Environmental Compliance Monitoring Program

The Environmental Compliance Monitoring Program was developed to ensure environmentally safe and sound operations. This established program is designed to determine industry conformity with environmental laws, regulations, lease stipulations, and project mitigations. Environmental monitoring provides for environmental protection by ensuring implementation of mitigation measures, identifying needed changes to mitigation to improve effectiveness in protecting coastal and marine resources, and understanding the changing environment.

Program Goals

- 1. Prevent irreversible environmental damage associated with OCS oil and gas operations, and future renewable energy projects.
- 2. Verify that implementation of environmental protection measures imposed/proposed for project impacts actually occurred and are implemented as designed/intended.
- 3. Provide feedback to staff and decision makers regarding the effectiveness of the measures so that improvements may be implemented during projects, and made more effective for future projects (Adaptive Management).

The Pacific OCS Region currently employs a 3-tiered environmental compliance monitoring program that includes Regional and District Office field presence, industry responsibility and environmental monitoring studies.

Pacific Region Environmental Compliance Monitoring: environmental and safety inspectors in the field and office monitor new projects and on-going operations for compliance with laws, regulations and project specific environmental protection measures.

Phase 1 - The Pacific Region has an extensive environmental inspection program to ensure safe and environmentally sound offshore oil and gas operations. This program places Bureau inspectors offshore on drilling rigs and production platforms on a daily basis to check operator compliance with extensive safety and environmental protection requirements. In the 1990's, the Pacific Region instituted an Environmental Liaison Program; under this program, Environmental Scientists work with District Inspectors to enhance the inspection program. The Environmental Liaison's field inspections are primarily related to monitoring compliance and effectiveness of environmental protection mitigation measures placed on projects during the NEPA review; District Inspectors are primarily engaged in ensuring regulatory compliance. The Environmental Liaisons additionally assist other agencies with offshore inspections field observations as appropriate.

Industry Mitigation Compliance Monitoring Plans: the Pacific Region requires applicants to provide Mitigation Compliance Monitoring Plans for conditions of approval for new projects.

Phase 2 - The Pacific Region requires industry to develop Mitigation Compliance Monitoring plans for all projects. The required Monitoring Plans must demonstrate to the Bureau prior to project initiation how the operator intends to implement and monitor the project's environmental mitigation measures. Operators are additionally required to submit a post-project report demonstrating implementation of the Monitoring Plan and resulting compliance with the mitigation measures of the project. Environmental scientists perform project reviews to determine the effectiveness of the mitigations in protecting environmental resources as well as overall compliance with the project mitigations measures. The Bureau ensures industry responsibility for compliance with their project conditions is ensured by conducting field inspections and through the mitigation monitoring review process.

Field and office inspections are designed to:

- Determine project compliance;
- Ensures industry responsibility in mitigating the affects of their projects;
- Adjust mitigation when necessary;
- Increase effectiveness of mitigation in future projects; and
- Improve the level of protection for coastal and marine resources.

Pacific Region Environmental Monitoring Studies: Pacific Region scientists and contractors conduct environmental monitoring studies.

Phase 3 - The Pacific Region conducts scientific Environmental Monitoring Studies to provide an objective basis for the development and implementation of environmental protection measures to protect coastal and marine resources. The Region conducts inhouse monitoring studies with personnel and contracts out monitoring studies through the Environmental Studies Program. Several studies are highlighted below.

Environmental Mitigation Monitoring Study

The Environmental Mitigation Monitoring Study provides for real time monitoring and field verifications of selected projects to develop the most effective and scientifically sound mitigation measures and project conditions for future oil and gas operations. The Bureau uses environmental monitoring data to evaluate mitigation measures and project conditions of post-lease OCS oil and gas operations. The study consists of observing, sampling and/or monitoring environmental conditions in the field to test environmental mitigation of current and future post-lease oil and gas projects. Information from the study will also aid decision makers in developing more feasible and scientifically defensible mitigation measures and project conditions for future oil and gas operations.

For further information, see the study profile for Environmental Mitigation Monitoring profile.

Multi-Agency Rocky Intertidal Network (MARINe)

Scientists from Federal, State, and local government agencies, universities, and private and volunteer organizations have formed a Multi-Agency Rocky Intertidal Network (MARINe) to monitor important shoreline resources.

For further information, see the MARINe website and the study profile.

Pacific Region Intertidal Survey & Monitoring (PRISM) Team

The objective of the Pacific Region Intertidal Survey & Monitoring (PRISM) team, which is made up of Pacific Region environmental scientists, is to monitor the health of the rocky intertidal resources in Santa Barbara and Ventura Counties adjacent to OCS oil and gas operations and to better understand the changes observed.

For further information, see the <u>PRISM</u> web page and the study profile.

Coastal Bird Research Program

The goal of the Pacific Region's research program on coastal birds is to ensure that the Bureau has the most up-to-date information feasible on how birds might be affected in some way by offshore energy development. Because birds are so vulnerable to contact with oil, the effect of an accidental oil spill on bird populations is a major concern. In addition, effects from offshore renewable energy development, including wind and wave energy, on birds has not been studied extensively. In an effort to increase our knowledge of the status and distribution of coastal birds, and the potential effects of offshore energy development upon them, the Bureau has initiated the following studies:

- a study of shorebirds occupying sandy beaches of Ventura County,
- a study on bird interactions with Pacific OCS oil and gas platforms, and
- a survey of seabirds and marine mammals at potential alternative energy sites offshore northern California, Oregon and Washington.