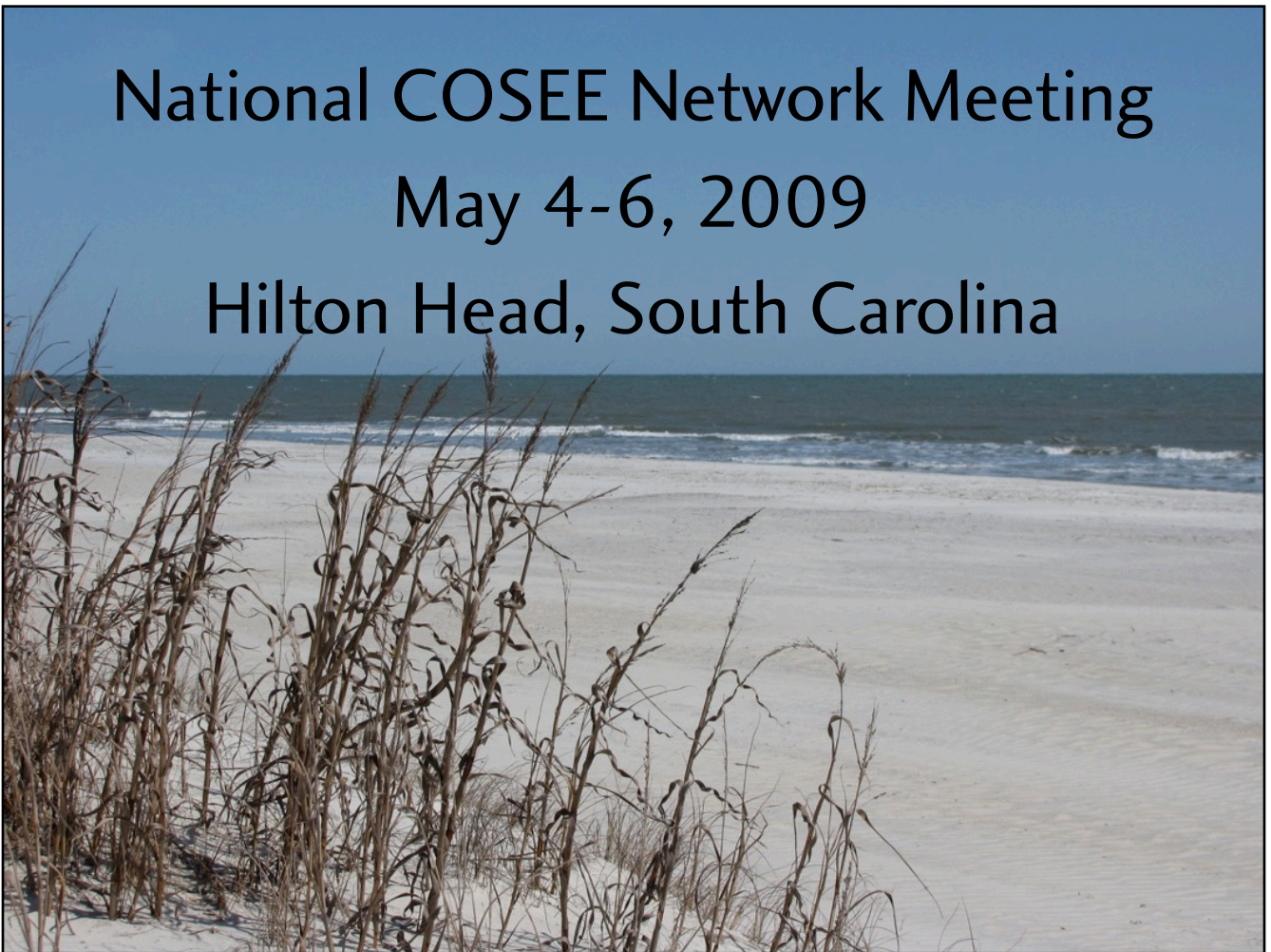




National COSEE Network Meeting
May 4-6, 2009
Hilton Head, South Carolina



Agenda At a Glance

Monday, May 4

various	Participant Arrival	
6:00 pm	Beer & Wine Reception	Dunes House
7:00 pm	Welcome Dinner	Dunes House

Tuesday, May 5

7:30 am	Council breakfast meeting	Palmetto Room
7:30 am	Breakfast (non-Council members)	Roger Trent Jones Grille
8:45 am	Welcome	Carolina Room
9:00 am	Update from NSF	Carolina Room
9:30 am	Plenary: <i>Effective evaluation of and research on COSEE</i>	Carolina Room
11:30 am	Plenary: <i>Review of the draft Strategic Business Plan/Optional Break</i>	Carolina Room
12:15 pm	Lunch	PDCC Foyer
1:15 pm	Concurrent Sessions	
	Session A: <i>Strategies for Engaging Scientists</i>	Fairway Room
	Session B: <i>Engaging the Business/Industry Sector in COSEE</i>	Palmetto Room
3:15 pm	Break & Networking	
3:45 pm	Plenary: <i>Summary Session</i>	Carolina Room
4:30 pm	Plenary: <i>Reports from COSEE Working Groups</i>	Carolina Room
5:30 pm	Announcements/Adjourn	Carolina Room
6:15 pm	Beer & Wine Reception	Dunes House
7:00 pm	Dinner	Dunes House

Wednesday, May 6

7:30 am	Council Breakfast Meeting	Palmetto Room
7:30 am	Breakfast (non Council members)	Roger Trent Jones Grille
8:45 am	Welcome Back & Announcements	Carolina Room
9:00 am	Concurrent Sessions	
	Session C: <i>Citizens Science</i>	Fairway Room
	Session D: <i>Storytelling as a Communication Tool</i>	Palmetto Room
10:45 am	Break & Networking (check-out as needed)	
11:30 am	Plenary: <i>Summary Session</i>	Carolina Room
12:15 pm	Lunch	PDCC Foyer
1:00 pm	Different Center, Same Boat: <i>Fostering Peer Relationships within the Network</i>	Carolina Room
3:00 pm	Closing Remarks/Adjourn	Carolina Room
3:15 pm	Non-mandatory Council/NAC Meeting	Palmetto Room
5:00 pm	Meeting Adjourn	
6:00 pm	Beer & Wine Reception	Dunes House
7:00 pm	Dinner	Dunes House

All Sessions will be held at the Palmetto Dunes Conference Center (PDCC)

Welcome

The National Centers for Ocean Sciences Education Excellence (COSEE) Network convenes once each year to strengthen our Network and develop effective Network strategies.

2009 Theme: *Sharing Today to Build a Better COSEE of Tomorrow*
Strategies for measuring and improving the Network's impact

The meeting's agenda reflects a design to encourage sharing and the identification of outcomes and actions from our discussions. The first session on effective evaluation and last session on fostering peer relations bookend our intent to provide a cohesive program that engages all facets of the National COSEE Network.

Day 1 Focus: *Brainstorm new approaches to reach key target audiences*

Day 2 Focus: *Increase sharing of resources/effective practices with each other... and the world*

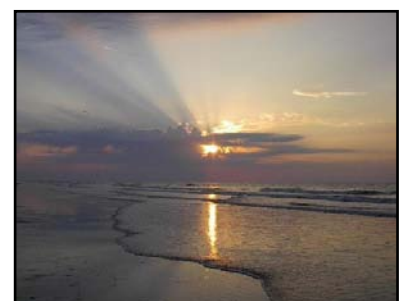
We will meet face-to-face, in targeted sessions and informally during unstructured times, with the following goals in mind:

- Strategize for measuring and improving the Network's impact. We will bolster the Network's foundation through sharing Centers' well-evaluated and successful activities.
- Brainstorm new and best approaches for reaching key target audiences. We will engage our cadre of bright and creative Network members, soliciting their ideas for growing the Network in exciting new directions.
- Increase the sharing of resources/effective practices with each other... and the world. We will explore opportunities for greater collaboration and identify programs that have high potential for transferability.

COSEE Meeting Planning Committee Members:

Lundie Spence, Committee Chair

Annette deCharon, Liesl Hotaling, Andrea Kecskes, Janice McDonnell, Gail Scowcroft, Steve Stewart, Sharon Walker, Ching Ching Yap



Day 1: Tuesday, May 5, Detailed Agenda

7:30 am	Council breakfast meeting	Palmetto Room
7:30 am	Breakfast (non-Council Members)	Roger Trent Jones Grill
8:45 am	<i>Welcome</i> Gail Scowcroft, COSEE National Network Director Annette deCharon, COSEE Council Chair	Carolina Room
9:00 am	<i>Update from the National Science Foundation</i> Don Elthon, NSF Lisa Rom, NSF	Carolina Room
9:30 am	Plenary Session: <i>Effective evaluation of and research on COSEE</i> Facilitator: Sarah Schoedinger, NOAA Scribe: Angela Bliss, COSEE SouthEast Panel: Mark St. John, National Evaluation/Inverness Research, Inc., <i>Strategy for plan for the Network</i> Susan Ross/Tracie Sempier, COSEE Central Gulf of Mexico, <i>Methods and Findings</i> Phil Bell, COSEE Ocean Learning Communities, <i>Methods and Findings</i>	Carolina Room
11:30 am	Plenary: <i>Review of the draft Strategic Business Plan/Optional Break</i> Facilitators: Billy Spitzer, COSEE New England & Carroll Hood, National Advisory Committee	Carolina Room
12:15 pm	Lunch	PDCC Foyer
1:15 pm	Concurrent Sessions (Choose Session A or B) Session A: <i>Strategies for Engaging Scientists</i> Facilitator: Sharon Walker, COSEE Central Gulf of Mexico Scribe: Elizabeth Vernon Bell, COSEE SouthEast Panel: George Matsumoto, National Advisory Committee Jim Yoder, COSEE Networked Ocean World Margaret Olsen, COSEE SouthEast (Ret.) Rosanne Fortner, COSEE Great Lakes	Fairway Room
	Session B: <i>Engaging the Business/Industry Sector in COSEE</i> Facilitator: Rick DeVoe, COSEE SouthEast Scribe: Angela Bliss, COSEE SouthEast Panel: Lynn Whitely, COSEE West Carroll Hood, National Advisory Committee Kelly Kryc, National Advisory Committee Annette deCharon, COSEE Ocean Systems	Palmetto Room
3:15 pm	Break	PDCC Foyer
3:45 pm	Plenary: <i>Summary Session</i> Facilitator: Gail Scowcroft, COSEE Central Coordinating Office Scribe: Romy Pizziconi, COSEE Central Coordinating Office	Carolina Room
4:30 pm	Plenary: <i>Reports from COSEE Working Groups</i> Speakers: Annette deCharon, Web Working Group Sharon Walker, Messaging & Marketing Working Group Rosanne Fortner, Evaluation Working Group Dionne Hoskins, Diversity Working Group	Carolina Room
5:30 pm	Announcements/Adjourn	Carolina Room
6:15 pm	Beer & Wine Reception <i>Introduction of Elizabeth Ban, COSEE Ocean Hall Educator</i>	Dunes House
7:00 pm	Dinner	Dunes House

Day 1: Tuesday, May 5

7:30 am	Council breakfast meeting	Palmetto Room
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8:45 am	<i>Welcome</i> Gail Scowcroft, COSEE National Network Director Annette deCharon, COSEE Council Chair	Carolina Room
9:00 am	<i>Update from the National Science Foundation</i> Don Elthon & Lisa Rom, NSF	Carolina Room

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Day 1: Tuesday, May 5

9:30 am

Plenary: *Effective evaluation of and research on COSEE*

Carolina Room

Facilitator: Sarah Schoedinger, NOAA

Scribe: Angela Bliss, COSEE SouthEast

Introduction and Purpose (10 minutes)

Panel (60 minutes)

Mark St. John, National Evaluation Team. *Strategy for the National Network Evaluation*

Susan Ross & Tracie Sempier, COSEE Central Gulf of Mexico. *Methods and Findings*

Phil Bell, COSEE Ocean Learning Communities. *Methods and Findings*

Q&A (15 minutes)

Brainstorming (20 minutes) Each panelist serves as leader of a group. Three sources of information (personal experiences, panelists' presentations, and exemplary programmatic activities from each Center) will help each group address the following questions:

1. What common practices do you see?
2. What challenges do you see for reporting Center evaluation and Network evaluation?
3. What recommendations would you make for effective collaboration and collaborative Network evaluation?

Report Out & Wrap Up (25 minutes)

Purpose: To identify commonalities among Center and National Evaluators to promote evaluation collaboration.

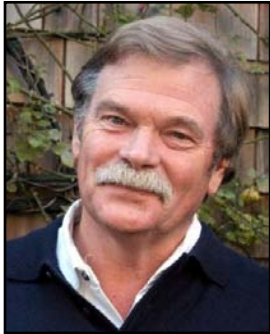
Outcome: Resource list of COSEE tested evaluation strategies and recommendations.

Action: Centers identify opportunities for collaborative evaluation.

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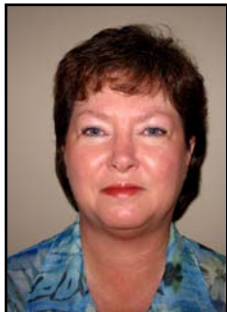
Plenary Session Panel Members

Dr. Mark St. John, National Evaluation, Inverness Research



Dr. Mark St. John, founder and president of Inverness Research, has a broad background in science and mathematics education at all levels. For over 20 years he has been involved in the evaluation and study of public and private initiatives aimed at improving science and mathematics education. He also advises philanthropies about investments in educational improvement. Dr. St. John and his colleagues at Inverness Research have been involved in many evaluations of reform initiatives in education—from the study of large scale initiatives undertaken by NSF and the U.S. Department of Education to the evaluation of individual science museum exhibits. They have been involved in studying professional development and teacher leadership networks, curriculum design projects, informal science education efforts, multi-institutional partnerships and centers, and systemic reform initiatives at the state, district, and school levels.

Dr. Susan Ross, COSEE Central Gulf of Mexico



Dr. Susan C. Ross is in the mathematics department at The University of Southern Mississippi (USM) where she specializes in mathematics education. She has been the director of the Center for Science and Mathematics Education at USM and the Coordinator of Educational Programs at the J.L. Scott Marine Education Center and Aquarium (MEC&A). While working at the MEC&A, she took on the role of internal evaluator for the first COSEE CGOM. When the second project was funded, she moved into the role of external evaluator where she works with the internal evaluator and graduate students to collect and analyze data on the various activities of COSEE CGOM. She is also currently serving on the Networks' Evaluation Working Group.

Tracie Sempier, COSEE Central Gulf of Mexico



Tracie Sempier is the Coastal Storms Outreach Coordinator for the Mississippi-Alabama Sea Grant Consortium. Tracie recently completed her doctoral research entitled: *Teacher Perceptions of the COSEE CGOM Program*. This mixed method longitudinal evaluation focuses on teacher use of lesson plans and resources received during the COSEE CGOM Institutes over a five year period. The study identifies predictor variables for understanding factors hindering or enhancing lesson plan use. Tracie has over fifteen years of professional experience in education and outreach with various audiences in formal and informal learning environments.

Philip Bell, COSEE Ocean Learning Communities



Philip Bell pursues a cognitive and cultural program of research across diverse environments focused on how people learn in ways that are personally consequential to them. He is the Geda & Phil Condit Professor of Science & Mathematics Education and an associate professor of the Learning Sciences at the University of Washington where he directs the ethnographic and design-based research of the Everyday Science and Technology Group (<http://everydaycognition.org>) and the UW Institute for Science and Mathematics Education. Bell has studied everyday expertise and cognition in science and health, the design and use of novel learning technologies in science classrooms, children's argumentation, culturally responsive science instruction, the use of emerging digital technologies within youth culture, and new approaches to inquiry instruction in science. He is a Co-Lead of the Learning in Informal and Formal Environments (LIFE) Center (<http://life-slc.org/>) and is a Co-PI of COSEE Ocean Learning Communities (<http://cosee-olc.org/>).

Day 1: Tuesday, May 5

11:30 am	Plenary: <i>Review of the draft Strategic Business Plan/Optional Break</i> Facilitators: Billy Spitzer, COSEE New England Carroll Hood, National Advisory Committee	Carolina Room
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12:15 pm	Lunch	PDCC Foyer
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1:15 pm	Concurrent Sessions (Choose session A or B)	Fairway & Palmetto Rooms
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Session A: <i>Strategies for Engaging Scientists</i> Facilitator: Sharon Walker, COSEE Central Gulf of Mexico Scribe: Elizabeth Vernon Bell, COSEE SouthEast	Fairway Room
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Introduction and Purpose (5 minutes)

Panel (12 minutes each)

George Matsumoto, National Advisory Committee/MBARI
Jim Yoder, COSEE Networked Ocean World/WHOI
Margaret Olsen, COSEE SouthEast (Ret.)
Rosanne Fortner, COSEE Great Lakes

Q&A (15 minutes)

Brainstorming (30 minutes) Identify strategies. Each Panelist serves as leader of a group.

Report Out & Wrap Up (15 minutes)

Purpose: Identify benefits to scientists for COSEE input and to identify some successful strategies for providing services to scientists.

Outcome: Resource list of strategies and case examples.

Action: Provide a list of strategies, references from the outcomes to all the Working Groups (MMWG, EWG, DWG, WWG).

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Session A: Panel Members

Dr. George Matsumoto, National Advisory Committee



George I. Matsumoto is a senior educational and research specialist at Monterey Bay Aquarium Research Institute. He received his Ph.D. from UCLA and his research interest is open ocean and deep sea communities; ecology and biogeography of open ocean and deep sea organisms; functional morphology, and natural history and behavior. He manages several education and outreach programs including collaborations with the Monterey Bay Aquarium Research Institute's sister organization, the Monterey Bay Aquarium. Dr. Matsumoto served on the Digital Library for Earth System Education (DLESE) Steering Committee and the 2004 NSF Committee of Visitors for Geoscience Education and is currently serving as a national advisory board member for the Center for Microbial Oceanography: Research and Education (C-MORE), COSEE, and several regional nonprofit organizations.

Dr. James Yoder, COSEE Networked Ocean World



Jim Yoder has served in his current position as Vice President for Academic Programs and Dean, Woods Hole Oceanographic Institutions since moving to WHOI in 2005. Before coming to WHOI, Dr. Yoder was a Professor at the University of Rhode Island, Graduate School of Oceanography, where he conducted research, taught graduate courses and advised MS and Ph.D. students. He also served five years as Associate Dean in charge of the graduate program in oceanography and one and a half years as Interim Dean of the School. Dr. Yoder's recent research projects and scientific publications involve satellite and aircraft remote sensing of the ocean for understanding biological oceanographic processes. Dr. Yoder also chairs the international group (IOCCG) that seeks international cooperation for satellite measurements of ocean color radiometry and its application for understanding regional to global ocean patterns in the productivity of the seas.

Margaret Olsen, COSEE SouthEast (Ret.)



Margaret Olsen is currently a consultant for COSEE SouthEast. Though recently retired, she served as Education Specialist for COSEE SouthEast from June 1, 2003 through December 31, 2008. She holds a Masters Degree in Secondary Science Education from the University of West Georgia. Margaret has taught Oceanography, Geology, Coastal Ecology, and Earth Science in both middle school (15 years) and high school (16 years). Her honors include the Friends of Wetlands Award, Environmental Educator of the Year, Dallas Stewart Award, Outstanding Earth Science Teacher of the Year (twice), Outstanding Marine Educator of the Year, the Millie Graham Award and the National Marine Educators Association Outstanding Marine Educator of the Year.

Rosanne Fortner, COSEE Great Lakes



Rosanne Fortner is the Director of COSEE Great Lakes. She retired from The Ohio State University School of Environment and Natural Resources in 2005 after 32 years of teaching, research and curriculum development in marine and Great Lakes education. She has advised 15 PhD students and over 50 MS students on their degrees. She holds degrees in biology and Earth science, with an EdD in science education from Virginia Tech. While being the grandmother of five is her primary *raison d'être* now, she has also been president of NMEA and a Fulbright Senior Scholar in Cyprus. She is the developer of 12 books of curriculum materials for classroom studies of interdisciplinary sciences; focus on the Great Lakes and global climate change.

Day 1: Tuesday, May 5

1:15 pm Concurrent Sessions (Choose session A or B)

Session B: *Engaging the Business/Industry Sector in COSEE*

Palmetto Room

Facilitator: Rick DeVoe, COSEE SouthEast

Scribe: Anglea Bliss, COSEE SouthEast

Introduction and Purpose (5 minutes)

Panel (12 minutes each)

Lynn Whitley, COSEE West (QuikSilver)

Carroll Hood, National Advisory Committee

Kelly Kryc, National Advisory Committee

Annette deCharon, COSEE Ocean Systems (COSEE.net)

Q&A (15 minutes)

Brainstorming (30 minutes) Identify strategies. Each Panelist serves as leader of a group.

Report Out & Wrap Up (15 minutes)

Purpose: To illustrate how selected Centers have engaged business with funds or in-kind support and to discuss how COSEE can serve the business community.

Outcome: List of strategies for getting the business sector involved with COSEE projects or providing funds to support COSEE activities.

Action: Add an addendum to the COSEE business plan that includes specific examples of engaging the business/industry sector in COSEE.

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Session B: Panel Members

Lynn Whitley, COSEE West



Lynn Whitley is co-director of COSEE West and Director of Education for the University of Southern California Wrigley Institute for Environmental Studies and Sea Grant Program. At USC she works with informal science centers, local school districts and others to bring educators and research scientists together to extend science content to the classroom. She has created, implemented, and taught marine science programs in both formal and informal settings and is passionate about helping to create an ocean literate public! She has been integral in designing and hosting COSEE West and Sea Grant's innovative online teacher workshops that bring scientists and educators together to exchange and facilitate learning on current marine science topics. Lynn has a BA degree in English from Florida State University, a California Teaching Credential with multi-cultural certification, and a MA degree from USC in Geography and Environmental Studies. She is an active member of several professional organizations and serves on several local advisory boards for local aquaria.

Carroll Hood, National Advisory Committee



Carroll A. Hood serves as the Global Earth Observation System of Systems (GEOSS) Chief Architect for Raytheon. In this position, he is responsible for identifying, shaping and executing business opportunities for Raytheon within the context of the GEOSS. GEOSS is an international initiative supported by over 75 countries and over 55 intergovernmental organizations to enable the exploitation of environmental data, information, products and services beyond their original intent in order to generate value for citizens and economies. Mr. Hood is a Raytheon Certified Architect, a certified Enterprise Architect (FEAC Institute) and a certified Six Sigma black belt. He has been active in the Alliance for Earth Observations and has led several Alliance activities related to GEOSS architecture. He has served on the Southeast Coastal Ocean Observing Regional Association (SECOORA) Board of Directors for two years and co-chairs the SECOORA Data Management and Communications (DMAC) Program Committee. He is the private sector representative on the National DMAC Steering Team and is a member of the COSEE National Advisory Council.

Kelly Kryc, National Advisory Committee



Kelly Kryc is a program officer with the Marine Microbiology Initiative for the Gordon and Betty Moore Foundation. Before joining the Foundation, Kelly worked in Washington, D.C. for the Integrated Ocean Drilling Program where she was responsible for implementing their long-range strategic plan. Kelly is a paleoceanographer who studied the geochemical record of climate change in Antarctica. Kelly received a B.A. in Geology from Middlebury College, an M.S. in Oceanography from the University of Rhode Island, a Ph.D. in Earth Science from Boston University, and did post-doctoral research at Stanford University.

Annette deCharon, COSEE Ocean Systems



Annette is the Senior Marine Education Scientist, at the University of Maine. Since 1997, she has authored over 30 web-based and other multimedia publications including the award-winning "Phytobia: Discovery of the Marine Ecosystem" CD-ROM. She is currently Director of COSEE Ocean Systems where her long-term goal is to help the COSEE Network reach rural and inland audiences. Annette also serves as the education lead for NASA's upcoming Aquarius mission (2010 launch) which will measure global ocean surface salinity.

Day 1: Tuesday, May 5

3:15 pm	Break	PDCC Foyer
3:45 pm	<p>Plenary: <i>Summary Session</i></p> <p>Facilitator: Gail Scowcroft, COSEE Central Coordinating Office</p> <p>Scribe: Romy Pizziconi, COSEE Central Coordinating Office</p> <p><u>Report Out</u> (10 minutes) Session facilitators (A&B) to share with the Network</p> <p><u>Prioritization Discussion</u> (25 minutes)</p> <p><u>Purpose:</u> Share with the Network the highlights, outcomes, and actions from each concurrent session.</p> <p><u>Outcome:</u> Priorities for the Network.</p>	Carolina Room
4:30 pm	<p>Plenary: <i>Reports from the COSEE Working Groups</i></p> <p>Scribe: Terri Kirby Hathaway, COSEE SouthEast</p> <p><u>Speakers</u> (10 minutes each)</p> <p>Annette deCharon, Web Working Group</p> <p>Laura Murray, Messaging & Marketing Working Group</p> <p>Rosanne Fortner, Evaluation Working Group</p> <p>Dionne Hoskins, Diversity Working Group</p> <p><u>Q&A</u> (15 minutes)</p>	Carolina Room
5:30 pm	Announcements/Adjourn	Carolina Room
6:15 pm	<p>Beer & Wine Reception</p> <p><i>Introduction of Elizabeth Ban, COSEE Ocean Hall Educator</i></p>	Dunes House
7:00 pm	Dinner	Dunes House
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Working Group Summaries

COSEE Web Working Group

Submitted by Annette deCharon for the Network Meeting (May 2009)

Members: Tim Carruthers, AJ Craft, Catherine Cramer, Nora Deans, Annette deCharon, Pam DiBona, Clayton Dilks, Coral Gehrke, Rose Marie Gonzalez, Sean Graham, Rick Hayduk, Liesl Hotaling, Adrian Jones, Andrea Kecskes, Brian McCann, Cheryl Peach, Carolyn Rosner, Harman Smith, Barbara Spector, Lundie Spence, Lisa Taylor, Joe Wieclawek III

The COSEE Web Working Group (WWG) was formed by consensus at the 28-Jul-07 Council meeting and charged with examining "how Centers can work together interactively to make existing / future COSEE information more accessible, engaging, and up-to-date." During telecons held from August 2007 through March 2009, 36 members of the COSEE Community representing 11 Centers and the Central Coordinating Office spent over 500 person-hours discussing the design, functionality, implementation, and improvement of COSEE.net and Center websites. Thanks to use of Sametime (web conferencing application) sessions, these telecons were also crucial to testing the functionality of prototype systems by Network web personnel.

WWG accomplishments over the past year:

- Analyzing of Network survey results relative to audience identification / targeting, use of common terminology among Center websites, and centralization of web functions (calendar of events, educational resources, funding opportunities, inter-Center projects, and relevant publications).
- Identifying candidate technical solutions, analyzing solution feasibility, and selecting an appropriate Content Management System (CMS).
- Rebuilding the COSEE.net website to include a full CMS.
- Creating a new, common "Look and Feel" for all COSEE websites.
- Creation of a basic multimedia piece for the home page with rotating highlights.
- Implementing interactive components for posting information (calendar, news, events), highlighting and archiving items on an automated basis, and sharing information between the Centers using the CMS and with COSEE.net.
- Search and index capabilities across all websites stored on a central server.
- Design support for six of the regional COSEE Centers that provides a look that captures the individuality of each Center while still maintaining a consistency with COSEE.net.
- CMS training of web personnel and initiating final documentation (i.e., help system, training manual, and production control instructions).
- Consensus on site architecture to enable automated generation of future COSEE websites.
- Operations support (i.e., debugging, answering user questions, basic support).

The CMS was implemented in January 2009 after population and extensive testing by Centers and Network webmasters. The COSEE Network and six Center websites are now publicly accessible. The new websites have a consistent appearance and operate similarly, allowing for automated generation of new COSEE sites, but maintain their individuality through the use of varying backgrounds, photos, and content.

Contingent upon additional funding, the WWG has identified, evaluated, and prioritized action items that would: 1) improve the look and functionality of the sites; 2) foster communication and the sharing of internal information within the COSEE community (i.e., information not intended for the general public); and 3) better integrate the non-CMS Center websites, thereby consolidating COSEE's online presence.

Working Group Summaries

COSEE Messaging & Marketing Working Group

Submitted by Sharon Walker for the COSEE Network Meeting (May 2009)

Members: Sharon Walker-Chair, Paula Keener-Chavis, Laura Murray, Lundie Spence, and Nora Deans

The MMWG also contains the following components:

- 1) Steering Committee-comprised of Funding Agencies: (SI-NMNH [Shari Werb, Myles Gordon, and Jill Johnson], NOAA-OER [Paula Keener-Chavis], and NOAA-Sea Grant [Sharon Walker], COSEE Council Chair [Annette deCharon], and the CCO Management Team Lead-[Gail Scowcroft]). This group "knows" the uniqueness of the Ocean Hall, the COSEE Council, and the COSEE Network.
- 2) Liaison Subcommittee will include Sharon, Paula, Laura, Lundie, and Nora (N. Deans—due to her editorial, marketing, and writing expertise—was approved as a MMWG member on May 13, 2009), as well as the Chair-Elect [Lundie Spence] and the Past-Chair [Janice McDonnell]. This Liaison Subcommittee is open to the COSEE Council and will ensure solid COSEE Network input. The Liaison Subcommittee will also identify effective practices with the Network and the transfer of these practices to the Ocean Hall and vice versa, e.g., transfer effective practices from the Ocean Hall to the COSEE Network.

Report to COSEE Network, May 2009 (Mission and Scope of Work, approved May 13, 2008)

Mission: to promote the COSEE Council and Network in serving as catalysts to increase public understanding of the ocean and its relevance to our social and economic well-being and the quality of our lives.

Scope of Work (contains two foci):

- 1) To develop science-based coordinated messages within each COSEE that can be used by many agencies, organizations, businesses, and/or industries to enhance ocean literacy and promote positive behavior changes for the ocean and its watersheds (messages will be similar in format to the Earth Gauge effort ongoing with the Smithsonian Institution's Sant Ocean Hall (SI-SOH) and NOAA-Office of Education). These messages may be used by media outlets (television [weather programs], radio, and newsprint) or within interactive or static exhibitry at aquariums, museums, and science centers. The SI-SOH Senior Educator, Elizabeth Ban, will serve as a resource in facilitating the development, transition, and use of the messages from the COSEE Network to the SI-SOH. It is recommended that approximately 20 messages be developed by each COSEE by the National Science Teachers Annual Conference in March 2009. Each Center will coordinate with their ocean scientists to assure scientific validity and rigor of the messages.
- 2) To collaborate with the partners identified in #1, so there is limited or no duplication of resources (people and funding).

This Mission and Scope of Work also complements COSEE's Mission (our collective purpose), i.e., to spark and nurture collaborations among scientists and educators to advance ocean discovery and make known the vital role of the oceans in our lives; COSEE's Values (what we stand for), i.e., leadership, collaboration, and innovation; and COSEE's Vision (our picture of the ideal future), i.e., the COSEE Network is a sustainable force and we are firing up the world's imagination!

Working Group Summaries

COSEE Messaging & Marketing Working Group (cont.)

Report Updates and Notes:

- The Scope of Work delineated above has been revised since Elizabeth Ban was offered and accepted the position of Senior Educator at the SI-SOH in December 2008. Ms. Ban officially began work at the SI-SOH on February 2, 2009. The employment of Ms. Ban involved the following process: the MMWG Steering Committee developed the position description for the SI-SOH Senior Educator and it was nationally posted in August-September. Seventy-five applications were received, reviewed, and narrowed to 16 qualified candidates in September-October 2009 by the SI-Office of Human Resources. The five-member Search Committee (SI-SOH, Shari Werb/Myles Gordon/Jill Johnson; NOAA-OER, Paula Keener-Chavis; and NOAA-Sea Grant, Sharon Walker) reviewed the 16 candidates and narrowed the applicant pool to six individuals through several conference calls. The six candidates were each asked the same questions via individual phone interviews. This pool of six applicants was reduced to four. The Search Committee interviewed these four candidates “face to face” at the SI-SOH in December 2008. And, as noted above, Elizabeth Ban was offered the position, accepted it, and began work in February 2009. Monthly calls have been initiated between SI-SOH (Shari Werb/Myles Gordon), NOAA-Sea Grant (Sharon Walker), NOAA-OER (Paula Keener-Chavis), and COSEE CCO (Gail Scowcroft/Annette deCharon/Billy Spitzer). This is a two-year funded position with fiscal support provided by the SI-SOH (50% salary, fringe benefits, travel, and an office at the SI-SOH), NOAA-Sea Grant (25% salary and fringe benefits) and NOAA Office of Exploration and Research (25% salary and fringe benefits).

- It was recommended at the November COSEE Council Meeting that each COSEE provide 20 messages, using the National Environmental Education Foundation (NEEF)-Earth Gauge format. These messages were due to Sharon Walker by the National Science Teachers Association Annual Conference in March 2009. MMWG-Chair, Sharon Walker, would then forward these messages to the SI-SOH (Elizabeth Ban), NOAA-Office of Education (Mike Shelby), and NEEF-Earth Gauge (Sara Espinoza) for use in the Ocean Today Kiosk (OTK) “ticker tape” area. To date, no messages have been received.

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Working Group Summaries

COSEE Evaluation Working Group

Submitted by Rosanne Fortner for the COSEE Network Meeting (May 2009)

The EWG has been evolving since its establishment in 2007. The group was inactive in 2008 while a new National Network Evaluator was being selected.

Members of the current EWG include: four PIs, Rosanne Fortner, Shawn Rowe, Craig Strang, and Sharon Walker; the CCO, Gail Scowcroft and Romy Pizziconi; seven Center Evaluators, Andrea Anderson, Rena Dorph, Patricia Kwon, Chris Parsons, Ted Repa, Susan Ross, Howard Walters; the National Network Evaluator, Pam Castori and Mark St. John; and NSF, Don Elthon and Lisa Rom. Rosanne Fortner chairs the group. Because all Center Evaluators are stakeholders in the work of the EWG, Chris Parsons serves as liaison to that group from the EWG. The Center Evaluators provide input to its functions.

Our Mission and Scope were submitted to the COSEE Executive Committee on February, 27, 2009, as follows:
Proposed Mission: To serve the COSEE Network, its sponsors, Center Evaluators (CE) and the National Network Evaluator (NNE) by providing information and advice on 1) collective evaluation needs, 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.

Proposed Scope of Work:

The EWG will perform the following tasks and report to the council on all plans, recommendations and activities.

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

- a. Assist the NNE with 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 with NNE 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 NNE and CEs; and
- e. Provide logistical support for projects involving multiple CEs and the NNE.

Task 2: Provide periodic review and assessment of NNE plans:

In the initial stages, this will involve review and assessment of NNE plans on a semi-annual basis, with comments and advice provided to the council and NSF for their consideration.

After approximately two years, this review and assessment will occur annually or as requested by NSF.

*Identifying and defining the multiple ways in which COSEE contributes to the advancement of ocean sciences education.

Current emphasis: The EWG is focusing attention on Tasks 1a and 1c.

Working Group Summaries

COSEE Diversity Working Group

Submitted by Dionne Hoskins for the COSEE Network Meeting (May 2009)

Members: Deidre Gibson, COSEE Coastal Trends (Interim Co-Chair); Dionne Hoskins, COSEE SE (Interim Co-Chair); Ray Barnhardt, COSEE Alaska; Sue Cook, COSEE Network; Lundie Spence, COSEE SE; Jessie Kastler, COSEE CGOM; Lynn Whitley, COSEE West; Phil Bell, COSEE OLC; Craig Strang, COSEE California; Carrie Dixon, COSEE CGOM; Jennifer Niemi, COSEE Great Lakes; Isaiah Warner, COSEE CGOM; Audrey Kharem, COSEE NOW; Claudia Benitez-Nelson, USC

The Diversity Working Group (DWG) was formed in June 2008 and constituted by the members above in August 2008. The group met via conference calls in August, November, and December and formulated the timeline below for the year's goals. The DWG decided the best service it could offer to the COSEE Network would be to develop 1) a review of best practices for increasing and accommodating diversity in ocean science education using primary literature, 2) survey current diversity programming in the network, and 3) furnish the network with a Diversity Guidance Document at the May Network meeting.

An outline for the guidance document was developed as was a diversity bibliography that the DWG has been reviewing.

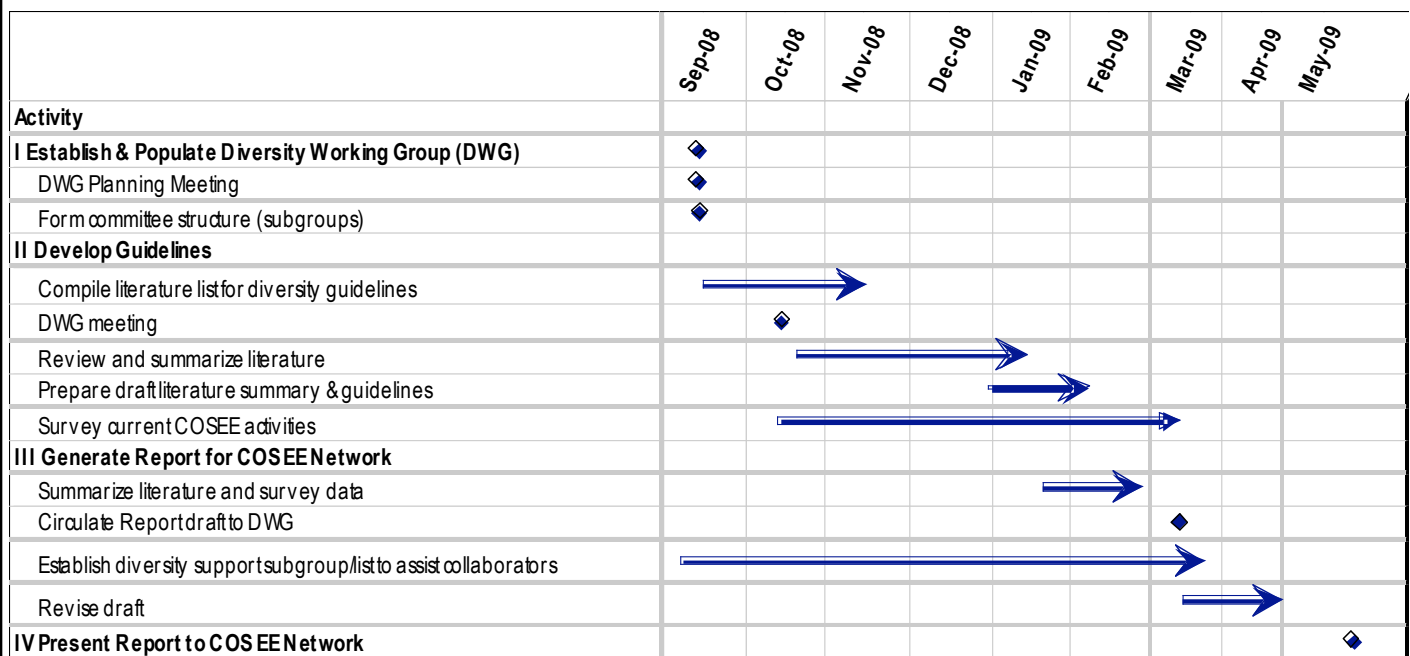


Figure 1. COSEE Diversity Working Group 2008-09 timeline.

Notes/Thoughts/Contacts/To Do

Blank lined area for notes, thoughts, contacts, or to-do items.



Lined area for notes, thoughts, contacts, or to-do items, adjacent to the pelican image.

Day 2: Wednesday, May 6, Detailed Agenda

7:30 am	Council breakfast meeting	Palmetto Room
7:30 am	Breakfast (non-Council Members)	Roger Trent Jones Grill
8:45 am	<i>Welcome Back & Announcements</i> Gail Scowcroft, COSEE National Network Director Annette deCharon, COSEE Council Chair	Carolina Room
9:00 am	Concurrent Sessions (Choose Session C or D) Session C: <i>Citizens Science</i> Facilitator: Craig Strang, COSEE California Scribe: Terri Kirby Hathaway, COSEE SouthEast Panel: Rick Keil, COSEE Ocean Learning Communities Steve Morton, NOAA Kevin Cuff, University of California, Berkeley	Fairway Room
	Session D: <i>Storytelling as a Communication Tool</i> Facilitator: Janice McDonnell, COSEE Networked Ocean World Scribe: Elizabeth Vernon Bell, COSEE SouthEast Panel: Ari Shapiro, COSEE Networked Ocean World Sage Lichtenwalner, COSEE Networked Ocean World Chris Parsons, COSEE Networked Ocean World	Palmetto Room
10:45 am	Break (Check-out, as needed)	
11:30 am	Plenary: <i>Summary Session</i> Facilitator: Gail Scowcroft, COSEE Central Coordinating Office Scribe: Romy Pizziconi, COSEE Central Coordinating Office	Carolina Room
12:15 pm	Lunch	PDCC Foyer
1:00 pm	Different Center, Same Boat, <i>Fostering Peer Relationships within the COSEE Network</i> Facilitators: Liesl Hotaling, COSEE Networked Ocean World & Ching Ching Yap, COSEE SouthEast	Carolina Room
3:00 pm	Closing Remarks/Adjourn	Carolina Room
3:15 pm	Non-mandatory Council/National Advisory Meeting Facilitators: Annette deCharon, Gail Scowcroft, Billy Spitzer	Palmetto Room
5:00 pm	Meeting Adjourn	
6:10 pm	Beer & Wine Reception	Dunes House
7:00 pm	Dinner	Dunes House



NOTES

Day 2: Wednesday, May 6

7:30 am	Council breakfast meeting	Palmetto Room
7:30 am	Breakfast (non-Council Members)	Roger Trent Jones Grill
8:45 am	<i>Welcome Back & Announcements</i> Gail Scowcroft, COSEE National Network Director Annette deCharon, COSEE Council Chair	Carolina Room
9:00 am	Concurrent Sessions (Choose session C or D)	

Session C: *Citizens Science* Fairway Room
Facilitator: Craig Strang, COSEE California
Scribe: Terri Kirby Hathaway, COSEE SouthEast

Introduction and Purpose (5 minutes)

Panel (12 minutes each)

Rick Keil, COSEE Ocean Learning Communities/UW
Steve Morton, NOAA, National Ocean Service
Kevin Cuff, University of California, Berkeley

Q&A (15 minutes)

Brainstorming (30 minutes) Identify strategies. Each Panelist serves as leader of a group.

Report Out & Wrap Up (15 minutes)

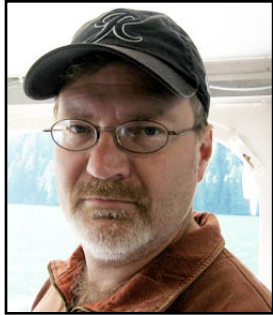
Purpose: Leverage COSEE to reach a broader audience who now does “real science” with these examples.

Outcomes: Examples of Citizens Science initiatives.

Actions: Identify transferability of initiatives.

NOTES

Session C: Panel Members



Rick Keil, COSEE Ocean Learning Communities

Rick is the Fleming Professor for Undergraduate Education in the School of Oceanography. He is interested in application of organic geochemistry to emerging environmental issues such as climate change and pollutant distributions and sinks in marine systems. He employs a diverse toolset of field and lab approaches to basic and applied research questions, with current research focuses on regional climate reconstruction, carbon flow between land and sea, marine pollution, and organic chemistry in anoxic environments. He is the faculty mentor for the SoundCitizen program started by his undergraduate students.

Steve Morton, NOAA National Ocean Service



Steve Morton, Ph.D. is a Research Oceanographer with the NOAA/National Ocean Service Marine Biotoxins Program located in Charleston, SC. Steve received a B.S. and M.S. degrees in Oceanography from Florida Institute of Technology and a Ph.D. in Plant Biology from Southern Illinois University at Carbondale. He has been with NOAA from 11 years. Steve has published over 80 scientific papers dealing with the identification, taxonomy, distribution and ecology of toxin producing algae. Steve founded the NOAA Volunteer Phytoplankton Monitoring Network in 2001. The goals of the program are to monitor coastal waters for different species of phytoplankton while directly involving students and volunteers directly in coastal stewardship. The program started with three groups in Charleston, SC and has grown to include over 151 sites in nine coastal states. Greater than 3,500 students participate in the program each year.

Kevin Cuff, University of California, Berkeley



Kevin Cuff is a geologist with over 15 years of experience as a Lawrence Hall of Science curriculum developer and designer of STEM programs for disadvantaged urban settings. Currently he is Project Director of the NSF sponsored Environmental Science Information Technology Activities (ESITA) and East Bay Academy for Young Scientists programs.

NOTES

Day 2: Wednesday, May 6

9:00 am Concurrent Sessions (Choose Session C or D)

Session D: *Storytelling as a Communication Tool*

Palmetto Room

Facilitator: Janice McDonnell, COSEE Networked Ocean World

Scribe: Elizabeth Vernon Bell, COSEE SouthEast

Introduction and Purpose (5 minutes)

Panel (12 minutes each)

Ari Shapiro, COSEE Networked Ocean World

Sage Lichtenwalner, COSEE Networked Ocean World

Chris Parsons, COSEE Networked Ocean World

Q&A (15 minutes)

Brainstorming (30 minutes) Identify strategies. Each panelist serves as leader of a group.

Report Out & Wrap Up (15 minutes)

Purpose: Discuss how to use storytelling in text and data to better market and improve awareness/understanding of COSEE.

Outcome: Panel will present examples of different strategies to tell COSEE's story including public friendly stories, podcasts, data, visualizations, and web products. The panel will lead a discussion of effective practices for telling COSEE's story.

Action: Identify transferability of this program.

NOTES

Session D: Panel Members



Ari Shapiro, COSEE Networked Ocean World

Ari Daniel Shapiro produces the Ocean Gazing podcast for COSEE NOW. He received his PhD in biological oceanography from the MIT/WHOI Joint Program in 2008. Currently, Ari is an independent science radio and multimedia producer. His pieces have appeared on NPR, Radio Lab and The World. Ari lives in Somerville, MA and likes to bake, bike, hike, act and travel.



Sage Lichtenwalner, COSEE Networked Ocean World

Sage currently serves in a joint appointment between the IMCS Education & Outreach group and the COOL Operations Center, maintaining a crucial link between the researchers and technicians of the coastal observatory and ongoing efforts of the outreach staff. He is tasked with transitioning research data into operational products for use by general public and K-12 audiences, using a variety of data management, visualization and interactive web interface technologies. Because of this, he is often referred to as the group's "Data Translator." Sage has been involved with the design and development of dozens of web sites over the past 10 years, and actively follows developments in the fields of data visualization, online education and science communication.



Chris Parsons, COSEE Networked Ocean World

Chris Parsons is a writer, educator and evaluator dedicated to informal science education for more than 30 years. She is the founder and principal of Word Craft, started in 1986 and specializing in the development, writing and evaluation of science education programs, exhibits, websites and teaching materials. Major clients include the Monterey Bay Aquarium, California Academy of Sciences/Steinhart Aquarium, California's National Marine Sanctuaries and Rutgers Institute of Marine & Coastal Sciences. Chris holds a BA in biology, MA in educational technology and MBA. Her COSEE role is as the evaluator for COSEE NOW and the former evaluator for COSEE Mid-Atlantic. She lives in Monterey with her sweetheart Steve and shepherd Neeka.

NOTES

Day 2: Wednesday, May 6

10:45 am Break (Check-out as needed) PDCC Foyer

11:30 am Plenary: *Summary Session* Carolina Room
Facilitator: Gail Scowcroft, COSEE Central Coordinating Office
Scribe: Romy Plizziconi, COSEE Central Coordinating Office

Report Out (10 minutes) Session Facilitators (A&B) to share with the Network
Prioritization Discussion (25 minutes)

Purpose: Share with the Network the highlights, outcomes, and actions from each concurrent session.

Outcome: Priorities for the Network.

12:15 pm Lunch PDCC Foyer

NOTES



Day 2: Wednesday, May 6

1:00 pm

Plenary: *Different Center, Same Boat*
Fostering Peer Relationships within the COSEE Network
Facilitators: Liesl Hotaling, COSEE Networked Ocean World
Ching Ching Yap, COSEE SouthEast

Carolina Room

Introduction and Purpose (20 minutes)

Round table with focused discussions (100 minutes)

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.

Process:

Part One (30 minutes): Identify and analyze new ways to collaborate.

- a. Each person comes up with a new/innovative way or idea within his/her function that will strengthen the Network.
- b. Share with idea with the group.
- c. Group selects 1-3 ideas for further development.

Part Two (30 minutes): For each idea, develop a brief description for implementation in these categories (to the best of ability):

- a. Outcome/product/idea
- b. Process/method
- c. Staff/administrative effort
- d. Cost
- e. Target audience
- f. Outcome/benefit to the Network

Part Three (30 minutes): Walk about

Part Four (10 minutes): Wrap up and summary

Purpose: Participants identify similar needs, available resources, potential collaborations and best practices in several areas, for example:

1. Web developers/administrators
2. Professionals development facilitators/coordinators
3. Scientists
4. Promotion/branding/marketing personnel
5. Evaluators
6. Formal educators
7. Informal educators
8. Administrators/PIs/Directors

Outcome: List of new ideas that can strengthen the Network.

Action: Network members review the ideas for potential implementation.

Day 2: Wednesday, May 6

3:00 pm	Closing Remarks/Adjourn	Carolina Room
3:15 pm	Non-mandatory Council/National Advisory Committee Meeting	Palmetto Room
5:00 pm	Meeting Adjourn	
6:00 pm	Beer & Wine Reception	Dunes House
7:00 pm	Dinner	Dunes House

NOTES



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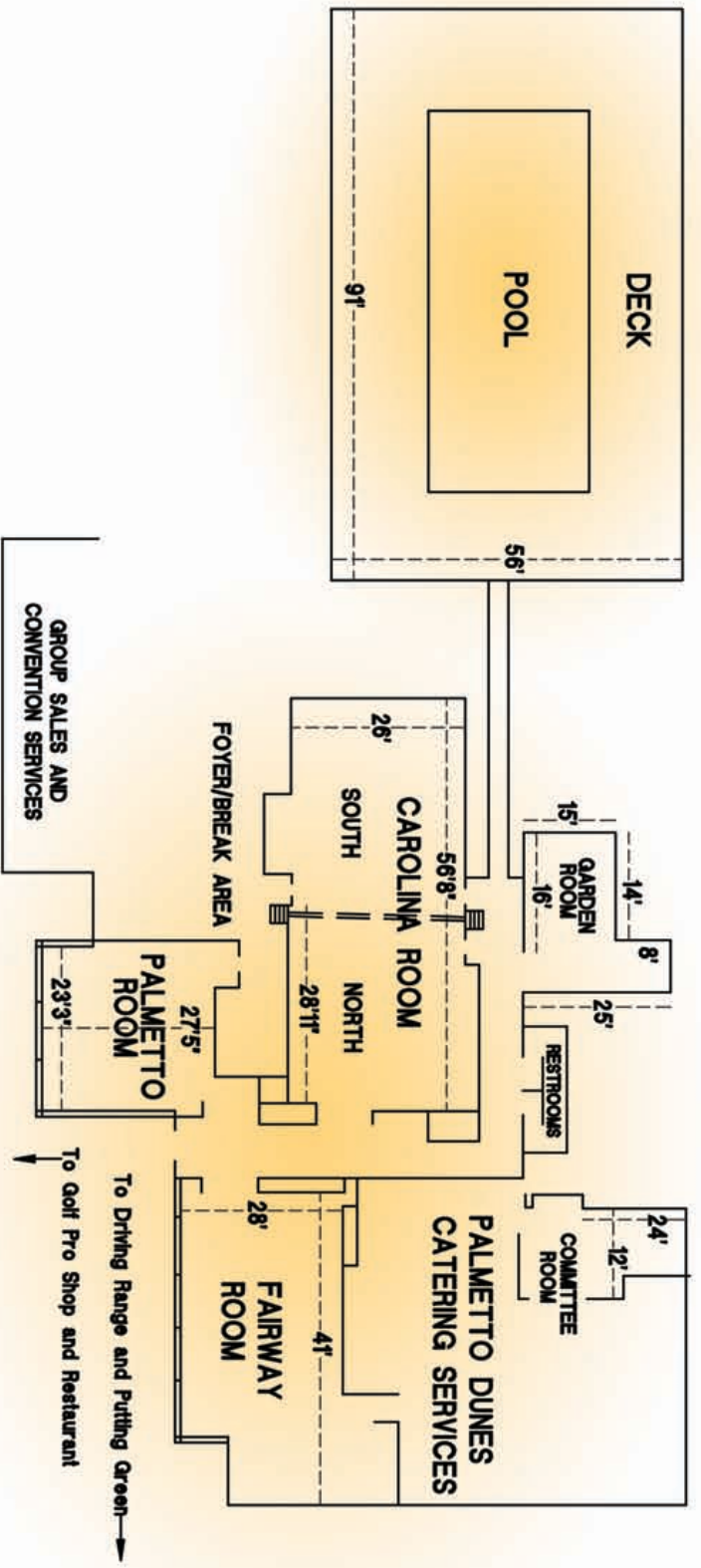


WAYS THE NETWORK MEETING IS GOING “GREEN”

- Reusable water bottles will be given out and spring water coolers will be placed in the meeting areas.
- All meals will be served on reusable china.
- Lunches will be served in reusable COSEE mini tote bags.
- 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.

Palmetto Dunes Conference Center (PDCC)

*Meeting will occupy the Carolina, Palmetto and Fairway Rooms



PALMETTO DUNES OCEANFRONT RESORT

