# Arthur Kill Coalition Asbury Park Fishing Club Asbury Park Frishing Club Bayberry Garden Club Bayshore Regional Watershed Council Bayshore Saltwater Flyrodders Belford Seafood Co-op Belmar Frishing Club Beneath The Sea Bergen Save He Watershed Action Network Shores Homeowners Civic Association Cape May Environmental Commission Cape May Environmental Commission Central Jersey Anglers Citizens Conservation Council of Ocean County Clean Air Campaign, NY Coalition Against Toxics Coalition for Peace & Justice/Unplug Salem Coast Alliance Coastal Jersey Parrot Head Club

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Communication Workers of Amenica, Local 1034
Concerned Businesses of COA
Concerned Clizens of Bensonhurst
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Concerned Students and Educators of COA Eastern Monmouth Chamber of Commerce Fisher's Island Conservance Fishermen's Conservation Association, NI Chapte rmen's Conservation Association, NJ Chapter men's Conservation Association, NY Chapter Fishermen's Dock Cooperative, Pt. Pleasant Friends of Island Beach State Park Friends of Liberty State Park, NJ Friends of the Boardwalk, NY Garden Club of Englewood Garden Club of Fair Haven Garden Club of Fair Haven Garden Club of Long Beach Island Garden Club of RFD Middletown Garden Club of Morristown Garden Club of Navesink Garden Club of New Jersey Garden Club of New Vernon Garden Club of Oceanport Garden Club of Oceanport
Garden Club of Princeton
Garden Club of Rumson
Garden Club of Short Hills
Garden Club of Shrewsbury
Garden Club of Spring Lake
Garden Club of Spring Lake
Garden Club of Washington Valley
Great Egg Harbor Watershed Association Green Party of Monmouth County Green Party of Monmouth County
Green Party of New Jersey
Highlands Business Partnership
Holly Club of Sea Girt
Hudson River Fishermen's Association
Jersey Shore Captains Association
Jersey Shore Parrot Head Club
Leavy Shore Purning Club Jersey Shore Running Club Junior League of Monmouth County

Junior League of Monmouth County
Keyport Environmental Commission
Kiwanis Club of Manasuquan
Kiwanis Club of Shadow Lake Village
Leonardo Party & Pleasure Boat Association
Leonardo Tax Payers Association
Main Street Wildwood Mani Street Wildwood
Mantoloking Environmental Commission
Marine Trades Association of NJ
Monmouth Conservation Foundation
Monmouth County Association of Realtors
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National Coalition for Marine Conservation Natural Resources Protective Association, NY NJ Beach Buggy Association NJ Commercial Fishermen's Association NJ Commercial Fishermen's Association
NJ Environmental Federation
NJ Environmental Lobby
NJ Main Ship Owners Group
NJ Marine Education Association
NJ PIRG Citizen Lobby
Nottingham Hunting & Fishing Club, NJ
NYC See Grossies

> NY/NJ Baykeeper Ocean Wreck Divers, NJ PaddleOut.org Picatinny Saltwater Sportsmen Club Raritan Riverkeeper Religious on Water Riverside Drive Association Rotary Club of Long Branch Rotary District #7510—Interact Itwater Anglers of Bergen County Sandy Hook Bay Anglers Save Barnegat Bay Save the Bay, NJ SEAS Monmouth Seaweeders Garden Club Shark Research Institute Shark River Cleanup Coalition Shark River Surf Anglers

Shore Adventure Club Sierra Club, NJ Shore Chapter

Sisters of Charity, Maris Stella Sons of Ireland of Monmouth County

NY State Marine Education Association

NYC Sea Gypsi

Sons of Ireland of Monmouth County
Soroptimist Club of Cape May County
South Jersey Dive Club
South Monmouth Board of Realtors
Staten Island Tuna Club
Strathmere Fishing & Environmental Club Surfers' Environmental Alliance Surfrider Foundation, Jersey Shore Chapter TACK I. MA

Terra Nova Garden Club
Three Harbors Garden Club
Unitarian Universalist Congregation/Monm. Cnty.
United Boatmen of NY/NJ Village Garden Club Volunteer Friends of Boaters, NJ WATERSPIRIT Women's Club of Brick Township Women's Club of Brick Township Women's Club of Long Branch Women's Club of Merchantville Women's Club of Spring Lake Women Gardeners of Ridgewood

# Clean Ocean Action



Ocean Advocacy Since 1984

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# March 23, 2009

Joe Christopher Regional Supervisor, Leasing and Environment (MS 5410) Minerals Management Service Gulf of Mexico OCS Region 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123–2394.

RE: Comments on Notice of Intent (NOI) To Prepare a Programmatic **Environmental Impact Statement (PEIS) and Call for Interest for Future Industry G&G Activity on the Atlantic OCS** 

#### VIA ELECTRONIC MAIL TO GGEIS@MMS.GOV

Dear Mr. Christopher:

Clean Ocean Action's submits for your review these comments on the abovereferenced NOI to prepare a PEIS and Call for Interest for future industry geological and geophysical (herein "G & G") activity on the Atlantic OCS. 1

Clean Ocean Action (herein "COA") is a broad-based coalition of 125 conservation, environmental, fishing, boating, diving, student, surfing, women's, business, service, and community groups, as well as many concerned citizens and business. Our goal is to improve the degraded water quality of the marine waters off the New Jersey/New York coast. It is COA's mission to investigate, review, and question proposals that may affect ocean water quality in the New York/New Jersey Bight.<sup>2</sup>

COA previously submitted comments opposing the inclusion of all new areas (including three in the Atlantic Region) in the draft Proposed 5-Year Outer Continental Shelf (OCS) Oil and Gas Leasing Program for 2010-2012 (herein the "2010 Leasing Program") that were previously afforded protection through Congressional Moratorium and Presidential Executive Order. COA strongly opposes the Department of Interior's Minerals Management Service (herein "MMS") continued pursuit of these new areas and respectfully demands that the MMS remove these regions from the current 2010-2015 Program or any new Oil and Gas Leasing Program Plan from the new Administration. Inclusion of these areas flies in the face of over 25 years of good governance policies to protect environmentally sensitive

Fed. Reg. Vol. 74 (12) pg. 3637

<sup>&</sup>lt;sup>2</sup> Visit http://www.cleanoceanaction.org for more information.

areas and puts the regional economic and environmental productivity and potential at risk.

As a result, COA opposes G & G activities related to oil, gas and minerals exploration and extraction in the previously protected areas of the Atlantic OCS. These G & G activities will promote and support oil and gas drilling in this area and should not be allowed. At a minimum, it is inappropriate to allow such activities when the public comments deadline on the 2010 Leasing Program has been extended and the Program's fate is uncertain. It is poor governance to encourage oil and gas drilling exploration into a new area when the federal government has still not determined what new areas, if any, will be opened to new oil and gas drilling.

COA also rejects the contention in the Federal Register Notice that a subset of G & G activities should be deemed sufficiently minor to qualify for only a cursory Environmental Assessment (EA) analysis, or a "Finding of No Significant Impact" (FONSI). COA asserts that each activity, whether considered individually or in aggregate, will warrant the preparation of a full EIS.

COA's strongest opposition to oil, gas and minerals exploration and extraction related G & G activities on the Atlantic OCS are due to the significant potential of these activities to harm marine life, including fish and endangered whales.

The Atlantic region encompasses several ecologically rich and unique marine systems, diverse habitats and protected areas. The New York Bight alone supports more than 300 species of fish, nearly 350 species of birds, 7 species of sea turtles, and many marine mammals, such as 17 species of whales and 24 species of seals and porpoises. In the coastal region from Virginia to New York, there are eleven National Wildlife Refuges, and a series of barrier islands that make up the International Shorebird Reserve designated by the United Nations as a World Biosphere Reserve. These national and international designations are designed to protect thousands of acres of coastal wetland and tidal marshes that are considered critical feeding habitat for millions of migratory birds that travel the Atlantic Flyway. The close proximity of the proposed oil and gas exploration activities threatens the coastal habitat and waters of the entire region.

Though COA opposes oil, gas and minerals exploration and extraction related G & G activities in the Atlantic OCS, COA offers the following considerations for the PEIS.

The PEIS must evaluate anticipated G & G activities from oil, gas and minerals exploration and extraction, including, but not limited to: seismic surveys, sidescan sonar surveys, electromagnetic surveys, geological and geochemical sampling, and remote sensing, each of which carries with it a range of adverse impacts on the marine environment. All noise related impacts of these G & G activities must be assessed for the entire biota of the Atlantic region, including cumulative effects from other G & G survey methods which may be used simultaneously or successively (electromagnetic, aeromagnetic, and gravity surveys) and the additional noise sources from helicopters and aircraft and boats. The PEIS also needs to include the availability of sufficient baseline data identifying preferred feeding, breeding, or nursery habitats for marine mammals, sea turtles and fish, as well as sensitive benthic habitats in study area. At its December 2008 workshop held in Williamsburg, Virginia, MMS presenters indicated that there are very significant scientific data gaps for the entire Atlantic coastline which need to be filled prior to OCS oil and gas leasing going forward, and we would further assert that these same data

gaps will need to be addressed prior to the completion of a PEIS on G&G activities in this region.

Clean Ocean Action makes the following specific points in response to the NOI to prepare a PEIS and Call for Interest for future industry G & G activity on the Atlantic OCS:

#### IMPACTS TO MARINE BIOTA

Important impacts of seismic activity on marine biota in the Atlantic region that must be assessed for both acute and chronic effects include, but are not limited to, the following:

- Risk of strandings to marine mammals and fish,
- Mortality, both direct and indirect (resulting from disruption of growth/feeding) of fish eggs, larvae and fry
- Disruption of biologically important behaviors (mating, feeding, nursing or migration, including loss of efficiency in conducting these behaviors) due to temporary hearing loss or impairment including impacts due to:
  - o separation of calves from mothers or separation of individuals from pods/groups (and resulting risk of predation, starvation, stranding, etc.)
  - o inability to hunt or capture prey, these assessment must include impacts during critical life stages (i.e. larvae, juveniles, nursing mothers) and critical seasons (i.e. pre and post migration, calving/nursing)
  - o inability to detect predators and consequent risk of predation (although noise generation from seismic activity may be transient, if organism is consumed due to hearing difficulties, the impact is obviously permanent)
  - o failure to detect mating calls (again transient noise from seismic activity during mating season can result in a loss of mating opportunities for the entire season/year)
  - o failure to maintain normal migration routes either due to avoidance or disorientation caused by noise generated during seismic activity.
- Declines in availability and viability of prey species due to avoidance of impacted area,
- Habituation (causing animals to remain near damaging levels of sound)

## IMPACTS TO COMMERCIAL & RECREATIONAL FISHING

In addition, the PEIS on seismic activity in the Atlantic region must examine the impact to both commercial and recreational fisheries catch rates caused by large scale movement of fish away from areas experiencing intense acoustic activity. Assessments must include, but are not limited to, the geographic extent of avoidance, length of time for full stock recovery in the affected area, and consequent reductions in commercial and recreational catch rates.

## CONFLICT WITH ONGOING AND PREVIOUS MILITARY ACTIVITIES

The sediments of the Atlantic OCS contain numerous mapped and unmapped disposal sites for unexploded military ordinance and chemical weapons, and the PEIS must consider the effect of induced acoustic impacts in potentially discharging such devices on the seabed. In addition, mission-critical homeland security operations areas occur in the Atlantic region, including instrumentation and training and navigational testing uses associated with the U.S. Navy's Virginia Capes Operations Area (herein "VACAPES"), as well as activities associated with the

Wallops Island NASA facility. The U.S. Navy previously determined that military activities in the VACAPES area "have the potential to interfere with or interrupt exploration and drilling operations." Therefore, the PEIS must address potential risks of G & G activities to all ongoing and previous military activities in the Atlantic OCS.

### INCREASED RISK OF COLLISIONS DUE TO INCLEMENT WEATHER

Seismic survey during inclement weather and/or low visibility can increase risk of collisions with marine mammals by limiting or eliminating the ability of trained observers to identify animals present in the exclusion zone around the survey vessel. California recommends halting surveys when conditions deteriorate to the point where visual observation becomes ineffective and where marine mammal densities are high enough to warrant concern. Moreover, the Draft Programmatic Environmental Assessment for Arctic Ocean Outer Continental Shelf Seismic Surveys – 2006 indicates that "observers would need the use of high-intensity lighting to maintain vigilance for marine mammals when the surveys are being conducted during periods of darkness or poor visibility (e.g. during rain or fog)." Such lighting poses a hazard to birds that are attracted by light and vulnerable to striking vessels. Therefore, the PEIS for the Atlantic region should consider banning seismic surveys during inclement weather and periods of low visibility (fog, rain, darkness) that do not allow visualization of the sea surface to decrease risks of harm to marine mammals and birds.

#### **CUMULATIVE IMPACTS**

The PEIS must consider all cumulative impacts, including, but not limited to, any concurrent acoustic surveys (including all non-oil and gas surveys), multiple noise sources (military activities), multiple proposed offshore wind/wave facilities in the region, and climate change (including the effect from underwater sounds travelling further with increases in ocean acidification). If G & G activities involve consecutive years of intensive seismic surveying in these same waters, the PEIS must account for all foreseeable future seismic surveys in the entire Atlantic region.

# USE OF MOST RECENT AVAILABLE LITERATURE

The 2004 Programmatic Environmental Assessement for Seismic Activity in the Gulf of Mexico OCS failed to utilize the most recent and up to date information and scientific literature available at the time. Therefore, any analysis of potential impacts from G & G activities in the Atlantic region must utilize the most recent available literature, including, but not limited, to the following:

- 1) Parsons, Dolman, Wright, Rose, Burns. Navy sonar and cetaceans: Just how much does the gun need to smoke before we act? Marine Pollution Bulletin 56: 1248–1257 (2008)
- Southall, Bowles, Ellison, Finneran, Gentry, Green Jr, Kastak, Ketten, James Miller, Nachtigall, Richardson, Thomas, Tyack. Marine Mammal Noise Exposure Criteria: Initial Scientific Recommendations. Aquatic Mammals, 33 (2007)
- 3) National Research Council, "Ocean Noise and Marine Mammals" (2003)

<sup>&</sup>lt;sup>3</sup> Outer Continental Shelf Oil and Gas Leasing Program 2007-2012, Draft Environmental Impact Statement, July 2006, Page IV-2, U.S. Department of the Interior, Minerals Management Service.

<sup>&</sup>lt;sup>4</sup> High Energy Seismic Survey Team, High Energy Seismic Survey Review Process and Interim Operational Guidelines for Marine Surveys Offshore Southern California (1999)

<sup>&</sup>lt;sup>5</sup> Draft PEIS for the Arctic Ocean OCS Seismic Surveys – 2006 at III-63.

- 4) Hildebrand, J., "Impacts of anthropogenic sound on cetaceans," Paper submitted to the IWC Scientific Committee, SC/56/E13. (2004)
- 5) Engel, M.H., M.C.C. Marcondes, C.C.A. Martins, F. O Luna, R.P. Lima, and A. Campos, "Are seismic surveys responsible for cetacean strandings? An unusual mortality of adult humpback whales in Abrolhos Bank, Northeastern coast of Brazil," Paper submitted to the IWC Scientific Committee, SC/56/E28. (2004)
- 6) Würsig, B., D.W. Weller, A.M. Burdin, S.A. Blokhin, S.H. Reeve, A.L. Bradford, R.L. Brownell, Jr., "Gray whales summering off Sakhalin Island, Far East Russia: July-October 1997, A joint U.S.-Russian scientific investigation," Final contact report to Sakhalin Energy Investment Company (1999)
- 7) Weller, D.W., A.M. Burdin, B. Würsig, B.L. Taylor, and R.L. Brownell, Jr., "The western Pacific gray whale: A review of past exploitation, current status and potential threats," J. Cetacean Res. Manage. 4: 7-12 (2002)
- 8) P. Tyack, "Behavioral Impacts of Sound on Marine Mammals," Presentation to the U.S. Marine Mammal Commission Advisory Committee on Acoustic Impacts on Marine Mammals (February 4, 2004)
- 9) Whale and Dolphin Conservation Society, "Oceans of Noise" (2004)
- 10) Greenpeace, Sonic Impacts: A precautionary assessment of noise pollution from ocean seismic surveys, (2004)
- 11) M.H. Engel, M.C.C. Marcondes, C.C.A. Martins, F. O Luna, R.P. Lima, and A. Campos, "Are Seismic Surveys Responsible for Cetacean Strandings? An Unusual Mortality of Adult Humpback Whales in Abrolhos Bank, Northeastern Coast of Brazil," IWC Doc. SC/56/E28 (2004)
- 12) J. Hildebrand, "Impacts of Anthropogenic Sound on Cetaceans," IWC Doc. SC/56/E13 (2004)
- 13) Simpson, S.D. et al., Settlement-stage coral reef fish prefer the higher-frequency invertebrate-generated audible component of reef noise Animal Behaviour. 75(6):1861-1868. (2008)
- 14) Ketten, D R. Underwater ears and the physiology of impacts: Comparative liability for hearing loss in sea turtles, birds, and mammals. Bioacoustics [Bioacoustics]. 17(1-3):312-315 (2008)
- 15) Parks, S.E. et. al.. Long- and Short-Term Changes in Right Whale Acoustic Behavior in Increased Low-Frequency Noise. Bioacoustics [Bioacoustics]. 17(1-3):179-180 (2008)
- 16) Hatch, L. et al. Characterizing the Relative Contributions of Large Vessels to Total Ocean Noise Fields: A Case Study Using the Gerry E. Studds Stellwagen Bank National Marine Sanctuary. Environmental Management 42(5): 735-742 (2008)
- 17) McCauley, et. al, High Intensity Anthropogenic Sound Damages Fish Ears. J. Acoust. Soc. Am. 113 (2003)
- 18) NMFS, Assessment of Acoustic Exposures on Marine Mammals in conjunction with USS Shoup Active Sonar Transmissions in the Eastern Strait of Juan de Fuca and Haro Strait, Washington (May 2003)
- 19) Popper, A.N. and Hastings, REVIEW The effects of human-generated sound on fish. Integrative Zoology, 4: 43-52. (2009)
- 20) Popper, A.N., Comeau, L.A., Campana, S. Determination of the Effects of Seismic Exploration on Fish (Project SEIFISH), Bioacoustics 17(1-3): 212-214 (2008)
- 21) Popper, A. N., Smith, M. E., Cott, P. A., Hanna, B. W., MacGillivray, A, O, Austin, M. E, Mann, D. A. Effects of exposure to seismic airgun use on hearing of three fish species. J. Acoust. Soc. Am., 117: 3958-3971. (2005)
- 22) Smith, M.E., Kane, A.S. and Popper, A.N. Noise induced stress response and hearing loss in goldfish (Carassius auratus) J. Exp. Biol. 207 (Pt.3) 427-435, (2004)

#### **CONCLUSION**

COA strongly urges MMS to rescind this NOI to prepare a PEIS and Call for Interest for future industry G & G activity on the Atlantic OCS to allow the new Obama Administration to complete their Energy Policy and determine whether opening up new regions of the OCS to oil and gas drilling is warranted. G&G activities and offshore development for oil and gas promotes our dependency on fossil fuels, fails to consider viable fuel efficiency alternatives and, most importantly, unnecessarily puts at risk an area that is economically and environmentally dependent upon clean coastlines and ocean waters. In addition, the U.S. Atlantic coast contains too little fossil fuel resources to justify the expense and environmental risk of offshore drilling activities when there are economically and technically feasible alternatives available.

These G & G activities will likely involve many years of intensive seismic survey noise that will have significant impacts on the ecology and economy of the entire region. If this program does proceed, MMS must ensure that the PEIS developed for G & G activity in the Atlantic region is

thorough and complete. Further, an EA and a resulting FONSI are unacceptable for G & G activities and if this action is to proceed, only a PEIS is the appropriate legal result given the environmental impacts from G & G activities.

Thank you for the opportunity to comment on the planned preparation of a PEIS for the Atlantic Region by the Minerals Management Service. Clean Ocean Action will be continuing to monitor and participate in the EIS process for the Atlantic OCS region. Please send any correspondence to Clean Ocean Action, 18 Hartshorne Dr., Suite 2, Highlands, NJ 07732, or email at <a href="mailto:science@cleanoceanaction.org">science@cleanoceanaction.org</a>. We will distribute to listed parties.

Jennifer C. Samson

**Principal Scientist** 

David Byer, Esq.

Water Policy Attorney

Jennifer Samson, Ph.D.

Sincerely,

Cindy Zipf

**Executive Director** 

Heather Saffert, Ph.D.

Heather Saffet

Staff Scientist

cc:

NJ US Congressional Delegation

open letter