Introduction

This section presents guidelines for the development of NRS reserve management plans. A management plan is a document that guides all aspects of the reserve operation, administration, and use. Although a management plan can become a lengthy and complex document, its purpose is strikingly simple: to capture the current status of the reserve, to establish goals and objectives for the future, and to articulate how those goals and objectives are prioritized and how they will be met.

The outline provided in Appendix A is intended to serve as a foundational structure for NRS management plans. The core of the management plan outline has four sections: 1) user programs, 2) conservation and stewardship programs, 3) administration, and 4) facilities. Reserve managers should address only the sections and the outline elements that apply to the specific reserve and should make any other reasonable modifications so that the plan better fits the needs of the reserve. Please note that the background section on biological and cultural resources is also an important component of the plan because it articulates key information about the reserve and sets context for the goals and objectives. However, much of that information will not change over time and need not be a major focus of management plan updates.

The International Union for Conservation of Nature (IUCN) has published an informative and useful document, Guidelines for Management Planning of Protected Areas, as part of its Best Practice Protected Area Guidelines Series.¹ Much of the content in this section has been excerpted from that document.
The Benefits of Management Planning

1. Improved management of the reserve

The primary product of management planning should be more effective management of the reserve. Management planning encourages more effective management by ensuring the management decisions are based on a clear understanding of the reserve, its purpose, and its resources, by providing guidance for managers in the form of a framework for day-to-day operations and long-term management, by helping to identify and define management “effectiveness.”

2. Improved use of financial and staff resources

Management plans can help make sensible use of resources by identifying, describing, and prioritizing management tasks required to achieve the objectives for the reserve. This list of tasks helps managers allocate staff, funding, and materials required. Management plans also highlight where additional resources are required.

3. Increased accountability

Management planning can provide a mechanism for increased accountability of both the reserve manager and other managing organizations or agencies. The management plan can be used to identify targets to reach and performance standards to attain. The plan can also be used by managers to draw up work plans for staff, assign duties, and monitor and assess performance. A management plan can also act as a sort of public contract between the manager, local communities, and visitors on how the reserve will be managed and protected in the future. Thus the management plan can provide a way by which the public can examine management decisions and monitor delivery against targets.

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4. **Improved communication**

   The management plan provides a means of communication with the public, to explain policies and proposals and to promote and publicize the reserve to a wide range of stakeholders.

**Qualities of a Good Management Plan**

1. Clear and accessible: easy to read, jargon-free and well presented
2. Concise and comprehensive: no longer than absolutely necessary, but with enough information to fulfill its functions
3. Accurate and objective: without major errors or statements likely to date the document and with the criteria for all judgments clearly explained
4. Systematic and logical: with management goals and objectives derived from an assessment of the site and with a clear rationale for all proposals
5. Precise and practical: with clear objectives, realistic methods for achieving them, resulting in desired outcomes that can be assessed

**Important Elements: Goals, Objectives, and Tasks**

Goals and objectives are key for an effective management plan. Each section of the plan should articulate goals, objectives, and management tasks. In addition, prioritization is crucial to implementation and should be expressed clearly in the management plan (see Appendix B).

1. **Goals** are broad, concise, visionary statements that set overall direction for monitoring and management.
2. **Objectives** derive from a goal, and are concrete and measurable to allow evaluation of progress toward meeting goals. An objective is a concise statement of what we want to achieve, how much we want to achieve, when and where we want to achieve it, and who is responsible for the work. Often multiple objectives are needed to meet a single goal.

3. **Tasks** are the specific management actions that are set to meet the specific objectives. Often multiple tasks are needed to meet a specific objective.

Objectives should be SMART: Specific, Measurable, Achievable, Results-oriented, and Time-fixed.\(^2\)

**Specific:** Avoid ambiguity by wording objectives clearly. A clearly worded objective is easy to understand and the meaning is difficult to misinterpret. Specificity results by including WHO will do the action, WHAT they will do, WHEN and WHERE they will do it, and WHY they will do it.

**Measurable:** Objectives should contain a measurable element that you can readily monitor to determine success or failure. Otherwise, you cannot tell if the strategies employed are appropriate, when an objective is met, or if it should be modified.

**Achievable:** Objectives, no matter how measurable or clearly written, must be achievable. If you cannot resolve constraints on achieving an objective, then you must discard or rewrite it.

**Results-oriented:** Objectives should specify an end result.

**Time-fixed:** Objectives should indicate the time period during which you will achieve them, so as not to be open-ended.

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Management Planning as a Continuous Process

Management plans are living documents that require continual evaluation of the current knowledge and best-available science. Each reserve’s management plan should be updated at least every 10 years.

Management planning is a continuous process—a cycle with four main steps:

1. Preparation of Management Plan
2. Implementation of the plan
3. Monitoring and evaluation
4. Review and update Management Plan
When the management plan has been approved and implementation is under way, monitoring and review will provide the feedback loop. The purposes of this step are to identify whether the plan is being implemented effectively and the objectives are being met, to learn from observation of the impacts of management, and to adapt the management actions accordingly. Where implementation runs into problems, monitoring and review can be used to re-deploy resources and effort to improve implementation. In terms of assessing management effectiveness, an evaluation of outcomes against objectives is the most relevant test.

**Other Types of Plans**

The management plan may be accompanied by a number of other plans or related documents. The management plan is the central plan for the reserve and all others flow from it. Examples of these other types of plans are annual work plans, business plans, zoning plans, cultural heritage conservation plans, and facilities development plans. Please note that Chapter 14 provides guidelines for facilities development and a complete facilities checklist.
NRS Procedural Guidelines

The following guidelines, originally approved by the Universitywide NRS Advisory Committee in March 1985 and updated in June 2013, outline the procedures for development, review, and approval of Management Plans.

1. Individual management plans are researched and written by the Reserve Manager in consultation with the NRS Program Coordinator, the Faculty Reserve Manager, and the Reserve Management Advisory Committee, in conformance with the management planning guidelines presented in this administrative handbook.

2. Management plans are reviewed and endorsed by the Campus NRS Advisory Committee.

3. Management plans are reviewed and endorsed by the Director of the NRS.

4. Management plans are forwarded to the Campus NRS Administrative Officer (a.k.a. Campus Director) for review, approval, and authorization to implement.

5. Final approved management plans are circulated to the Universitywide NRS Advisory Committee and the Campus NRS Advisory Committee for informative purposes.