

B12. Monitoring

Monitoring and evaluation of bushland management projects is vitally important so that strategic actions undertaken to achieve objectives can be documented and their effectiveness assessed.

There are several reasons why documentation of bushland management actions must be included as a significant part of any management plan:

- to assess and evaluate the effectiveness and efficiency of management actions;
- to recognise and compare the effectiveness and efficiency between projects and the various methodologies used in undertaking management actions;
- to justify the resources required and used; and
- to report to funding bodies.

It is important that the project's goals, objectives and expected outcomes are clear to all those involved in the monitoring activities. This will make monitoring and evaluation much easier. Monitoring indicators should be clear and measurable, providing consistency in the collection of meaningful data.

Factors to consider when selecting monitoring activities include:

- the information needed to meet the project's objectives;
- the amount of time and resources required to undertake the monitoring; and
- the information needs of stakeholders and funding bodies (Coote *et al*, 2003).

The role of stakeholders, involved with bushland management projects, should be considered during the monitoring and evaluation planning phase. Stakeholder ownership is important in maintaining commitment to projects. Monitoring and evaluation therefore should be a participatory process whereby stakeholders are consulted, informed and involved in the evaluation of their work.

Biodiversity conservation projects may occur over long time frames. Therefore, monitoring requirements to be met over this term, will require forward planning that incorporates provision of resources to cover this work.

Collection of information from a starting point and subsequent monitoring will show direction and demonstrate the amount of change or progress towards the project's goal. A simple and consistent system of documentation for monitoring and evaluating bushland management actions/projects is necessary to enable ease of recording, filing, reporting and decision making.

The preparation of a monitoring schedule is advisable. The frequency of monitoring and information collected will depend on the project's objectives. The use of standard checklists and recording sheets is preferable. Recording large amounts of randomly collected information is likely to be difficult to interpret later.

Monitoring should be done at the same time of year in consistent intervals, using consistent techniques.

There are many different monitoring activities and techniques that may be used to evaluate a project's objectives. For example, in monitoring revegetation projects, techniques may include:

- establishing permanent photo point/s;
- establishing vegetation quadrats; and

- monitoring plant regeneration, planting success and weeds (Coote et al, 2003).

Keeping photographic records (before, during and after bushland management action implementation) as proof of on-ground outcomes can be a powerful tool to support applications for similar projects. Additionally, the use of several, replicate, control sites is also useful to show differences, between the activity site and the controls, and to provide a higher level of confidence about the effect of the project's activities.

For more information on planning and designing a monitoring and evaluation program, see the practical guide *Monitoring and Evaluating Biodiversity Conservation Projects* (Coote et al, 2003).

Regional NRM bodies such as the Swan Catchment Council have recently developed regional spatial information management toolkits in line with the launch of the Shared Land Information Program (SLIP). The 'tool kits' can be used by project managers and others responsible for collecting, using and managing spatial data. Within the 'tool kits' is a summary of resources and contacts to help project staff identify standards which apply to the type of data they are collecting. This ensures that data is collected according to agreed industry and scientific standards (Swan Catchment Council, 2008).