

The Principles of Adaptive Management and the Project Cycle

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Project Management Cycle is a term used to describe the management activities and decision-making procedures used during the life-cycle of a project (including key tasks, roles and responsibilities, key documents and decision options). Although originally used in project management, the approach is equally suitable for the elaboration and implementation of a management plan.

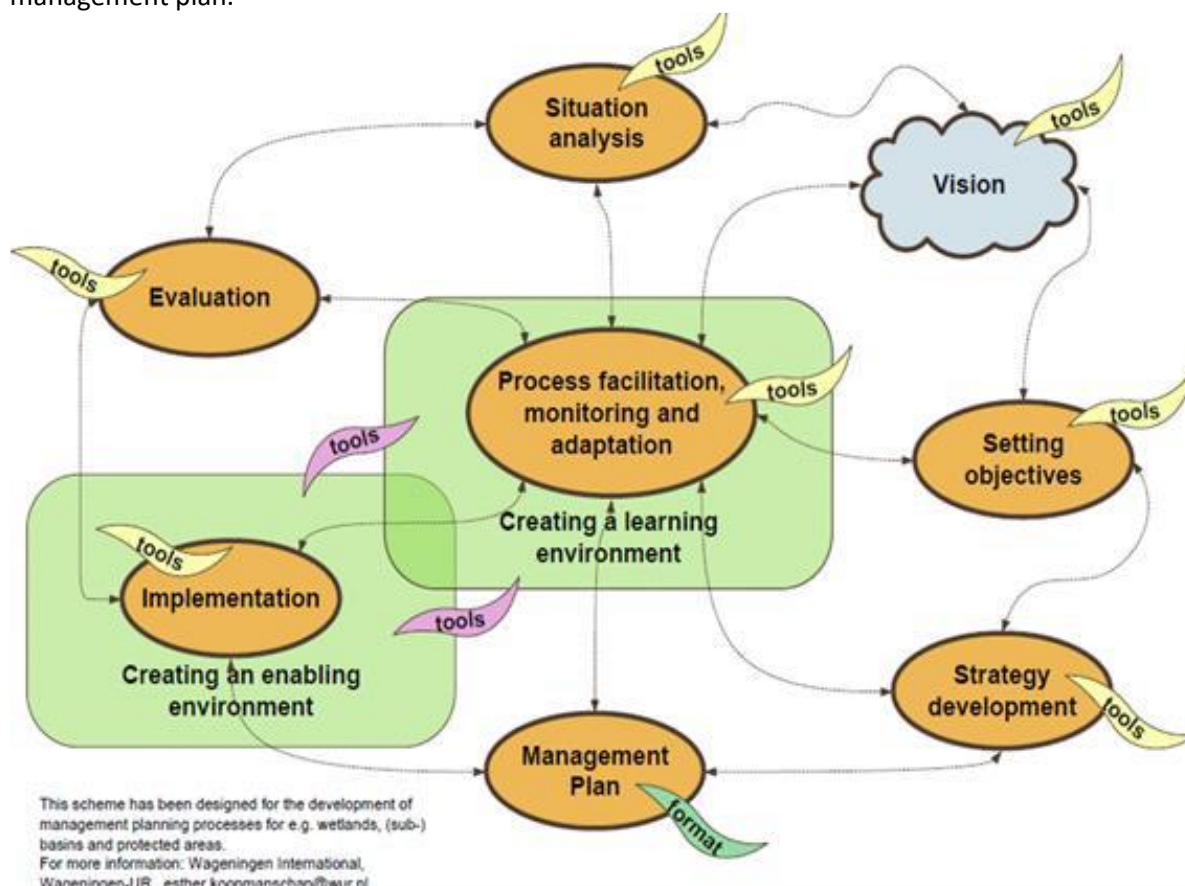


Figure 1 Illustration of the project management planning cycle for protected area management.

The first step in the management planning process is to make a thorough situation analysis, to clarify what habitats and species occur in the area and where, and analyse population trends and threats based on existing descriptions and inventories. A systematic problem analysis helps to gain insight into root causes of the threats to biodiversity and whether these root causes can be addressed through management interventions. Climate change and air pollution are root cause for biodiversity decline that cannot be addressed through management. Instead adaptation measures can however help to mitigate the impact of these threats.

The situation analysis is also important for getting a feel for what is at stake in the region in which the protected area is located in terms of economic development, social and political issues and issues in terms of security and stability. A brief description of what is at stake often suffices but is nevertheless important to ensure that the management planning process is well embedded in the

local and regional situation and can appropriately respond to local tensions and issues. Topics important to look at may include:

- Economic situation and prospects (income, unemployment etc)
- Political situation (stable/unstable, issues at stake)
- Population (dynamics, age structure)
- Natural disasters, climate vulnerability
- Attitudes towards the protected area
- Institutional setting

Having gained a full understanding of the trends and problems, the next step is to create a vision and answer the question; where do we want to go? What will be the long term goal of the area. What kind of landscape do we envisage and what role does management play? Ideally, this vision is developed in close cooperation with the main stakeholders. Different stakeholders will have different interests and play different roles with respect to the management. A stakeholder analysis is therefore an important part of the situation analyses.

After having agreed on a shared vision, the next steps are to agree on the objectives and to design a strategy to achieve these objectives. The management plan describes how the vision and objectives will be achieved through management interventions and how these will be funded. A good process facilitator is key to a successful implementation of the Project Management Circle approach. Monitoring is essential to determine whether the management activities are delivering the aims and objectives and for channelling this information back to the site manager. Monitoring is an integral component of any management plan and is covered as a separate module in this portal. Although it seems obvious, it is important to stress the importance of storing monitoring data in a well-designed and easily accessible database. It is crucial that there is some flexibility in the management planning system and that there is room to adapt to the outcomes of the monitoring.

For the purpose of monitoring and assessing whether management objectives are achieved, the following generic recommendations can be considered good practice, keeping in mind that objectives should be SMART:

- **be specific** - relate to a particular feature (species or habitat type) and define conditions to satisfy conservation objectives;
- **be measurable and reportable** - enabling monitoring to be undertaken to determine whether the conservation objectives are being met and for the purposes of Article 17(reporting) of the Habitats Directive;
- **be realistic** - given a reasonable time-frame and application of resources;
- **be consistent in approach** - the structure of conservation objectives should, as far as is possible, be the same across all sites
- **be comprehensive** - the attributes and targets should cover the properties necessary to describe its condition as either favourable or unfavourable

The use of the Project Cycle is especially useful in view of the Adaptive Management Approach. Adaptive management is very much the recommended operating principle for protected areas management. See

Figure 3.1 Adaptive Management Approach

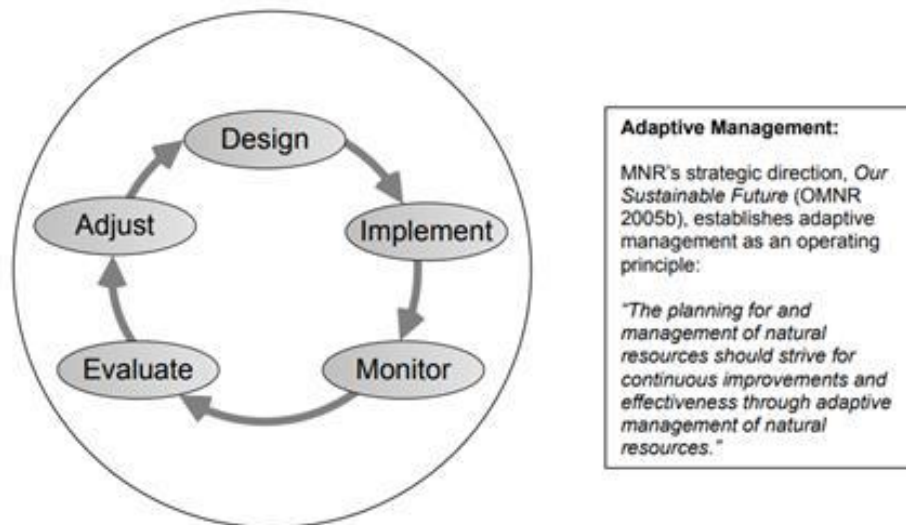


Figure 2 Source: <https://www.cbd.int/doc/pa/tools/Protected%20Areas%20Planning%20Manual.pdf>

Applying adaptive management in protected areas management involves the integration of project/program design, management, and monitoring to systematically test assumptions in order to adapt and learn. The three components of adaptive management in environmental practice are:

- *Testing assumptions* is about systematically trying different actions to achieve a desired outcome. It is not, however, a random trial-and-error process. Rather, it involves using knowledge about the specific site to pick the best known strategy, laying out the assumptions behind how that strategy will work, and then collecting monitoring data to determine if the assumptions hold true.
- *Adaptation* involves changing assumptions and interventions to respond to new or different information obtained through monitoring and project experience.
- *Learning* is about explicitly documenting a team's planning and implementation processes and its successes and failures for internal learning as well as learning across the conservation community. This learning enables conservation practitioners to design and manage projects better and avoid some of the perils others have encountered.^[16] Learning about a managed system is only useful in cases where management decisions are repeated.^[17]

(Source: https://en.wikipedia.org/wiki/Adaptive_management)

Another example of the use of some sort of cycle in management planning and evaluation of the effectiveness of management of protected areas is shown in the IUCN Framework for Evaluating Protected Areas Management Effectiveness.



Figure 3 Source: <http://press-files.anu.edu.au/downloads/press/p312491/pdf/CHAPTER28.pdf>

For more information, see also the [monitoring module](#) on this portal.

References/ Further reading:

Ontario Protected Areas Planning Manual

Ontario Ministry of Natural Resources. 2009.. Peterborough. Queen's Printer for Ontario. 50 pp.
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Protected Area Management Effectiveness

Hockings, M., Leverington, F. and Cook, C. (2015), in G. L. Worboys, M. Lockwood, A. Kothari, S. Feary and I. Pulsford (eds) *Protected Area Governance and Management*, pp. 889–928, ANU Press, Canberra
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<https://opentextbc.ca/projectmanagement/>. Watts, A. (2014).
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WWF Standards of Conservation Project and Programme Management (PPMS)

http://awsassets.panda.org/downloads/WWF_Standards_2017-June_30_clean.pdf

Conservation Measures Partnership ; Open Standards for the Practice of Conservation <http://cmp-openstandards.org/wp-content/uploads/2014/03/CMP-OS-V3-0-Final.pdf>

Wikipedia on Adaptive Management: https://en.wikipedia.org/wiki/Adaptive_management