



Applied science for informed decision making

March 10, 2014

Welcome to the March edition of *BOEM Science Notes*

This month, we're featuring the story around an upcoming television special on long-term monitoring of the East and West Flower Garden Banks in the Gulf of Mexico. It is one of BOEM's longest running studies of corals and other marine life in this National Marine Sanctuary, in partnership with NOAA and other partners. Below, read about the research featured in "Window in the Waves - the Flower Garden Banks," to be aired on Louisiana Public Broadcasting on March 20. BOEM senior scientist for coral reef ecology, Greg Boland, has studied this area for nearly 40 years and was interviewed for the program. We hope you will have an opportunity to watch "Window in the Waves" on Louisiana Public Broadcasting (check local listings) or [online](#). The documentary was directed and produced by Todd Richard of Synergy Productions in association with Louisiana Public Broadcasting. Please enjoy reading this Science Note.

Sincerely,

William Y. Brown
Chief Environmental Officer

Window in the Waves

Louisiana Public Broadcasting Special on Coral Oasis in the Gulf of Mexico

Just 110 miles southeast of Galveston, Texas, sit the northernmost coral reef communities on the North American continental shelf – the East and West Flower Garden Banks (FBGs).

BOEM is honored to be a part of a Louisiana Public Broadcasting documentary, "Window in the Waves," telling the story of this coral wonderland on Thursday, March 20 (7:00 P.M., CDT). The program includes interviews with individuals long associated with the ocean research, including renowned oceanographer Dr. Sylvia Earle, and BOEM senior scientist for coral reef ecology, Gregory Boland.

Why is this area unique?

The East and West FBGs are the largest topographic features on the continental shelf in the northern Gulf of Mexico. They host a thriving expanse of coral covering more than 680 and 100 acres respectively, sit in 330-500 feet of water and crest in 60 feet of water. They are home to at least 20 species of reef-building coral, and provide habitat for fish, lobster, urchins, sponges and other types of marine life.



Brain corals and large healthy sponges inside the monitoring area at the East Flower Garden Bank.
Photo: Greg Boland, BOEM



Close-up of the fire coral (*Millepora alcicornis*) in the East Flower Garden Banks. Photo: James Sinclair, BSEE

BOEM and its predecessor agencies have been studying the FGBs since 1975, and began continuous annual monitoring in 1988, making it one of its longest-running monitoring endeavors. The FGBs obtained national marine sanctuary status in 1992, after which NOAA's National Marine Sanctuary program began co-funding the monitoring, which continues today.

BOEM's rationale for studying the FGBs has remained constant over nearly four decades: to monitor the environmental health of the Banks, which are surrounded by offshore oil and gas operations. With 25 years of annual monitoring, the purpose of the current study is to validate and sustain BOEM's contention that its lease stipulations provide effective mitigation of impacts to the offshore environment in general and to these sensitive and unique biological features. The latest research indicates that the FGB are stable with no significant changes since monitoring began.

BOEM expects to continue long-term monitoring with the NOAA Marine Sanctuaries program to detect any subtle, chronic effects from natural and man-induced activities that could potentially endanger community integrity. Monitoring is also evaluating coral health and growth, possible signs of ocean acidification, coral bleaching related to warming waters and climate change, and general water quality.

BOEM plans to publish its report on the current study in mid-2014. The most recent report, covering research up to 2010, is available [here](#). The bureau's research collection on the Flower Garden Banks is available [here](#). Visit our Environmental Studies Program at this [link](#).

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The Bureau of Ocean Energy Management (BOEM) promotes energy independence, environmental protection and economic development through responsible, science-based management of offshore conventional and renewable energy resources.