

OFFSHORE PLATFORMS AND SUSTAINABLE FISHERIES

The United States could be world-leaders in sustainable fisheries and marine eco-technologies if there existed a regulatory framework to redeploy retired oil and gas platforms into sustainable fishery platforms. At least 100 of them will be removed every year for the next 40 years (MMS 1999) and only 8% are currently redeployed as artificial reefs. Japan has the most active and innovated marine technology program in the world and they utilize offshore platforms and artificial reefs for the foundation of their most ambitious projects.

ESSENTIAL FISH HABITAT (EFH)

Research video footage suggest that offshore platforms are “essential fish habitat.” The data indicate that demersal fish are utilizing platforms for mating, spawning, recruitment, and feeding grounds. Dr. Paul W. Sammarco has found coral, seafans and other important benthic organisms colonizing the platforms. Coral are protected by law from harvest and removal. Both Dr. Sammarco’s and I have film of endangered sea turtles residing on platforms. Platform ecosystems are not considered under any of our current Fisheries Management Plans. If the platforms qualified as “protected habitat,” the National Marine Fisheries Service (NMFS) could then make recommendations to Minerals Management Service (MMS) to not remove the platforms or take actions to mitigate the loss of habitat such as transferring them into a sustainable fisheries complex.

ALTERNATIVE APPLICATIONS FOR OIL AND GAS PLATFORMS

Oil and gas platforms could be redeployed into new artificial reef complexes, advanced sustainable fishery systems, and environmental enterprises such as sequestration of greenhouse gases, water purification of eutrophic systems, ocean fertilization, and generation of carbon free renewable energy. The structures have proven to be exceptional artificial reefs (Reggio, 1989). Stanley and Wilson (2000) reported that each standing platform provides reef habitat for 10,000-30,000 fish at any one time. One platform can raise 9 million pounds of fish a year in net pens (WNI Inc. 1999). This is significant in that the e total allowable annual harvest for red snapper in the entire Gulf of Mexico, for both commercial and recreational harvest, is ~ 9 million pounds.

JAPANESE MARINE TECHNOLOGY AND OFFSHORE PLATFORMS

The Japanese are designing and practicing high-tech eco-technologies which utilize offshore platforms. Their platforms are powered by non-carbon producing energy sources and support biotechnology reactors which are reported to sequester CO₂ greenhouse gases, reduce the intensity of hurricanes in their coastal waters, and produce \$100 million (optimistic) in seafood products a year (Matsuda et al 1999). As of 1994, the Japanese had spent about \$8 billion (Grove et al., 1994) in developing a sustainable fishery that utilizes materials very similar to oil and gas platforms. Considering all of our platforms in waters > 60 ft, their collective structural value as artificial reefs is about \$8.6 billion. The cost to remove these platforms under the present law will be ~ \$7 billion. It seems counter-productive for the United States to force leaseholders to spend huge amounts of money to destroy an ecologically important and economically valuable resource.

NO REGULATORY FRAMEWORK

No regulatory framework currently exists to protect platforms or encourage sustainable fisheries applications. Since the positive contribution of platforms in the marine environment was not considered when existing laws and regulations were developed, I request that the Commission review the following laws which I feel would be required to promote the effective redeployment of oil-rigs into eco-rigs:

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- Stanley, D., Wilson, C. 2000. Variation in the density and species composition of fishes associated with three petroleum platforms using dual beam hydroacoustics. *Fisheries Research* 47: 161-172.
- MMS 97-0036 LGL Ecological Research Associates, Inc. and Science Applications International Corporation. 1998. Cumulative Ecological Significance of Oil and Gas Structures in the Gulf of Mexico: Information Search, Synthesis, and Ecological Modeling; Phase I, Final Report. U.S. Dept. Interior, U.S. Geological Survey, Biological Resources Division, USGS/BRD/CR--1997-0006 and Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA, OCS Study MMS 97-0036.vii+ 130 pp.
- MMS 1999 Minerals Management Service offshore platform database 1999. <http://www.gomr.mms.gov/homepg/pubinfo/freeasci/platform/freeplat.html>
- Reggio, V.C., comp. 1089 Petroleum structures as artificial reefs: a compendium. Fourth International Conference on Artificial Habitats for Fisheries, Rigs to Reefs Special Session, November 4, 1987, Miami, Fla. OCS Study/MMS 89-0021
- WNI Inc. 1999. Feasibility Study-Offshore Mariculture, Waldemar International Report Inc. The report was funded through a cooperative agreement with NOAA. Award No. NA77FL0150