributions with a due date.
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### **New NOAA Environmental Science Training Center – Bart Merrick (*input request*)**

*See PowerPoint slides.*

- BMe: I am looking for ideas for programs and ways to present programs.
- PS: The Climate Stewards educators are really struggling with competency for action. They feel like they know a lot, but then they don't know what to do. How do you build stewardship and how do you assess it?
  - LK: Is there anything in the CBEO that could provide stewardship projects?
  - BMe: The place-based resource is where that transition happens.
  - KT: One of your outcomes dealt with what you do in your school's backyard. There is an Ocean Guardian program that seems to work so well. Maybe you could think about a watershed guardian program. This could work really well. They go out and take the pledge and do something in their school's backyard. This has worked for us in California. Maybe it's something we can connect and work on together.
    - BMe: There is a Watersheds Stewards program that is for adults.
    - SSp: It might be good to bring this to kids, too.
- BMe: Are there any other programs that target environmental educator programs beyond SG and NERRS?
  - FN: I think these exist, but normally PD is focused on formal educators.
  - BMe: I would argue that environmental educators are a key link and an underserved group.
- CM: Do you have a sense of your service area for environmental educators.
  - BMe: MAEO has about 500 members. About 80% of these are environmental educators. Right now most people are in Maryland, but we're close to Delaware and Virginia.
  - SSp: We want to take this show on the road, like to Nauticus, Annapolis, Silver Spring, etc.
- AI: I think an assessment might be useful.
- SSp: We also want to have a virtual presence and podcast for people that can't make it to the workshops. However, our priority is hands-on and in-person. We want to model best practices for this virtual presence.

### **PK-20 and Connects partnership survey – Peg Steffen and Kate Thompson (*input request*)**

*See PowerPoint slides.*

- CM: I think this is terrific. One of the NAS recommendations was urging us to engage more strategically with partnerships. Is it worth thinking through a rubric allowing people to classify partnerships using certain criteria? It could consider how effective partnerships are, are the partners getting what they want, and are the partnerships helping us with our strategic goals. I am happy to work with you to incorporate this into the survey.
  - PS: Some of this is in the survey now, but there might be ways to make modifications.
- LK: You have to make sure the partnerships are strategic and are helping you accomplish your goals and not distracting you. I think it would be helpful to focus questions on a limited list of partners. Unfortunately, this doesn't get at the full inventory and identifying overlapping partners or places for synergy.
  - KT: Yes, it doesn't get at the big list. We need this. We might want to ask for a full list and then ask people to go into more detail for their top five partners, or some number, that they work with the most.
  - PS: We are looking for longer term partnerships that have been in place for over five years.
- FN: With this limitation, I haven't been around for five years.
  - SSp: You could say if you anticipate a five-year relationship.
  - FN: Five is a fine number, but we do use shorter term partnerships that are important for strategic reasons.
  - KT: Put the partnership down if it is important to you.
- JH: Do you have an Other category under Partnership Mechanism that doesn't involve funds?
  - PS: Maybe we can add an "Other" under Partnership Mechanism and then have a box to explain.
  - LK: Maybe add "In-kind" as an option under Partnership Mechanism.
  - JH: Most of the partnerships I have are not any of those choices, but I value them and think they're important.
- LL: Is there anywhere that you can answer about common audiences or goals of the partnerships? I am thinking about this for the Blue Book and think it would look good for us.
  - LK: LL is suggesting that you add a separate series of checkboxes for the audience type.
    - PS: What would you do when it serves more than one audience?
    - LL: I wouldn't consider this as double counting.
    - FN: The way we did that in the past was to have primary and secondary audiences.
    - SSp: This would be very useful when you're trying to cross-reference and contact specific people that deal with specific audiences.
    - LK: I would use the same six categories we've already collected for audience.
- PM: Perhaps it would be good to capture the goal of the partnership.
  - LK: Are we talking about our Strategic Plan goals?
  - PM: No, more specifically what the goal or outcome is of that specific partnership.
- AI: How are you anticipating distributing this? Will it go as an Excel file to all of your Sanctuaries? It might be great to have a drop down list under each institution type so there aren't typos to deal with in the end.
  - KT: It will go to all of my Sanctuaries. We did talk about SurveyMonkey. Chelsea offered to do this in Excel. If you have suggestions, please share these with her.
  - CL: There are some limitations to SurveyMonkey.
  - AI: Web-based clickable things would probably get more response.
  - LK: How will you do this for your Sea Grant network?
    - CL: For everything we turn into the Office of Education, I make a spreadsheet that I send out and then compile everything and send it back to you guys.

- LK: Have you talked to your network to find out if they are interested and will participate?
  - CL: They think this is a good idea, but they would like a limit for how many partnerships they should provide. One of our Sea Grants has over 200 partnerships from that Sea Grant alone.
  - LK: It might be helpful for everyone doing the compilation if there is some limitation.
  - KT: Maybe the top ten would be useful, prioritizing those that get funding.
- LL: What if you first collect just the names?
- SB: Are you considering grants in the partnership mechanism?
  - PS: Yes.
  - SB: Do folks also collect the numbers of people reached through the partnership.
    - KT: This is a good point. Sometimes it's hard to find that information. Maybe this is something we should leave as optional.
    - LL: We have a metric that we are trying to measure that. This would help us a lot.
  - SB: Is this something we would update every fiscal year?
    - PS: We haven't thought about it. It could be, but let's just start with once.
- PM: The partnership definition is broad. Will there be guidelines to decide which to include?
  - KT: Yes, prioritize your top ten by those you fund first, then by the amount of in-kind support. This should be formal and informal education partnerships.
  - PM: Please provide examples when you send out the survey.
- LL: Just add the audiences, etc. as drop-down menus.
- PS: It might be helpful if CM is at the meeting so that we make sure we capture the information you are looking for.
  - CM: I will be happy to sit in.
- AI: What is meant by "estimate annual cost to NOAA?" Will you send instructions with the survey?
  - KT: This is the amount of funds you spend on the partnership. Yes, we will send instructions.
- LK: When will this be sent out?
  - KT: It will be later.

#### **EPA environmental education grant – Pepe Marcos (*input request*)**

*See PowerPoint slides.*

- MK: There is a new grant award out of EPA's Environmental Education Program, the EETAP grant program. I think it is around \$8 million over five years. In the application process, Brian Day from NAAEE asked for NOAA's partnership. Pepe Marcos is the incoming president of NAAEE. There are a lot of natural connections, like to the CBEO. This is a train-the-trainer program. We're looking for: 1) NOAA people who can participate in some of the trainings, 2) NOAA materials to support this effort, and 3) evaluation and how to measure stewardship. This groups specifically focused on attracting underrepresented groups to environmental education.
- MK: Do you know which will be the first three states?
  - Pepe: We are not sure. The proposed states include Colorado, California and a state in the D.C. area. We are still working on this.
- FN: In what format would you like our input and responses to requests?
  - LK: I think we need to collect this centrally, then make sure we have the most strategic people identified, and then get back to Pepe.
  - Pepe: I think that works best.
- MK: There's a principals meeting in July. We'll have a better sense and opportunity to provide input after this groups gets together.
- AI: On the national training workshop, could you be more specific about the goals? Will it have a major focus around urban environmental stewardship?
  - Pepe: It will, but we are trying to balance it out. Because some of the partners are already focused on urban work, we have to balance it out. The theme is working with urban and diverse audiences. We will provide tools that are similar to what you'd find at a leadership clinic including fundraising, communication techniques, and how to reach diverse audiences.
  - AI: This poses a question to the Council to help identify NOAA reps that will be able to work with this focus.
  - Pepe: Aside from getting people from the regions of the participating state consortia, it would be great to have someone who has a need for the training and the networking capability to disseminate materials. We want people to incorporate the guidelines into the dissemination tools you are using already, not to do something outside the scope of their regular work.
- BMe: Do you have government, state consortia, and the urban trainers?
  - Pepe: We expect to see overlap and collaboration between disseminators and state consortia. State consortia are expected to do separate work from what they already do to build materials. Dissemination partners, like NOAA, are just expected to incorporate things into what they already do.

#### **Updates and Announcements**

- LK: I was at the NEC for the engagement briefing and budget. Bill Broglie wants to help NOAA obligate funds by sweeping them into facilities. Mitch is worried that GMD will not be able to get grants out in time. Maureen expressed a lot of support for Mitch, but she does not want carry-over. There was very broad agreement that this is not the year to carry over funds because they will be rescinded.
  - Andy Winer presented the engagement brief. The NEC agreed to reinvigorate the Executive Committee on Engagement. All the line offices will be asked to have a representative.

- I have now completed 25 Hill briefings including people that are on our appropriations and those involved in our inclusion in America COMPETES. It has been a banner year. The Blue Book was my script, and we handed out a lot of these. The TAS materials were extremely well received. Sen. Kirk was the most engaged and had many questions. He is a big supporter of environmental education. We were often meeting with multiple staffers. We were told repeatedly that this will be a tight year and there will be no earmarks. If we were to do this again, we would like to have the list of offices to visit reviewed by Council members, who can also provide talking points. We will do it next year more inclusive process in deciding who we visit. Sierra, from Legislative Affairs, gave us very positive feedback that this was a NOAA-wide story, not just one specific programmatic element.
    - JH: You might want to take some Council members with you if it helps for certain Hill members and the specific topics for them.
    - PS: You might want to get some talking points from our leadership and our legislative affairs, who are concerned about being able to provide feedback.
  - Yesterday, we talked to House Science, who is behind the GAO. They asked us lots of questions and were disappointed that the inventories (GAO and NSTC) were not aligned and have different definitions of STEM education. Earmarks is the most clear line between the two.
- JH: Two teachers are sailing this week. I went to the NRC meeting last week on STEM and integrating it into different types of schools. We'd like to get some of these speakers to come to Council meetings to present. Is the proposal that Pepe presented online?
  - MK: They are in discussion with EPA. There isn't a final version of the proposal yet.
- RG: We had two school visits: to Calvin Coolidge HS in Takoma Park, where we might provide weather observations, weather curriculum, and broadcasting from the school. The Smithsonian invited the Edmund Burke School from DC, which we helped with. The things they liked the most were interactive games, Forces of Nature, Build a Hurricane, and Build a Tornado. AMS Broadcasters Conference is next week in Oklahoma City. I'd like to get some of PS's postcards for the games.
- KT: Thanks to all who participated in our webinar on how to give a webinar. Our next training will be on using large document formats in Word. Next week in Massachusetts, we are having a joint educators and researchers meeting. We are trying to get our researchers to understand more about STEM education. STEM education and informal education are not a priority to our higher ups. We are trying to figure out how our education efforts works fits with the threats that are priorities.
- PS: Next month is the International Society for Technology in Education Conference in Philadelphia. We are taking publications for the booth. Pass these to Jeannine by June 10. Coastal Zone Climate Change workshop registration is due June 1.
- FN: There's a partnership with NCDC with America's Gardens that will be formalized. We are working on a climate change tour for each of the gardens. On the climate assessment side, America's Climate Choices finally came out. A lot of substantive work has been done on Energy Literacy and on Clean Pathways. There will be an agency review of USGCRP strategic plan.
- PM: Next month I will conduct workshops on Ocean Acidification NODE in Florida. We are openly recruiting, so let me know if you know of any teachers in the area. I will send an announcement so you can disseminate it.
- SSp: We have the Chesapeake Exploration curriculum that will be completed and online in the next couple months. We will do user testing with teachers this weekend. If you have people from your network who should be included, let me know. We had a visit from Stu Levenbach, which went really well.
- CM: Our preliminary spend plan shows a 35% reduction from 2010 appropriations minus hard earmarks. There was no money for B-WET. We are working hard to include minimal B-WET money from the funds we will have. The best case scenario is to fund salaries and existing commitments fully. We may be funding these at reduced levels. For ELG, we should be able to fund the majority of existing commitments, but may not be able to fund new awards. We heard from several appropriators that there is still commitment for B-WET for 2012.
- JMc: The Science On a Sphere workshop was two weeks ago in Chicago, the largest to date. We had an expo for the first time. Preliminary feedback was that it was very successful. Carrie will likely present on this in June. We awarded the NOAA award at the Intel International Science and Engineering Fair to a student who created a smartphone app that helps people prepare for and respond to tornadoes.
- AI: One of our NERRS educators, Margaret at the Weeks Bay NERR, won the National Wetlands Award for her work. We have been working on a database system for performance indicators and outcomes for our programs. Let me know if you are interested in finding out about this.
- Susan Haynes: Okeanos Explorer will be traveling this summer from the Galapagos, then to the Cayman Trench, the Gulf of Mexico, and Rhode Island. We will be starting on-site professional development called "Why Do We Explore?"
- SSt: I just participated in the Federal Interagency Committee for Interpretation. The group is almost exclusively informal education. June 11 is National Get Outdoors Day. Leave No Trace grants are available. Contact me if you are interested.