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***Long-Term Monitoring at the East and West Flower Garden Banks
National Marine Sanctuary, 2002-2003***

OCS Study MMS 2006-035

The Minerals Management Service (MMS), Gulf of Mexico OCS Region, announces the availability of a new study report, *Long-Term Monitoring at the East and West Flower Garden Banks National Marine Sanctuary, 2002-2003*.

This report presents results of a monitoring study begun in 1988. Monitoring cruises were conducted in October 2002 and August 2003 with additional quarterly water quality sampling efforts. Data collection was conducted within previously established 100 x 100 m study sites on the East and West Flower Garden Banks (FGB). Monitoring results using repetitive and random, nondestructive photographic techniques highlighted the continued health of these reefs, expressed as consistently high coral cover with a mean of 54.05% for both banks and both years. Nine deep repetitive quadrats (32-40 m depth) were established on the East Bank in April 2003 and photographed in August 2003. Coral cover was high at 75.14% overall. Sclerochronology (measurements of coral skeleton) was used to measure the accretionary growth rates of the star coral *Montastrea faveolata*. Cores taken at both banks revealed annual growth bands spanning 1997-2003. Yearly growth rates ranged from 7.3 to 10.7 mm. Water quality parameters, including photosynthetically active radiation (PAR), turbidity, temperature, salinity, pH, and dissolved oxygen, were recorded using YSI datasondes. Fish survey results included a mean number of 51 fish species observed per bank in 2002 and 2003. The FGB coral reefs remain in good condition and productive in comparison to reefs throughout the region. No impact from oil and gas activity in the area has been documented before or after Sanctuary designation (1992).

This report is available only in compact disc format from the Minerals Management Service, Gulf of Mexico OCS Region, at a charge of \$15.00, by referencing OCS Study MMS 2006-035. The report may be downloaded from the MMS website through the [Environmental Studies Program Information System \(ESPIS\)](#). You will be able to obtain this report also from the National Technical Information Service in the near future. Here are the addresses. You may also inspect copies at selected Federal Depository Libraries.

Minerals Management Service
Gulf of Mexico OCS Region

U.S. Department of Commerce
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