

# COSEE

CENTERS FOR OCEAN SCIENCES  
EDUCATION EXCELLENCE



National COSEE Network Meeting  
May 2-4, 2011  
Newport, Rhode Island

# Agenda At a Glance

## Monday, May 2

various	Participant Arrival	
7:00 pm	Welcome Dinner Meeting	Canfield House (transportation provided)

## Tuesday, May 3

7:30 am	Council breakfast meeting	Heritage
7:30 am	Breakfast (non-Council members)	Rose Island Foyer
8:30 am	Welcome, Expectations, Introductions	Rose Island II
9:00 am	Plenary: <i>Multicultural Training for Broadening Participation in Ocean Sciences</i>	Rose Island II
9:55 am	<i>Breakout Session I</i> (see room assignments)	Rose Island I, II Heritage, Vanderbilt Commodore Perry
10:30 am	Break & Networking	Rose Island Foyer
10:45 am	<i>Breakout Session II</i> (see room assignments)	Rose Island I, II Heritage, Vanderbilt Commodore Perry
11:30 am	Plenary: <i>Summary Session</i>	Rose Island II
12:15 pm	Lunch & Networking	Rose Island Foyer
1:15 pm	Plenary: <i>Review of the 2011 Annual Operating Plan</i>	Rose Island II
1:45 pm	Plenary: <i>COSEE's Goals for 2012 and Beyond for Broadening Participation</i>	Rose Island II
2:15 pm	Plenary: <i>Decadal Review Discussion/COSEE Future Ideas</i>	Rose Island II
3:00 pm	Break & Networking	Rose Island Foyer
3:15 pm	Plenary: <i>Minority Recruitment, Education and Community Outreach</i>	Rose Island II
4:00 pm	Reflection/Announcements	Rose Island II
4:30 pm	Adjourn	
6:00 pm	Peer to Peer Dinner Meeting (optional)	Waterfront Pavilion

## Wednesday, May 5

7:30 am	Council breakfast meeting	Heritage
7:30 am	Breakfast (non-Council members)	Rose Island Foyer
8:30 am	Welcome Back & Announcements	Rose Island II
8:45 am	<i>Different Center, Same Boat</i>	Rose Island II
10:45 am	Break & Networking	Rose Island Foyer
11:00 am	Plenary: <i>Effective Networking: Why, How, and for What?</i>	Rose Island II
11:45 am	Plenary: <i>Networking within the COSEE Network</i>	Rose Island II
12:45 pm	Lunch & Networking	Rose Island Foyer
1:45 pm	Plenary: <i>Network to Network Collaborations</i>	Rose Island II
2:30 pm	Plenary: <i>Future Directions for Formal &amp; Informal Science Education</i>	Rose Island II
3:30 pm	Closing Remarks/Adjourn	Rose Island II
3:45 pm	Non-mandatory Council/NAC Meeting	Heritage
5:00 pm	Meeting Adjourn	
6:00 pm	Sunset Sail (optional)	
7:30 pm	Dinner on your own	

# Welcome

Welcome to Rhode Island the “Ocean State” and the 2011 National COSEE Network Meeting!

COSEE colleagues, it has truly been a pleasure to serve as your COSEE Council Chair over this last year. It has been a very busy and active one with three new Centers coming on board, a Community Meeting, and all your individual and collaborative team work in developing the decadal review documents. We hope to finalize the decadal review documents by the end of the week. Throughout the year the COSEE Centers have continued to provide innovative and exciting ocean science activities that explore and test communications and interactions among scientists, educators, and the public. This year’s agenda for the meeting is to learn more about the best practices that we can employ to broaden participation in COSEE and the ocean sciences and how to develop stronger networks and increase our partnerships.

As we move through our formal decadal review process over the summer and look forward to the next decade of engaging ocean scientists in formal and informal education programs, we can all look with pride on our beginnings at the turn of the millennium and our evolution to an innovative strong national Network. What the National COSEE Network does, and is, has always depended on us — the people behind the programs and activities. We are a strong family, with many friends and colleagues. A success for one of us helps all of us.

Please enter into discussions informally and formally. Make new friends. Enjoy the beautiful State of RI and city of Newport – RI was founded on religious freedom for all and Newport is the home of the very first synagogue in the US so it is a very fitting place for our dialogue on broadening participation.

I wish to thank the National COSEE Office (NCO) at the University of RI for providing unparalleled support and leadership for COSEE over the last several years and for being our gracious hosts here in RI for the May meeting.

All the Best,

Linda Duguay,

Lead PI, COSEE West, 2010-2011 National COSEE Council Chair, and Chair COSEE Decadal Review Working Group

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## *Meeting Themes*

“Broadening Participation in the Ocean Sciences” and “Increasing Network Effectiveness and Partnerships in Ocean Sciences”.

## *Meeting Objectives*

1. To identify strategies/programs/practices within and outside COSEE for broadening participation in the ocean sciences.
2. To gain an increased understanding and interest in network science and an increased capacity of individuals and centers to operate from a network perspective.
3. Identify people within the COSEE Network who have existing relationships with potential partnering organizations and develop strategies to increase COSEE Network partnerships.

# Day 1: Tuesday, May 3, Detailed Agenda

7:30 am	Council breakfast meeting	Heritage Room
7:30 am	Breakfast (non-Council members)	Rose Island Foyer
8:30 am	Welcome, Expectations, Introductions Gail Scowcroft, COSEE National Network Director Linda Duguay, COSEE Council Chair and COSEE West	Rose Island II
9:00 am	Plenary: <i>Multicultural Training for Broadening Participation in Ocean Sciences</i> Facilitator: Christy Herren, COSEE Ocean Systems Scribe: Carla Companion, COSEE Ocean Systems; Liv Dietrick, Institute for Broadening Participation Presenters: Sara Hernandez, Institute for Broadening Participation DiOnetta Jones, Institute for Broadening Participation Renatta Tull, Institute for Broadening Participation Allyson Fauver, Institute for Broadening Participation Liv Dietrick, Institute for Broadening Participation Purpose: <i>Participants will learn from experts the latest information on efforts to broaden participation in the sciences as well as practical tools and strategies to apply to their own programs and audiences.</i> Outcome: <i>COSEE Centers should leave the interactive session not only with new contacts in this field, but also with a draft plan for incorporating diversity enhancement strategies into their current and future ocean sciences education programs.</i> Process: <ul style="list-style-type: none"><li>- Within the framework of a diversity briefing, invited panelists will provide participants with the most up to date information on why broadening participation is important and point to a variety of resources participants can tap to aid their own efforts.</li><li>- Participants will then disperse for Breakout I into groups that are pre-assigned according to common interest, to discuss their top priorities in broadening participation, their target audiences, goals, and challenges faced. Panelists will circulate, providing mini-consults, responding directly to the issues brought to the table by participants, and offering practical, hands-on strategies that are directly applicable to attendees' projects and programs.</li><li>- After a formal break, participants will reconvene for Breakout II, to use what they've learned from the panelists and their peers to inform their planning processes and formulate action plans customized to their program needs and target audiences. All participants will then gather for a plenary report out.</li></ul>	Rose Island II
10:30 am	Break & Networking	Rose Island Foyer
10:45 am	<i>Multicultural Training for Broadening Participation in Ocean Sciences, Continued</i>	
12:15 pm	Lunch & Networking	Rose Island Foyer
1:15 pm	Plenary: <i>Review of the 2011 Annual Operating Plan</i> Presenter/Facilitator: Billy Spitzer, National COSEE Office and COSEE Ocean Systems Scribe: Gwen Noda, COSEE West Purpose: <i>Review progress and make adjustments as needed. Highlight tasks that are completed, on track, behind, or deferred.</i> Outcome: <i>Identify tasks that need follow up, or mid-year adjustments to the plan.</i>	Rose Island II
1:45 pm	Plenary: <i>COSEE's Goals for 2012 and Beyond for Broadening Participation</i> Facilitator: Billy Spitzer, National COSEE Office and COSEE Ocean Systems Scribe: Linda Chilton, COSEE West Purpose: <i>Our 3-year strategic plan ends in 2011, need to begin preparation for the next phase of strategic planning.</i>	Rose Island II

# Day 1: Tuesday, May 3, Detailed Agenda

2:15 pm	<p>Plenary: <i>Decadal Review Discussion/COSEE Future Ideas</i></p> <p>Facilitators: Linda Duguay, COSEE West Cheryl Peach, COSEE California</p> <p>Scribe: Patricia Harcourt, COSEE West</p> <p>Purpose: <i>This session will inform and update the COSEE Network, NAC and NSF on the status of the Decadal Review documents.</i></p> <p>Outcome: <i>To obtain COSEE Network, COSEE NAC and NSF input and consensus on finalizing the documents.</i></p>	Rose Island II
3:00 pm	Break & Networking	Rose Island Foyer
3:15 pm	<p>Plenary: <i>Minority Recruitment, Education, and Community Outreach</i></p> <p>Facilitator: Liesl Hotaling, National COSEE Office and COSEE Networked Ocean World</p> <p>Scribe: Romy Pizziconi, National COSEE Office</p> <p>Presenter: Lonnie Gonsalves, Fisheries Research Scientist Cooperative Oxford Laboratory, Oxford, MD</p> <p>Purpose: <i>Government agencies and private institutions have provided support for research and education activities at minority-serving institutions in order to increase minority recruitment into science fields. While these programs continue to grow, students who currently benefit from these resources can play a vital role in increasing the effectiveness of their institution's recruitment and outreach efforts.</i></p> <p>Outcome: <i>Description of the positive impact of student involvement in established outreach programs that have provided our students with valuable training in education and communication.</i></p>	Rose Island II
4:00 pm	<p>Plenary: <i>Reflection</i></p> <p>Facilitators: Lundie Spence, COSEE SouthEast</p>	Rose Island II
4:30 pm	<p>Plenary: <i>Education and Human Resources (EHR) Funding Opportunities</i></p> <p>Facilitator: Liesl Hotaling, National COSEE Office and COSEE Networked Ocean World</p> <p>Scribe: Romy Pizziconi, National COSEE Office</p> <p>Presenter: David Campbell, National Science Foundation</p> <p>Purpose: To review current funding opportunities within EHR and potential for leveraging existing COSEE activities.</p> <p>Outcome: Ideas for funding opportunities within EHR.</p>	Rose Island II
5:00 pm	<p>Plenary: <i>Wrap-up &amp; Announcements</i></p> <p>Facilitator: Gail Scowcroft, National COSEE Office</p>	Rose Island II
6:00 pm	Peer to Peer Dinner Meeting	Waterfront Pavilion
<p>NOTES: _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>		

# Multicultural Training for Broadening Participation

## PLENARY SESSION PRESENTERS

**Sara Xayarath Hernandez**, Director of Diversity Programs, Engineering College, Cornell University



In addition to directing the diversity programs at the Engineering College, Hernandez is the Cornell advisor to the Society of Women Engineers and the Society of Hispanic Professional Engineers. Hernandez serves on Cornell's university Judicial Hearing Board and the Cornell Co-op Employer Advisory Board. She is also an alumna advisor to Psi Chapter of Kappa Kappa Gamma. In the local community, she serves as a board member for One to One Big Brothers/Big Sisters of Ithaca & Tompkins County as well as for the Latino Civic Association of Tompkins County. In addition, she is active in the Eleanor Roosevelt Fund, an organization providing no-interest emergency micro-loans to immigrants and resettled refugees residing in the greater Ithaca area.

**DiOnetta Jones**, Associate Dean and Director, Office of Minority Education, Office of the Dean for Undergraduate Education, MIT



Jones is the Associate Dean and Director of the Office of Minority Education, Office of the Dean for Undergraduate Education at the Massachusetts Institute of Technology. Prior to this appointment, she was the Director of Diversity Programs for the College of Engineering at Cornell University. She previously served as Director of Education, Training and Outreach at The National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM). Before joining GEM, she held the position of Statewide Associate Director for California's Mathematics Engineering and Science Achievement Schools Program. She also served as Director of the MESA Schools Program and the MESA Engineering Program at the University of the Pacific in Stockton, CA. Ms. Jones holds a BA Degree in

Communications from Northwestern State University in Natchitoches, LA and a MA Degree in Educational and Counseling Psychology from the University of the Pacific. She has also completed post-graduate course work in Education Administration and Theology. Ms. Jones is also currently serving on the board of directors for The Institute for Broadening Participation.

**Renetta Tull**, Assistant Dean for Graduate Student Development and Director, PROMISE: Maryland's Alliance for Graduate Education and the Professoriate (AGEP) University of Maryland (UMBC, UM Baltimore, UM College Park) UMBC Graduate School



Dr. Tull earned the BS in Electrical Engineering from Howard University, and both the MS in Electrical Engineering and the Ph.D in Speech Science from Northwestern University. She was an Anna Julia Cooper Postdoctoral Fellow and Assistant Professor of Communicative Disorders at the University of Wisconsin-Madison (UW), and a researcher in the both the Waisman and Trace Centers (Rehabilitation Engineering) prior to coming to UMBC. In addition to academic experience, she has been involved with entrepreneurship projects and meetings in Silicon Valley, New York, Raleigh, as well as Illinois and Maryland. She has also worked with the Washington DC Technology Council.

In her current roles, Dr. Tull works to increase community and professional development opportunities for graduate students at UMBC, UMB, and UMCP through targeted PROMISE programs that include: Professors-in-Training (PROF-it), Dissertation House, the Community Building Retreat, Fall Harvest, Research Symposium, Reflections Health and Wellness Seminars, and others. These programs, along with PROMISE's recruitment efforts and the growing recognition of Maryland's commitment to diversity at the graduate level, have contributed to increases in applications, enrollments, and graduation rates of underrepresented graduate students in STEM fields.

# Multicultural Training for Broadening Participation

## PLENARY SESSION PRESENTERS CONTINUED

**Liv Detrick**, Assistant Director, Institute for Broadening Participation



Liv is an Assistant Director at the Institute of Broadening Participation, a non-profit supporting pathways to STEM fields and placing particular emphasis on connecting underrepresented groups with STEM programs, funding, mentoring and resources. As the Project Manager for IBP's NASA One Stop Shop Initiative (OSSI) project, she coordinates OSSI-related recruitment activities, assists students in completing their applications, and coordinates activities to increase faculty networking and student/faculty awareness of OSSI. She works closely with IBP's project managers and Regional Specialist team to coordinate recruitment and outreach, and plays a leading role in designing and creating IBP materials. Additionally, Liv contributes to grant writing and project development at IBP, and serves as IBP's web developer. Liv has a BS in Environmental Studies from Mount Holyoke College and an MS in Geography from Penn State University.

**Allyson Fauver**, Policy Analyst, Institute for Broadening Participation



Allyson Fauver is a policy analyst and media specialist at the Institute of Broadening Participation, a non-profit supporting pathways to STEM fields and placing particular emphasis on connecting underrepresented groups with STEM programs, funding, mentoring and resources. As co-PI and Project Manager for IBP's Pathways to Ocean Sciences project, she works with faculty, administrators and students to increase networking and support diversity in the National Science Foundation's ocean sciences Research Experiences for Undergraduates (REU) programs. She also contributes to grant writing and project development at IBP, and designs outreach materials that present practical, hands-on strategies for supporting diversity within a broader framework that speaks to diversity as a national imperative. She holds a BA in International Development Studies from Marlboro College, and a JD with a focus on energy policy and natural resources law from the University of Maine School of Law.

# 2011 Annual Operating Plan Status Report

## PLENARY SESSION PRESENTER

**Billy Spitzer**, National COSEE Office and COSEE Ocean Systems



William Spitzer is a member of the NCO team, responsible for the National Advisory Committee and orientation of new centers. He is also PI of COSEE Ocean Systems. At the New England Aquarium, he is Vice President for Programs, Exhibits, and Planning, and is responsible for oversight of exhibit design, animal care, volunteer, and education programs. He also is responsible for coordinating implementation of the Aquarium's strategic plan, across all departments and programs throughout the institution. Previously, he served as Director of Education, leading the development, delivery and evaluation of institutional education programs and exhibits that reach more than one million Aquarium visitors, and thousands through outreach to youth and community organizations, schools and hospitals. He has served as Principal Investigator for a number of informal science education projects funded by NSF, IMLS, and foundations. Prior to coming to the Aquarium, Dr. Spitzer worked at TERC, an educational research and development firm in Cambridge, MA. At TERC, he focused on creating professional development opportunities for teachers and learning opportunities outside schools in museums and science centers, supported by effective applications of technology. Dr. Spitzer has a background in physics, chemistry and oceanography.

# 2011 Annual Operating Plan Status Report

The National COSEE Network Strategic Business Plan  
Annual Operating Plan 2011

Draft  
4/25/11

Action/Deliverable	Lead	When	Additional Resources	Status	Notes
<b>Goal 1: Build capacity of the National COSEE Network</b>					
<b>Objective 1.1: Improve Planning, Reporting and Evaluation</b>					
1. Develop draft Annual Operating Plan (AOP)	SBPWG	Sep 2010 - Nov 2010	N/A	Completed	
2. Review and approve AOP with NCC, NAC, NSF	ExComm NCC	Nov 2010	N/A	Completed	
3. Track AOP implementation		Dec 2010 - Nov 2011	N/A	On schedule	
4. Gather participation, program, and product data (from Centers)	Centers & DRWG	Jul 2011	N/A	On schedule	Includes data from annual survey of scientist participation in COSEE to address NSF metrics
5. Gather impact data (from Center evaluations and Decadal Review process)	EWG, DRWG & NNE	Jul 2011	N/A	On schedule	
6. Review progress on a quarterly basis (Feb, May, Aug, Nov)	NCC	Dec 2010 - Nov 2011	N/A	On schedule	
7. Make adjustments and develop next AOP (then repeat steps # 2-6 annually)	SBPWG	Sep 2011 - Nov 2011	N/A		
<b>Objective 1.2: Support Strategic Partnerships</b>					
8. To retain the strongest partnerships and activities from Centers whose funding has ended, create 2-3 collaborations with currently funded Centers to support these "legacy" programs	GWG & NCC	Nov 2011	Needs funding	On schedule	Identify possible funding sources, integrate with #9 and #19. Governance structure now contains a provision to retain centers. R&D knowledge is being captured at best practices workshops, and cosee.net will have a "legacy centers" section.
9. Develop a Partnership Working Group to identify and vet potential partners, create templates for partnership agreements, and help to create a balanced portfolio of COSEE network level partnerships.	GWG, PWG & NCO	May 2011	[Received NSF funding]	On schedule	GWG can develop a "workflow" and the PWG can help to selectively seek out and develop new partnerships. There are ongoing discussions with other professional societies (TOS, ASLO, AGU, MTS) to produce/distribute relevant COSEE products at conferences, and for joint proposals. PWG is now active.
<b>Objective 1.3: Enhance Leadership and Accountability</b>					
10. Develop concise list of expectations and responsibilities for Center PIs and staff (including "deep bench" staff beyond the PIs) participation in Network level activities	ExComm	Dec 2010	N/A	Completed	Table of responsibilities has been completed.
11. Identify changes in "Network architecture" needed to support vision and goals	GWG	Dec 2010	N/A	Completed	No changes were identified that need to be made at this time. Current architecture does facilitate (1) addition of new centers, (2) transition of existing centers to non-NSF funding, and (3) orderly closure of centers with disposition of IP.
13. Incorporate expectations (#10), operating agreements (#12), and Center responsibilities to the Network into the COSEE website, for new PIs or those applying for COSEE funding.	NCO	Dec 2010	N/A	In progress	Underway, will be completed soon.
<b>Objective 1.4: Build COSEE's Profile Among Key Constituencies</b>					
15. Continue to develop and enhance COSEE's web presence to facilitate partnership building and outreach	WWG	Nov 2011	[Received NSF funding]	On schedule	Integrate new centers; enhance ability of centers to update content; create "community center"; build out blog and resource functions
16. Develop 13 multimedia case studies of successful scientist engagement	SEWG/MMWG	May 2011	[Received NSF funding]	On schedule	Ongoing project, 5 case studies completed, remained will be done by 12/31/11.
17. Establish/maintain COSEE "presence" at 4-6 key national professional meetings per year (esp. ocean science and science education)	NCO	Nov 2011	[Received NSF funding]	On schedule	Ongoing work.
18. Develop annual award program for scientists or private sector entities who contribute to COSEE's success	NCO	Nov 2011	[Not funded]	On schedule	Seek funding, or identify ways to recognize contributions at low or zero costs (e.g. certificate), and deliver at 2012 Ocean Sciences meeting
<b>Objective 1.5: Increase fundraising capacity</b>					



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Action/Deliverable	Lead	When	Additional Resources	Status	Notes
19. Obtain \$60-100K in non-federal resources to support fundraising activity	NCO	Nov-2011	May need seed funding	On schedule	Call Scowcroft has raised \$10K to set up a COSEE Foundation; papers have been filed with the state of RI; a bookkeeping system is being set up; and an initial prospect list is being developed.
20. Develop local/regional business partnerships	Centers	Nov 2011	N/A		May be realistic for some centers but not all.

## Goal 2: Propagate effective practices, innovations, and products

### Objective 2.1: Identify

22. Agree on criteria for "excellence" (see "excellence" under Values and description of "excellence" under Goal #2)	NCC	Dec 2010	N/A	In progress	Underway, will be completed soon.
23. Choose annual focus topic/theme for 2011	NCC	Nov 2010	N/A	Completed	Focus on Diversity
24. Produce literature review or "white paper" for engaging scientists	EWG	Dec 2010	N/A	Completed	A draft report including a literature review has been completed and submitted for incorporation into the Decadal Review report.
24. Produce literature review or "white paper" for 2011 topic	EWG	Mar 2011	N/A	Deferred	There will be no white paper produced this year due to the heavy demands from the Decadal Review. However, Phil Bell produced a literature review on diversity in November 2009 that will be included in the Decadal Review report.
25. Survey of Center activities and evaluation results (Survey Monkey)	NCO	Jun 2011	N/A		Focus on Diversity
26. Summarize activity and evaluation data, including data from NCO/NSF site visits	NCO	Jul 2011	N/A		Focus on Diversity
27. Conduct effective practices workshop	NCO	Sep 2011	Funding was redirected to Decadal Review at NSF's request	Deferred	Deferred until 2012. In consultation w/ NSF, funds in 2011 reallocated toward NCO participation in Decadal Review
28. Produce workshop proceedings	NCO	Oct 2011		Deferred	Deferred until 2012. In consultation w/ NSF, funds in 2011 reallocated toward NCO participation in Decadal Review
29. Document 1-2 repeatable, proven, "mature" effective practices out reach programs in which scientists as well as educators can engage to fulfill broader impact	NCO with relevant Centers	Nov 2011	May require some additional funding	On schedule	Discussions underway with AMS and several other professional societies re dissemination of relevant COSEE products at conferences. Other activities may need to be deferred pending funding.

### Objective 2.2: Adopt within the Network

30. Implement ongoing internal professional development on the annual topic/theme (e.g., via webinar, miniconference, study group, or self-assessment tools), involving external partners as appropriate	NCC	Jan 2011 - May 2011	TBD	On schedule	Focus on Diversity. Webinars planned with the Institute for Broadening Participation.
31. Include internal professional development on the annual topic/theme at the May Network meeting	NCC	May 2011	N/A	On schedule	The Institute for Broadening Participation will be conducting professional development at the May meeting on Diversity.
32. Implementation of program(s) (from #29) on small, medium, and/or large scale as appropriate -- teacher professional development	Centers and/or Network	Nov 2011	Depends on scale of implementation	On schedule	Discussions underway with AMS and several other professional societies re dissemination of relevant COSEE products at conferences. Partnering with AMS to conduct a professional development webinar series on hurricane science.
32. Implementation of program(s) (from #29) on small, medium, and/or large scale as appropriate (see Considerations above)	Centers and/or Network	Jun 2011 - Dec 2011	Depends on scale of implementation		Focus on diversity

### Objective 2.3: Disseminate beyond the Network

33. Develop 1-2 strategic partnerships to extend COSEE practices to reach additional ocean scientists (e.g., through professional societies)	NCO/Network/ Centers	Mar 2011	Depends on scale of implementation	On schedule	Memoranda of understanding have been completed with AMS and ASLO.
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# 2011 Annual Operating Plan Status Report

Action/Deliverable	Lead	When	Additional Resources	Status	Notes
34. Identify opportunities within NSF (beyond OCE) and other federal agencies to extend COSEE practices or programs to other disciplines (e.g., in NSF/GEO, geology, atmospheric scientists)	NCO/Network/ Centers	Nov 2011	Depends on scale of implementation	On schedule	Discussions underway with NSF IT/EST program
36. Institutionalize successful programs	Centers	Nov 2011	N/A		
<b>Objective 2.4: Compile Evidence, Evaluate, and Publish</b>					
37. Document evidence that multiple COSEE effective practices, innovations, and products are being used broadly within and across COSEE Centers and externally through strategic partnerships	NNE (as it relates to Decadal Review)	May 2011	N/A	Deferred	Focus on Scientist Engagement. This activity is deferred until Network evaluation work is resumed.
37. Document evidence that multiple COSEE effective practices, innovations, and products are being used broadly within and across COSEE Centers and externally through strategic partnerships	NNE (as it relates to Decadal Review)	Nov 2011 (as part of annual review)	N/A	Deferred	Focus on Diversity. This activity is deferred until Network evaluation work is resumed.
38. Create 1-3 peer-reviewed publications per year on COSEE effective practices, innovations, and products	Centers	Dec 2010	N/A	Completed	A list of publications from the Centers is included in the Decadal Review report.
38. Create 1-3 peer-reviewed publications per year on COSEE effective practices, innovations, and products	Centers	Nov 2011 (as part of annual review)	N/A		Focus on Diversity

### Goal 3: Create strategic partnerships to extend COSEE's reach

<b>Objective 3.1: Scientific Community</b>					
40. Increase quality engagements within the academic, private, and government scientific community (leveraging effective practices from Goal #2)	NCC	May 2011	[Leverage new NSF-funded COSEE initiatives]	On schedule	Liesl Hotaling is working with NSF to include COSEE in IT/EST meetings. The NCO is working with the Inner Space Center to provide professional development to staff at South Carolina and Mystic aquariums, and is also working with NOAA fisheries to develop a program for the 2011 SACNAS conference. NCO is addressing deans of oceanographic institutions re addressing diversity in ocean sciences. The Partnerships Working Group is addressing this.
42. Establish a COSEE presence in major ocean science graduate programs	Centers	Nov 2011	N/A		
43. Increase COSEE's profile in relevant ocean science agencies and organizations. Identify 2-3 additional strategic partners (industry, NGOs, federal agencies), and establish partnership agreements	PWG	Nov 2011	[Received NSF funding for Collab. & Partnerships Coordinator]	On schedule	
<b>Objective 3.2: Underrepresented Audiences</b>					
44. Evaluation demonstrates COSEE's progress towards use of innovative and effective approaches to overcome barriers to access and participation for underrepresented and underserved audiences	NNE	Nov 2011	TBD	On schedule	Initial diversity survey has been completed. Awaiting further data from Decadal Review.
45. Increase diversity in the NAC	NAC	May 2011	Nominating Committee	Behind schedule	This should be addressed in future recruitment efforts.
46. Increase diversity in the NCN	Centers	Nov 2011	TBD		Consider survey to identify diversity not captured via meeting attendance. Consider creation of opportunities for more junior staff to attend COSEE meetings.
47. Develop 2-3 quality partnerships that focus on underrepresented/underserved groups	DWG	Nov 2011	TBD		Institute for Broadening Participation in partnering with COSEE-OS to reach out to scientists and underrepresented groups. Considering partnership with Boys and Girls Clubs, and collaboration w/IBP on diversity in NSF REU programs.

# 2011 Annual Operating Plan Status Report

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Action/Deliverable	Lead	When	Additional Resources	Status	Notes
				Future task	
				Completed	
				On schedule	
				Behind schedule	
				Needs attention	
				Carryover from previous year	
				Deferred	

# Minority Recruitment, Education & Community Outreach

## PLENARY SESSION PRESENTER

**Lonnie Gonsalves**, Fisheries Research Scientist, Cooperative Oxford Laboratory, Oxford, MD



Lonnie Gonsalves is a doctoral student at the University of Maryland Eastern Shore (UMES) and a member of the Class of 2010 NOAA Graduate Sciences Program. He received his B.S. in Biology from East Carolina University in 2005. Lonnie currently performs research on striped bass health and immunity at the Cooperative Oxford Laboratory (COL) under the guidance of Dr. John Jacobs. At COL, Lonnie is currently conducting his dissertation project entitled “Nutritional Status and Immune Function of Chesapeake Bay Striped Bass *Morone saxatilis*”. In addition to his thesis research, Lonnie assists COL’s Coastal Ecosystem Assessment and Pathogen Monitoring Programs. He also possesses a keen interest in science education and youth mentoring. As a member and past-president of the American Fisheries Society UMES Student Subunit, Lonnie has participated extensively in student outreach initiatives that facilitate environmental awareness, science education, and participation in aquatic sciences. As a native of eastern North Carolina and current resident of the Delmar peninsula, Lonnie enjoys ample opportunities for fishing, biking, and canoeing from spring-fall on the gorgeous “Eastern Shore.”

# Education & Human Resources Funding Opportunities

## PLENARY SESSION PRESENTER

**David Campbell**, National Science Foundation



David Campbell grew up in Newport, Rhode Island, and spent a great deal of time in and on the ocean, sparking his interest in marine biology. He received his B.S. in Zoology at the University of Rhode Island, and spent the following year as a dock worker unloading commercial fishing trawlers. He then enrolled in the Florida Institute of Technology and received a M.S. in marine biology. His Master’s thesis led to the discovery and naming of a new species of sea star, *Echinaster graminicola*. David returned to the University of Rhode Island for his Ph.D. in biological sciences where his research focused on the foraging behavior of sea stars. His first position after receiving the Ph.D. was to teach coral reef ecology for the School for Field Studies in the US Virgin Islands. This was followed by a one-year visiting assistant professor position in the Zoology Dept. at the University of New Hampshire that lasted three years. It was while at UNH that David started teaching field marine science courses for the Shoals Marine Laboratory, and he continued to do so for the next 20 summers. David then settled in at Rider University for 15 years, where he served as chair of the Biology Dept. and helped to institute the University’s marine biology and environmental science majors. David has been a Program Director in the Education Directorate at the National Science Foundation since 2001. He works with several programs, including Advanced Technology Education, Discovery Research K-12, Innovative Technology Experiences for Students and Teachers, and Climate Change Education Partnerships.

# Day 2: Wednesday, May 4, Detailed Agenda

7:30 am	Council breakfast meeting	Heritage
7:30 am	Breakfast (non-Council members)	Rose Island Foyer
8:30 am	Welcome Back & Announcements Gail Scowcroft, COSEE National Network Director Linda Duguay, COSEE Council Chair and COSEE West	Rose Island II
8:45 am	<p><i>Different Center, Same Boat: Fostering Peer Relationships within the COSEE Network</i></p> <p>Facilitator: Liesl Hotaling, National COSEE Office and COSEE Networked Ocean World</p> <p>Purpose: <i>Participants identify similar needs, available resources, potential collaborations and best practices in several areas, for example:</i></p> <ol style="list-style-type: none"> <li>1. <i>Web developers/administrators</i></li> <li>2. <i>Professionals development facilitators/coordinators</i></li> <li>3. <i>Scientists</i></li> <li>4. <i>Promotion/branding/marketing personnel</i></li> <li>5. <i>Evaluators</i></li> <li>6. <i>Formal educators</i></li> <li>7. <i>Informal educators</i></li> <li>8. <i>Administrators/PIs/Directors</i></li> </ol> <p>Outcome: <i>List of new ideas that can strengthen the Network.</i></p> <p>Action: <i>Network members review the ideas for potential implementation.</i></p> <p>Introduction and Purpose (20 minutes)</p> <p>Round table with focused discussions (100 minutes)</p> <p>Format: form break-out groups according to participant's function within COSEE and/or personal interest. Limit group size to about eight participants. For each group, identify a scribe and a team leader.</p> <p>Process:</p> <p>Part One (30 minutes): Identify and analyze new ways to collaborate.</p> <ol style="list-style-type: none"> <li>a. Each person comes up with a new/innovative way or idea within his/her function that will strengthen the Network.</li> <li>b. Share with idea with the group.</li> <li>c. Group selects 1-3 ideas for further development.</li> </ol> <p>Part Two (30 minutes): For each idea, develop a brief description for implementation in these categories (to the best of ability):</p> <ol style="list-style-type: none"> <li>a. Outcome/product/idea</li> <li>b. Process/method</li> <li>c. Staff/administrative effort</li> <li>d. Cost</li> <li>e. Target audience</li> <li>f. Outcome/benefit to the Network</li> </ol> <p>Part Three (30 minutes): Walk about</p> <p>Part Four (10 minutes): Wrap up and summary</p>	Rose Island II

# Day 2: Wednesday, May 5, Detailed Agenda

10:45 am	Break & Networking	Rose Island Foyer
11:00 am	<p>Plenary: <i>Effective Networking: Why, How, and for What?</i></p> <p>Facilitator: Bob Chen, COSEE OCEAN</p> <p>Scribe: Kristin Uiterwyk, COSEE OCEAN</p> <p>Presenter: Jean Egmon, Kellogg School of Management, Northwestern University, Evanston, IL and COSEE National Advisory Committee</p> <p>Purpose: <i>To increase the knowledge of COSEE Network members about effective practices in networking, how they are formed, how success can be measured, and why networks are effective.</i></p> <p>Outcome: <i>An increased understanding and interest in network science and an increased capacity of individuals and centers to operate from a network perspective. A baseline knowledge of effective networking practices to inform the following COSEE Network Meeting sessions.</i></p>	Rose Island II
11:45 am	<p>Plenary: <i>Networking Within the COSEE Network</i></p> <p>Facilitator: Bob Chen, COSEE OCEAN</p> <p>Scribe: Kristin Uiterwyk, COSEE OCEAN</p> <p>Purpose: <i>The goal of this session is to apply what we have collectively learned from Jean Egmon's talk and what we know already about networking to increase the effectiveness and productivity of the COSEE Network.</i></p> <p>Outcome: <i>A set of recommendations for effective networking practices within COSEE. Also, a set of recommendations of how to measure the success of our networking practices.</i></p>	Rose Island II
12:45 pm	Lunch & Networking	Rose Island Foyer
1:45 pm	<p>Plenary: <i>Network to Network Collaborations</i></p> <p>Facilitator: Liesl Hotaling, National COSEE Office and COSEE Network Ocean World</p> <p>Scribe: Sue Cook, COSEE Florida</p> <p>Purpose: <i>Identify strategic partnerships for the COSEE Network to pursue.</i></p> <p>Outcome: <i>1) Identify people within the COSEE Network who may have existing relationships with officials in potential partnering organizations and may be able to assist facilitating a formal COSEE Network partnership.</i>  <i>2) Gather suggestions and concrete steps for pursuing relationships with potential partnering organizations from and with members of the COSEE Network.</i></p> <p>Introduction and Purpose (10 minutes)</p> <p>Brainstorming (30 minutes) Identify organizations and strategies. Sheets of paper will be placed around the room listing various organizations for potential partnerships. Participants will be asked to circulate around the room, list on the paper if they know anyone in the organization, if they have ideas as to how COSEE might have a substantial partnership with the organization, or if they can think of other groups not listed that might be of interest to the COSEE Network.</p> <p>(Note: papers will include a brief description of the organization listed and what COSEE might already be doing – as far as we are aware)</p> <p>Report Out &amp; Wrap Up (5 minutes)</p>	Rose Island II
2:30 pm	<p>Plenary: <i>Future Directions for Formal and Informal Science Education</i></p> <p>Facilitator: Bob Chen, COSEE OCEAN</p> <p>Scribe: Catherine Cramer, COSEE OCEAN</p> <p>Presenters: Arthur Eisenkraft, UMASS Boston and COSEE OCEAN          Alan Friedman, New York Hall of Science and COSEE OCEAN</p>	Rose Island II

# Day 2: Wednesday, May 5, Detailed Agenda

2:30 pm, cont.	Plenary: <i>Future Directions for Formal and Informal Science Education</i> Purpose: <i>To form and enhance strategic connections between COSEE and initiatives in STEM formal and informal education.</i> Outcome: <i>A new perspective on the role of ocean education within STEM learning in formal and informal learning. Ultimately, we would like to see a set of prioritized recommendations to increase the prominence of Ocean Science Education.</i>	Rose Island II
3:30 pm	Closing Remarks Gail Scowcroft, COSEE National Network Director Linda Duguay, COSEE Council Chair and COSEE West	Rose Island II
3:45 pm	Meeting Adjourned	
3:45 pm	Non-mandatory Council/NAC Meeting	Heritage
5:00 pm	Meeting Adjourned	
6:00 pm	Sunset Sail (optional event)	
7:30 pm	Dinner on your own	

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# Effective Networking: Why, How, and For What?

Jean Egmon, Kellogg School of Management, Northwestern University, Evanston, IL and COSEE National Advisory Committee



Jean Egmon is the director of the Ford Center Network. She is also the president of Third Angle, Inc. Jean's work focuses on spotting & leveraging interdependencies across value networks. This means synthesizing information and ideas from diverse sources, working with companies to spot the "third angle," i.e., a higher order concept of simple elegance that enables companies to meet multiple needs of multiple stakeholders at once. From there, she works with companies to design strategies and environments to innovate and make decisions that create a pull for participation across the networks.

Applications of this expertise include: uncovering and exploring new market niches; engaging cross-boundary collaboration for invention and innovation; designing new things to be more easily adopted & viral across customers and employees; employing a design method where interdisciplinary teams approach a variety of business questions with a design mindset and iterate with end users; and designing work to be done by networks.

Jean relies heavily on her interdisciplinary background, and that of her team, in cognition, management, and complexity sciences, marketing and literature to develop frameworks, approaches and tools that help business leaders and scientists see the world with a more connective lens and actively build their own capabilities and applications in these areas.

Organizations with which Jean has worked include: Abbott, Accenture, Bank of America, Boeing, Equity Office Properties, Exelon Corporation, ExxonMobil, General Electric, Kraft, Merck, Proctor & Gamble, Raytheon, Unilever, United Airlines & US Intelligence.

Jean's Ed.D. and M.A. are from the University of Illinois in management and cognition. Jean's B.A from Monmouth College is in business administration and English.

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# Future Directions for Formal and Informal Science Ed.

## Arthur Eisenkraft, UMASS Boston and COSEE OCEAN



Arthur Eisenkraft is the Distinguished Professor of Science Education, an adjunct Professor of Physics and Director of the Center of Science and Math in Context (COSMIC) at the University of Massachusetts Boston. For 25 years, he taught high school physics and was a 6-12 science coordinator. He is past president of the National Science Teachers Association. He served on the content committee and helped write the National Science Education Standards of the National Research Council and has served on other NRC committees resulting in the reports *How People Learn*, *Tech Tally*, *America's Lab Report*, and *Exploring the Intersection of Science Education and 21st Century Skills*. He also participated in the creation of the NAEP Frameworks for 2009-2019, the College Board Science Standards for College Success and the NRC Framework for Science Education. He is project director of the NSF-supported Active Physics Curriculum Project that is introducing physics instruction for the first time to all students and leading a similar effort with Active Chemistry. He is chair and co-creator of the Toshiba/NSTA ExploraVision Awards, involving 15,000 students annually. In 1993, he was Executive Director for the XXIV International Physics Olympiad after initiating the U.S. involvement in the program and serving as the academic director of the United States team for six years. Eisenkraft's publication *Quantoons* is an outgrowth of work done in *Quantum*, a physics magazine for high school students and a collaborative effort of the United States and Russia. He was also a consultant for the award-winning ESPN SportsFigures.

Eisenkraft has received numerous awards recognizing his teaching and related work including the Presidential Award for Excellence in Science Teaching, the American Association of Physics Teachers Distinguished Service Citation for "excellent contributions to the teaching of Physics" as well as the Millikan Medal, the Disney Corporation's Science Teacher of the Year in their American Teacher Awards program, and the Distinguished Service To Science Education Award of NSTA and the Robert Carleton Award. He is a fellow of the AAAS, holds a patent for a laser vision testing system and was awarded an Honorary Doctorate from Rennsalaer Polytechnic Institute.

## Alan Friedman, New York Hall of Science and COSEE OCEAN



Alan J. Friedman is a consultant in museum development and science communication. For 22 years he served as Director of the New York Hall of Science, New York City's public science technology center. Under his leadership the Hall won special recognition for encouraging new technologies, creating models for teacher training, serving an extraordinarily diverse audience, and evaluating the effectiveness of informal science learning. His work has been recognized by the American Association for the Advancement of Science's Award for Public Understanding of Science and Technology, the Association of Science-Technology Centers' Fellow Award, the American Institute of Physics' Andrew Gemant Award, the National Science Teachers Association's Distinguished Informal Science Education award, and the New York City Mayor's Special Recognition Award for Excellence in Science and Technology. He was President of the Visitor Studies Association for 2005-2007. Before coming to New York, Dr. Friedman served as Conseiller Scientifique et Muséologique for the Cité des Sciences et de l'Industrie, Paris, and was the Director of Astronomy and Physics at the Lawrence Hall of Science, University of California, Berkeley for 12 years. Dr. Friedman received his Ph.D. in Physics from Florida State University and his B.S. in Physics from the Georgia Institute of Technology.

# Working Group Summaries

## *EVALUATION WORKING GROUP (EWG)*

Submitted by Patricia Kwon, EWG Chair for the COSEE Network Meeting (May 2011)

Members: Chris Parsons, Craig Strang, Shawn Rowe, Ted Repa, Andrea Anderson, Dave Plude, Gordon Kingsley, Lisa Rom, Michelle Hall, Gail Scowcroft, Romy Pizziconi

The EWG has been evolving since its establishment in 2007. The group was inactive in 2008 and became extremely active with almost weekly teleconferences starting in 2009 with work for the decadal review, administration of Network surveys, and future evaluation planning.

Members of the EWG include: PIs Rosanne Fortner (until March 2011), Shawn Rowe, Craig Strang; CCO Gail Scowcroft and Romy Pizziconi; Center Evaluators Andrea Anderson, Dave Plude, Rena Dorph, Patricia Kwon, Chris Parsons, Ted Repa; National Advisory Committee member Gordon Kingsley; and Michelle Hall and Lisa Rom from NSF. Chris Parsons chaired the EWG until February 2011 and Patricia Kwon is the current EWG Chair. Rosanne Fortner served as liaison to the COSEE Council until March 2011 and Shawn Rowe is the current Council liaison. Patricia Kwon serves as liaison to the Center Evaluators.

EWG Mission: To serve the COSEE Network, NSF, and Center Evaluators by providing information and advice on 1) collective evaluation needs, and 2) existing resources and collaborative opportunities that document the extent to which COSEE goals and objectives are achieved, as well as the Network's impacts.

Scope of Work: The EWG will perform the following tasks and report to the COSEE Council on all plans, recommendations and activities.

Task 1: Provide a forum for identifying collaborative opportunities among the Center Evaluators (CEs):

- a. Assist in the identification of and mechanisms for integrating specific evaluation research being conducted in the Centers;
- b. Establish the scope of CE input to the portfolio of COSEE evaluation products, research, and lessons learned;
- c. Establish the standards for reporting existing or new "return on investment" data being collected by the CEs;
- d. Assist in brokering relationships among CEs and between the Network and CEs; and
- e. Provide logistical support for projects involving multiple CEs and the Network.

Task 2: Provide periodic review and assessment of Network plans

Task 3: Work on evaluation documents for the NSF decadal review\*

Task 4: Provide recommendations for a cross-Center evaluation plan\*

Task 5: Provide a conceptual framework for a COSEE Network database\*

The primary work of the EWG 2010-2011 has been in preparing evaluation documents for the NSF decadal review. This includes Evidence of Success documents analyzing the major Network level accomplishments from the wiki evidence bank, 2010 Scientist Engagement Survey results, past evolution of evaluation within COSEE, and the future direction of evaluation in COSEE.

# Working Group Summaries

## *2010 COSEE Scientist Engagement Survey*

### *Summary of Key Findings April 2011*

This document reports on the second Network-wide COSEE Scientist Engagement Survey, which focused on scientist/researchers engaged with COSEE during the 2010 calendar year. From the 872 invitations to take the online survey, we received 492 responses (a high 56% response rate). For an individual count of respondents for analysis, we carefully reviewed the data and eliminated those not involved with COSEE in 2010, those we could not verify from the survey data as scientists (respondents are anonymous), and all duplicates (individuals who responded to two or more Centers' surveys). As a result, we are reporting on the responses of 397 individual scientists/researchers who were engaged with COSEE during 2010. This 2010 cross-Center survey has generated a second set of reliable, consistent, coherent and comparable data about scientists' engagement in COSEE, and, for this year, the benefits that they derive from COSEE.

### Demographics

We found that the scientists engaged with COSEE are a diverse and accomplished group. A substantial majority (67%) holds doctoral degrees, and 42% of those teaching at the postsecondary level are tenured. They are roughly equally early-, mid- and advanced-career professionals (23%, 30% and 27% respectively), and bring to COSEE expertise from a wide range of disciplines. Gender is nearly evenly split (53% male; 47% female) and the racial background is predominantly white (88%). Scientists work at nearly 200 universities, agencies and other institutions located in 34 states and a few foreign countries.

The majority of scientists were engaged with COSEE in 2010 as participants in programs, activities, etc. (70%), but a substantial number also served as resources (41%), advocates/advisors (23%) and/or partners (24%). Nine percent considered themselves leaders within COSEE. Nearly half (48%) of the respondents receive NSF funding for their scientific research. These results are consistent with those from the COSEE 2009 Scientist Engagement Survey.

This year we asked about the source of funding within NSF. Of those with NSF funding for research, 64% received support from the Division of Ocean Sciences (OCE). Twenty-nine percent of all respondents have included COSEE or a COSEE partner in a research proposal.

### Benefits

This year's survey asked about NSF's "broader impacts" criterion and COSEE's assistance to scientists in meeting that criterion. Seventy percent of scientists say that their level of involvement in "broader impacts" has increased as a result of being involved with COSEE, with 16% indicating it has increased a lot. Asked how helpful COSEE has been with each of NSF's "broader impacts" categories, scientists responded that COSEE has been very helpful with broadening participation (32%), broadening dissemination (31%), advancing discovery (30%), benefits to society (26%) and enhancing infrastructure (19%).

An open-ended question asked scientists to comment on the benefits they have gained from COSEE. The top benefits categories (in order) are: making connections with the formal K-14 education community, including teachers and students; acquiring communications skills and science research "translation" skills; access to a vast education and outreach network; connecting with collaborators and partners; understanding the needs and challenges of the education community; and gaining assistance with NSF-required broader impacts. (See full summary report for details and Workbook for all comments.)

COSEE's engagement surveys, which involve all COSEE Centers and the NCO, continue to strengthen Network-wide understandings and working relationships. Based on these results, and those from future surveys, COSEE will continue to track and improve the Network's professional services to the ocean sciences research and education communities.

# Working Group Summaries

## EXCELLENCE IN NETWORKING TOOLS SUB-GROUP (ENTs)

Co-Chairs: Catherine Cramer and Carla Companion

Members: Angela Bliss, Giancarlo Cetrulo, Nora Deans, Annette deCharon, Coral Gehrke, Sean Graham, Jane Lee, Sage Lichtenwalner, Brittney Marshall, Brian McCann, Romy Pizziconi, Mike Senise, Marilyn Sigman, Lisa Taylor

In July 2009 the Web Working Group (WWG) agreed unanimously to support the formation of the Excellence in Networking Tools Sub-Working Group (ENTs). Carla Companion (COSEE-OS) and Catherine Cramer (CCO) are now serving as interim co-Chairs of ENTs. ENTs reports to the Council through the Chair of the WWG.

The ENTs proposed charter is to “explore new ways to broaden the reach of COSEE by using online networking tools to increase internal/external collaboration, communication, and exposure.” The ENTs use web conference and collaborative tools (such as Google Docs and Wikis) to create resources and work collaboratively. Three primary products have been created through ENTs efforts:

I) Online Tools Guidebook This wiki-based document (available at : <http://coseenow.net/ents>) was designed and created collaboratively. The purpose of the guidebook is “to help COSEE Network members become familiar with a wide variety of online tools and choose the tools that best fit their needs.” The wiki includes information about how to choose specific tools, categories describing the purposes these tools can have, and “tips and tricks” added by members that have experience working with the tools. To aid the COSEE Network, there is also a list of Centers that are currently using the tools, encouraging cross-Center consultation and collaboration when implementing new tools and strategies.

II) Tools That Work Stories about online technology that has been effectively used by Network members have been integrated into Tools That Work, a feature in the monthly COSEE Network News. These short case studies help to provide guidance for other Centers looking to adopt similar tools, and each story includes lessons learned by the Center when using the tool. This CNN feature has also expanded into Network-level blog posts highlighting Centers using tools and technology to accomplish their goals. (<http://www.cosee.net/news/blogs/index.cfm?BlogsAuthorID=389>)

III) Webinar Series on Tool Training The Online Tools Guidebook is also serving as the basis for a series of training opportunities for the COSEE Network. Four webinars have been conducted to date: a joint effort between the ENTs and the Professional Development Ad Hoc Committee to introduce the online guidebook and address general questions about networking tools; a session covering the use of Elluminate, Moodle, Adobe Connect, and video-based distance learning technology; a session on the use of blogging tools; and one on evaluation instruments. A Network-wide survey was used to collect data for the development of future webinar topics.

For more information visit the ENTs About Us page. (<http://www.cosee.net/about/aboutgroups/ents/>)

# Working Group Summaries

## *PROFESSIONAL DEVELOPMENT AD HOC COMMITTEE*

Listserv Members: E.V. Bell, Marilyn Sigman, Helen Domske, Lynn Whitley, Linda DuGuay, Lundie Spence, Gwen Noda, Barbara Spector, Medea Steinman, Christ Herren, Lesley Smith, Janice McDowell, Jennifer Albright, Jane Lee, Lyndsey Manzo, Gail Scowcroft, Annette DeCharon, Angela Bliss

The COSEE Professional Development (PD) Ad Hoc Committee emerged from the 2009 COSEE Network Meeting where PD coordinators and facilitators met to share ideas, address challenges and brainstorm ideas for network-wide PD initiatives. The group decided to capture the momentum of these discussions and nurture communication beyond the scope of the network meeting. Thus, the PD Ad Hoc Committee formed and began teleconferences in the fall of 2009. Each teleconference is designed around a particular topic of interest identified by the PD Ad Hoc Committee and provides a format that encourages Centers to share their successes, highlight quality resources, seek advice on challenges or new projects and generally keep the communication lines open among the COSEE Network.

In 2010, the PD Ad Hoc Committee has offered webinars primarily in partnership with ENTs (Excellence in Networking Tools subgroup). Topics presented were based upon needs and interests identified in survey data gathered from members of the PD Ad Hoc Committee and included webinar tools for use in professional development and overview/feedback of the ENTs wiki site.

All Centers are encouraged to invite their PD staff to attend the meetings and join the listserv: [coseepd@lists.ucla.edu](mailto:coseepd@lists.ucla.edu).

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## *PARTNERSHIPS AND COLLABORATIONS WORKING GROUP (PCWG)*

Members: Bob Chen, Sue Cook, Jan Hodder, Ivar Babb, Liesl Hotaling, Gail Scowcroft

The COSEE Partnerships and Collaborations Working Group is awaiting final approval from the COSEE Council as a new Working Group in the COSEE Network.

The Partnerships and Collaborations Working Group (PCWG) will seek out and support productive collaborations and connections between institutions, organizations and individuals involved in activities aligned with COSEE's mission and interests.

The PCWG will translate the descriptions of partnership types and criteria to create a workflow for evaluating and forming partnerships. The workflow can help to selectively seek out and develop new partnerships. There are ongoing discussions with other professional societies (TOS, ASLO, AGU, MTS) to produce/distribute relevant COSEE products at conferences and for joint proposals.

The PCWG will also work to explore options of possible funding sources and recommend to the COSEE Council to Network activities and expansion.

# Working Group Summaries

## WEB WORKING GROUP (WWG)

The Web Working Group (WWG) was formed by consensus at the July 2007 Council meeting to examine how the Centers could work together to make existing and future COSEE information more accessible, engaging, and up-to-date. Today, the WWG supports productive collaborations and connections between institutions, organizations and individuals involved in COSEE's web-based ocean sciences education efforts by centralizing the online posting of news, events, educational and scientific resources, and people; encouraging the sharing of these across Centers and the CCO; and promoting the use of common terminology among Centers.

Since Fall 2007, the WWG has:

- Designed, developed, and implemented, with Raytheon Web Solutions (RWS), a common platform and unified Content Management System (CMS) for COSEE.net and participating COSEE Centers that centralizes the online posting of news, events, educational and scientific resources, and people; encourages the sharing of these across Centers and COSEE.net; and promotes the use of common terminology among Centers.
- Trained Center and Network administrators on how to operate the CMS and populate their websites.
- Populated the CMS database and tested system components, providing feedback to the developers for system refinements while tentatively identifying desired improvements.
- Created audience-specific features to accompany as-built search and sort functionality, thus providing both automated filtration capabilities and the flexibility to locate requisite documentation across Centers and COSEE.net by user-defined keywords.
- Delivered, in January 2009, public web pages that are 508 compliant and have a unifying "COSEE look and feel" while still maintaining a Center's individuality.
- With RWS, designed, developed, and implemented new functionality to allow those Centers not on the CMS to create "About Us" pages that display content, news, events, and a directory of people on COSEE.net and to share this information with other Centers. This functionality was also made available to select external partners, COSEE Working Groups, and the CCO.
- Modified existing functionality to include integrated Center and Network blogs and RSS feeds.
- Prepared an online tutorial on navigating the CMS and populating Center websites.
- Continued to meet two times monthly to collaboratively identify, evaluate, and prioritize action items to enhance the look and functionality of the websites.
- Updated the Network as to WWG activities with monthly articles in CNN.



## COSEE File Manager

In addition to the CMS and integrated websites, the WWG has overseen the development and implementation of the COSEE File Manager, which serves as a repository and access portal for documents belonging to COSEE. This application cultivates linkages and promotes collaboration within the Network by supporting the sharing of files between Centers, working groups, the CCO, and other COSEE entities in a password-protected environment readily accessible by all COSEE personnel.

# Working Group Summaries

## SCIENTIST ENGAGEMENT WORKING GROUP (SEW-G)

Enhanced Engagement of Scientists for Broader Societal Impacts is a grant to COSEE Central Gulf of Mexico from the National Science Foundation, through the American Recovery and Reinvestment Act. This project, which initiated the formation of the Scientist Engagement Working Group (SEW-G) is the first to provide funding for all Centers to work together on a single project for the National COSEE Network. The project entails the production of a series of robust and interactive case studies that showcase the education and outreach efforts of some of the scientists who have worked with the COSEE Network. Effective April 20, 2011, five of 13 planned case studies are posted on COSEE.net (Figure 1). Each of these case studies is excellent on its own merit because of the work of the featured scientist supported by a specific COSEE. Taken together, the case studies show diversity in both the approach of the individual scientists and the Centers that make this section of COSEE.net worthy of extensive exploration by 1) early career scientists and academic departments interested in education and public outreach, 2) members of the general public interested in knowing more about scientific careers,, and 3) organizations interested in understanding how the National Science Foundation encourages research scientists to make their work relevant to the general public.

The SEW-G oversees the project and approves each case study before it is made public. This group includes representatives of the 12 Centers funded at the time the grant began (fall 2009), the Central Coordinating Office, and Inverness Research, the project evaluator. The development of each case study is driven by the efforts of SEW-G, the featured scientists and the production team, which includes Jessie Kastler (project manager, COSEE CGOM), Brian McCann (case study producer, COSEE CGOM), Catherine Cramer (online content developer, COSEE CCO, COSEE OCEAN, COSEE New England) and Lisa Taylor (Web developer, COSEE Ocean Systems). This team meets weekly via Skype to coordinate progress on the project, from scheduling interactions with featured scientists to developing messages related to each case study.



Figure 1. Home of the SEW-G case study project at COSEE.net

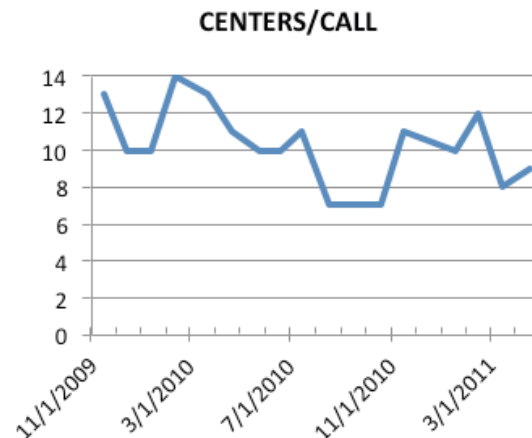


Figure 2. Participation in Monthly SEW-G Teleconferences

Of 14 possible SEW-G representatives, an average of 10 participates in monthly SEW-G calls (Figure 2). The commitment of all Center representatives has produced a website of robust content unique to COSEE and representing a wide selection of the currently funded Centers.

# Working Group Summaries

## SCIENTIST ENGAGEMENT WORKING GROUP (SEW-G), *cont.*

Center	Scientist	Affiliation	Visit	Status	Case Study
New England	Bob Chen	U Mass Boston	Complete	Complete	Approved
Southeast	Carrie Thomas	North Carolina State U	Complete	Complete	Approved
Ocean Learning Communities	Rick Keil	U Washington	Complete	Complete	Approved
Networked Ocean World	Scott Glenn	Rutgers U	Complete	Complete	Approved
Coastal Trends	Michael Kemp	U Maryland	Complete	Complete	Approved
Central Gulf of Mexico	Crystal Johnson	Louisiana State U	Complete	In Production	May 2011
California	Adina Paytan	UC Santa Cruz	Complete	In Production	June 2011
West	Peggy Fong	UCLA	Complete		July 2011
Central Coordinating Office	Isaac Ginis	U Rhode Island	May 2011		August 2011
Great Lakes	Joel Hoffman	EPA	June 2011		September 2011
Pacific Partnerships	Jude Apple	Western Washington U	July 2011		October 2011
Ocean Systems	Mary Jane Perry	U Maine			November 2011
Alaska	Michael Castellini	U Alaska- Fairbanks			December 2011

Figure 3. Schedule of case study progress.

This project is approximately 75% complete and moving steadily toward completion (Figure 3). The SEW-G anticipates approving and posting one case study each month until the project is complete at the end of 2011. The production team continues to work with Center representatives and featured scientists on case studies. In addition, the team is beginning to plan finishing touches that will link the case studies and facilitate navigation among them. One task is to produce a final multimedia element that introduces the project. A second requires linking case studies within the website to facilitate navigation and make connections among featured scientists, particularly in the areas of viewpoints expressed, research topics and educational strategies.

Final requirements include evaluation and dissemination to the target audience. Inverness Research has developed instruments they will implement in May 2011, engaging expert reviewers from the target audience (early career scientists and graduate students) to provide feedback that will in turn inform remaining case studies. The production team is working with SEW-G and featured scientists to take advantage of dissemination opportunities. Several featured scientists are actively promoting the online case studies to provide more information about their professional lives to colleagues and journalists. Featured scientists and Centers wanting to showcase their collaborations will have access to a one-page summary, a DVD of the first five case studies, and project business cards. The project was presented at ASLO Ocean Sciences and AGU meetings in 2010 and will be presented as a session and a pre-conference workshop at the Coastal and Estuarine Research Federation in 2011.



## Participant List

Anderson, Andrea COSEE Ocean Learning Communities <a href="mailto:andrea@soundviewevaluation.com">andrea@soundviewevaluation.com</a>	Clark, Harold COSEE Networked Ocean World <a href="mailto:hclark@lsc.org">hclark@lsc.org</a>	Fong, Peggy COSEE West <a href="mailto:pfong@biology.ucla.edu">pfong@biology.ucla.edu</a>
Babb, Ivar COSEE TEK <a href="mailto:babb@uconn.edu">babb@uconn.edu</a>	Companion, Carla COSEE Ocean Systems <a href="mailto:carlajean@gmail.com">carlajean@gmail.com</a>	Fortner, Rosanne COSEE Great Lakes <a href="mailto:fortner.2@osu.edu">fortner.2@osu.edu</a>
Baldassari, Carol COSEE OCEAN <a href="mailto:baldasar@lesley.edu">baldasar@lesley.edu</a>	Cook, Susan COSEE Florida <a href="mailto:scook@irsc.edu">scook@irsc.edu</a>	Friedman, Alan COSEE OCEAN <a href="mailto:Alan@friedmanconsults.com">Alan@friedmanconsults.com</a>
Bell, Elizabeth Vernon COSEE SouthEast <a href="mailto:elizabeth.vernon@scseagrant.org">elizabeth.vernon@scseagrant.org</a>	Cramer, Catherine COSEE OCEAN <a href="mailto:catherinecramer@comcast.net">catherinecramer@comcast.net</a>	Gehrke, Coral COSEE Pacific Partnerships <a href="mailto:cgehrke@uoregon.edu">cgehrke@uoregon.edu</a>
Bell, Philip COSEE Ocean Learning Communities <a href="mailto:pbell@u.washington.edu">pbell@u.washington.edu</a>	Deans, Nora COSEE Alaska <a href="mailto:nora.deans@nprb.org">nora.deans@nprb.org</a>	Gingras, Andrea National COSEE Office <a href="mailto:agingras@gso.uri.edu">agingras@gso.uri.edu</a>
Bourexis, Patti COSEE Florida <a href="mailto:studygroup@aol.com">studygroup@aol.com</a>	deCharon, Annette COSEE Ocean Systems <a href="mailto:annette.decharon@maine.edu">annette.decharon@maine.edu</a>	Hall, Michelle National Science Foundation <a href="mailto:mihall@nsf.gov">mihall@nsf.gov</a>
Bredin, Siobhan ITEST LRC <a href="mailto:sbredin@edc.org">sbredin@edc.org</a>	Detrick, Liv Institute for Broadening Participation <a href="mailto:ladetrick@gmail.com">ladetrick@gmail.com</a>	Hernandez, Sara Institute for Broadening Participation <a href="mailto:sh267@cornell.edu">sh267@cornell.edu</a>
Bullerick, Susan COSEE Ocean Learning Communities <a href="mailto:susan@aquariumsociety.org">susan@aquariumsociety.org</a>	Dierderick, Laura COSEE Florida <a href="mailto:diederick@si.edu">diederick@si.edu</a>	Herren, Christy COSEE Ocean Systems <a href="mailto:Christy.herren@gmail.com">Christy.herren@gmail.com</a>
Campbell, David National Science Foundation <a href="mailto:dcampbel@nsf.gov">dcampbel@nsf.gov</a>	Duguay, Linda COSEE West <a href="mailto:duguay@usc.edu">duguay@usc.edu</a>	Hodder, Jan COSEE Pacific Partnerships <a href="mailto:jhodder@uoregon.edu">jhodder@uoregon.edu</a>
Cetrulo, Brenda COSEE Florida <a href="mailto:bcetrulo@irsc.edu">bcetrulo@irsc.edu</a>	Egmon, Jean COSEE National Advisory Committee <a href="mailto:egmon@kellogg.northwestern.edu">egmon@kellogg.northwestern.edu</a>	Hotaling, Liesl National COSEE Office, COSEE NOW <a href="mailto:lieslhotaling@yahoo.com">lieslhotaling@yahoo.com</a>
Cetrulo, Giancarlo COSEE Florida <a href="mailto:gctrulo@irsc.edu">gctrulo@irsc.edu</a>	Eisenkraft, Arthur COSEE OCEAN <a href="mailto:arthur.eisenkraft@umb.edu">arthur.eisenkraft@umb.edu</a>	Jones, DiOnetta Institute for Broadening Participation <a href="mailto:dionetta@mit.edu">dionetta@mit.edu</a>
Chen, Bob COSEE OCEAN <a href="mailto:bob.chen@umb.edu">bob.chen@umb.edu</a>	Fauver, Allyson Institute for Broadening Participation <a href="mailto:afauver@ibparticipation.org">afauver@ibparticipation.org</a>	Kastler, Jessica COSEE Central Gulf of Mexico <a href="mailto:jessica.kastler@usm.edu">jessica.kastler@usm.edu</a>
Chilton, Linda COSEE West <a href="mailto:lchilton@usc.edu">lchilton@usc.edu</a>	Ferraro, Carrie COSEE Networked Ocean World <a href="mailto:ferraro@marine.rutgers.edu">ferraro@marine.rutgers.edu</a>	Kingsley, Gordon COSEE National Advisory Committee <a href="mailto:gkingsley@gatech.edu">gkingsley@gatech.edu</a>

## Participant List

Kryc, Kelly COSEE National Advisory Committee <a href="mailto:kakryc@gmail.com">kakryc@gmail.com</a>	Peach, Cheryl COSEE California <a href="mailto:cpeach@ucsd.edu">cpeach@ucsd.edu</a>	Spitzer, Billy National COSEE Office, COSEE OS <a href="mailto:bspitzer@neaq.org">bspitzer@neaq.org</a>
Kwon, Patricia COSEE West <a href="mailto:pkwon@aqmd.gov">pkwon@aqmd.gov</a>	Pizziconi, Romy National COSEE Office <a href="mailto:romy@gso.uri.edu">romy@gso.uri.edu</a>	Sponberg, Adrienne COSEE OCEAN <a href="mailto:sponberg@aslo.org">sponberg@aslo.org</a>
Lemus, Judy COSEE California <a href="mailto:jlemus@hawaii.edu">jlemus@hawaii.edu</a>	Plude, David COSEE Alaska <a href="mailto:dave@soundviewevaluation.com">dave@soundviewevaluation.com</a>	Strang, Craig COSEE California <a href="mailto:cstrang@berkeley.edu">cstrang@berkeley.edu</a>
Matis, Kelly COSEE TEK <a href="mailto:KMatis@searesearch.org">KMatis@searesearch.org</a>	Rader, Lauren COSEE TEK <a href="mailto:lrader@oceanology.org">lrader@oceanology.org</a>	Tankersley, Richard COSEE Florida <a href="mailto:rtankers@fit.edu">rtankers@fit.edu</a>
Matsumoto, George COSEE National Advisory Committee <a href="mailto:mage@mbari.org">mage@mbari.org</a>	Randol, Scott COSEE California <a href="mailto:srandol@berkeley.edu">srandol@berkeley.edu</a>	Thomas, Carrie COSEE SouthEast <a href="mailto:carrie_thomas@ncsu.edu">carrie_thomas@ncsu.edu</a>
Mayhew, Michael National COSEE Office <a href="mailto:m2mayhew@gmail.com">m2mayhew@gmail.com</a>	Randolph-George, Carolyn COSEE National Advisory Committee <a href="mailto:george2drs@bellsouth.net">george2drs@bellsouth.net</a>	Tull, Renatta Institute for Broadening Participation <a href="mailto:rtull@umbc.edu">rtull@umbc.edu</a>
McCann, Brian COSEE Central Gulf of Mexico <a href="mailto:bmccann@ext.msstate.edu">bmccann@ext.msstate.edu</a>	Ryan, Melissa COSEE TEK <a href="mailto:melissa.oceantechnology@gmail.com">melissa.oceantechnology@gmail.com</a>	Tzou, Carrie COSEE Ocean Learning Communities <a href="mailto:tzouct@u.washington.edu">tzouct@u.washington.edu</a>
McDonnell, Janice COSEE Networked Ocean World <a href="mailto:mcdonnel@marine.rutgers.edu">mcdonnel@marine.rutgers.edu</a>	Scowcroft, Gail National COSEE Office <a href="mailto:gailscow@gso.uri.edu">gailscow@gso.uri.edu</a>	Uiterwyk, Kristin COSEE OCEAN <a href="mailto:kristin.uiteryk@umb.edu">kristin.uiteryk@umb.edu</a>
McKee, Michael COSEE TEK <a href="mailto:mp.mckee@yayoo.com">mp.mckee@yayoo.com</a>	Shapiro, Ari COSEE Networked Ocean World <a href="mailto:aridanielshapiro@gmail.com">aridanielshapiro@gmail.com</a>	Van Dyk, Pam COSEE SouthEast <a href="mailto:evaluationresources@msn.com">evaluationresources@msn.com</a>
Nadeau, Beverly COSEE OCEAN/Boston Public Schools <a href="mailto:bnadeau@boston.k12.ma.us">bnadeau@boston.k12.ma.us</a>	Shuler, Sally COSEE National Advisory Committee <a href="mailto:shulers@si.edu">shulers@si.edu</a>	Walker, Sharon COSEE Central Gulf of Mexico <a href="mailto:sharon@imms.org">sharon@imms.org</a>
Noda, Gwen COSEE West <a href="mailto:gwenoda@gmail.com">gwenoda@gmail.com</a>	Sigman, Marilyn COSEE Alaska <a href="mailto:marilyn.sigman@alaska.edu">marilyn.sigman@alaska.edu</a>	Wang, Xuchen COSEE OCEAN <a href="mailto:xuchen.wang@umb.edu">xuchen.wang@umb.edu</a>
Parsons, Chris COSEE Networked Ocean World <a href="mailto:cp@word-craft.com">cp@word-craft.com</a>	Simms, Eric COSEE California <a href="mailto:esimms@ucsd.edu">esimms@ucsd.edu</a>	Whitley, Lynn COSEE West <a href="mailto:lwhitley@usc.edu">lwhitley@usc.edu</a>
Payne, Diana COSEE TEK <a href="mailto:Diana.Payne@uconn.edu">Diana.Payne@uconn.edu</a>	Spence, Lundie COSEE SouthEast <a href="mailto:lundie.spence@scseagrant.org">lundie.spence@scseagrant.org</a>	Yoder, Jim COSEE Networked Ocean World <a href="mailto: jyoder@whoi.edu">jyoder@whoi.edu</a>

# Notes/Thoughts/Contacts/To Do

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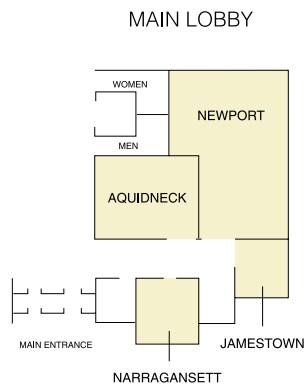
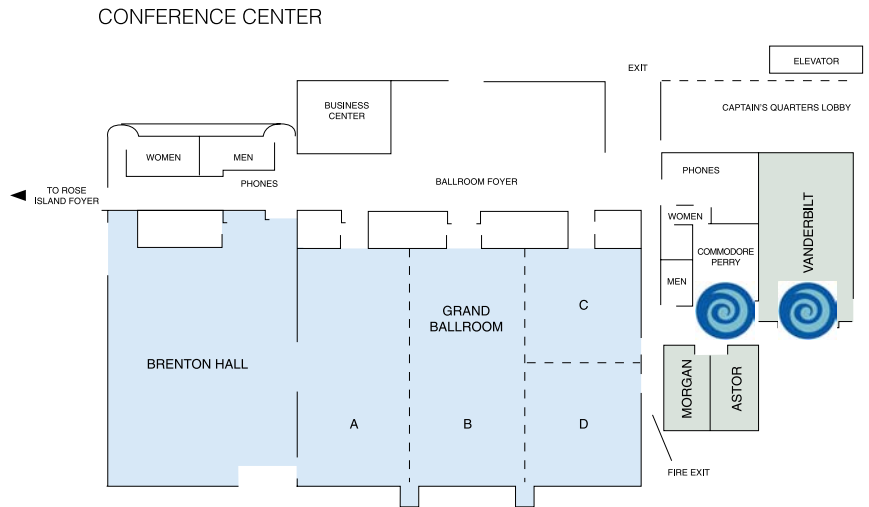
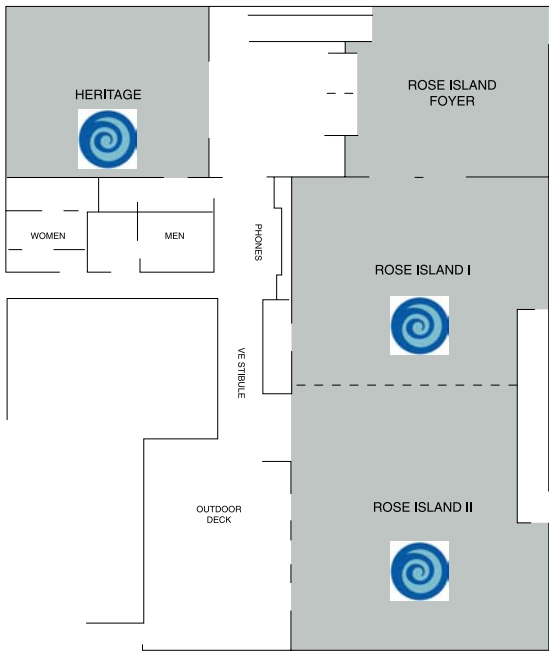
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#### WAYS THE NETWORK MEETING IS GOING “GREEN”

- Pack your water bottles and coffee mugs, water dispensers will be placed in the meeting areas. Bottled water will not be available.
- Recycle a name-tag from a previous meeting (name-tags will not be provided). We all have a ton of them, who needs one more!!
- Meeting booklet is printed on recycled paper.

# Hyatt Regency Newport

\*Meeting will occupy the Rose Island I, Rose Island II, Heritage, Vanderbilt, Commodore Perry



Tuesday, Peer to Peer Dinner Meeting will take place at the Waterfront Pavilion