

# Management Planning

## Introduction: learning outcomes

As a result of this unit you will be able to:

- State why management planning is important for protected area management
- Say why some management plans fail, and how they can be made to work
- Demonstrate that different kinds of plan are needed for different circumstances
- Describe the process of management plan making
- Summarise the content of different kinds of plan
- State the difference between monitoring and evaluation and say why each of these is of central importance to good management

## Management Planning Protected Areas

'...only those areas where the **main objective** is **conserving nature** can be considered protected areas; this can include many areas with other goals as well, at the same level, but **in the case of conflict, nature conservation will be the priority.**'

IUCN 2009

IUCN Category Guidelines provide advice

# Management Planning

## Why make management plans?

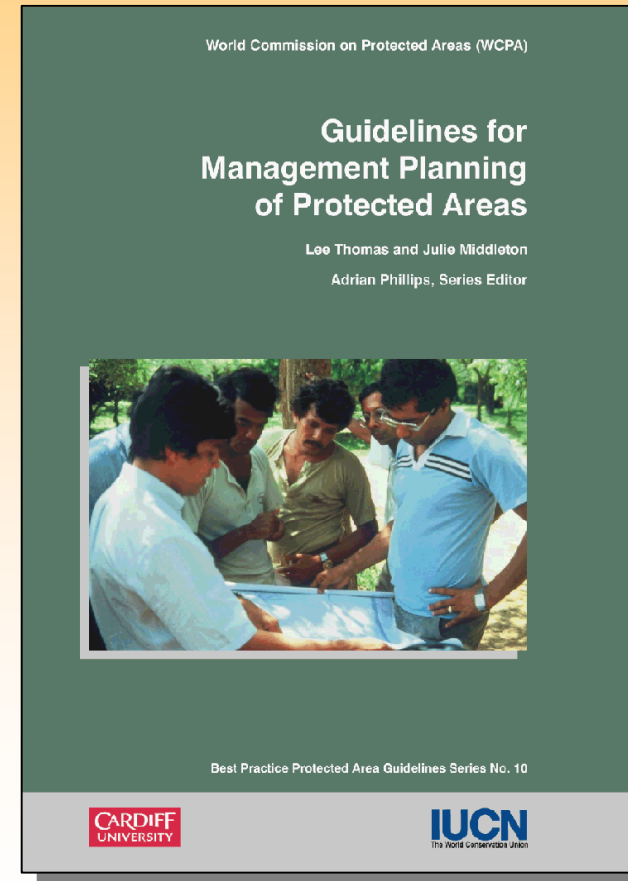
# Management Plans and Planning

- **Planning is useful for:**
  - Committing different interests and stakeholders*
  - Getting money*
  - Promoting the area's/organisation's values*
  - (external reasons)**
  
- **Planning is useful for:**
  - Ensuring continuity of management*
  - Clarifying roles, priorities, costs*
  - Resolving areas of conflict*
  - (internal reasons)**



## Well-produced plans will result in ...

- Improved management of the area
- Improved use of financial and staff resources
- Increased accountability
- Improved communication



## Unfortunately ...

*“By far the most common situation is that (general management and development) plans tend to gather dust or at best receive minimal implementation, despite the tremendous national (and frequently international) technical co-operation efforts which go into their preparation”*



(Budowski and MacFarland 1982)

## Management Planning

# Why do management plans fail?

# Management Planning Sagarmatha NP



- *'The current plan was prepared over 14 years ago and is long overdue*

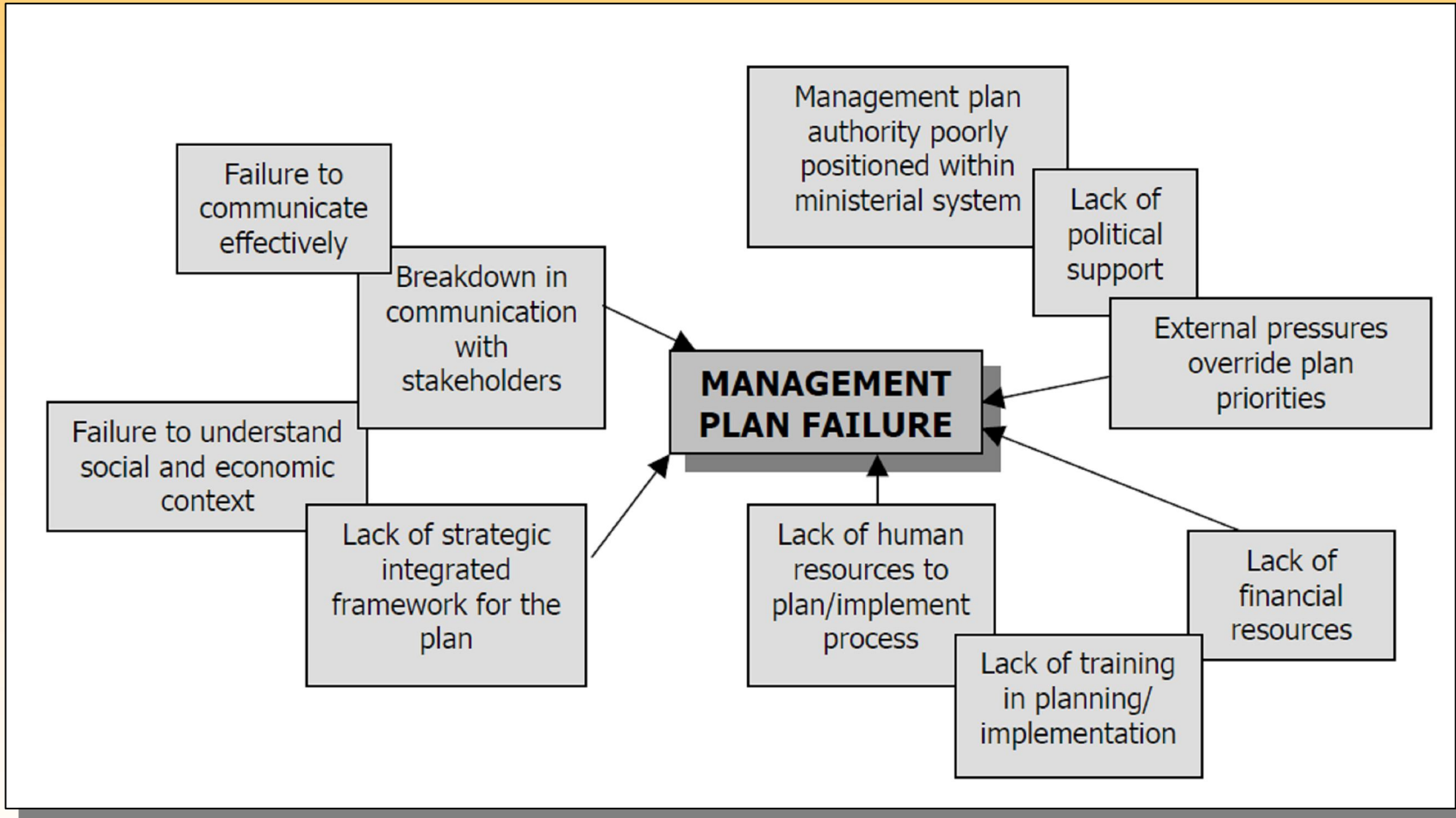
## *Must*

- *...be prepared by an inter-disciplinary team*
- *...integrate the needs and aspirations of the local people and visitors'*

**Plan Review 1993**



# Why do management plans fail?



# Management Plan Status & Links



# Management Planning

## Three kinds of management plan

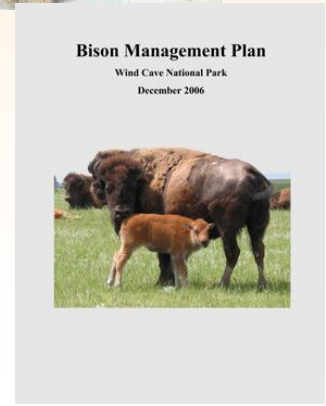
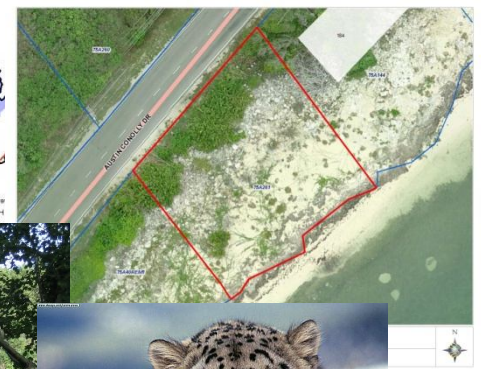
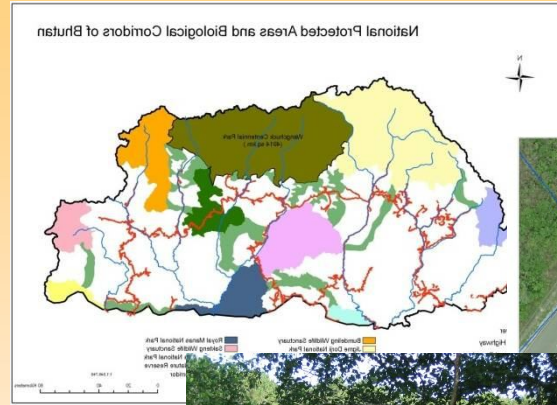
For a...

*Protected area*

*Protected site*

*Protected species*

What do you think is the difference between them?



# Management Planning

## Two kinds of management plan

### Protected Area

- Large scale
- Complex pattern of protected sites and sustainable use areas
- Many stakeholders
- Requires a broad management vision
- Should be non-technical
- Possibility of many conflicting interests and values
- Lengthy production process
- Many influencing factors

### Protected Site

- Small scale
- Values clearly identified and agreed
- Emphasis on 'aim' rather than 'vision'
- Strong focus on protection
- Likely to be technical
- Fewer stakeholders
- Relatively shorter production process
- Relatively straightforward to monitor

# Management Planning

## Two kinds of management plan

## Different kinds of management plan



## Management Planning Protected Area Level

*'...a comprehensive picture of problems, conflicts and opportunities in a protected area; an analysis of its physical, financial and human resources; and a phased programme of implementation over its lifetime, together with associated costs.'*

Malcolm MacEwen

Protected area management plans are 'snapshots' of a continual process. The **process** is critical.

# Management Planning Protected Area Level

- Management planning is about **considering the context** and the **current situation** on a site or area, considering the **options**, and deciding what ought to happen
- Management planning is a **political process** – it is **an art**, based on a science. It is as much about **communicating with stakeholders** as **scientific research**

So management plans have to:

**provide a basis or context** (State of Environment/policy context/other plans)

**provide a message** (Policies/vision)

**provide the means of delivery** (Implementation/costs)

# Management Planning

## Gathering data

- Can it be used to help management?
- Is it reliable?
- Is it up to date?
- Is it only quantitative?
- Is it in different formats?
- Is it relevant?

Identify and record any gaps

Storing, retrieving and analysing data...





# Management Planning

Where are you now?

How did you get here?

Where are you going?

How will you get there?

What will it take?

How will you know?

# Management Planning

## Protected Area Level - Typical Content

Where are you now?

Introduction – why the area is important – significance

How did you get here?

Description of features & values

External factors (other plans/offsite links/influences)

Key issues – threats and opportunities

Where are you going?

Participation

Vision/Aim (or Goal)

How will you get there?

Objectives

Tasks – human/financial resources

What will it take?

Monitoring/evaluation – impact on site

(see objectives) + effective use of resources

How will you know?

Appendices

# Management Planning

## Protected Area Level – ‘Significance’

- Highest point of the Earth’s surface – of global significance
- Ecological unit in the highest region of the world – of important scientific value
- Vital to local people as a source of fuel and building material. Glaciers critical for communities downstream
- Of major cultural and religious significance – sacred mountains – religious beliefs are central to conservation
- Important international tourist destination



Sagarmatha (Mount Everest) National Park Nepal

# Management Planning

**Agreeing a vision** 'how you want the area to be in  $x$  years'

**Why are vision statements important?**

Based on:

- Agreed values – natural and cultural
- Context – legal and policy framework
- Consensus and political support
- Capacity to achieve
- Clarity!

**Not likely to change unless the values change**

# Management Planning

## Examples of vision statements at area level:

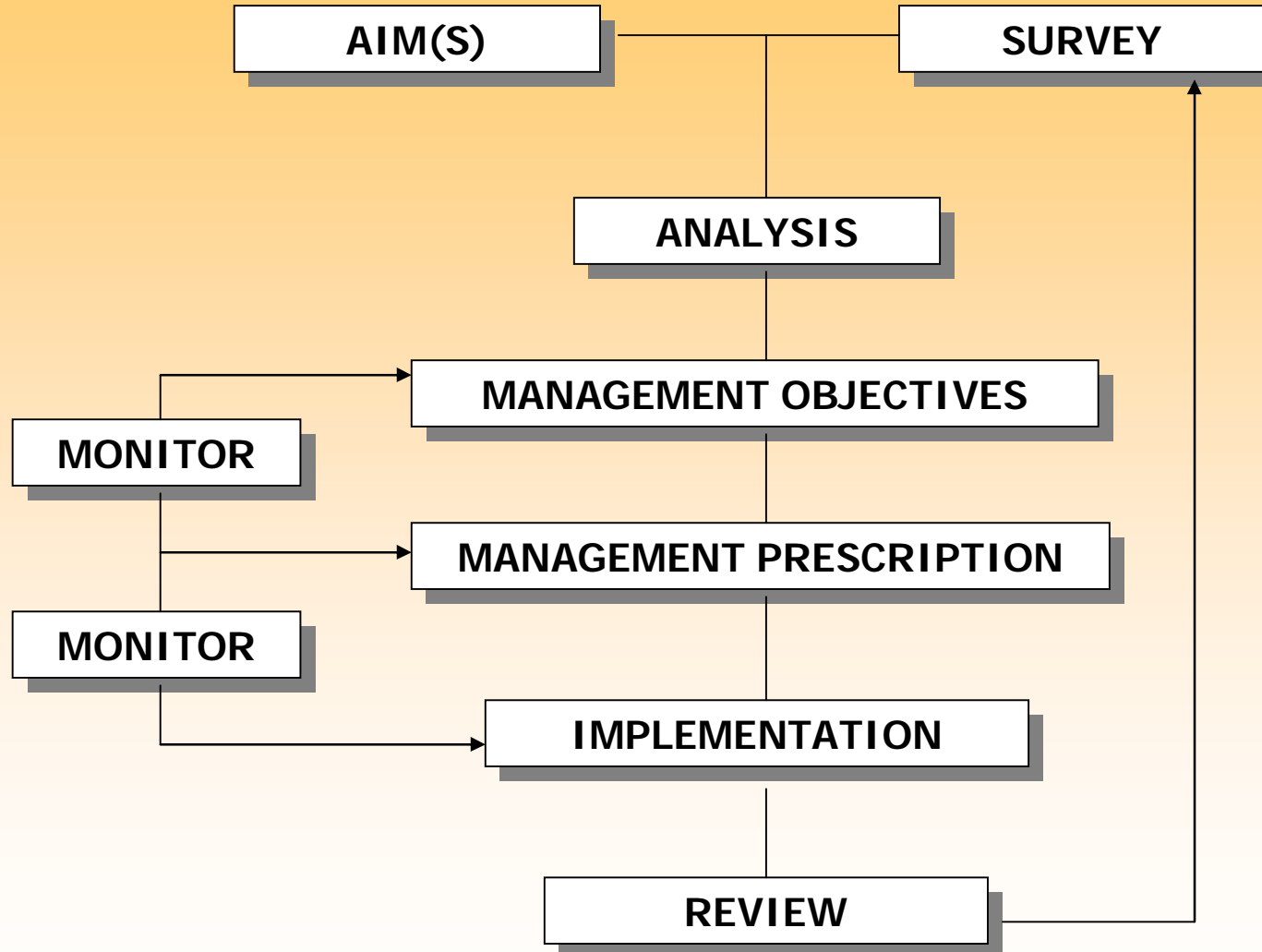
*'The intrinsic value of parks, wildlife, land and seascapes of KwaZulu-Natal are sensitively protected as a source of spiritual and long-term sustenance for future generations.'*

KZN Parks Service

*'Region 4 will be rich in quality natural areas of wide physical and biological diversity. The most important ecosystems will have been identified and given the special protection they require to flourish. Natural habitats supporting secure populations of all native plants and animals exist throughout the Region. Special value resources – the wetlands of the rivers, streams, lakes, and estuaries – will be protected from further loss and will be improving in quality.'*

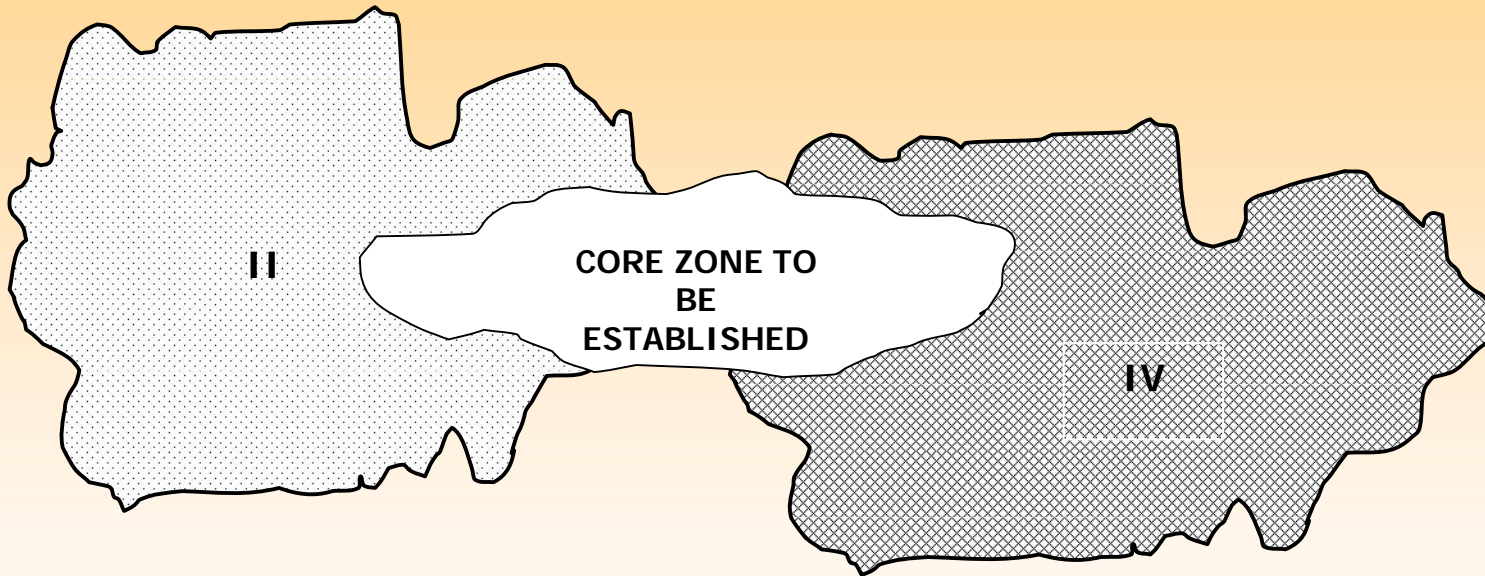
US Environmental Protection Agency

# Management Planning Cycle



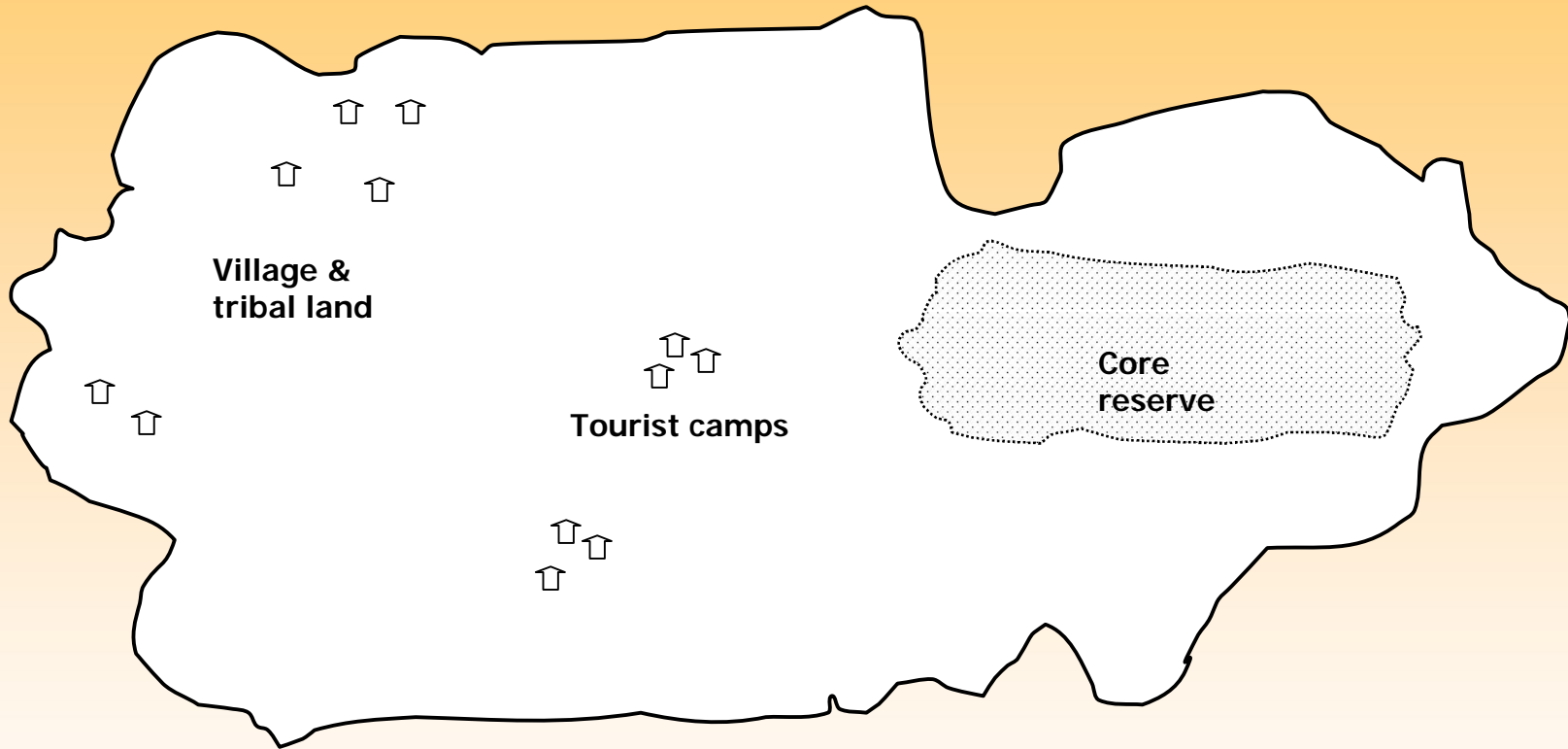
	Name	Description
Ia	Strict Nature Reserve	Strictly protected areas set aside to protect biodiversity and also possibly geological/geomorphological features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values
Ib	Wilderness Area	Usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition
II	National Park	Large natural or near natural areas set aside to protect large-scale ecological processes, along with the species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities
III	Natural Monument or Feature	Areas set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove.
IV	Habitat/species Management Area	Areas that aim to protect particular species or habitats and where management reflects this priority. Many category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category (Note that this is a change from the 1994 guidelines where IV was defined by its need for continual management intervention to maintain values.)
V	Protected Landscape or Seascape	An area where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values
VI	Protected areas with sustainable use of natural resources	Areas which conserve ecosystems and habitats, together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area.

# Zoning and Multiple Designations





# Zoning and Multiple Designations



# Management Planning

**Agreeing an aim or goal** 'how you want the site to be in  $x$  years'

Based on:

- Agreed values – natural and cultural (e.g. historic)
- Context – legal and policy framework
- Capacity to protect
- Clarity!

**Not likely to change unless the values change**

Note: Do not confuse the aim of the site with the aim of the plan!

# Management Planning

## Examples of aims or goals at site level

*Protect and, where necessary, restore the wild character and landscape of the site*

John Muir Trust

*Improve site security and limit violations within the Protected Site*

Bulgaria National Parks Agency

*To prevent the human introduction into the Reserve of alien species or disease and to respond to reports of such events to minimise impacts on the Reserve's values.*

Australia National Parks Agency

# Management Planning

## Aims or Goals to Objectives

### **Aim:**

'To conserve the diversity, abundance and ecological integrity of all physical and biological resources in the park area, so that they may be enjoyed and used productively by present and future generations.'

### **Objectives:**

- **Environmental**
- **Social**
- **Cultural**
- **Economic**

### **Are the objectives**

Specific to the aim/goal?

Capable of being measured?

Capable of being achieved in the given time?

Relevant to management of the area or site?

# Management Planning

## Aims or Goals to Objectives

### Aim

'To conserve the diversity, abundance and ecological integrity of all physical and biological resources in the park area, so that they may be enjoyed and used productively by present and future generations.'

### Objectives

1. Carry out a comprehensive audit of existing species
2. Carry out a comprehensive audit of ecosystem services in the area – water, soil function, wood, geology, wild foods
3. Agree priorities for site and species management – develop zones for conservation and for economic activity including tourism and sustainable resource use; produce site and species management plans in accordance with this
4. Establish user groups, and raise awareness of ecosystem and biodiversity conservation priorities
5. Develop visitor facilities that will optimise visitor experience whilst minimising conflict with conservation priorities and other interests
6. Develop a process and criteria for monitoring and evaluating the outcomes of this plan
7. Develop the capacity of staff to manage, through training and resourcing

# Management Planning Uluru National Park

## **'Objective:**

To continue to take into account religious interpretations of landscape ... particularly in relation to the nature and siting of developments within the Park.'

**National Park Plan 1992**

**Is this a good objective?**



# Selecting indicators for objectives

You cannot measure everything

– indicators are a proxy for reality...

- Must be specific to the achievement of objectives
- Must tell you enough
- Must be cost effective
- Must be repeatable

## Indicators exercise

Here is a set of objectives. Between you, first identify appropriate indicators that will tell you whether you are achieving your objectives.

REPORT BACK

When you are agreed on the indicators, agree some ways of measuring those indicators

REPORT BACK



# Management Planning

## Action Planning

Objectives	Actions	Priority	Indicators	Metrics	Lead	Time	Cost
<b>Develop the capacity of staff to manage through training and resourcing</b>	Carry out audit of equipment, report & agree	<b>A</b>	Suitability of Equipment Access to equipment	Age & condition Amount & location	Admin Section PA Team leader	0-3 months	Low-medium (internal)
	Design & carry out skills & training needs audit, report & agree	<b>A</b>	Skills, knowledge & motivation to carry out function		Human Resources	0-6 months	Medium (external)
	Identify internal & external funding sources	<b>A</b>			Admin Section	3-15 months	
	Develop training curriculum & standards	<b>B</b>			Human Resources/ Education & Training College Head		
	Identify trainers & carry out ToT	<b>B</b>			Human Resources		
	Review job descriptions	<b>A</b>			Human Resources/ PA Team leader		
	Review organisation structure and systems	<b>C</b>			PA Team leader/ Committee Chair/ Minister		

# Management Planning Monitoring and Evaluation

- Monitoring happens at different scales, at different times, uses different techniques and criteria, and is both qualitative and quantitative
- Allows for adjustments within the management system
- Time, cost, relevance

# Management Planning

## Monitoring – examples of indicators

### Environmental

- Total area of woodland
- Rivers & streams – extent and amount in favourable condition
- Standing open water – extent and amount in favourable condition
- Key vertebrate & invertebrate species
- Soil quality / compaction / erosion
- Use of natural resources

### Social/cultural

- Numbers and types of livestock
- Population increases/decreases
- Awareness of protected area purposes
- Societies and user groups

### Economic

- Tourist numbers and venues
- Incomes generated
- Households involved in non-farm activities

# Management Planning Monitoring and Evaluation

## Woodland

• <b>Total cover</b>	Percentage change from original	Annual
• <b>Species balance</b>	Percentage of key tree species (numbers, %, volume)	Annual
• <b>Growth patterns</b>	Amount at each growth stage (numbers, %, volume)	Annual
• <b>Disease</b>	Amount, types & distribution patterns of disease	Seasonal
• <b>Dead wood</b>	Amount fallen and standing (volume, weight)	6 months

## Rivers and Streams

• <b>Biology</b>	Numbers of indicator species for a given length	Monthly
• <b>Chemistry</b>	Chemical composition	Monthly
• <b>Volume</b>	Estimated amount	Seasonal
• <b>Sedimentation</b>	Particles	Monthly/events
• <b>Flow</b>	Rates and fluctuations	Seasonal/events

## Visitors

• <b>Numbers</b>	Total numbers by type	Weekly/monthly
• <b>Activities</b>	Numbers for each activity	Weekly/monthly
• <b>Spend</b>	Returns on fees, food, accommodation etc	Monthly
• <b>Awareness</b>	Knowledge of PA purposes, values etc	Seasonal/opportune
• <b>Preferences</b>	Likes/dislikes/intentions to return & stay etc	Seasonal/opportune

**Systematic recording and rigorous maintenance of data critical**

# Management Planning

## Limits of Acceptable Change

**Mostly used for:**

- Biodiversity management on Category IV sites
- Visitor & tourist management on sites in Category II areas

**Based on identifying:**

- Features
- Factors
- Attributes

# Management Planning Evaluation

What to evaluate?

- **Focus on achievement of objectives**

*'Doing the thing right is not the same as doing the right thing.'*

- Has management been **effective**? Has it been **efficient**?
- **Reinforcement of values** (outcomes), not simply **achievement of tasks** (outputs)

