7.0 Plan Monitoring

7.1 Purpose and Scope

Plan monitoring is an essential component of natural resource management because it provides information on the relative success of implementing management strategies. The proposed monitoring program of NEMO will determine if the goals and objectives of the program are being met. Monitoring demonstrates the progress and accomplishments of the Plan, and with the information generated by monitoring, managers can objectively adjust programs when needed.

The implementation of the NEMO Plan amendments would be monitored to ensure that management actions follow prescribed directives to meet plan objectives and are based on accurate assumptions. Some maturation of projects is needed before results can be discerned. Therefore monitoring would not necessarily occur immediately after implementation of any program.

Findings obtained through monitoring, together with research and other new information will provide a basis for adaptive management changes to the plan. The processes of monitoring and adaptive management share the goal of improving effectiveness and permitting dynamic responses to increased knowledge and a changing landscape. The monitoring program itself will not remain static. Monitoring would be periodically evaluated to ascertain if the monitoring questions and standards are still relevant, and the program would be adjusted as appropriate. Some monitoring items may be discontinued and others added as knowledge and issues change. These changes to the monitoring of the plan are a part of plan maintenance.

Monitoring will collect information in a cost-effective manner, and may involve sampling, modeling, or remote sensing. Monitoring would be designed so that it is not cost prohibitive. It is not necessary to monitor every management action. The level of monitoring will vary, depending on the sensitivity of the resource or area and the scope of the action.

Monitoring will be coordinated, and results shared with other parties to enhance their usefulness. The approach will build on past and present monitoring. For BLM-administered lands, field offices will be responsible for the collection, compilation and analysis of much of the data.

NEMO plan amendments monitoring is tiered to the strategy described in the California Desert Conservation Area Plan. The CDCA monitoring includes project level NEPA analysis to satisfy requirements of the Endangered Species Act, Clean Water Act and Clean Air Act.

Table 7-1(NEMO) summarizes a variety of topics and questions to be answered by monitoring. Each of the Proposed Plan Amendments would be monitored in terms of their ability to meet the objectives of the CDCA Plan. The activities in Table 7-1 form the basis and starting point for plan monitoring which will be adopted in the Record of Decision. Plan monitoring is separate from and different than inventory activities. Plan monitoring consists of gathering information to answer key management questions. Key questions will contain thresholds or levels of acceptability and compliance. Inventory does not contain thresholds of acceptability/non-acceptability.

7.2 One-time, Continuous, and Sequential Monitoring

- Some monitoring will be continuous or long term. Examples include use authorizations, and desert tortoise and bighorn sheep population trends.
- Some monitoring will be sequential - i.e., initial monitoring efforts may lead to subsequent new or modified monitoring.
- The results from initial monitoring may indicate that no additional monitoring is needed (one time).

7.3 Collaboration in Monitoring

The roles, responsibilities and interests of NEMO cooperating land management agencies, the Desert Managers Group, U.S. Geological Service, Biological Resources Division (USGS-BRD), academia, and interest groups such as the California Native Plant Society and Desert Wildlife Unlimited provide opportunities to collaborate in monitoring efforts.

NEMO Cooperators may collaborate in the development of monitoring activities to create efficiencies in shared monitoring objectives, tasks, technical expertise, resources and funding. The Desert Manager's Group, USGS-BRD and academic institutions may provide assistance in collaborative monitoring efforts. Collaboration in monitoring should aid in consistency, reduce redundancy, and enhance resource understanding and management on a broad scale. As other CDCA Plan amendments are completed, some monitoring efforts may coalesce into desert-wide efforts.

Table 7-1 lists the primary monitoring subjects of the NEMO Plan. The monitoring recommendations for each topic, e.g., threatened and endangered and special status species such as desert tortoise, grazing allotments, burro management etc. are described in more detail in various appendices of the FEIS. Each major kind of land use classification in the Plan Amendments is included in the monitoring program. Through collaborative efforts with the parties mentioned above, specific topics within each mentioned category of Table 7-1 would be drafted and finalized for the monitoring program, and put into practice as the NEMO Plan amendments begins.

Table 7-1 NEMO Plan Monitoring

Monitoring for General Ecosystem Health, including standards, trends in human disturbances, exotic species establishment and displacement of natives.
Monitoring for Desert Tortoise, with emphasis on population dynamics, distribution predation, diseases and epidemiology, effects of unauthorized uses, recolonization, exotic plants and fires. Monitoring on the effects of land use, and environmental determinants of reproduction for the desert tortoise.
Monitoring for Other Special Status Species to determine population trends, known occurrences of species, life histories and restoration possibilities, biodiversity dynamics and predictive occurrence parameters.
Monitoring for Burros, for census, use occurrence of habitat and forage, disturbance and competition phenomena with other species.
Monitoring of Use on the Desert Wildlife Management Areas (DWMA), on a continuing basis for disturbances, restoration, private land use, unauthorized disturbances, and vehicle use. Also of importance are wildland fire monitoring, effects of cattle grazing, highway fencing, land tenure adjustments, and effects of the amendments on the DWMAs.
Monitoring of Use on Wildlife Habitat Management Areas (WHMA), including vehicle use of roads and washes, unauthorized disturbances, land tenure adjustments, in terms of land transfers, effects of livestock grazing, and accumulative effects.
Monitoring for species habitats, resource inventories and research needs.