

ENVIRONMENTAL STUDIES PROGRAM

Division of Environmental Sciences

OUTER CONTINENTAL SHELF SCIENTIFIC COMMITTEE MEETING

May 13-15, 2014

Reston Sheraton Hotel 11810 Sunrise Valley Drive Reston, Virginia



Outer Continental Shelf Scientific Committee Meeting Agenda

This meeting of the Bureau of Ocean Energy Management's Outer Continental Shelf's Scientific Committee was held in accordance with the published Federal Register notice and followed the attached agenda (Appendix I). Held in Reston, Virginia, this meeting was attended by the members and visitors shown in Appendix II. An outline created from the verbatim transcripts and references page numbers of the transcripts, which may be reviewed, is provided in Appendix III.

All external requests for the meeting transcripts should be submitted to the CDER, Freedom of Information Office.

The summary minutes for May 13-15, 2014, Meeting of the OCS Scientific Committee were approved on August 15, 2014.

I certify that I attended the May 2014 meeting of the OCS Scientific and that the minutes accurately reflect what transpired.

<u></u>	August 15, 2014
Lorrie D. Rea	Date
Chair, OCS Scientific Committee	
/s/	August 15, 2014
William Y. Brown	Date
Designated Federal Officer	

OCS SCIENTIFIC COMMITTEE MEETING

PLENARY SESSION AGENDA

Official Proceedings

Tuesday, May 13, 2014

Presentations

Welcome and Introductions <u>Dr. Lorrie Rea</u>, OSC Scientific Committee Chair

Welcome Remarks Dr. Walter Cruickshank, BOEM Acting Director

Chief Environmental Officer's Message

Dr. William Brown, Designated Federal Officer of the
Committee and BOEM Chief Environmental Officer

Environmental Studies Program: Dr. Rodney Cluck, Executive Secretary of the

<u>Use Inspired Science</u> Committee and Chief, Division of Environmental Sciences

Science for Informed Decisions: Panel

Discussion on Environmental Assessment Mr. James Bennett, Chief, Division of Environmental

Assessment, Herndon VA

Mr. Joe Christopher, Gulf of Mexico Region Mr. Rick Yarde, Pacific OCS Region Ms. Lisa Toussaint, Alaska OCS Region

Ms. Michelle Morin, Chief, Environmental Review - Office

of Renewable Energy Programs

geoESPIS Demonstration Dr. Jonathan Blythe & Dr. Mike Rasser

REGIONAL UPDATES

<u>Gulf of Mexico Region</u>
<u>Dr. Pat Roscigno</u>, Chief Environmental Studies Section GOMR

Atlantic OCS Region Dr. Mary Boatman, Chief, Environmental Studies Section OREP

Alaska OCS Region Dr. Dee Williams, Chief, Environmental Studies Management

Section AOCSR

<u>Pacific OCS Region</u> <u>Dr. Ann Scarborough Bull</u>, Chief, Environmental Sciences

Section POCSR

Marine Minerals - Sand and Gravel Program Dr. Jeffrey Reidenauer, Chief, Marine Minerals Branch

• Wednesday, May 14, 2014

OCS SCIENTIFIC COMMITTEE MEETING

STUDY PRESENTATIONS AGENDA

Physical/Chemical Oceanography				
<u>Upgrading air-quality modeling in the Gulf of Mexico:</u> integrating local and remote emissions with photochemical model	Alexis Lugo Fernandez - GOMR			
Watersipora II: Biological Oceanographic Connectivity of Southern California Reefs and Manmade Structures	Susan Zaleski POCSR			
Development of a Very High-resolution Regional Circulation Model of Beaufort Sea Nearshore Areas	Heather Crowley .AOCSR			
Committee Questions and Discussion				
Biology/Ecology				
Explosive Removal Fisheries Impact Assessment	Rebecca Green GOMR			
A Demonstration Marine Biodiversity Observation Network (BON) for Ecosystem Monitoring	Jim Price HQDES			
Consequences of Ocean Energy Projects to Productivity and Trophic Structure in Marine and Coastal Habitats	Donna Schroeder POCSR			
<u>Field Evaluation of an Unmanned Aircraft System</u> for Studying Cetacean Distribution, Density and Habitat Use in the Arctic	Carol Fairfield . AOCSR			
Cetacean Distribution, Abundance, and Ecology in Cook Inlet	Carol Fairfield .AOCSR			
Subtidal and Intertidal Habitats and Invertebrate Biota in Lower Cook Inlet	Carol Fairfield/Chris Campbell AOCSR			
Tracking Movements of Endangered Roseate Terns and Threatened Piping Plovers in the NW Atlantic	David Bigger OREP			
Endangered Atlantic Sturgeon Habitat Use in Mid Atlantic Wind Energy Areas	Brian Hooker OREP			
Understanding Whale Presence in the Virginia Offshore Wind Energy Area	Desray Reeb OREP			

Committee Questions and Discussion

Marine Minerals / Benthic Ecology		
Comprehensive Seafloor Substrate Mapping and Model Validation in the	Josh Wadlington OREP	
Atlantic		
Development of a Decision Support Tool to Reduce Sea Turtle Dredging	Doug Piatkowski HQDEA	
Entrainment Risk		
Sediment Sorting During Coastal Restoration Projects: Implications for	Doug Piatkowski. HQDEA	
Resource Management, Environmental Impacts, and Multiple Use	DOUG PIATKOWSKI NQ DEA	
Conflict		
Managing Dredge Impacts by Optimizing the Use of Sand Resources	Dr. Jeffrey Reidenauer, MMP	
Committee Questions and Discussion		

Social Science		
Quantitative Assessment of Spatially Explicit Social Values Relative to Wind Energy Areas	Brandi Carrier OREP	
Alternative Energy Capacity Inventory in Coastal Alaska	Chris Campbell AOCSR	
The Demographic Consequences of the Gulf of Mexico Offshore Petroleum Industry	Harry Luton GOMR	
Interdisciplinary Research at the Site of Three 19th Century Deepwater Shipwrecks the Monterrey Shipwrecks	Melanie Damour GOMR	
Refining Maps of Ocean Use Compatibility and Cumulative Impacts for Ocean Energy Projects	Donna Schroeder POCSR	
Committee Questions and Discu	ussion. Any profile	
Multi-disciplinary or Regional Scale		
BOEM MARINe: Multi Agency Rocky Intertidal Network	<u>Lisa Gilbane</u> POCSR	
High Resolution Aerial Imaging for Surveying of Ocean Use by Humans and Marine Animals	Mike Rasser HQDES	
Gulf Oxygen Deepwater Experiment (GODEX): An Interdisciplinary Field Survey of Rates and Processes Controlling Distributions	Rebecca Green GOMR	

Committee Questions and Discussion

Committee Recommendations. Presentation Preparation

OCS SCIENTIFIC COMMITTEE MEETING COMMITTEE RECOMMENDATIONS – FINAL DAY AGENDA

Official Proceedings

Thursday, May 15, 2014

Presentations

Introduction to Committee Comments Regarding Study Profiles: ` Dr. Lorrie Rea

Disciplines Subcommittee Presentations / Questions and Answers/Discussion

Physical/Chemical Oceanography Dr. Mark Johnson

Biology/Ecology Dr. Milton Love

Marine Minerals/Benthic Ecology Dr. Rodney Mather

Social Science Dr. Richard Gould Multi-Disciplinary / Regional Scale Dr. Sandra Werner

General Committee Recommendations and Discussion

Presentation of Plaques to Retiring OCSSC Members by Dr. William Brown

National Academy of Sciences Perspectives: Perspectives from the NAS:

Greg Symmes, Executive Director, Division on Earth and Life Studies

Susan Roberts, Director, Ocean Studies Board

Maggie Walser, Gulf of Mexico Research Program: Questions / Discussion

Kim Waddell, Senior Program Officer, Gulf of Mexico Research Program

Discussion Regarding Subcommittees

Dissolution of Environmental Sensitivity Assessment Subcommittee
Subcommittee Titled Science Relevant to the Consideration of Oil and
Gas Energy in the Mid and South Atlantic OCS

Public Comments: There Were No Comments from the Public

General Committee Recommendations and Discussion and Committee Recommendations and Discussion Regarding Additional Studies Not Presented

Comments Regarding Committee Business

Letter to the Director

New Member Nominations

Date of 2015 OCS Scientific Committee Meeting
Format for Meeting Breakout SME Teams

Additional Days to the Meeting

Orientation for New Members in 2015

MEETING ADJOURNED at 5:00

IN ATTENDANCE

COMMITTEE MEMBERS:

LORRIE D. REA, Ph.D., Chair STEPHEN L. ELGAR, Ph.D. RICHARD A. GOULD, Ph.D. MARK A. JOHNSON, Ph.D. MILTON S. LOVE, Ph.D. J. RODERICK MATHER, Ph.D. TABER ALLISON, Ph.D. SANDRA WERNER, Ph.D. DEN DUNTON, Ph.D. JERRY GALT, Ph.D. LISA LEVIN, Ph.D. RICHARD J. McLAUGHLIN, Ph.D. WILLETT KEMPTON, Ph.D.

NOAA:

PAUL SANDIFER, Ph.D., NOAA, National Ocean Service,
Chief Scientist. Representing Dr. Kathryn D. Sullivan,
Assistant Secretary of Commerce for Environmental
Observations and Prediction Deputy Administrator and the
Acting Chief Scientist, Office of the Under Secretary

NATIONAL ACADEMY OF SCIENCES:

GREG SYMMES, Executive Director, Division on Earth and Life Studies
SUSAN ROBERTS, Director, Ocean Studies Board
MAGGIE WALSER, Gulf of Mexico Research Program
KIM WADDELL, Senior Program Officer, Gulf of Mexico
Research Program

BOEM:

WILLIAM BROWN, Designated Federal Officer, and
BOEM Chief Environmental Officer
WALTER CRUICKSHANK, BOEM Acting Director
RODNEY CLUCK
JAMES BENNETT
MARY BOATMAN

PAT ROSCIGNO
DEE WILLIAMS
JOE CHRISTOPHER
LISA TOUSSAINT
MICHELLE MORIN
JEFFREY REIDENAUER

ANN SCARBOROUGH BULL

RICK YARDE
JENNIFER EWALD
PHYLLIS CLARK
BRAD BLYTHE
WALTER JOHNSON
JONATHAN BLYTHE

RON LAI MIKE RASSER GREG BOLAND GUILLERMO AUAD CHRIS CAMPBELL
CATHY COON

MELANIE DAMOUR
BARRY OBIOL
DAVID PEREKSTA
JOHN PRIMO

DONNA SCHROEDER SUSAN ZALESKI

ALEXIS LUGO-FENANDEZ

HARRY LUTON JAMES MOORE REBECCA GREEN JIM PRICE

CAROL FAIRFIELD DAVID BIGGER BRIAN HOOKER DESRAY REEB

JOSH WADLINGTON DOUG PIATKOWSKI BRANDI CARRIER LISA GILBANE

Index of Transcripts

The complete transcripts are available upon request through FOIA. Please see this Index of Transcripts to find which pages you would like to receive.

OCS SCIENTIFIC COMMITTEE MEETING

PLENARY SESSION

Tuesday, May 13, 2014

	Pages
Welcome and Introductions Dr. Lorrie Rea, OCS Scientific Committee Chair	6
Welcome Remarks Dr. Walter Cruickshank, BOEM Acting Director	10
Chief Environmental Officer's Message Dr. William Brown, Designated Federal Officer of the Committee and BOEM Chief Environmental Officer	34
Environmental Studies Program: Use Inspired Science Dr. Rodney Cluck, Executive Secretary of the Committee and Chief, Division of Environmental Sciences Questions and Answers/Comments	57 73
Science for Informed Decisions Panel Discussion on Environmental Assessment James Bennett, Chief, Division of Environmental Assessment, Herndon, VA Joe Christopher, Gulf of Mexico Region Rick Yarde, Pacific OCS Region Michelle Morin, Chief, Environmental Review – Office	86 91 98
of Renewable Energy Programs Lisa Toussaint, Alaska OCS Region Questions and Answers/Comments/Discussion	106 111 121
Regional Updates Gulf of Mexico Region – Dr. Pat Roscigno, Chief, Environmental Studies Section Questions and Answers/Comments/Discussion	176 186
Atlantic OCS Region Dr. Mary Boatman, Chief, Environmental Studies Section Office of Renewable Energy Programs Questions and Answers/Comments/Discussion	210 232
Alaska OCS Region – Lisa Toussaint Questions and Answers/Comments/Discussion	243 263
Pacific OCS Region – Dr. Ann Scarborough Bull, Chief, Environmental Studies Management Section Questions and Answers/Comments/Discussion	273 298
Dr. Jeffrey Reidenauer, Chief, Marine Minerals Branch Questions and Answers/Comments/Discussion	303 317
Committee Questions and Discussion	320

Index of Transcripts (continued)

OCS SCIENTIFIC COMMITTEE MEETING

COMMITTEE RECOMMENDATIONS - FINAL DAY

Thursday, May 15, 2014

	PAGE
Introduction to Committee Comments Regarding Study Profiles: Dr. Lorrie Rea	4
Disciplines Subcommittee Presentations	
Physical/Chemical Oceanography Dr. Mark Johnson	5
Questions and Answers/Discussion	13
Biology/Ecology Dr. Milton Love	14
Questions and Answers/Discussion	22
Marine Minerals/Benthic Ecology Dr. Rodney Mather	31
Questions and Answers/Discussion	37
Social Science Dr. Richard Gould Questions and Answers/Discussion	39 52
Multi-Disciplinary / Regional Scale Dr. Sandra Werner	60
Questions and Answers/Discussion	70
General Committee Recommendations and Discussion	74
Presentation of Plaques to Retiring OCSSC Members by Dr. William Brown	87
National Academy of Sciences Perspectives	
Greg Symmes, Executive Director, Division on Earth and Life Studies	
National Academy of Sciences	96
Susan Roberts, Director, Ocean Studies Board	
National Academy of Sciences	102
Maggie Walser, Gulf of Mexico Research Program	
National Academy of Sciences	112
Questions / Discussion	121
Kim Waddell, Senior Program Officer, Gulf of Mexico Research	
Program, National Academy of Sciences, Questions / Discussion	131
Discussion Regarding Subcommittees	145
Dissolution of Environmental Sensitivity Assessment Subcommittee	167
Subcommittee Titled Science Relevant to the Consideration of Oil and	
Gas Energy in the Mid and South Atlantic OCS	176
Public Comments: There Were No Comments from the Public	
General Committee Recommendations and Discussion; Committee Recommendations	
and Discussion Regarding Additional Studies Not Presented	178
Comments Regarding Committee Business	
Letter to the Director	193
New Member Nominations	194
Date of 2015 OCS Scientific Committee Meeting	197
Format for Meeting Breakout SME Teams	198
Additional Days to the Meeting	204
Orientation for New Members in 2015 and Miscellaneous Comments	200
Regarding Committee Business	209

ACRONYMS

AMSS Alaska Marine Science Symposium
BOEM Bureau of Ocean Energy Management

CalCOFI California Cooperative Oceanic Fisheries Investigation

CMSP Coastal Marine Spatial Planning
DBG Discipline Breakout Groups
DOE Department of Energy

DOI Department of Energy

DOI Department of Interior)

EA environmental assessment

EIS Environmental Impact Statements

EMF electromagnetic fields
EPA Energy Policy Act

ESP Environmental Studies Program

FY Fiscal Year

G&G Geological & Geophysical

GOMRI Gulf of Mexico Research Initiative

IARPC Interagency Arctic Research Policy Committee

MARINe Multi-Agency Rocky Intertidal Network NEPA National Environmental Policy Act

NOAA National Oceanic and Atmospheric Administration

NOP National Ocean Policy

NOPP National Ocean Partnership Program
NRDA Natural Resource Damage Assessments

OCS Outer Continental Shelf
OSU Oregon State University

RESTORE Act Resources and Ecosystems Sustainability, Tourist Opportunity and Revived

Economics of the Gulf States Act of 2011

RODEO Real-time Opportunity for Development Environmental Observations

ROV Remotely Operated Vehicles
RPB Regional Planning Bodies

SC Scientific Committee

SEARCH Study of Environmental Arctic Change

SME subject matter expert

SOAR Synthesis of Arctic Research
USGS United States Geological Survey