une
University of
New England

GIRT

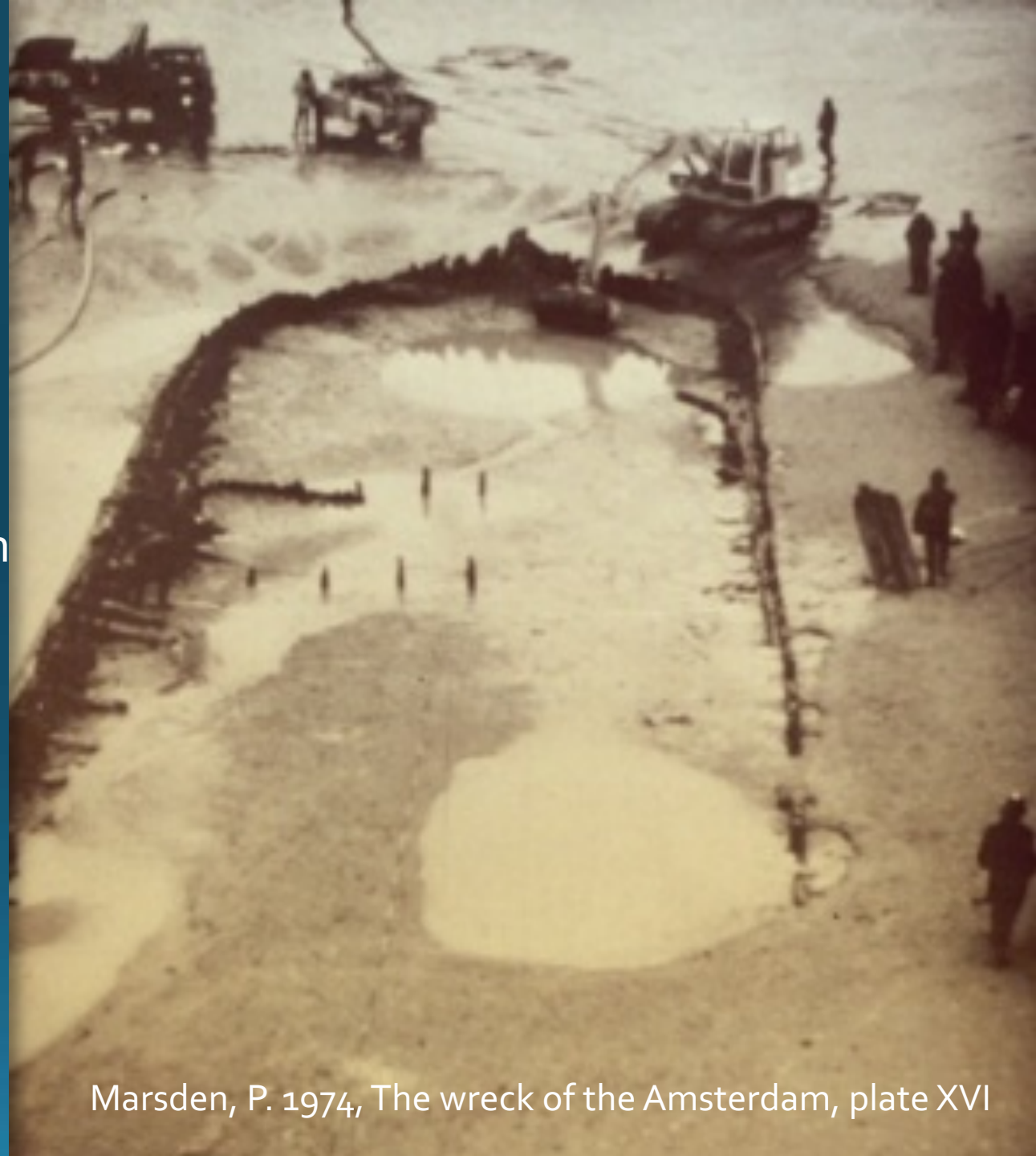
Gathering Information via Recreational and Technical

Scientific Divers

'Our land is girt by sea', so dive into an ocean full of history!

Why In Situ 'Preservation'?

- Need to preserve heritage for the future
- Well developed protection system by law
- Enormous amount of newly discovered sites and insufficient resources to excavate
- Cost effective option (pragmatic - excavation can be expensive)
- Is a minimum action between discovery and excavation
- Lack of conservation knowledge, resources and staff with expertise
- Monitoring sites vital to informed science based site management decisions



Marsden, P. 1974, The wreck of the Amsterdam, plate XVI

Background

- UNESCO –*in situ* as a first option
- Australia - 8,000 protected Historic Shipwrecks. New Zealand - 2195 shipwrecks
- The management balances protection of shipwrecks with maintaining public access for recreational, scientific and educational purposes
- Thorough documentation is required to assess the physical condition of sites
- Approximately 15-20 maritime archaeologists employed to manage UCH
- Only 7-10 maritime archaeological objects conservators in Australia
- < 5 diving conservation scientist

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Background

- Australia ~ of 112 site assessments only 20 sites have been fully assessed for physical, chemical, biological and electrochemical effects by conservation scientists
- *Longitudinal* environmental documentation of even basic site formation parameters will create better understanding of the dynamic nature of each site's environment driving preservation and deterioration and site formation processes
- A premise of GIRT is that trend observations of the macro environment can be used to note stability of condition
- Engaging the coordinated efforts of a group of 'recreational' divers for 'citizen science' site assessment could be a 'game changer'

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Lack of conservation knowledge (and/or budget)

- One of the biggest problems is the lack of conservation facilities and expertise
- Conservation is expensive
- Therefore it is very important to choose which sites to excavate

Aretefacts from the *Vasa* 1628 (Stockholm, Sweden)

What is the definition of preservation?

- ‘The action of preserving something.’
- Synonyms: conservation, protection, maintenance, care, safeguarding, keeping, *or*
- ***The process of working to protect something valuable so that it is not damaged or destroyed,*** *or*
- To keep up; maintain: to preserve *historical monuments*.

What does UNESCO say about *in situ* preservation?

Rules relatad to activities directed at underwater cultural heritage (See manual Activities directed at underwater cultural heritage UNESCO 2012)

I. General principles

- **Rule 1.** The protection of underwater cultural heritage through ***in situ preservation*** shall be considered as the **FIRST OPTION**.

Management of UCH
What does this mean in practice?

Management means that sites and the information they contain, are safeguarded over a long period of time while encouraging and facilitating appropriate public access.

That sites are preserved so they can be investigated according to international standards such as the UNESCO Convention on the Protection of the Underwater Cultural Heritage (Paris 2001).

Archaeologists, conservators, policy makers and the public are all involved in the management and protection of underwater cultural heritage.

The *in situ* preservation of sites is an integral component of this management process.

To achieve effective management and know that sites are actually being protected, active monitoring of sites is required.

Why not *in situ* preservation?

Reasons to decide against *in situ* preservation include:

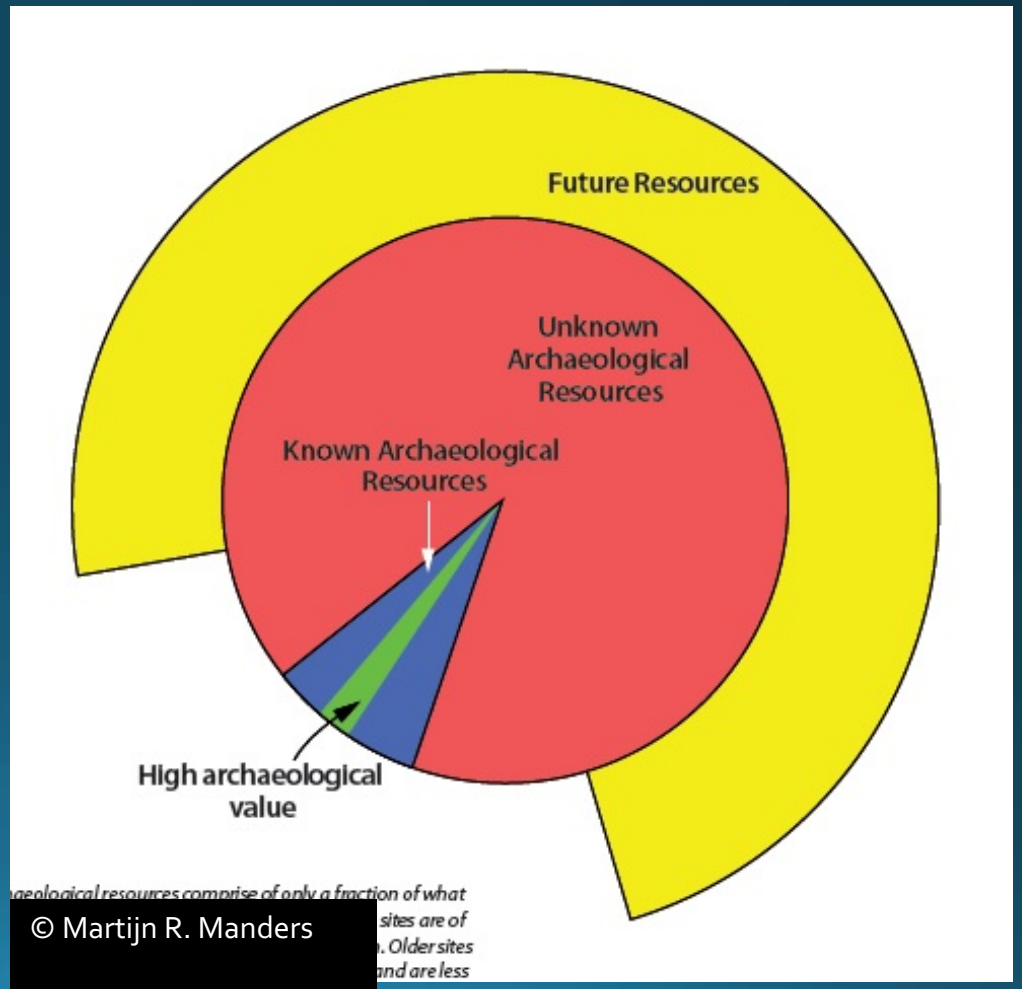
- External factors that are prohibitive.
- Substantive reasons to excavate partially or completely.

Rule 1 of the 2001 Convention explicitly mentions three activities directed at underwater cultural heritage that can be authorized:

* Protection of that heritage.
* Making a significant contribution to protection or knowledge or,
* Enhancement of underwater cultural heritage.

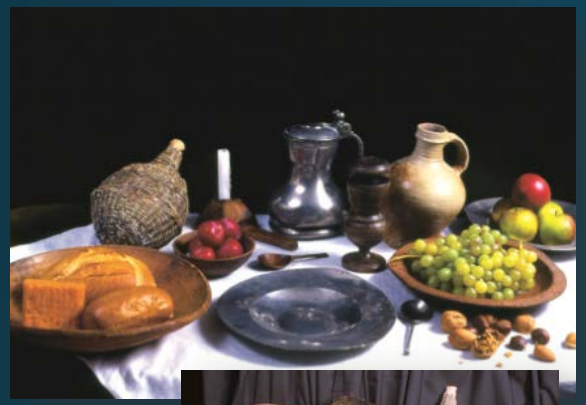
Another view - A representative proportion of our maritime past has to be preserved for future enjoyment and research

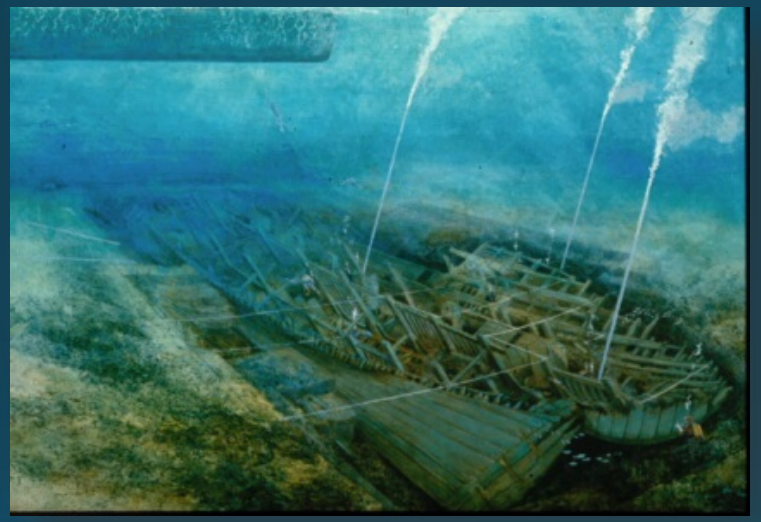
- The known archaeological resources comprises only a fraction of what remains in the seabed.
- **Only a few sites are of high archaeological value and it is important to identify them.**
- Older sites, are less visible, are usually more deteriorated, but are often protected under sediments.
- More modern sites are often more exposed, under greater threat and sometimes subject to different opinions.
- Therefore, it is important to determine a sites value.

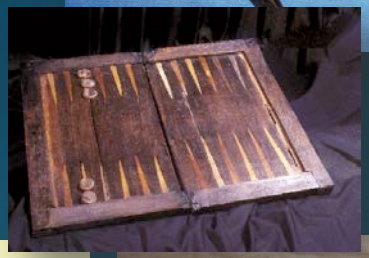


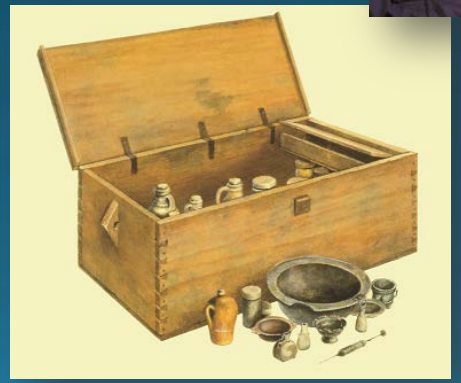
Shipwrecks and other sites are ‘time capsules’

- Every shipwreck (or site) has its own unique story to tell. Their value is their story.
- The story is discovered through the sum of all of the associated objects: ship, ships fittings, personal belongings, armament and cargo.





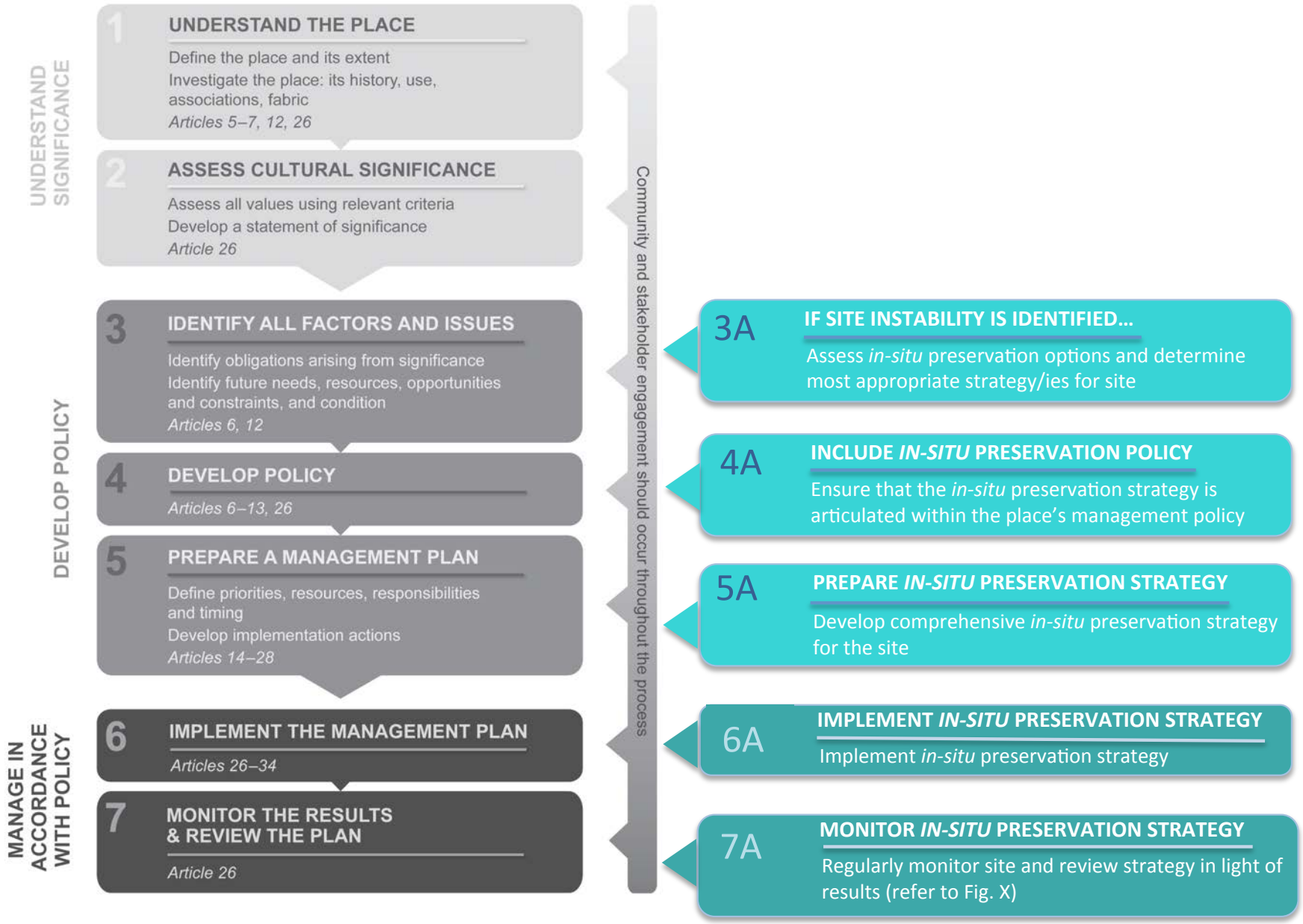



In-situ Preservation Guidelines and Protocols

- Guidelines developed for primarily by UCH managers in Australasia
- Concepts transferable internationally
- Contribute to growing body of scientific knowledge of *in-situ* preservation & reburial
- 8-point Protocol based on observations & testing (developed by Gregory and Richards)
- Aim to make *in-situ* preservation achievable, with a sound, scientific basis for selection of methodologies
- Common terminology defined and flow charts developed to assist management policy and assist with decision making

In-situ Preservation within the Burra Charter Process



8-point Protocol

(Gregory (2010) and Richards (2011))

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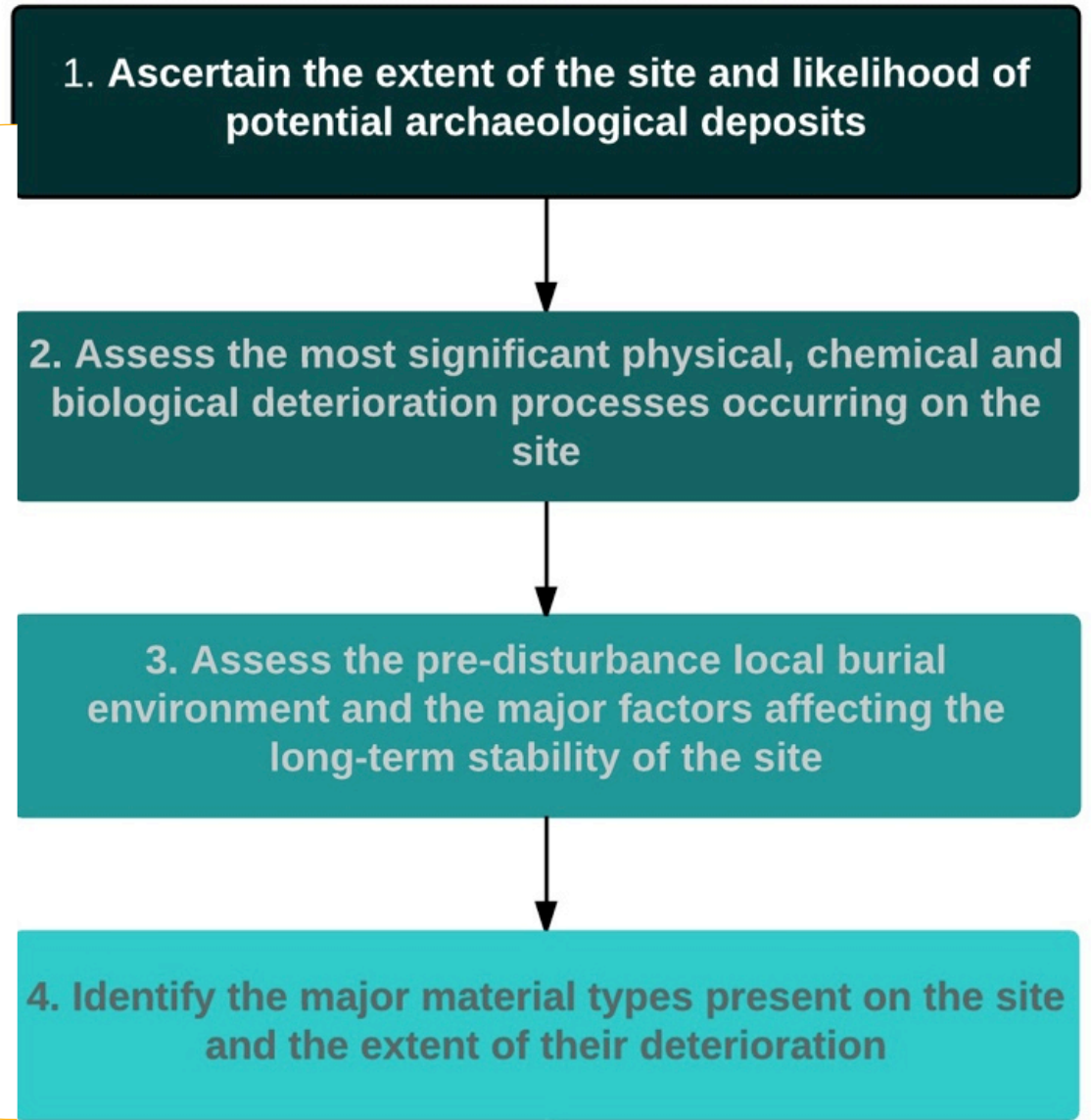

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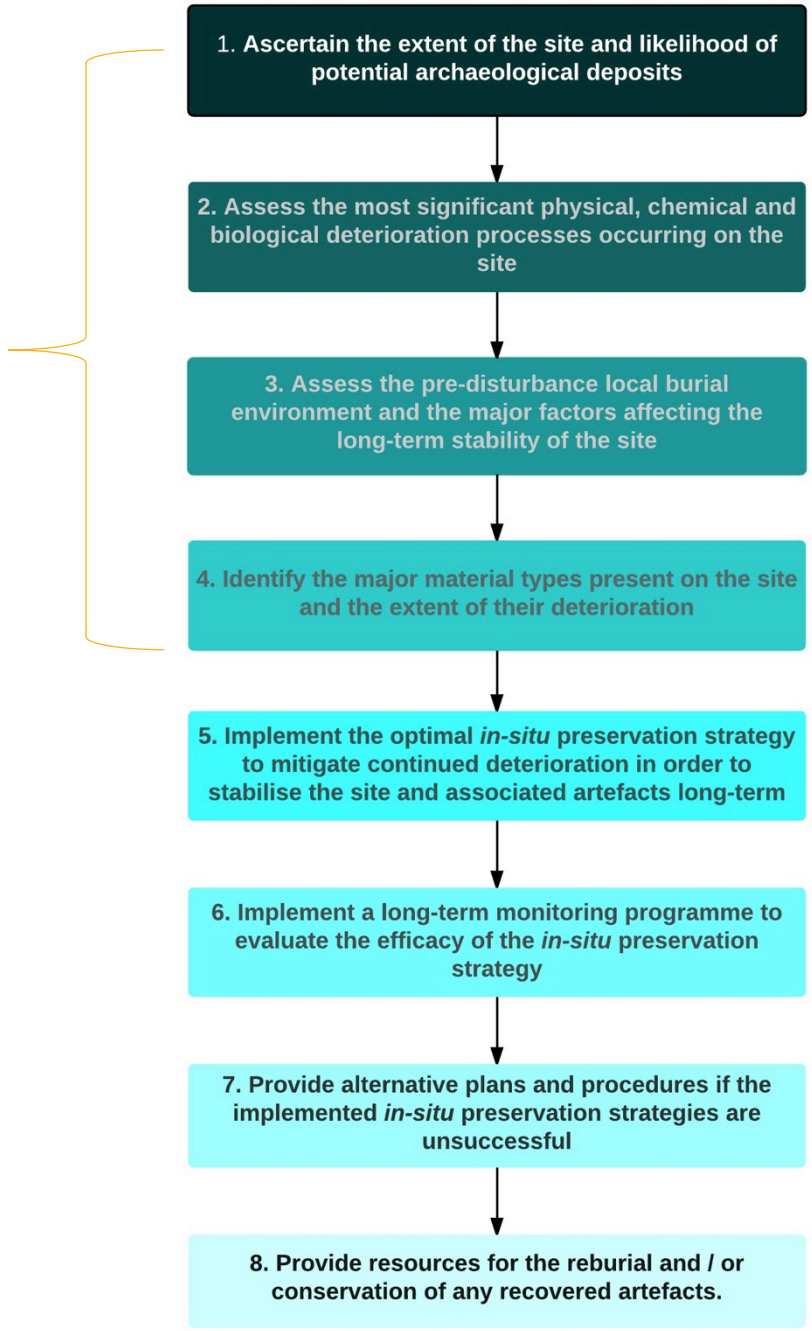
8-point Protocol

(Gregory (2010) and Richards (2011))



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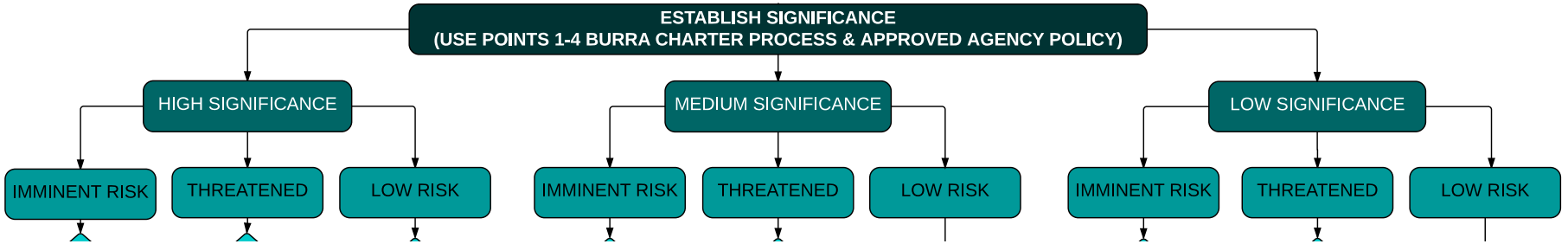
IN-SITU PRESERVATION PROCESS



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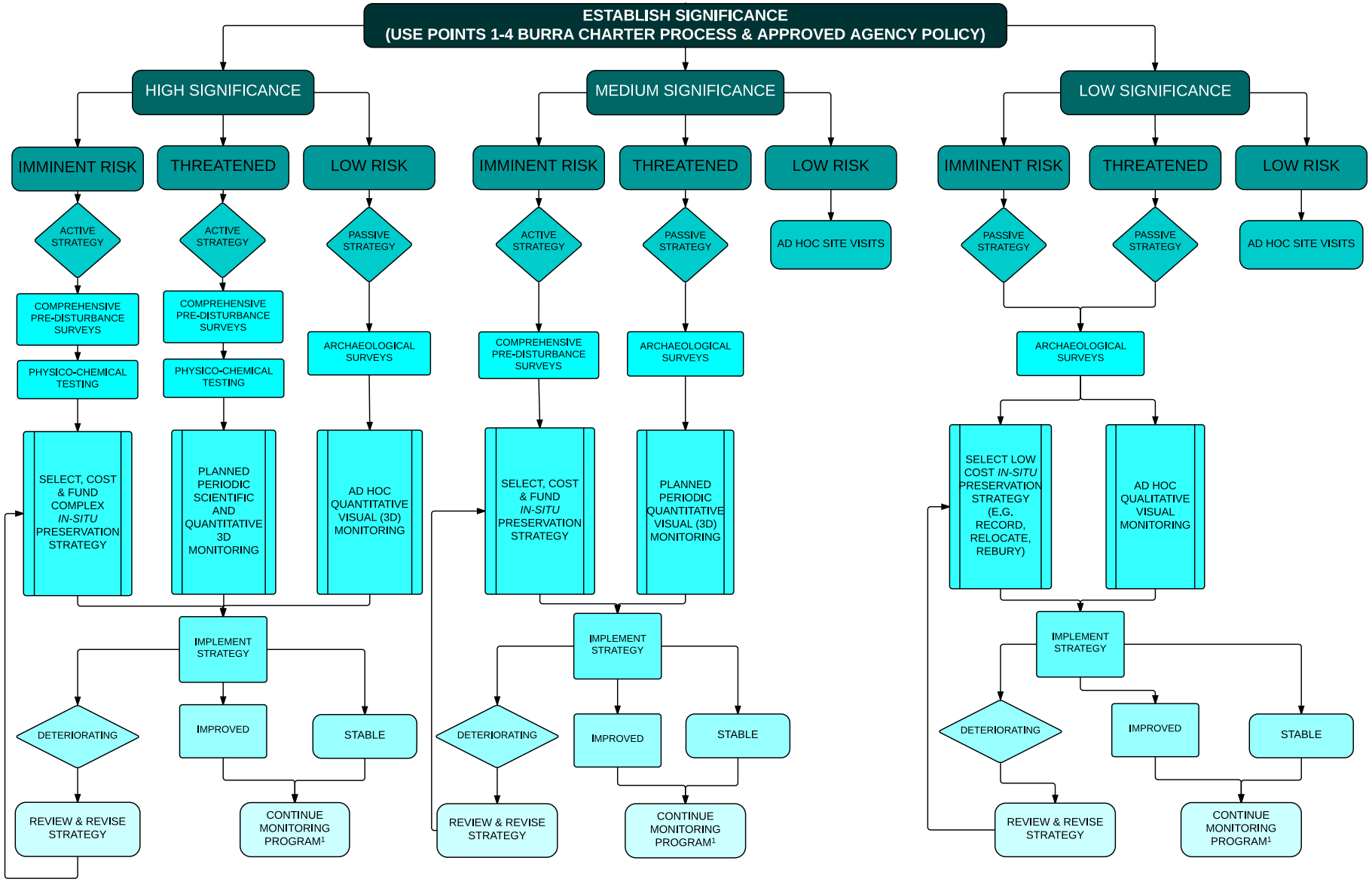

1. If a threatened site improves or remains stable after a pre-determined number of monitoring cycles, managers may consider downgrading it's risk rating & follow the 'low risk' column.

Summary

- *In situ* preservation is the **FIRST RULE** in the UNESCO Convention and is considered as the **FIRST OPTION** for archaeologists to consider.
- *In situ* preservation normally requires legal and specific physical protection of the site
- Protecting a site carries a long term commitment.
- Different threats determine the way sites are protected.
- Monitoring a site for changes is required to inform science based decision making in heritage management and to facilitate preserving the site for perpetuity.
- **GIRT Scientific Divers have a clear role in monitoring a site's condition that could inform into the management of their adopted site.**

References

- **Training Manual** for the UNESCO Foundation Course on the Protection and Management of Underwater Cultural Heritage in Asia and the Pacific
- **Australian National Shipwrecks Database**
- **Australian Historic Shipwreck Preservation Project**

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DIVE INTO AN OCEAN FULL OF HISTORY

Supported by:

Wreck Check Inc.

Australasian Institute for Maritime Archaeology

Nautical Archaeology Society

une University of New England

This project has been approved by the Human Research Ethics Committee of the University of New England