

4. NATURAL AREAS MONITORING TECHNIQUES

Monitoring is an essential component in the proactive management of natural area lands. The information that is gained through site monitoring allows for focused management activities on the areas of greatest need, as well as evaluating the success of restoration projects. The effectiveness of management practices should be assessed through the monitoring program outlined in this chapter. Personnel and equipment necessary for conducting monitoring are shown in Table 4.1.

Table 4.1. Monitoring program staffing and equipment needs.

TASK	TIMING	PERSONNEL NEEDS	EQUIPMENT NEEDS
Program Supervision	Year-round	1 employee, 15 days per year for all natural areas combined	None
Annual Site Monitoring	Once per year per natural area site	1 employee, 1 day (8 hours) per natural area site (average)	Field vehicle, blank annual monitoring forms, camera, aerial photograph, Mylar overlay, tape, pens, and pencils
Annual Work Plan Development	Once per year per natural area site	1 employee, 0.25 day per natural area site work plan (average)	Annual work plan form and computer
Post-Restoration Project Monitoring	2 times per year	1 employee, 0.5 day per natural area site (average)	Field vehicle, blank post-restoration monitoring forms, camera, pens, pencils, aerial photograph, and Mylar overlay (if necessary)

The natural areas monitoring program consists of the following actions.

4.1 Annual Assessment Monitoring

Natural areas should be monitored annually using the Annual Monitoring Form provided in Appendix A. Information is gathered by taking notes on aerial photographs, listing and



describing problems and issues, and documenting the area with photographs. The following steps comprise the annual monitoring process.

Step 1. Familiarize yourself with the annual monitoring form (Appendix A).

Step 2. Gather necessary equipment:

- annual monitoring forms
- camera
- aerial photograph of monitoring site
- Mylar overlay
- tape
- pencils
- pens

Step 3. Visit the monitoring site and fill out the monitoring form, answering as many questions as possible.

Step 4. Make notes about issues and mark specific problem areas on the mylar/aerial photograph.

Step 5. Photograph site issues and problem areas.

Step 6. Return the monitoring form to personnel responsible for work plan development.

4.2 Work Plan Development

Upon completion of the annual monitoring visit, develop an annual work plan using the form provided in Appendix A. The annual work plan form will be used to direct the specific efforts required to address any problems or issues discovered during annual site monitoring efforts. The work plan will include the specific locations, actions, time of year, and labor needs for each natural area.

4.3 Monitoring Schedule

A monitoring schedule should be developed for individual natural areas based upon specific monitoring needs. Annual monitoring will generally occur in early spring (March or April). Early monitoring allows for timely work plan develop-

ment, project implementation, and completion. Natural areas with specific invasive weed outbreaks will require additional follow-up monitoring to facilitate appropriate control (see section 5.1.3). The timing of these efforts will be based on specific area issues and conditions.

4.4 Post-Restoration Project Monitoring

All restoration projects require a monitoring component to increase the opportunities for success. By regularly monitoring revegetation projects, issues can be identified and addressed in a timely manner. This will increase the potential for project success and aid in designing future projects by identifying successful and effective restoration strategies. The post-restoration monitoring form is provided in Appendix A.

Post-restoration project monitoring should occur at specific times outlined in the restoration project plan.



