CULTURE: Conserving it Together
Suva, Fiji, 1-5 October 2018
An ICOMOS conference on heritage conservation across the Pacific
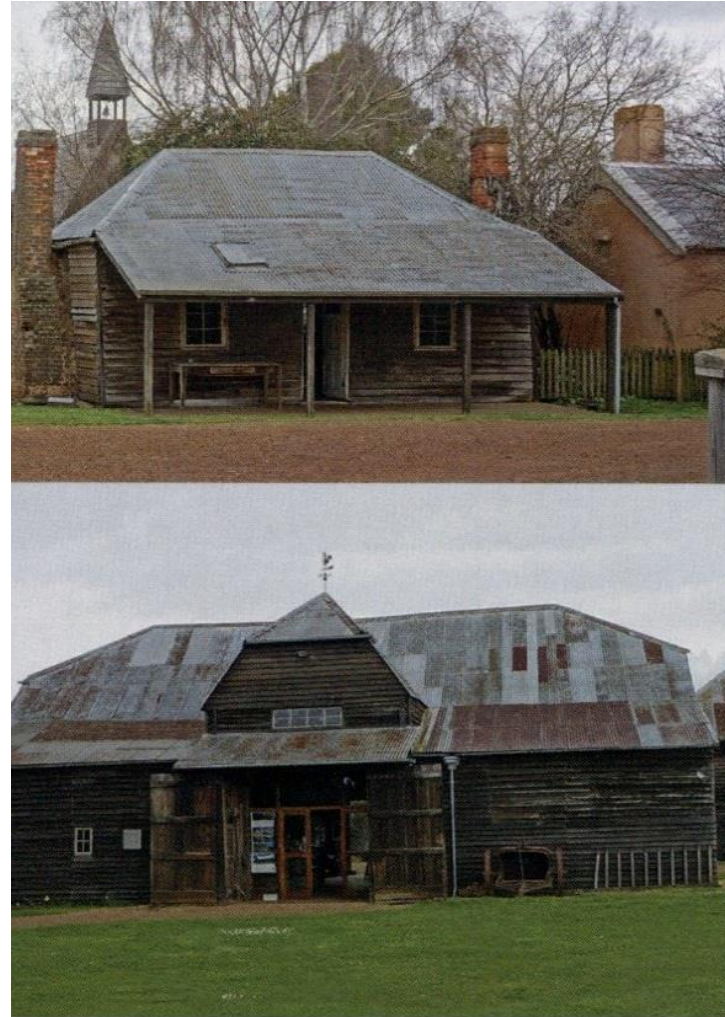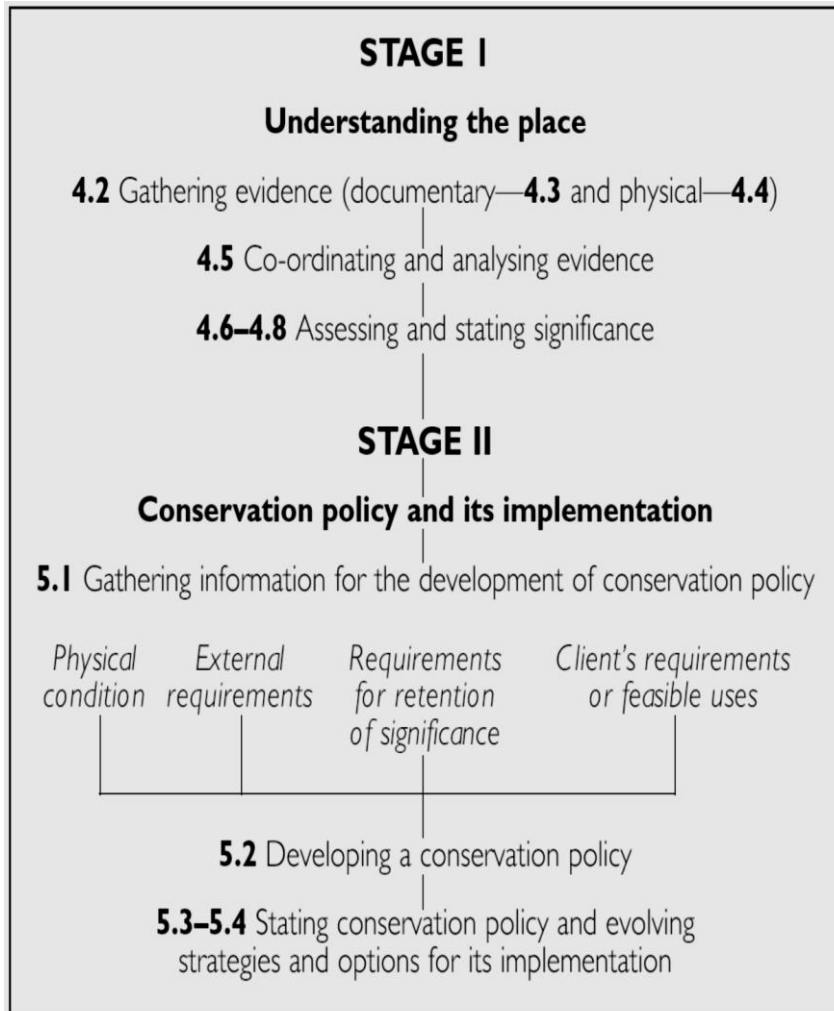
TOWARDS A HERITAGE QUALITY FRAMEWORK

MARY KNAGGS
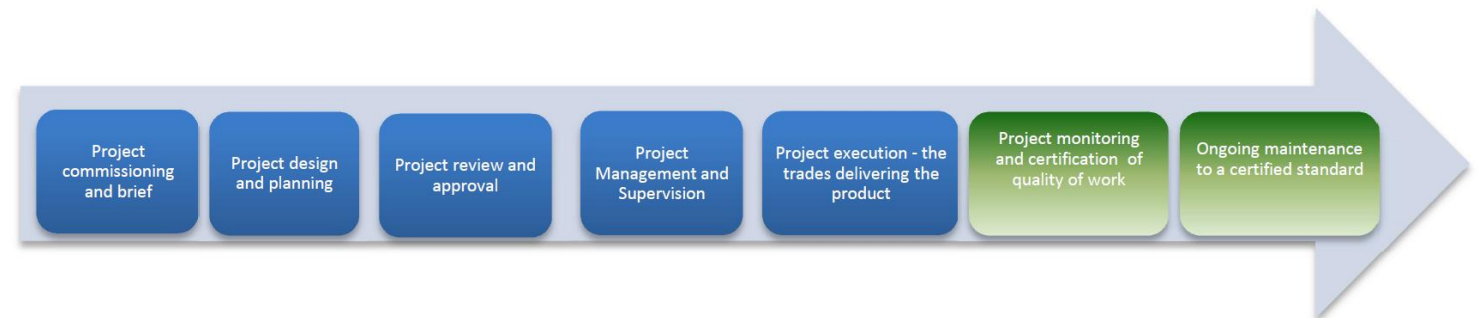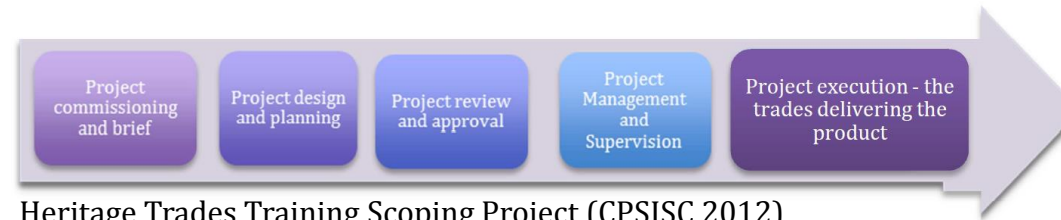
VICE PRESIDENT AUSTRALIA ICOMOS

THE VALUES BASED APPROACH
THE CONSERVATION PLAN (KERR 2013)

THE VALUES BASED APPROACH
THE AUSTRALIA ICOMOS BURRA CHARTER

UNDERSTAND SIGNIFICANCE

1 UNDERSTAND THE PLACE

Define the place and its extent
Investigate the place: its history, use, associations, fabric
Articles 5–7, 12, 26

2 ASSESS CULTURAL SIGNIFICANCE

Assess all values using relevant criteria
Develop a statement of significance
Article 26

DEVELOP POLICY

3 IDENTIFY ALL FACTORS AND ISSUES

Identify obligations arising from significance
Identify future needs, resources, opportunities and constraints, and condition
Articles 6, 12

4 DEVELOP POLICY

Articles 6–13, 26

5 PREPARE A MANAGEMENT PLAN

Define priorities, resources, responsibilities and timing
Develop implementation actions
Articles 14–28

MANAGE IN ACCORDANCE WITH POLICY

6 IMPLEMENT THE MANAGEMENT PLAN

Articles 26–34

7 MONITOR THE RESULTS & REVIEW THE PLAN

Article 26

Community and stakeholder engagement should occur throughout the process

Project commissioning and brief	Project design and planning	Project review and approval	Project Management and Supervision	Project execution - the trades delivering the product

Heritage Trades Training Scoping Project (CPSISC 2012)

Project commissioning and brief	Project design and planning	Project review and approval	Project Management and Supervision	Project execution - the trades delivering the product	Project monitoring and certification of quality of work	Ongoing maintenance to a certified standard

WHAT IS QUALITY?

Quality is the degree to which (conservation) services for (heritage places) increase the likelihood of desired (heritage conservation) outcomes and are consistent with current professional knowledge.

WHAT IS QUALITY MEASUREMENT?

The term 'measurement' implies that the approach being used is:

- *rigorous*

- *systematic*

- *quantifiable*

WHAT IS QUALITY MEASUREMENT FOR HERITAGE CONSERVATION?

Quality measurements typically focus on structures or processes of conservation that have a demonstrated relationship to positive heritage conservation outcomes and are under the control of heritage conservation practitioners.

Technically, quality measures are a mechanism to assign a value to quality of conservation by comparison to a defined criterion.

Heritage conservation quality measurement for heritage places is the process of using measures to assess the extent to which heritage places are receiving quality conservation when assessed against standards, performance criteria or benchmarks.

WHY HAVE QUALITY MEASUREMENT FOR HERITAGE?

Quality measures can be used to evaluate any of the following:

- *safeguarding of heritage significance*

- *sustainability of conservation actions or processes, including reversibility of actions*

- *training and skills development*

- *adherence to methodologies, policies and procedures*

HOW DO WE HAVE QUALITY MEASUREMENT FOR HERITAGE?

To use quality measurement, there needs to be a responsible entity that:

- *can be identified*

- *is held accountable for observed behaviour.*

- *has a reasonable degree of control over the aspect of conservation being evaluated*

HOW IA QUALITY MEASURED?

Quality measurement is a type of evaluation that is used in many sectors.

Example: The Environmental Protection Agency measures the quality of the air in the surrounding environment by analysing the presence of specific compounds that are known to cause pollution. The resulting calculation, known as the Air Quality Index, tells you how clean the air is and whether it will affect your health.

Guide to the National Quality Standard

3

Australian Children's Education & Care Quality Authority

Quality areas

There are seven quality areas.

QA1	Educational program and practice
QA2	Children's health and safety
QA3	Physical environment
QA4	Staffing arrangements
QA5	Relationships with children
QA6	Collaborative partnerships with families and communities
QA7	Leadership and service management

Standards and elements

The *National Quality Standard* contains 18 standards with two or three standards in each quality area. These standards are high-level outcome statements.

Under each standard sit elements that describe the outcomes that contribute to the standard being achieved. There are 58 elements in total.

QA2	Children's health and safety
2.1	Each child's health is promoted.
2.1.1	Each child's health needs are supported.
2.1.2	Each child's comfort is provided for and there are appropriate opportunities to meet each child's need for sleep, rest and relaxation.
2.1.3	Effective hygiene practices are promoted and implemented.
2.1.4	Steps are taken to control the spread of infectious diseases and to manage injuries and illness, in accordance with recognised guidelines.
2.2	Healthy eating and physical activity are embedded in the program for children.
2.2.1	Healthy eating is promoted and food and drinks provided by the service are nutritious and appropriate for each child.
2.2.2	Physical activity is promoted through planned and spontaneous experiences and is appropriate for each child.
2.3	Each child is protected.
2.3.1	Children are adequately supervised at all times.
2.3.2	Every reasonable precaution is taken to protect children from harm and any hazard likely to cause injury.
2.3.3	Plans to effectively manage incidents and emergencies are developed in consultation with relevant authorities, practised and implemented.
2.3.4	Educators, co-ordinators and staff members are aware of their roles and responsibilities to respond to every child at risk of abuse or neglect.
QA3	Physical environment
3.1	The design and location of the premises is appropriate for the operation of a service.
3.1.1	Outdoor and indoor spaces, buildings, furniture, equipment, facilities and resources are suitable for their purpose.
3.1.2	Premises, furniture and equipment are safe, clean and well maintained.
3.1.3	Facilities are designed or adapted to ensure access and participation by every child in the service and to allow flexible use, and interaction between indoor and outdoor space.
3.2	The environment is inclusive, promotes competence, independent exploration and learning through play.
3.2.1	Outdoor and indoor spaces are designed and organised to engage every child in quality experiences in both built and natural environments.
3.2.2	Resources, materials and equipment are sufficient in number, organised in ways that ensure appropriate and effective implementation of the program and allow for multiple uses.
3.3	The service takes an active role in caring for its environment and contributes to a sustainable future.
3.3.1	Sustainable practices are embedded in service operations.
3.3.2	Children are supported to become environmentally responsible and show respect for the environment.

MANAGING HERITAGE - NOT A LINEAR PROCESS!
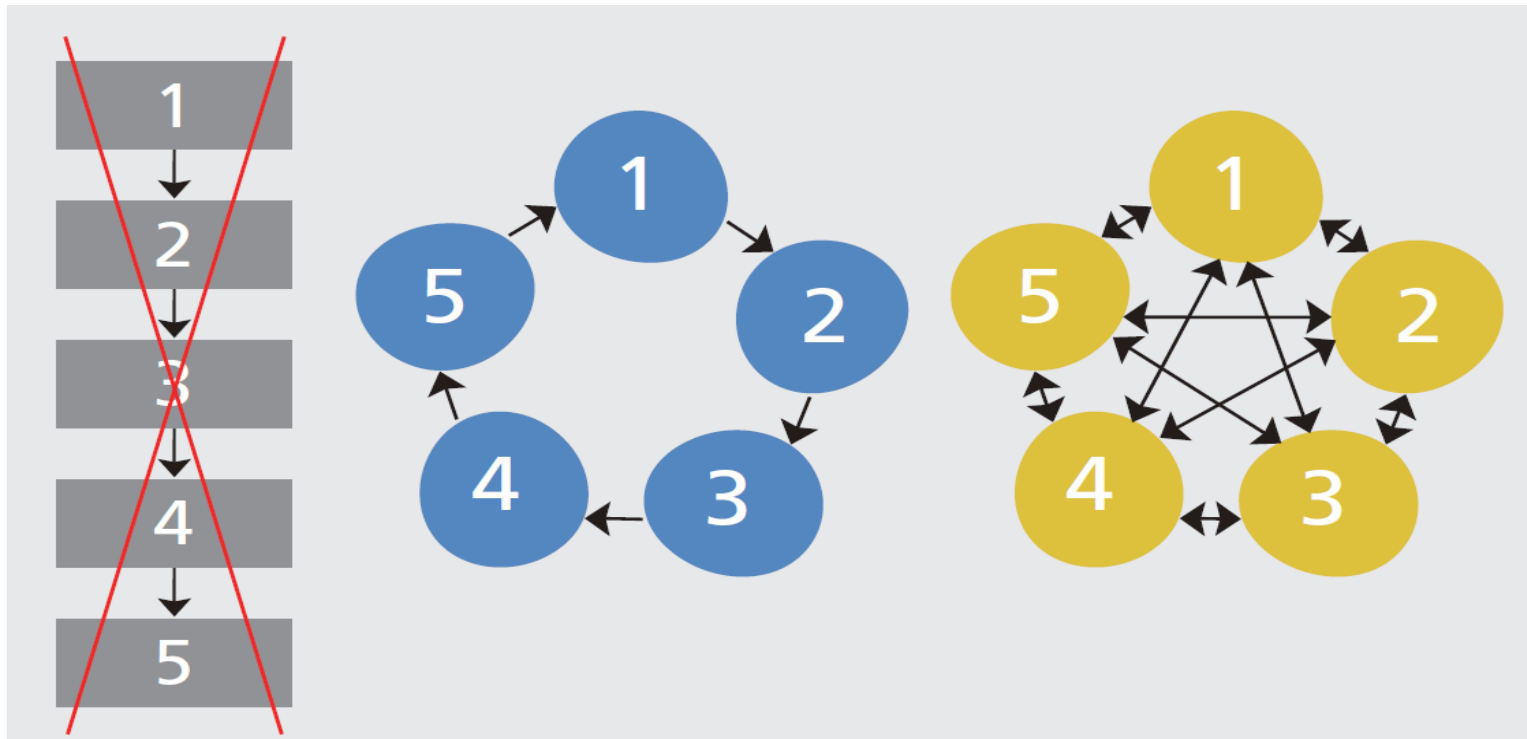
1. Preparation & data / information gathering / consultation
2. Significance / condition assessment
3. Developing policy / strategies / proposals
4. Documentation & approvals
5. Implementation
6. Monitoring

THE ADAPTIVE MANAGEMENT CYCLE

Source: DPIPWE 2014 after Jones 2005, 2009

MANAGING HERITAGE - COLLECTIVE AGREEMENT

Collective agreement of stakeholders on:

- **THE MANAGEMENT SYSTEM APPLYING TO HERITAGE PLACES**

- **BEST QUALITY HERITAGE CONSERVATION GOALS, OBJECTIVES AND STANDARDS**

to make the place sustainable into the future

SOME BASIC PRINCIPLES FOR MANAGING HERITAGE

- Managing & monitoring for **ALL VALUES** (all cultural & natural values)

- Managing & monitoring the impact from and to **THE CONTEXT** (i.e. monitor what is happening beyond the site)

- Managing & monitoring for **ALL COMMUNITIES** - an inclusive approach

HERITAGE MECHANISMS & CONTEXTS

- Conserving heritage values (World, national, state/regional)
- Conserving heritage values (natural and cultural)
- Urban and regional planning / urban design
- Social / community sustainability
- Traditional practices
- Spiritual practices
- Economic context
- Tourism / community recreation
- Art and culture
- Transport
- Education
- Defence
- Disaster Management.
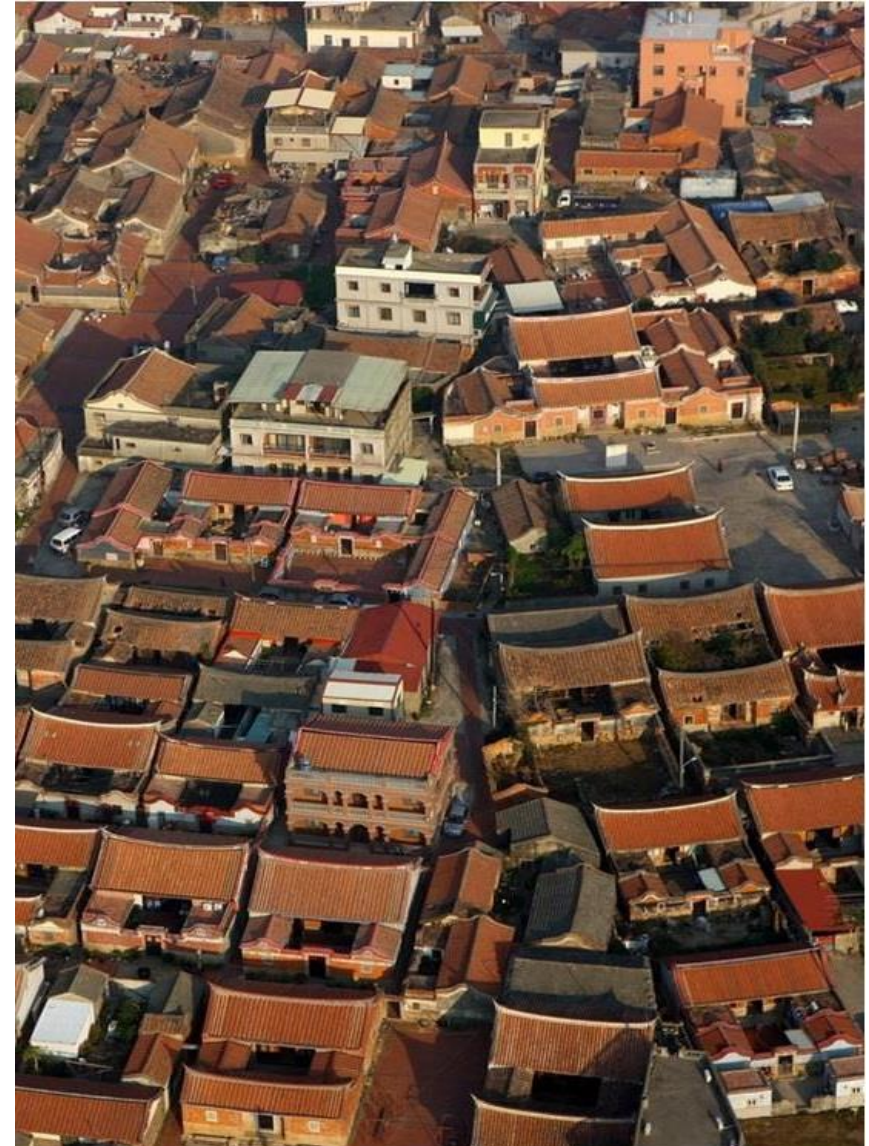
HERITAGE MANAGEMENT IS AN INCLUSIVE APPROACH

Heritage Management Planning & Monitoring for particular heritage values must link with:

- other existing environmental and other relevant planning mechanisms; and

- all stakeholders including those outside the designated heritage area.

We must consider the **environmental, social and the economic context** in order for the heritage place to be **sustainable**.

WHO ARE THE STAKEHOLDERS?

- Government Planning Authorities (National. State, Local)
- Defence Department
- National Parks
- Local Community
- Local Businesses
- Artist associations
- Clan Associations
- University and Schools
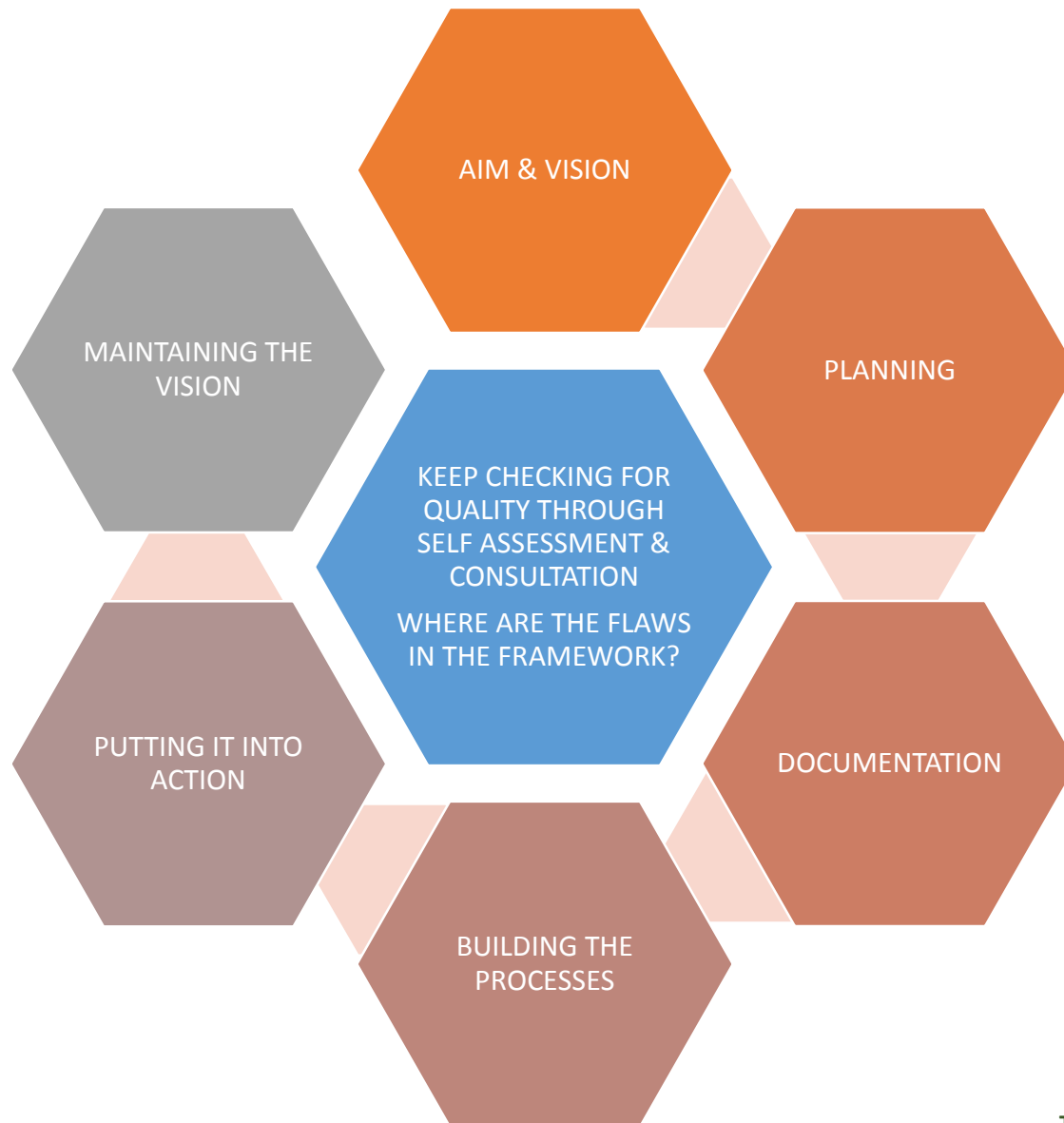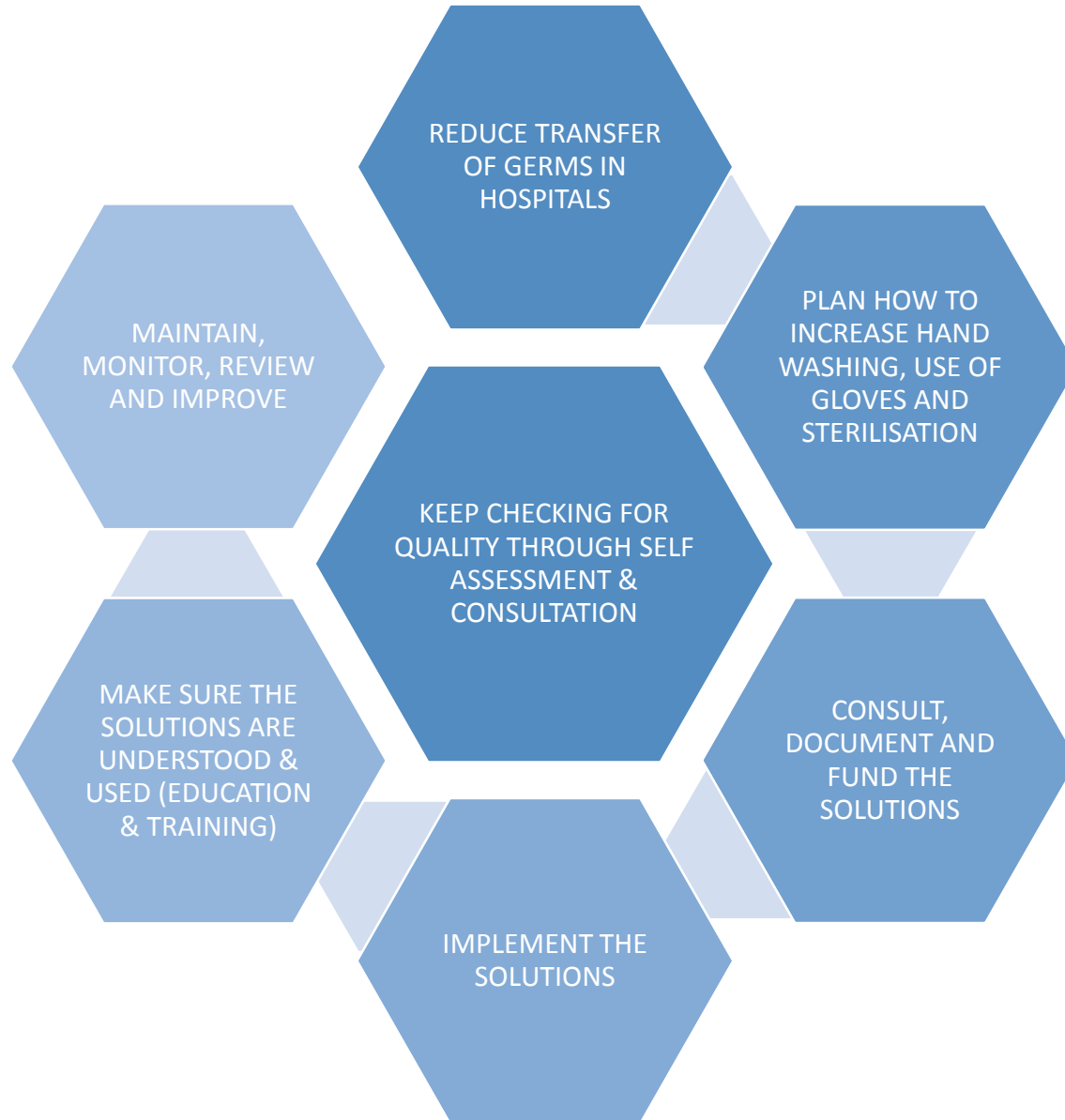- NGOs (e.g. ICOMOS)
- UNESCO
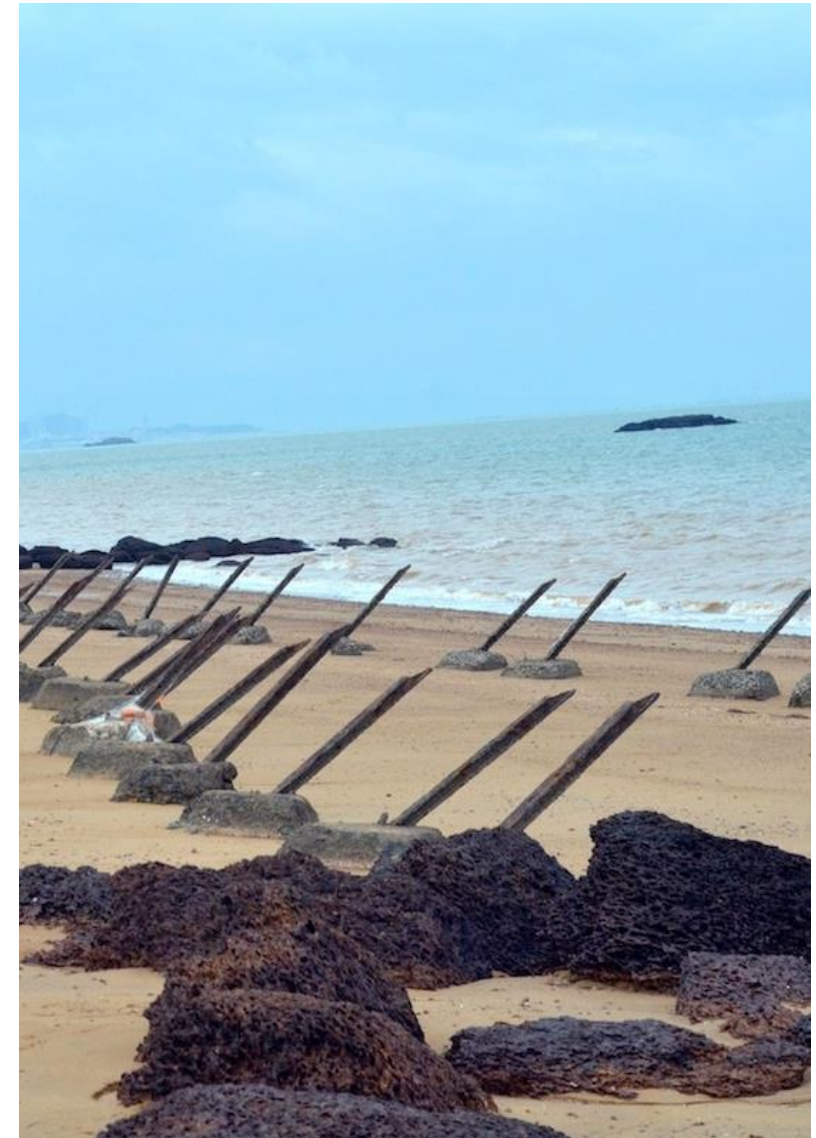
AN OUTCOMES BASED APPROACH
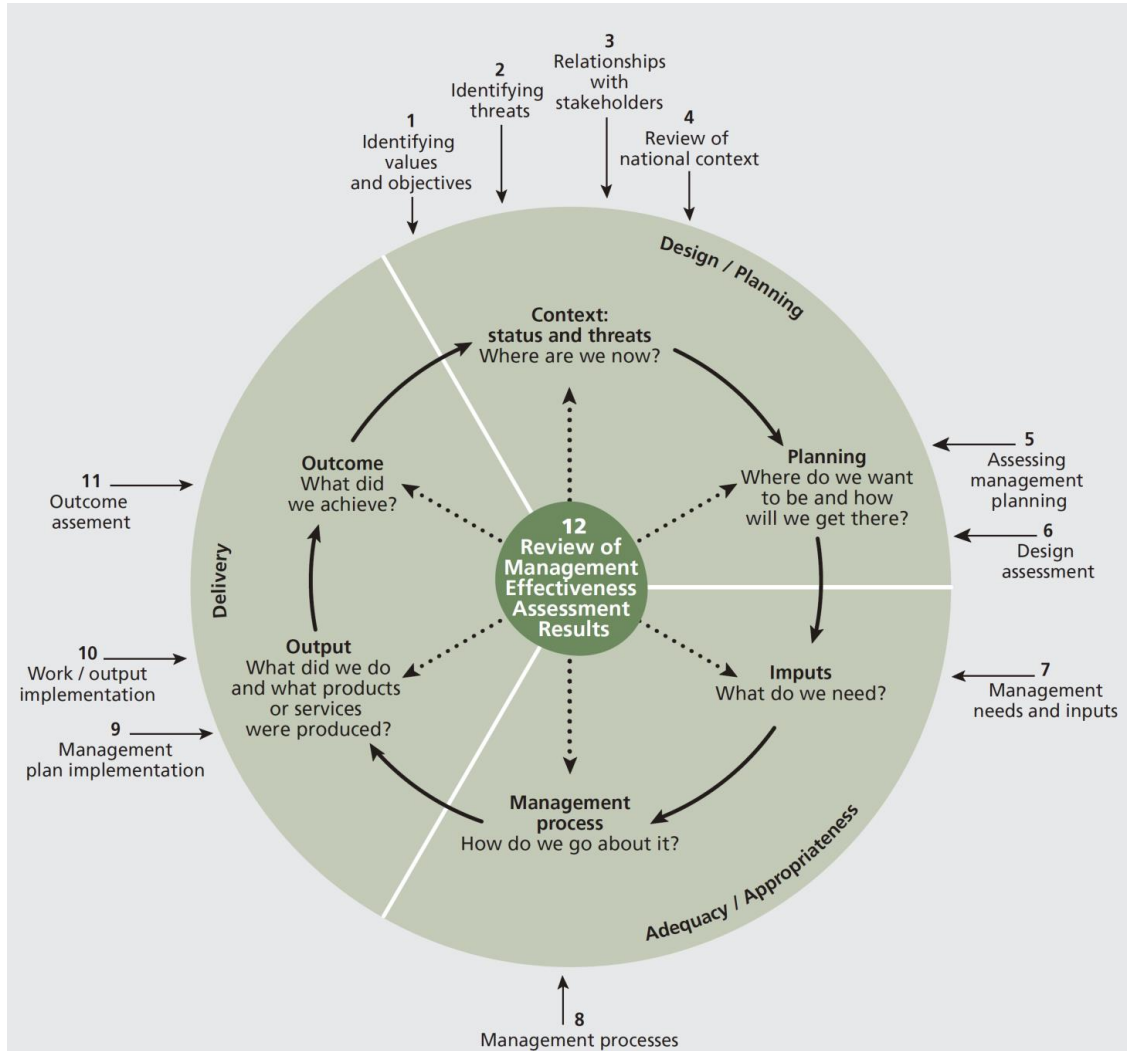
Figure 3. Relationship of tools in the toolkit to the WCPA Management Effectiveness Framework.
Source: Hockings et al. (2006).

The IUCN World Commission on Protected Areas.

QUALITY MANAGEMENT – WHAT IS IT?

AIM & VISION

PLANNING

MAINTAINING THE VISION

KEEP CHECKING FOR QUALITY THROUGH SELF ASSESSMENT & CONSULTATION

WHERE ARE THE FLAWS IN THE FRAMEWORK?

PUTTING IT INTO ACTION

DOCUMENTATION

BUILDING THE PROCESSES
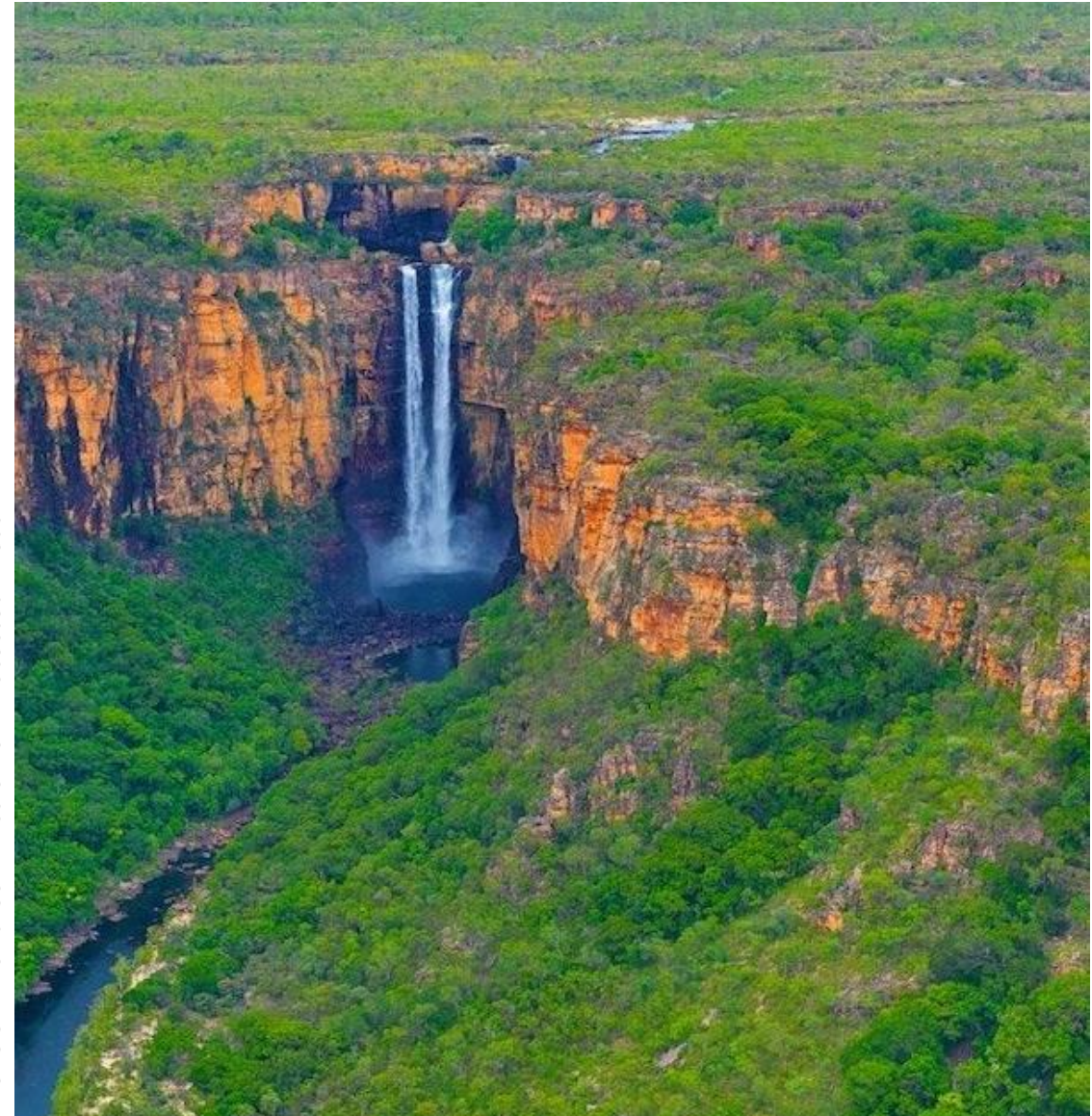
QUALITY MANAGEMENT – A HEALTH CARE EXAMPLE

REDUCE TRANSFER OF GERMS IN HOSPITALS

PLAN HOW TO INCREASE HAND WASHING, USE OF GLOVES AND STERILISATION

MAINTAIN, MONITOR, REVIEW AND IMPROVE

KEEP CHECKING FOR QUALITY THROUGH SELF ASSESSMENT & CONSULTATION

MAKE SURE THE SOLUTIONS ARE UNDERSTOOD & USED (EDUCATION & TRAINING)

CONSULT, DOCUMENT AND FUND THE SOLUTIONS

IMPLEMENT THE SOLUTIONS

HERITAGE QUALITY MANAGEMENT – WHAT IS IT?

Diagram of hexagons:

- UNDERSTAND THE HERITAGE PLACE
- VISION FOR ITS FUTURE
- PLAN FOR SUSTAINABLE CONSERVATION
- DOCUMENT, REVIEW AND APPROVE ANY CHANGES
- IMPLEMENT THE CHANGES TO MEET BEST PRACTICE
- MAINTAIN, MONITOR, REVIEW AND IMPROVE
- KEEP CHECKING FOR QUALITY THROUGH SELF ASSESSMENT & CONSULTATION

WHY WE MONITOR

Monitoring is about:

- measuring whether the management system is working;

- whether the state of the cultural heritage is getting better or worse; and

- whether heritage benefits are being harnessed for society.

WHY WE MONITOR

A MEANS TO POSITIVE CHANGE:

- Better resources allocation;

- Improving documentation and reporting;

- Facilitating compliance with reporting processes;

- Allowing management to change;

- To promote a proactive rather than reactive attitude

- Gaining new support from potential donors or partnerships by showing …

A COHERENT AND CREDIBLE APPROACH.

WHY WE MONITOR

Monitoring assists us to establish what:

- **REMEDIAL MEASURES;** or

- **NEW INITIATIVES**

to take in the event of shortcomings or opportunities being identified.

THE TWO AREAS FOR MONITORING

Monitoring involves:

the collection and analysis of data for specific purposes

It falls into two streams:

1. **CHECK PROCESS & PROGRESS**

Whether the management system is operating effectively

2. **CHECK OUTPUTS & OUTCOMES**

Whether the management system is delivering the right results

KEY PERFORMANCE INDICATORS

The Periodic Reporting questionnaire for World Heritage properties includes the question (4.8.2):

'Are key indicators for measuring the state of conservation used in monitoring how the Outstanding Universal Value of the property is being maintained?'

Indicators in this manual (section numbers in parentheses)	Explanatory notes on assessment measures	Link to Periodic Reporting questions
Conservation status of the property (2.1) • *Is the OUV of the property in good condition?* • *Is the OUV being adequately conserved (e.g. management and protection)?*	Measures could include trends and status of key species populations or habitats and management effectiveness assessments	Current state of the World Heritage property's OUV (question 5.3.3)
Statement of Outstanding Universal Value (2.2) • *Is the SOUV adequate or does it need to be revised?*	Assess whether the statement conveys the reasons the site is included on the World Heritage List	Is there a SOUV; does it need revising? (section 2 of the PR)
Threats to OUV (2.3 and 2.4) • *Is the OUV of the property seriously threatened?*	Threat assessment to help identify if the site is faced with specific and proven imminent danger or by potential threats which could seriously affect the site's OUV	Factors affecting the property: current and potential factors; negative (threats) and positive factors; and factors with impacts inside and outside of the property (sections 3 and 5.1)
Relationships with local people (2.5) • *Do relationships with stakeholders in the property help to facilitate effective conservation of the property's OUV?* • *Are the needs of local stakeholders addressed effectively within the management system for the property, and are benefits provided by the World Heritage site shared equitably with local people?*	Measures could include participation in governance; stakeholder consultation processes; cooperation with people living around the property; equitable benefit sharing	Local people relationships (questions 4.3.7 to 4.3.9)
Legal framework (3.1) • *Is the legal framework for the World Heritage site effective in maintaining its OUV?*	Presence of legislation, regulation or customary law; effective enforcement of legal frameworks	Adequacy of protective designation and legal framework (legislation and/or regulation) (section 4.2)

Indicators in this manual (section numbers in parentheses)	Explanatory notes on assessment measures	Link to Periodic Reporting questions
Management system and plan (3.2) • *Are the management system and plan adequate to maintain the property's OUV?*	Measures on monitoring plan implementation; management effectiveness assessments	Management system/ management plan (section 4.3)
World Heritage Committee decisions and recommendations (3.3) • *Has the State Party implemented the decisions and recommendations of the World Heritage Committee relating to the property?*	Are decisions known and acted upon and are processes in place to measure implementation?	World Heritage Committee recommendations (questions 4.8.4 and 4.8.9)
Boundaries (3.4) • *Are the boundaries of the property, including buffer zone, effective in relation to the management and protection of its OUV?*	Assessment of the adequacy of the boundary to protect OUV; are the boundaries known and respected locally?	Boundaries and buffer zones (section 4.1)
Sustainable finance (4.1) • *Are financial resources adequate to implement the management measures required to maintain the site's OUV?* • *Are the existing sources of funding secure and are they likely to remain so?*	Assessment of the scale of budget relative to need; security of budget; presence of business plan	Financial and human resources (questions 4.4.1 to 4.4.5)
Staff training and development (4.3) • *Are human resources adequate to manage the World Heritage property?*	Staff numbers, assessment of training and development needs; presence of capacity development programmes	Adequacy of human resources to manage the World Heritage property? (questions 4.4.9 to 4.1.15)
Sustainable use (5.1) • *Are effective mechanisms in place to ensure that resource use permitted in and around the World Heritage site is sustainable and does not impact negatively on its OUV?*	Assessment of effectiveness of policies, monitoring, use agreements, etc.	Questions within the factors affecting the property (section 3)

UNESCO Resource Manual Managing Natural Heritage

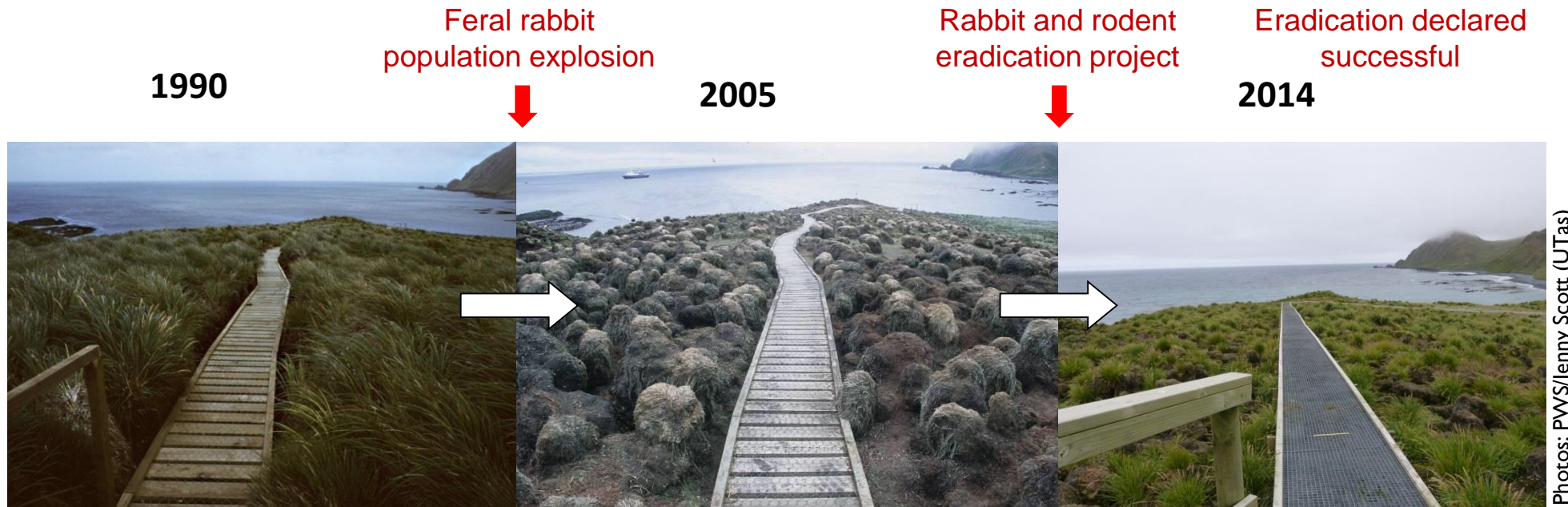| Indicators in this manual (section numbers in parentheses)	Explanatory notes on assessment measures	Link to Periodic Reporting questions
Education and interpretation programmes (5.2) • *Do education, interpretation and awareness programmes significantly enhance the understanding of the site's OUV among stakeholders?*	Assessment of awareness and understanding of the existence and justification for inscription of the World Heritage property among visitors and other stakeholders	Education, information and awareness-building (section 4.6)
Tourism and interpretation (5.3) • *Is there an understanding and promotion of the site's OUV in local and national tourism policies?* • *Does visitor management result in the maintenance of the OUV?*	Assessment of relations with the tourism industry, visitor surveys, visitor management plans, impact assessments, etc.	Visitor management (section 4.6)
Monitoring (6.1) • *Are the values for which the site was inscribed on the World Heritage List adequately monitored?* • *Are management plans, tools and decisions adapted and improved as a result of monitoring outcomes?*	Monitoring of the values for which the site was inscribed on the World Heritage List is developed around agreed indicators and established protocols and results fed back into management; development of management effectiveness assessment programmes	Monitoring (section 4.8)
Research (6.2) • *Is there adequate knowledge of the property to support planning, management and decision-making to ensure that its OUV is maintained?*	Measures relating to the number and appropriateness of research project looking at, for example, understanding stakeholders, pressures and threats, resource use, biodiversity, etc.	Scientific studies and research projects (section 4.5)

PERFORMANCE MONITORING (QUALITY MANAGEMENT?) AREAS

1. Management context and arrangements (e.g. information about the ownership, legislation and policy mandates, governance arrangements, funding for management, etc.)

2. Condition of values (e.g. information about the condition of community intangible heritage values, historical cultural heritage, ecosystems and natural diversity, environmental quality, wilderness quality, etc.)

3. Management of threats, risks and impacts (e.g. information about the management of new development, traffic, climate events, fire, weeds, diseases, feral animals, erosion, damaging/unsustainable activities, visual impacts, new and emerging issues, etc.)

4. Management of uses including tourism, recreation and other uses) (e.g. information about impacts of development, removal of intrusive elements, visitor numbers and activities, visitor satisfaction, infrastructure, public health and safety, sensitivity and sustainability of human use, etc.)

5. Community engagement and support (e.g. information about public awareness and support; community feedback; media profile; communication and education; community involvement; public and political advocacy and support, etc.)

6. Management systems, processes and tools (e.g. information about management plans, policies and processes for place management; information management; research and monitoring; collaboration and linkages with others; organisational workforce and staff morale, etc.).

7. Conservation and adaptation implementation best practice

EXAMPLE OF MONITORED RESULTS – QUALITATIVE DATA

Macquarie Island pest eradication project
Photo monitoring sequence of vegetation condition on Macquarie Island

Feral rabbit population explosion

Rabbit and rodent eradication project

Eradication declared successful

1990   **2005**   **2014**

Photos: PWS/Jenny Scott (UTas)

1. Condition of vegetation healthy with full tussock cover

2. Vegetation heavily over-grazed by feral rabbits, dead tussocks common

3. Three years after the baiting program, vegetation is clearly recovering and surrounds the new boardwalk

MONITORING & TRENDS

Supporting Evidence

External funding grants for WILDCARE community projects 2002 to 2010
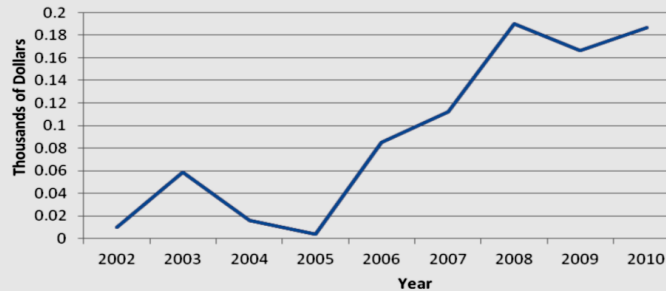
Figure 1. External funding grants for Wildcare projects has increased over the 2002-2010 period as a result of successful applications through Wildcare Inc for external grants. For details, refer to Appendix 1.

Donations to WILDCARE Gift Fund 2005-2010
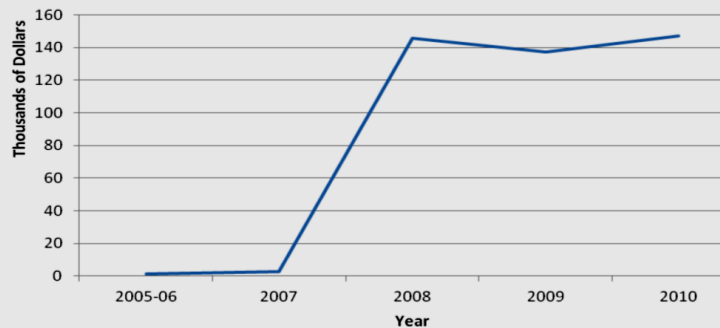
Figure 2. Wildcare established a Gift Fund in 2005 to enable people and organisations who care for Tasmania's wild places to make a financial contribution towards their conservation and management.

Number of volunteer working bees and online project call-ups per year
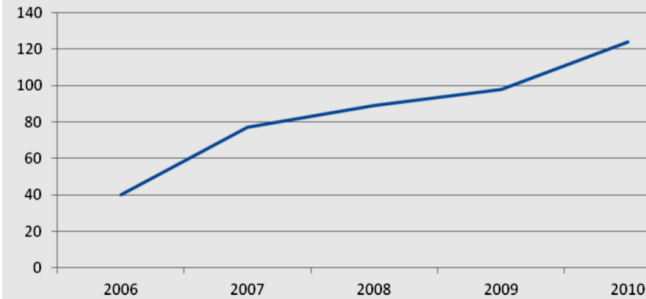
Figure 3. Volunteerism in Tasmania's national parks and reserves is steadily increasing as community groups and individuals respond to Wildcare's calls for volunteers to assist working bees and projects to help reserve management and wildlife conservation.

Commentary on Management Performance

Key Factors Contributing Positively to Management Performance:
➢ The Parks and Wildlife Service has continued to invest in building relationships with key community organisations, volunteers and the wider community.
➢ The creation of the Community Programs Section (within the Strategy and Sustainable Use Branch) has further strengthened PWS's capacity and expertise in the area of community engagement.

Key Factors Limiting or Threatening Management Performance:
None identified

Suggestions for Improving Management Performance:
➢ PWS is exploring opportunities for extending our capacity to engage with the community through building regional and field centre skills and staffing structures.

Sources

PROJECT MANAGER/RESPONSIBLE OFFICER
Name: Andrew Smith
Position title/section/division: PWS Manager Community Partnerships
Email address: Andrew.Smith@parks.tas.gov.au
Acknowledgements: Stuart Lennox (PWS Branch Manager Strategy & Sustainable Use) and Chris Leitch (PWS Training and Development Coordinator) provided information about PWS's Aboriginal involvement in reserve management.

Andrew Smith, PWS Manager
Community Programs
Photo: PWS

References and Further Information
None provided

MONITORING & TRENDS

Not performing well?

We need to know
- so we can improve

Performing well?

We want to know

MANAGEMENT & MONITORING MUST HAVE WIDE SUPPORT
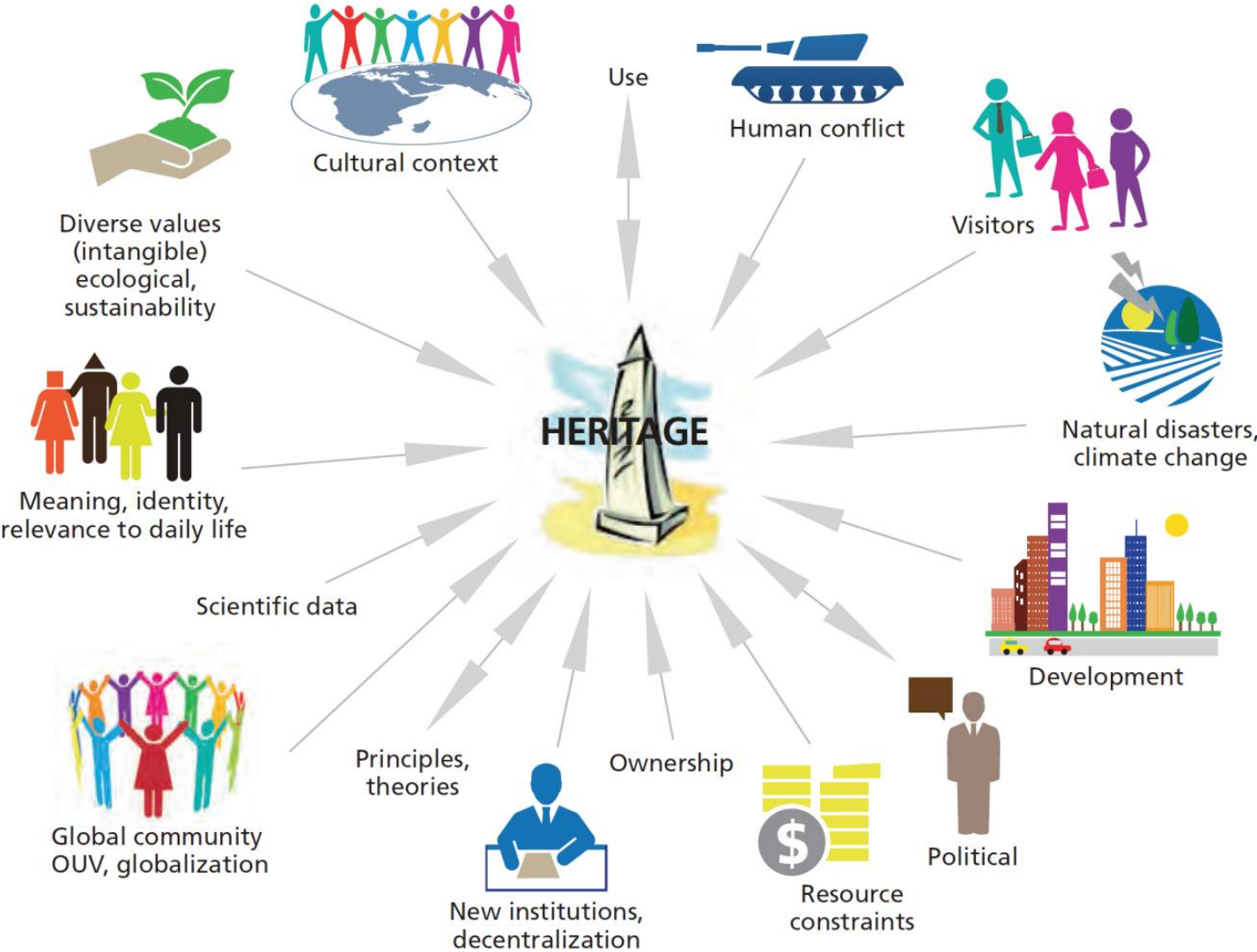
KEY FEATURES OF MONITORING & QUALITY MANAGEMENT

- Outcomes-focused

- Evidence-based

- Transparent to all interested parties

- Operationally practical and scalable

- Aligned with formal responsibilities for management

- Aligned with stakeholder-identified needs for performance information

- Addresses different reporting scales (major projects, managed-area)

- Well-suited to government

- Fosters organizational learning and continuous improvement

- Builds community trust and understanding
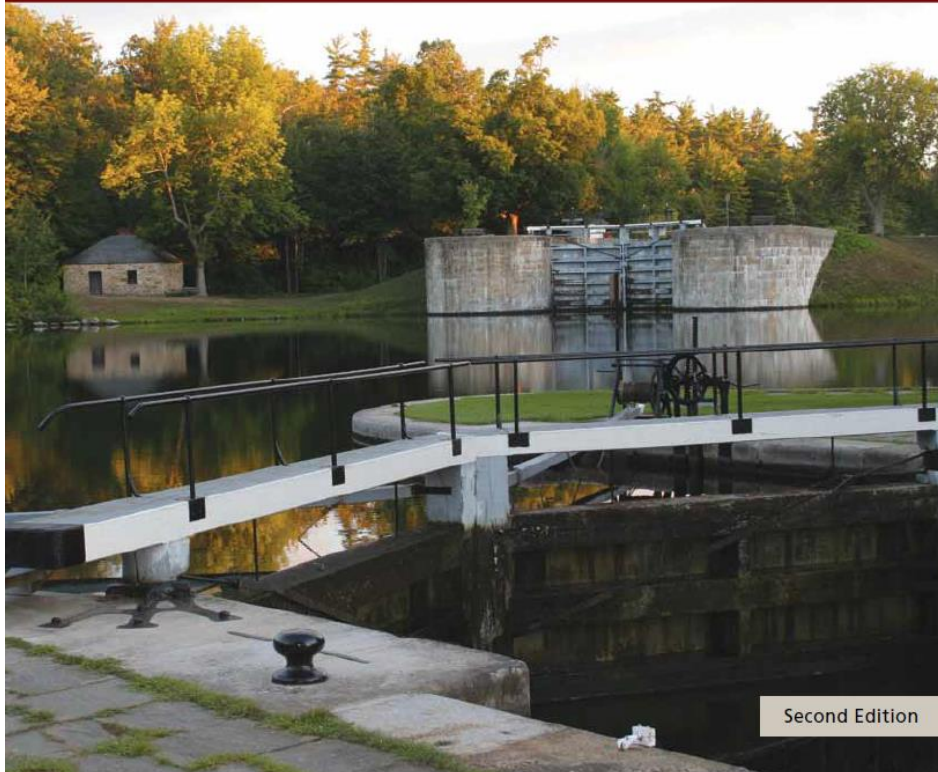
- Supports evidence-based adaptive management

STANDARDS AND GUIDELINES

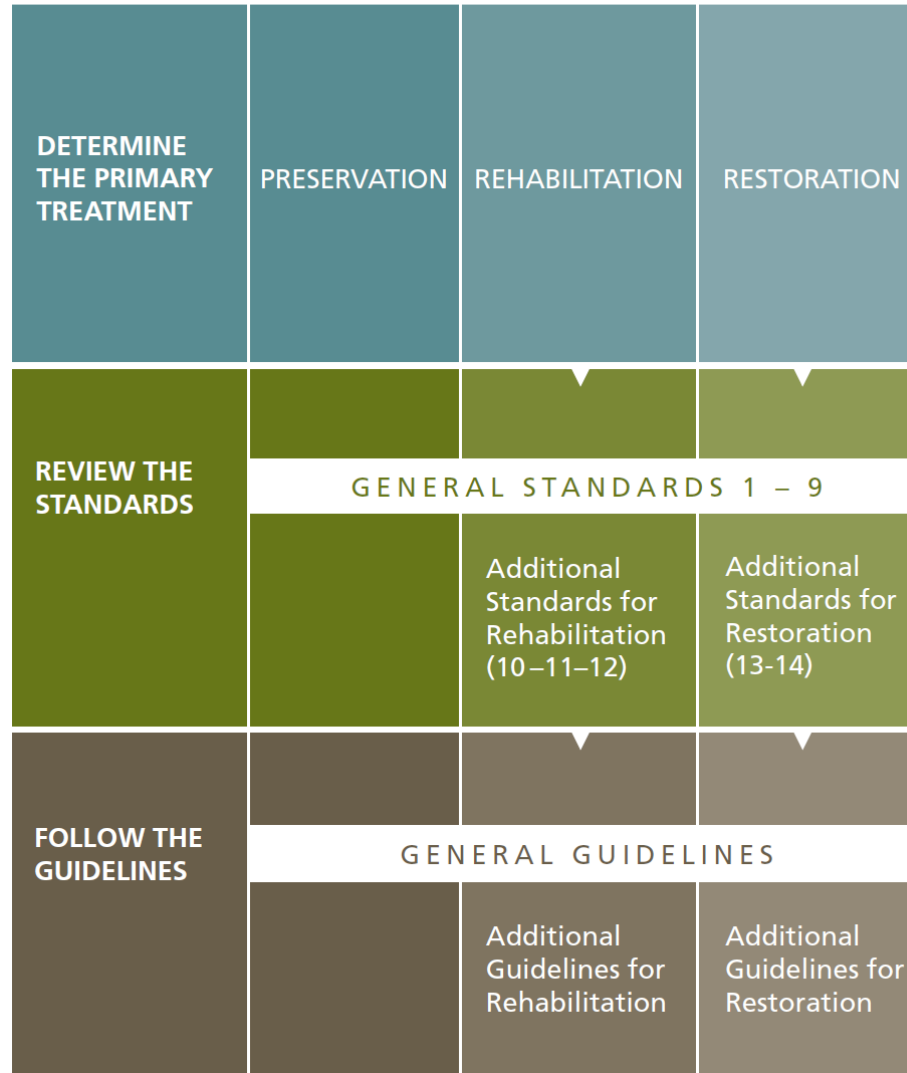FOR THE CONSERVATION OF
HISTORIC PLACES IN CANADA

Canada's Historic Places / Lieux patrimoniaux du Canada

A Federal, Provincial and Territorial Collaboration

Second Edition

The Standards and Guidelines apply particularly to these three steps of the conservation decision-making process: Determine the Primary Treatment, Review the Standards and Follow the Guidelines.

DETERMINE THE PRIMARY TREATMENT	PRESERVATION	REHABILITATION	RESTORATION
REVIEW THE STANDARDS	GENERAL STANDARDS 1 – 9		
		Additional Standards for Rehabilitation (10–11–12)	Additional Standards for Restoration (13-14)
FOLLOW THE GUIDELINES	GENERAL GUIDELINES		
		Additional Guidelines for Rehabilitation	Additional Guidelines for Restoration

The Standards and Guidelines for the Conservation of Historic Places in Canada is a pan-Canadian collaboration. The participating governments are:

Government of Alberta · British Columbia · Canada · Manitoba · New Brunswick · Newfoundland Labrador · Northwest Territories · Nova Scotia · Prince Edward Island · Québec · Government of Saskatchewan · Yukon

THE STANDARDS

The Standards are not presented in a hierarchical order. All standards for any given type of treatment must be considered, and applied where appropriate, to any conservation project.

General Standards for Preservation, Rehabilitation and Restoration

1. Conserve the *heritage value* of an *historic place*. Do not remove, replace or substantially alter its intact or repairable *character-defining elements*. Do not move a part of an historic place if its current location is a character-defining element.

2. Conserve changes to an *historic place* that, over time, have become *character-defining elements* in their own right.

3. Conserve *heritage value* by adopting an approach calling for *minimal intervention*.

4. Recognize each *historic place* as a physical record of its time, place and use. Do not create a false sense of historical development by adding elements from other historic places or other properties, or by combining features of the same property that never coexisted.

5. Find a use for an *historic place* that requires minimal or no change to its *character-defining elements*.

6. Protect and, if necessary, stabilize an *historic place* until any subsequent *intervention* is undertaken. Protect and preserve archaeological resources in place. Where there is potential for disturbing archaeological resources, take mitigation measures to limit damage and loss of information.

7. Evaluate the existing condition of *character-defining elements* to determine the appropriate *intervention* needed. Use the gentlest means possible for any intervention. Respect *heritage value* when undertaking an intervention.

8. Maintain *character-defining elements* on an ongoing basis. Repair character-defining elements by reinforcing their materials using recognized conservation methods. Replace in kind any extensively deteriorated or missing parts of character-defining elements, where there are surviving *prototypes*.

9. Make any *intervention* needed to preserve *character-defining elements* physically and visually compatible with the *historic place* and identifiable on close inspection. Document any intervention for future reference.

Additional Standards Relating to Rehabilitation

10. Repair rather than replace *character-defining elements*. Where character-defining elements are too severely deteriorated to repair, and where sufficient physical evidence exists, replace them with new elements that match the forms, materials and detailing of sound versions of the same elements. Where there is insufficient physical evidence, make the form, material and detailing of the new elements compatible with the character of the *historic place*.

11. Conserve the *heritage value* and *character-defining elements* when creating any new additions to an *historic place* or any related new construction. Make the new work physically and visually compatible with, subordinate to and distinguishable from the historic place.

12. Create any new additions or related new construction so that the essential form and integrity of an *historic place* will not be impaired if the new work is removed in the future.

Additional Standards Relating to Restoration

13. Repair rather than replace *character-defining elements* from the *restoration* period. Where character-defining elements are too severely deteriorated to repair and where sufficient physical evidence exists, replace them with new elements that match the forms, materials and detailing of sound versions of the same elements.

14. Replace missing features from the *restoration* period with new features whose forms, materials and detailing are based on sufficient physical, documentary and/or oral evidence.

KEY DEFINITIONS

Conservation: all actions or processes that are aimed at safeguarding the character-defining elements of an historic place so as to retain its heritage value and extend its physical life. This may involve *Preservation, Rehabilitation, Restoration,* or a combination of these actions or processes.

Preservation: the action or process of protecting, maintaining, and/or stabilizing the existing materials, form, and integrity of an *historic place,* or of an individual component, while protecting its *heritage value.*

Rehabilitation: the action or process of making possible a continuing or compatible contemporary use of an *historic place,* or an individual component, while protecting its *heritage value.*

Restoration: the action or process of accurately revealing, recovering or representing the state of an *historic place,* or of an individual component, as it appeared at a particular period in its history, while protecting its *heritage value.*

REPAIRING OR REPLACING?

Standards 8, 10 and 13 are related standards; each one describes the importance of repairing before replacing for each of the three treatment types based on the condition of the character-defining elements and the type of evidence available.

- Standard 8, in the context of *Preservation*, where the condition allows more for repair than replacement, assumes that material evidence is available to use as a basis when part of a character-defining element needs to be replaced;
- Standard 10, in the context of *Rehabilitation*, permits compatible, distinguishable new elements to be inserted when replacing elements too deteriorated to repair;
- Standard 13, in the context of *Restoration*, requires that replacement elements be based on evidence from the restoration period.

PATINA

There is a fine distinction between patina and decay. Patina is the natural aging of materials; an organic and superficial surface degradation that is usually not harmful to the material. It can also be caused by use and wear. Understanding patina and its heritage value in the context of an historic place is part of assessing the condition of materials. It may be important to conserve patina for reasons of appearance, such as moss growing on a mature tree or the changed colour of a building stone, or for natural protection, such as on metals, where corrosion may form a protective coating.

4.1 GUIDELINES FOR CULTURAL LANDSCAPES, INCLUDING HERITAGE DISTRICTS

4.1.2 EVIDENCE OF TRADITIONAL PRACTICES

Located south of Rankin Inlet, NU, Marble Island has a long history of diverse use. Inuit first came to the island as seasonal hunters, followed by European explorers and then by Scottish and American whalers. Today, traces of each group, such as stone tent rings, graves and kayak remnants, can be found among the summer vegetation. Understanding the users' traditional practices and how they have contributed to the heritage value of this cultural landscape is essential to good preservation practice.

Preservation of the totems at Nan Sdins, Gwaii Haanas includes their stabilization, while continuing to allow their gradual deterioration. The values associated with the totems include their eventual return to the earth.

EVIDENCE OF TRADITIONAL PRACTICES

GENERAL GUIDELINES FOR PRESERVATION, REHABILITATION AND RESTORATION

	Recommended	Not Recommended	Quality Measure	Has the QM been Met?
1	**Understanding** traditional practices and how they contribute to the heritage value of the cultural landscape.			
2	**Understanding** the local environmental context, including climate, prevailing winds, underlying topography and ecological processes integral to traditional practices.			
3	**Documenting** aspects of traditional practices prior to beginning project work, including consulting with the cultural community on the ways that traditional practices have changed over time.	Documenting only material features of the cultural landscape, and neglecting to document the traditional practices associated with them.		
4	**Assessing** the overall condition of the features that support traditional practices early in the planning process, so that the scope of work is based on current conditions.			
5	**Protecting** and maintaining the features that support traditional practices by using non-destructive methods in daily, seasonal and cyclical tasks in keeping with those practices.	Allowing the features that support traditional practices to be altered or lost through incompatible development or neglect.		
6	**Repairing** or rejuvenating deteriorated parts of features that support traditional practices using recognized conservation methods. Where possible, conservation work should be done according to traditional practices.	Replacing features that support traditional practices when those features can be repaired or rejuvenated.		
7	**Replacing** in kind extensively deteriorated or missing parts of features that support traditional practices where there are surviving prototypes. The new work should match the old in form, location, orientation, materials, detailing and craftsmanship.	Replacing an entire feature that supports traditional practices, when limited replacement of deteriorated and missing parts is possible.		
8	**Documenting** all interventions that affect the features that support traditional practices, and ensuring that this documentation is available to those responsible for future interventions.			

4.1.2
EVIDENCE OF TRADITIONAL PRACTICES

ADDITIONAL GUIDELINES FOR REHABILITATION PROJECTS

	Recommended	Not Recommended
9	**Repairing** or rejuvenating extensively deteriorated or missing features that support traditional practices within the cultural landscape, by using non-destructive methods and materials. For example, using only native plant species significant to the cultural community, when rejuvenating vegetation or ecological features important to traditional practices.	Replacing an entire feature that supports traditional practices when repair or rejuvenation is possible.
10	**Replacing** in kind an entire feature that supports traditional practices when that feature is too deteriorated to repair or rejuvenate, such as replanting a clear-cut forest with the type and mix of trees removed.	Replacing an irreparable feature with a new feature that does not support the past or continuing traditional practice.

ADDITIONS OR ALTERATIONS TO A CULTURAL LANDSCAPE

11	**Designing** a new feature when required by a new use that does not obscure, damage or destroy other features also important to traditional practices.	Adding a new feature that detracts from, damages, or destroys features that support traditional practices. Introducing a new feature that is incompatible with the past or continuing traditional practice.

ADDITIONAL GUIDELINES FOR RESTORATION PROJECTS

	Recommended	Not Recommended
12	**Repairing** deteriorated features that support traditional practices from the restoration period using a minimal intervention approach. Where possible, repair activities should be done according to traditional practices.	Replacing an entire feature that supports traditional practices from the restoration period when repair is possible.
13	**Replacing** in kind an entire feature from the restoration period that is too deteriorated to repair or rejuvenate, using the same configuration and design details. The new work should be well documented to guide future research and treatment.	Removing an irreparable feature from the restoration period and not replacing it, or replacing it with an inappropriate new feature.

REMOVING EXISTING FEATURES FROM OTHER PERIODS

14	**Removing** or altering non character-defining features from periods other than the chosen restoration period that obscure the historic features that support traditional practices within the cultural landscape.	Failing to remove non character-defining features from another period that confuse the understanding of traditional practices during the chosen restoration period.

RECREATING MISSING FEATURES FROM THE RESTORATION PERIOD

15	**Recreating** a missing feature that supports traditional practices from the restoration period, based on physical, documentary and oral evidence.	Installing a feature that could have been important to traditional practices, but was never implemented, or introducing a feature thought to have existed during the restoration period, but for which there is insufficient documentation.

4.5 GUIDELINES MATERIALS

4.5.2 WOOD AND WOOD PRODUCTS

It is important to identify the cause of any damage to a wooden building element before beginning a Preservation treatment. For the former machine shop of the North Pacific Cannery in Port Edward BC, exposure to marine conditions caused the exterior wood cladding to deteriorate.

Using minimally destructive testing methods can help evaluate the condition of wood without damaging it. Here a resistance measuring micro drill is being used to evaluate the condition of a log wall at Fort Walsh, NHSC in Saskatchewan. A drilling needle penetrates the wood at a constant speed and measures the resistance encountered to advance the drill bit. The resistance the wood offers indicates its condition: low resistance can indicate decay.

Wood was often used in modern buildings as a finish to contrast with more industrial materials, or as part of an acoustical treatment on ceilings and walls. The wood ceiling and column claddings of the Beaver Lake Pavilion in Montreal were carefully preserved as part of the recent rehabilitation of the pavilion.

Preserving the wood doors of the Langevin Block in Ottawa included carefully dismantling the doors to permit the damaged and decayed wood to be repaired.

4.5.2 WOOD AND WOOD PRODUCTS

GENERAL GUIDELINES FOR PRESERVATION, REHABILITATION AND RESTORATION

	Recommended	Not Recommended	Quality Measure	Has the QM been Met?
1	**Understanding** the properties and characteristics of wood and its finishes or coatings, such as its species, grade, strength and finish, or the chemical make-up of its coating.			
2	**Documenting** the location, dimension, species, finish and condition of wood before undertaking an intervention.	Undertaking an intervention that affects wood, without first documenting its existing characteristics and condition.		
3	**Protecting** and maintaining wood by preventing water penetration; by maintaining proper drainage so that water or organic matter does not stand on flat, horizontal surfaces or accumulate in decorative features; and by preventing conditions that contribute to weathering and wear.	Failing to identify, evaluate and treat the causes of wood deterioration.		
4	**Creating** conditions that are unfavourable to the growth of fungus, such as eliminating entry points for water; opening vents to allow drying out; removing piled earth resting against wood and plants that hinder air circulation; or applying a chemical preservative, using recognized conservation methods.			
5	**Inspecting** coatings to determine their condition and appropriateness, in terms of physical and visual compatibility with the material, assembly, or system.			
6	**Retaining** coatings that help protect the wood from moisture, ultraviolet light and wear. Removal should be considered only as part of an overall maintenance program that involves reapplying the protective coatings in kind.	Stripping paint or other coatings to reveal bare wood, thus exposing historically coated surfaces to moisture, ultraviolet light, accelerated weathering and mechanical wear.		
7	**Removing** damaged, deteriorated, or thickly applied coatings to the next sound layer, using the safest and gentlest method possible, then recoating in kind.	Using destructive coating removal methods, such as propane or butane torches, sandblasting or water-blasting. These methods can irreversibly damage woodwork.		

4.5.2
WOOD
AND WOOD
PRODUCTS

ADDITIONAL GUIDELINES FOR REHABILITATION PROJECTS

	Recommended	Not Recommended
19	**Repairing** wood elements by patching, piecing-in, consolidating or otherwise reinforcing the wood, using recognized conservation methods. Repair might include the limited replacement in kind, or replacement with compatible substitute material, of extensively deteriorated or missing wood, where there are surviving prototypes. Repairs might also include dismantling and rebuilding a timber structure or wood assembly, if an evaluation of its overall condition determines that more than limited repair or replacement in kind is required.	
20	**Replacing** in kind an irreparable wood element, based on documentary and physical evidence.	Removing an irreparable wood element and not replacing it, or replacing it with an inappropriate new element.

HEALTH, SAFETY AND SECURITY CONSIDERATIONS

21	**Removing** or encapsulating hazardous materials, such as lead paint, using the least-invasive abatement methods, and only after adequate testing has been conducted.	

SUSTAINABILITY CONSIDERATIONS

22	**Selecting** replacement materials for character-defining old-growth, exotic, or otherwise unavailable wood, based on their physical and visual characteristics.	

ADDITIONAL GUIDELINES FOR RESTORATION PROJECTS

	Recommended	Not Recommended
23	**Repairing**, stabilizing and securing fragile wood from the restoration period, using well-tested consolidants, when appropriate. Repairs should be physically and visually compatible and identifiable on close inspection for future research.	Removing wood from the restoration period that could be stabilized and conserved. Replacing an entire wood element from the restoration period when repair and limited replacement of deteriorated or missing parts is possible. Using a substitute material for the replacement that neither conveys the same appearance as the surviving wood, nor is physically or chemically compatible.
24	**Replacing** in kind a wood element from the restoration period that is too deteriorated to repair, based on documentary and physical evidence. The new work should be well documented and unobtrusively dated to guide future research and treatment.	Removing an irreparable wood element from the restoration period and not replacing it, or replacing it with an inappropriate new element.

Thank you

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