Management Plan for the Historic Shipwreck *Hokitika* 1871—1872

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PREAMBLE

This draft document is one of 75 proposed management plans for shipwrecks along the Western Australian coastline that are protected under the Commonwealth *Historic Shipwrecks Act 1976*. The document deals only with the wreck of the *Hokitika*, which was gazetted an historic wreck in 1977. Although the remains of the vessel have yet to be located, it is important to formulate a general plan of management that can be implemented when the wreck is eventually found.

The plan was prepared by the Western Australian Maritime Museum, Fremantle, with the

approval and financial support of DASET.

The development of this Management Plan is based upon the National Historic Shipwrecks Program's, Statement of Principles for the Management of Shipwreck Sites, and the criteria outlined in the Guide-lines for management of Australia's historic shipwrecks, published by DASET.

SUMMARY

The purpose of the Management Plan is twofold. Firstly, to assess and describe the heritage significance of the historic shipwreck, *Hokitika*. Secondly, to provide appropriate strategies for the management of the wreck site and its associated artefacts if and when the vessel is located. This document is divided into four parts.

Part 1 outlines the scope of the *Historic Shipwrecks Act* and the responsibilities of instrumentalities and individuals in the administration of the Act.

Part 2 places the *Hokitika* in its historical context with a brief history of the vessel and the wrecking event. A summary of the inquiry into the circumstances of the wrecking is given, followed by a description of the probable wreck area. The information outlined in Part 2 provides the basis for the assessment of cultural significance in Part 3. A Statement of Significance is derived from the assessment process.

The plan highlights various constraints, possible threats and research opportunities which may affect the archaeological and structural integrity of the wreck.

Part 4 provides a general statement of management policy and recommendations for implementation of the policy.

PART 1. BACKGROUND

INTRODUCTION

This document is a plan of management for the historic shipwreck *Hokitika* (1871 -1872).

Scope of the management plan

The scope of this management plan encompasses the wreck site, artefact collections and records relating to the *Hokitika*.

Legislation: Historic Shipwrecks Act 1976

The Commonwealth Historic Shipwrecks Act 1976, gives legal protection to all shipwrecks declared to be historic, lying in Australian waters below the low water mark. Responsibility for the administration of the Act is vested in DASET. However, under the provisions of the Act, the Federal Minister for DASET has delegated the responsibility for managing the site and it's associated materials to the Western Australian Museum, which has further delegated responsibility for the practical management of the site to the Western Australian Maritime Museum.

Responsibilities of the Western Australian Museum

The Museum is responsible for the preservation and interpretation of the site (site management), the conservation, documentation, storage and display of artefacts (collection management) and the documentation of all activities associated with the site (document management).

Responsibilities of archaeologists: legislative-ethical.

As custodians of the shipwreck and associated artefacts, archaeologists must comply with the requirements of the *Historic Shipwreck Act 1976*, the *Protection of Movable Cultural Heritage Act*, 1986 and the *Museum Act 1969*.

They are required to adhere to the standards of relevant professional bodies such as: the International Council of Museums (ICOM), the Australian Institute for Maritime Archaeology (AIMA), and the Australian Institute for Conservation of Cultural Materials (AICCM), and be guided by: AIMA Code of ethics, ICOMOS Burra charter, ICOM Code of ehics for museums, AICCM Code of ethics and guidance for conservation practice and Ownership of cultural property and the UNESCO Convention on the means of prohibiting and preventing iillicit import, export and transfer of ownership of cultural property.

Responsibilities of the public

Members of the public may not disturb, remove or destroy material from any wreck site that is protected under the Act.

Persons finding a shipwreck or any items associated with a shipwreck are required to report their findings to the Commonwealth Minister for the Arts, Sport, the Environment and Territories. Notification of a discovery in waters off the coast of Western Australia may be made to the Director of the Western Australian Museum.

PART 2. THE HOKITIKA

Historical context

The *Hokitika* was designed and built during the transitional period from sail to steam at a time when sailing ships were still considered to be more reliable and economical to operate on long-haul routes.

History of the vessel and its wrecking

The Hokitika was built in 1871 by Alex Hall and Co. at Aberdeen, Scotland for Melbourne merchants, John and David Spence. It was a 282-ton, three masted iron barque with one deck and a round stern with a female demi-figurhead and no galleries. The iron framed, clinker built vessel measured 131 ft 6 in [40.4 m] by 24 ft 10 in [7.6 m] by 12 ft [3.7 m].

Hokitika departed Newcastle, New South Wales on 7 October 1872 under the command of Captain Samuel Findlay. The vessel was bound for Mauritius on its first trading voyage, laden with a cargo of coal. At midday on 2 November, after a stormy crossing of the Bight, Hokitika was 20 km [12.5 miles] off Cape Leeuwin on the south-western tip of Western Australia. Three hours later the barque was making 12 km an hour [about 5 knots] in a heavy swell, when it struck a reef. Captain Findlay immediately made for land but within an hour of striking, the vessel sank. The eleven crew members reached land safely in the ship's two boats and after spending the night ashore, sailed north to reach Busselton three days later.

Apart from the ship's boats, nothing was salvaged from the *Hokitika*. The boats were subsequently sold at Busselton. In recent years, a wooden mast section was reported to be on the beach in the approximate vicinity of wreck.

Court of Inquiry

An inquiry was held to establish the circumstances of the loss. In the initial police report, dated 6 November, Captain Findlay had stated that he believed the *Hokitika* had sunk in 180 ft [55 m] of water, approximately 5 miles [8 km] from shore. (Corporal R. Furlong's report, 6 November 1872, CSR. 727, fol. 153). However, in evidence to the court of inquiry, Findlay claimed his vessel was 15.5 miles [25 km] from land when the grounding occurred. Ultimately, Captain Findlay was cleared of any blame for the loss, the verdict being that the vessel had struck an unmarked rock many kilometres out to sea from Cape Leeuwin.

It is clear from contemporary documents however, that not all agreed with the findings of the court. Commander Archdeacon wrote in a private letter to the Colonial Secretary.

At Fremantle I heard privately that the helmsman (who gave evidence) stated, after inquiry was over (upon being told I believe that he had lost the vessel) that the truth was that Captain and Mate were both drunk; and as this man had his clothes packed, anticipated an accident, one is apt to think there may be misinformation. Another report was also current at Fremantle, viz. that a herd boy, on the coast in vicinity of locality where the ship sank, stated that the vessel was close in that he saw the people on her decks. (Commander Archdeacon to Col. Sec. 6 December 1872, CSR. 727, folio 216)

Search for the Hokitika

Modern charts show that there are no reefs in the area Captain Findlay claimed to have struck rocks. Strong prevailing currents probably carried the *Hokitika* much closer to the coast than Findlay realized. The most likely place to run aground is on Cumberland Rock or Geographe Reef, both only 3 km offshore. Given that the damaged vessel drifted for 45 to 60 minutes after striking rocks, it is possible to estimate that the *Hokitika* went down approximatley 2 to 3 km north-east of Cumberland Rock, about 2 km from shore. This would give credence to Archdeacon's report of the herd boy's story, for at that distance, it would be quite possible to see people on the decks.

Archdeacon's Map.

The Maritime Museum undertook a search for the *Hokitika* in March 1984 while on an expedition to the *Cumberland* wreck. No conclusive evidence of the wreck was found. When

conducting a swimline search between the *Cumberland* wreck and the adjacent shoreline, divers found coal on the seabed. This coal may be from either the *Cumberland* or from the *Hokitika*.

Description of the wreck area: locality-environmental setting

The Cape Leeuwin area is pounded by heavy swells rolling in from the Southern Ocean. The seabed is comprised mainly of granite boulders and rocks, interspersed with patches of sand. The rocky areas are overgrown with a thick matting of kelp, which acts as a damper on the mechanical force of the swells. The present condition of the wreck is unknown.

Documentation

Archival documents relating to the *Hokitika* are located in the Battye Library, Western Australia. Copies of relevant documents are maintained at the Western Australian Maritime Museum in Fremantle.

PART 3. EVALUATION

ASSESSMENT OF CULTURAL SIGNIFICANCE

This management plan is based upon an appreciation of the significance of the vessel in terms of its historical, technical, social, archaeological and scientific value, as well as the educational and recreational value for the wider community.

The assessment for significance is based on the criteria outlined in the Guide-lines for management of Australia's historic shipwrecks.

Historical significance: concerned with range of context

Significant in the evolution and pattern of history.

Importance in relation to a figure, event, phase or activity of historic influence.

The *Hokitika* is significant in relation to the development of Australia's international shipping trade during the transitional period from sail to steam.

Technical significance: concerned with technical or creative accomplishment

Significant in possessing or contributing to technical or creative accomplishment.

Importance in demonstrating a high degree of technical or creative achievement for the period in question.

The archaeological evidence has the potential to yield information on 19th century iron shipbuilding techniques.

Social significance: concerned with community regard or esteem

Significant through contemporary associations with a community or communities in Australia for social, cultural or spiritual reasons.

Importance as cultural items or places highly valued for reasons of social, cultural, religious, spiritual, aesthetic or educational associations by a community.

The *Hokitika* is not endowed with a high degree of social significance.

Archaeological significance: concerned with research potential through investigation of material remains

Significant for the potential to yield information contributing to an understanding of history, technological accomplishment and social developments.

The present condition of the wreck is unknown, but if is found to be in a good state of preservation, it will be worthy of archaeological investigation.

Scientific significance: concerned with research potential through repeatable measured tests Significant in the potential to yield information about the composition and history of cultural remains through examination of physical and chemical processes.

Important in the generation or testing of hypotheses concerning the composition of cultural remains, the effects of original use and the effects of other environmental factors.

The *Hokitika* will be an appropriate site for inclusion in a comparative study of the relationship between the physical environment and the condition of the wreck. A comparative analysis of corrosion patterns will aid in the development of systematic management strategies for iron wrecks throughout Australia.

Educational and recreational significance: concerned with public education values Significant for its potential to contribute towards public education. Importance for its potential for public education through on-site (or other) interpretation.

The educational and recreational significance of the site cannot be assessed until the wreck has been located.

DEGREE OF SIGNIFICANCE

Rarity or representativeness on a national basis and/or a state basis.

Rare: concerned with the uncommon or exceptional

Significant in possessing rare, endangered or uncommon aspects of history.

Importance in demonstrating a distinctive way of life, custom, process, waterway use, function or design no longer practised, is in danger of being lost or is of exceptional interest to the community.

The remains of the *Hokitika* will provide a rare example of a 19th century iron sailing vessel built expressly for Australian clients for operating in Australian waters.

Representative: concerned with the typical or characteristic

Significant in demonstrating the characteristics of a class of cultural items.

Importance in demonstrating the principal characteristics of the range of human activities (including the way of life, philosophy, custom, process, waterway use, function, design or technique).

The *Hokitika* is representative of the type of sailing vessel engaged in international trade during the 1870s. The loss of the vessel is representative of the risks involved in seafaring in the age of sail.

STATEMENT OF SIGNIFICANCE

The *Hokitika's* significance is reflected in the fact that the vessel's remains have the potential to contribute to the knowledge of iron shipbuilding techniques of the late 19th century.

CONSTRAINTS

In the formulation of a management plan, consideration must be given to certain environmental, administrative and legislative constraints.

Environmental constraints

The Management Plan cannot be implemented until the *Hokitika* has been located.

Significance constraints

There is a precedence of importance in attributes of significance which, in the case of the *Hokitika*, cannot be properly assessed until the wreck has been located and examined.

Legal, statutory and regulatory constraints

There are no restrictions to public access to the site, however the *Historic Shipwrecks Act 1976* ensures the protection of the fabric of the wreck from undue human intervention. Sections 13 and 15 stipulate that the wreck site must not be disturbed or material removed by any person without permission from the Minister responsible for the administration of the Act.

Environmental threats

All wreck sites are prone to deterioration by physical forces, chemical corrosion and biological action. Because of the dynamic nature of the marine environment in the area the *Hokitika* was lost, exposed material would probably be subject to destructive mechanical forces. Wave action increases the oxygen content of sea water, creating an environment conducive to active corrosion of metals.

Human threats

The protection of historic shipwrecks must be balanced against the requirement to increase community awareness and provide public access to the sites.

The discovery of the *Hokitika* will probably result in an influx of divers to the wreck site. Some damage to the fabric of the wreck may occur through the inadvertent actions of fishing parties and recreational divers or from illegal activities such as vandalism or the pilfering of some artefacts. However, the general area is subject to strong surging swells for most of the year

which would tend to limit recreational diving activites, thereby substantially reducing the risk of damage.

RESEARCH POTENTIAL

A long-term conservation program will be established to monitor the corrosion rate of the wreck. Measurements will be taken regularly and the resulting data will be used to determine the approximate 'life' of the iron remains in its present environment. This information will be corelated with data from other iron shipwrecks in Australian waters.

PART 4. MANAGEMENT STRATEGIES

MANAGEMENT POLICY STATEMENT

The policy is derived from the statutory requirements of the *Historic Shipwrecks Act 1976* and the Statement of Significance, with consideration given to the constraints outlined above.

OBJECTIVES

Preserve and protect the fabric of the wreck.

The provisions of the *Historic Shipwrecks Act 1976* will continue to apply to the wreck site and the collections.

The structural and archaeological integrity of the wreck will be preserved.

The site will be reserved for passive recreation only.

No archaeological or conservation procedures will be undertaken that could cause unnecessary disturbance or damage to the fabric of the wreck.

Activities on the wreck site will be monitored.

Wreck inspections will be carried out at regular intervals.

Conserve, curate and display artefacts associated with the wreck site.

Material recovered from the *Hokitika* wreck site or any associated land site will be in the custody of the WA Maritime Museum. Artefacts will be conserved, curated and displayed according to professional standards.

Members of the public in possession of *Hokitika* relics will be encouraged to pass them on to the WA Maritime Museum so that the artefacts may be conserved and documented.

Generate, catalogue, store and disseminate documentation regarding the *Hokitika*.

All Maritime Museum activity associated with the site will be documented.

The documents and pictorial records will be catalogued and stored in such a manner as to be accessible to bona fide researchers.

The results of archaeological research will be published.

Documents generated by the Maritime Museum will be subject to copyright.

Develop interpretation and education programmes for the community and facilitate public access to historic shipwrecks.

Responsible community participation in the management process will be encouraged.

Arrangements will be made for the promotion of public access and enjoyment of the site.

Interpretive materials will be produced to:

- (a) Enhance public awareness of the location of the wreck site.
- (b) Emphasise the historic status of the site and the public's responsibility towards protected wreck sites.

POLICY IMPLEMENTATION

In the event that the wreck of the *Hokitika* is found, the management strategies outlined below will be implemented. The success of the policy implementation will largely dependent upon the involvement of local interest groups in the management process, particularly as the wreck site is so remote from Perth.

Initial site survey

A non-disturbance site survey and verification of the wreck remains will be undertaken by the Maritime Museum.

Enforcement of Regulations

Section 22 of the *Historic Shipwrecks Act 1976* gives the Minister the authority to appoint suitable persons to be inspectors for the purpose of enforcing the provisions of the Act. It is proposed that officers of the WA Maritime Museum will be appointed as inspectors. At present, members of the Commonwealth and State police forces automatically have authority to act as inspectors.

Site surveillance

Officers of Marine and Harbours, Fisheries and Wildlife and Conservation and Land Management, (CALM) are encouraged to consider the notion of monitoring activities in the vicinity of protected wreck sites. As the wreck area is adjacent to the Leeuwin-Naturaliste National Park, surveillance of the wreck site will enhanced by the vigilance of CALM rangers and Fisheries and Wildlife inspectors. An informal arrangement exists between the Maritime Museum and the officers of CALM, National Parks, and the Fisheries Department, authorising Rangers to act on the behalf of the Museum for the purpose of reporting persons found interfering with protected shipwrecks. There are no arrangements to empower these officers to enforce the Act.

Wreck inspection

With the approval of the WA Maritime Museum, members of the Maritime Archaeological Association of Western Australia (MAAWA) may carry out annual non-disturbance inspections and report to the Museum where there is evidence of human interference or significant environmental damage to the site.

The WA Maritime Museum will inspect the wreck site every five years or more frequently if it is considered necessary.

Site conservation

The physical, chemical and biological environment of the site will be monitored. Measurements of sand movements, pH values, electrical conductivity, oxygen saturation, water temperature and marine organism concentrations will recorded and analysed. Only data collection techniques that ensure the maximum information for the minimum disturbance will be employed.

In situ corrosion reversal techniques will be applied (if necessary), to preserve the structural integrity of the site.

Collection management

The Museum will actively encourage the public to return any relics removed from the site. Suitably worded notices will be placed in appropriate places, advising the public to the effect that; (i) it is illegal to keep items from shipwrecks as 'souvenirs.'

- (ii) material taken from shipwrecks will deteriorate and eventually be destroyed without proper conservation treatment.
- (iii) artefacts can be returned to the Maritime Museum anonymously, without fear of prosecution.
- (iv) recovered materials may go on display in the local region if a suitable display venue is available.

The collection will be studied and interpreted and the findings published.

The condition and the visual presentation of the artefacts on display at the WA Maritime Museum will be reviewed regularly.

Document management

The WA Maritime Museum will ensure that all documents associated with the *Hokitika* will be

collated, stored and catalogued in such a manner as to be accessible to bona fide researchers and that the laws of copyright will be observed. Documents relating to the *Hokitika* will be housed in three locations.

Archival documents are located in the Battye Library (Western Australian History Library). Conservation reports for artefacts will be maintained in the Conservation Department of the WA Maritime Museum.

The WA Maritime Museum will be responsible for archaeological records, pictorial collections and published and unpublished reports.

Any material removed from the *Hokitika* wreck site will be recorded in an artefact collection register and a collection catalogue will be created on a database, indicating where each item is displayed or stored.

A pictorial record will be made of all archaeological work associated with the wreck and the pictorial collection will be catalogued and stored at the WA Maritime Museum. Duplicates of photographs and transparencies from the photographic collection will be made available to other researchers.

Bibliographic information of documents held at the WA Museum can be accessed via inhouse computer databases.

Publication

The publication and dissemination of scholarly research relating to the *Hokitika* will be encouraged. The interests of the wider community will be met by the publication of popular articles and interpretive materials.

Education and interpretation programmes for the community

If environmental conditions permit, an underwater information plaque may be placed adjacent to the wreck site, providing divers with a brief summary of the circumstances surrounding the loss of the vessels and a pictorial interpretation of the wreck site.

Public access

There are no legal limitations to public access to the wreck for recreational purposes, although access may be limited by virtue of the nature the site.

Resources and funding

All of the management strategies outlined above can be implemented by the WA Museum without the necessity for special resources or funding.

Review Process

The Management Plan is to be reviewed every five years.

In the event that the *Hokitika* is located, the strategies outlined in the Management Plan will be implemented.

The frequency of wreck inspections will be determined by the archaeologist-in-charge, based on the criteria outlined above.

The integrity of any artefacts removed from the wreck will be reassessed annually and further conservation treatments instigated if necessary.

In the event of future amendments to any relevant legislation, the Management Plan will be reviewed immediately to ensure that it complies with all statutory requirements.

REFERENCES

Australia, 1976, Historic Shipwrecks Act 1976.

Australia, 1980, Historic Shipwrecks Amendment Act 1980.

Australian Institute for Maritime Archaeology, 1986, A code of ethics. Australian Institute for Maritime Archaeology Newsletter, 5(1):6-8.

Captain Findlay, Report, November 1872, CSR 727, folio 153.

Commander Archdeacon to Colonial Secretary, 6 December 1872, CSR 727, folio 216.

Corporal R. Furlong's report, 6 November 1872, Police Records, Acc. No. 129.

CALM, 1992, Memorandum of understanding between CALM and the Western Australian Museum for the management of Western Australian marine parks and marine nature reserves in respect of historic shipwrecks. (Draft).

DASET, 1990, An assessment of the effectiveness of existing legislative arrangements for protecting and preserving Australia's underwater cultural heritage. Department of the Arts, Sport, the Environment, Tourism and Territories, Canberra.

DASET, 1990, *Handbook of inspectors*. Department of the Arts, Sport, the Environment, Tourism and Territories, Canberra.

DASET, 1991, Guide-lines for management of Australia's historic shipwrecks. Draft report, 17 September 1991. Department of the Arts, Sport, the Environment and Territories, Canberra.

DASET, 1992, Statement of principles for the management of shipwreck sites. Department of the Arts, Sport, the Environment, Tourism and Territories, Canberra.

Henderson, Graeme and Kandy-Jane, 1988, *Unfinished voyages: Western Australian shipwrecks 1851–1880*. UWA Press, Nedlands.

Henderson, G. J., 1990, Acquisitions policy as it relates to shipwreck material at the Western Australian Museum. Bulletin of the Western Australian Institute of Maritime Archaeology, 14(1):56.

ICOMOS Australia, 1988, The Australia ICOMOS Charter for the conservation of places of cultural significance (Burra Charter).

ICOMOS Australia, 1992, Papers from the ICOMOS workshop on the underwater cultural heritage, Fremantle, March 1992. Organised as a part of the Australia ICOMOS Conference by the ICOMOS International Committee on Underwater Cultural Heritage.

WA Maritime Museum, Fremantle, Western Australia.

Noble, V. E., 1988, Historical archaeology and the management of cultural resources. *Cultural Resource Management Bulletin*, Oct-Dec 11(5-6):2-6.

Preliminary Court of Inquiry, Herald) 23 November 1872.

Sullivan, S., 1986, The 'management' in cultural resource management: training for public archaeologists and other cultural resource managers. Ward, G. K., (ed.), *Archaeology at ANZAAS*, *Canberra*. Canberra Archaeological Society.