United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001

OCT 25 2012

Memorandum

To: Secretary

Through: Marcilynn A. Burke
Acting Assistant Secretary - Lands and Minerals Management

From: Tommy P. Beaudreau
Director

Subject: Report on the Bureau of Ocean Energy Management (BOEM)'s Accomplishments in Support of the National Fish Habitat Action Plan

Under a Memorandum of Understanding among the Departments of Agriculture, Commerce, and Interior signed in March 2012, individual Bureaus are required to report to their respective Secretaries on accomplishments and progress in support of the National Fish Habitat Action Plan (NFHAP). BOEM's work addresses NFHAP Goals 1 and 2 through Implementation Strategies 3 and 4 as noted on the attached chart. Goal 1 is to protect and maintain intact and healthy aquatic systems and Goal 2 is to prevent further degradation of fish habitats that have been adversely affected. Attached in the common template provided to all Bureaus are descriptions of BOEM projects and programs, which support this initiative.

Attachment

Report to the Secretary of the Department of the Interior
Multi-Bureau National Fish Habitat Plan Highlights

October 2012

Purpose: Provide examples of bureau accomplishments and progress supporting the National Fish Habitat Action Plan (NFHAP).
Contents: The following tables are based on the implementation strategy of the NFHAP.

Measure and Communicate Aquatic Habitat Needs National Fish Habitat Action Plan -Implementation Strategy #3: *Measure and communicate the status and needs of aquatic habits.*			
Agency	**Project Title**	**Timeline**	**NFHAP Goal Addressed**
BOEM	Monitoring the East and West Flower Garden Banks in the Gulf of Mexico	ongoing	1&2
	Brief Project or Program Description		
	The Bureau of Ocean Energy Management (BOEM) supports an ongoing monitoring program of the East and West Flower Garden Banks in partnership with National Oceanographic and Atmospheric Administration's (NOAA) National Marine Sanctuaries Program. These Banks, along with Stetson Bank, form the Flower Garden Banks National Marine Sanctuary. The East and West Flower Garden Banks are the northernmost coral reefs on the continental shelf of North America and are home to over 170 species of fish and approximately 300 species of reef invertebrates. The monitoring program includes: assessing the health of the coral reefs; evaluating changes in population levels, including reef fish; and measuring coral and algal cover and growth rates. For more information on BOEM's history of stewardship of the East and West Flower Garden Banks, see http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Gulf-of-Mexico-Region/flower_garden_banks.aspx		
BOEM	The Multiagency Rocky Intertidal Network (MARINe)	ongoing	1&2
	Brief Project or Program Description		
	BOEM is a primary sponsor of an ongoing effort to monitor rocky intertidal sites adjacent to outer continental shelf (OCS) oil and gas production facilities off California and potential OCS wave energy sites off Oregon. BOEM and its 39 partners in MARINe monitor shoreline rocky intertidal sites from Alaska to Mexico using standardized protocols and a shared database (www.MARINe.gov). Partners include a number of state universities, the California State Water Quality Control Board, the California Ocean Protection Council, NOAA's Office of Marine Sanctuaries, and the National Park Service. Many of these sites have been monitored for periods of 15-25 years. Examples of findings have included the documentation of the sudden decline of black abalone, which led to the listing under the Endangered Species Act of that species as endangered, and documentation of significant, long-term declines in the number of species in mussel beds.		

BOEM	The Habitat Role of Oil and Gas Platforms	ongoing	1&2
	Brief Project or Program Description		
	What to do with oil and gas platforms when they are decommissioned is a subject of considerable debate. To better understand the impact decommissioning may have on fish populations, BOEM has supported a number of studies. ***In the Pacific:*** BOEM has funded over 20 research efforts and continues to examine and determine the habitat value and ecological importance of oil and gas platforms off southern California. The habitat value of nine platforms on the Pacific OCS was determined during a multi-year study that was synthesized in the report OCS Study MMS #2003-032 and expanded and reported in OCS Study MMS #2009-033, OCS Study BOEMRE #2010-012, and OCS Study BOEM #2012-020. In total, BOEM will have funded over 30 years of work at platforms to determine their habitat value and ecological influence on the local and regional marine ecosystem. BOEM-funded research has shown that, compared to natural reefs, platforms offshore southern California act as defacto marine protected areas. These areas experience very little fishing pressure, harbor much higher densities of large individuals of NOAA-designated overfished species than natural reefs, produce far more larvae of these overfished species per unit area than do natural reefs, and are regionally important to the recovery of these species. On-going studies will determine the overall biological productivity of Pacific Platforms. For more information see: http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Pacific-Region/Studies/Completed-Studies.aspx and http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Pacific-Region/Studies-Highlights-and-Accomplishments.aspx. ***In the Gulf of Mexico:*** In the Gulf of Mexico, there are several thousand oil and gas structures which can effectively increase reef habitat in an environment dominated by soft sediments. Recent and ongoing studies that focus on the habitat role of platforms include: an evaluation of the foraging behavior and site fidelity of the blue runner (*Caranx crysos*), a species that is associated with platforms and is consumed by large predatory species such as king mackerel and tuna and grouper species; surveys to determine the deepwater coral distribution and abundance on active oil and gas platforms and decommissioned "Rigs-to-Reefs" platforms; and the evaluation of short-term movement, home range and behavior of red snapper, a popular commercial and recreational species, around petroleum platforms. For more information on ongoing studies in the Gulf of Mexico visit http://www.boem.gov/GMStudies/ For reports from completed studies for both the Pacific and the Gulf of Mexico see http://www.data.boem.gov/homepg/data_center/other/espis/espismaster.asp?appid=1		

Provide National Leadership and Coordination

National Fish Habitat Action Plan -Implementation Strategy #4: *Provide national leadership and coordination to conserve fish habitats.*

Agency	Project Title	Timeline	NFHAP Goal
BOEM	Arctic Fish Ecology Catalogue	2009-present	1&2
	Brief Project or Program Description		
	In cooperation with the U.S. Geological Survey, BOEM is developing a comprehensive Arctic fish desk reference document that will be available to fisheries scientists and the general public for use in management, research and education. It will include such information as distribution, life history, and ecological significance for fish found in the U.S. Exclusive Economic Zone in the Chukchi and Beaufort Seas. More than 1200 individual references relative to Arctic marine fishes have been reviewed to form the scientific basis for the species information. Museum specimens and associated databases are another important source of information. The Catalogue also incorporates information from recent fish surveys, including BOEM-funded surveys in the Beaufort Sea.		
BOEM	Chukchi and Beaufort Sea Assessments of Fish and Their Habitats	2008-present	1&2
	Brief Project or Program Description		
	BOEM is providing support for multiple surveys and assessments of fish, shellfish and fish habitats in the Chukchi and Beaufort Seas. These studies will provide a geospatial baseline of fish (and prey) distribution and abundance. When completed in 2015, these studies will provide the first ever systematic marine fish and habitat survey across the entire Beaufort Sea continental shelf and slope and update and improve our knowledge base of fish distributions and their use of habitats in the Chukchi Sea. Study partners include the University of Alaska, NOAA, and the Department of Fisheries and Oceans, Canada. Examples of studies include: • U.S.-Canada Transboundary Fish and Lower Trophic Communities. Objectives include: documentation of fish and invertebrate species presence, abundance, distribution and biomass; testing of under-ice methods and development of the baseline for the ice-covered season; analysis of the dietary habits, age, and growth patterns of the most abundant species; and a better understanding of how habitat variables affect distribution. • Distribution of Fish, Crab, and Lower Trophic Communities in the Chukchi Sea Lease Area. This study will provide the information needed to compare these communities with prior studies, as well as adjacent regions, and will also relate data to physical and chemical parameters. The study will include sampling during the ice-covered season. • Population Assessment of Snow Crab (*Chionoecetes opilio*) in the Chukchi and Beaufort Seas. To assess the snow crab population, this research project will survey and evaluate the abundance, biomass, stock structure, diet, and trophic position of the snow crab in the Chukchi and Beaufort Seas.		

	• Dispersal Patterns and Summer Ocean Distribution of Adult Dolly Varden from the Wulik River, Alaska, Evaluated Using Satellite Telemetry. This study will follow the movements and document the distribution of Dolly Varden in the Chukchi. The Dolly Varden is an important subsistence fish used by northwestern Alaskan native peoples. For more information about ongoing research in the Beaufort and Chukchi Seas visit http://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Alaska/Index.aspx For completed studies search the BOEM Studies Database (ESPIS) at http://www.data.boem.gov/homepg/data_center/other/espis/espismaster.asp?appid=1