

Master's thesis



Marine and Underwater Cultural Heritage  
Management, Robben Island, Cape Town,  
South Africa:  
Current State and Future Opportunities

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## **Declaration**

I hereby confirm that I am the sole author of this thesis and it is a product of my own academic research.

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Johanna Humphrey

# **Abstract**

Defined as “all traces of human existence having a cultural, historical or archaeological character which have been partially or totally under water” by UNESCO, Underwater Cultural Heritage (UCH) sites are often critical for the understanding of local and international history. Increasing interest in UCH calls for more effective solutions to management challenges. These sites can be seen as common assets, with great potential for knowledge sharing and public enjoyment. Robben Island, South Africa, and its surrounding waters appear to provide great potential for UCH preservation and research. Indeed, at least 22 ships were lost around the Island during the period 1694-1976. The Island is renowned for being home to the high security prison during the Apartheid era where Nelson Mandela spent 18 of his 27 years in prison. After the democratization of South Africa, the Island became a symbol, leading to its inscription in 1999 as a UNESCO World Heritage Site (WHS). The boundaries of the WHS included the former one nautical mile security perimeter. But despite great potential, no mention of the cultural richness of the nautical zone can be found in the WHS designation. This research aims at clarifying the management status of the UCH while investigating opportunities for sustainable use. Data collection techniques included a literature and policy review, two semi-structured interviews and a series of personal communications.

Findings showed a clear lack of incorporation of the UCH sites in WHS management by Robben Island Museum (RIM). This has potentially led to deterioration of sites. Results also showed that the nautical area shows great potential for academic and tourism opportunities if challenges are addressed properly. The presence of these sites could be enhanced by the establishment of a shipwreck trail, both on land and underwater. It is recommended that further attention be given to UCH sites by RIM. Further investigation into sustainable use of sites could reveal great addition in the visitor experience combined with economic benefits. Improved relations between the management structure and the academic community would be welcomed for increased knowledge.



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# **Acronyms**

CIE - Centre for International Heritage

ICMP - Integrated Conservation Management Plan

MUCH - Maritime and Underwater Cultural Heritage

RIM - Robben Island Museum

SAHRA - South African Heritage Agency

UCH - Underwater Cultural Heritage

UNCLOS - United Nations Convention on the Law of the Sea

UNESCO - United Nations Educational, Scientific and Cultural Organization

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# **1 Introduction**

## **1.1 Robben Island, Heritage beyond the prison**

Underwater Cultural Heritage (UCH) sites are often critical for the understanding of local and international history. They appear as fascinating puzzle pieces of our complex history of coastal communities, colonial settlement and international trade.

Robben Island, South Africa, is a place of great symbolic meaning to the public, a heritage site that includes the Island's infamous political prison, where Nelson Mandela spent 18 of his 27 years in confinement. But the Island, a strategic place in the maritime landscape of South Africa for centuries, possesses a much richer history than just the prison, reflected in a wide variety of maritime and underwater cultural heritage sites (MUCH) on and around the Island. This includes a rich maritime landscape with onshore and underwater shipwrecks. A minimum of 22 ships (see Appendix A for table of identified shipwrecks) were lost around the Island during the period 1694-1976 (Werz, 1994).

In 1999, the Island was inscribed as a UNESCO World Heritage Site (WHS). The boundaries of the WHS included the former prison's one nautical mile security perimeter (UNESCO, 2014). Therefore, the UCH around the Island are included in the WHS boundary and are under the management of Robben Island Museum (RIM), the managing authority. But despite great potential, little mention of the cultural richness of the nautical zone can be found in the WHS designation and management documents by RIM. Why these UCH are not recognized in current management of the site, what protection they are currently provided, and, if they represent valuable assets in this maritime landscape, how they might be effectively integrated into the management planning process, are all questions that form the foundation of this research.

## **1.2 Maritime and Underwater Cultural Heritage**

Underwater Cultural Heritage (UCH) is defined in the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage as «all traces of human existence having a cultural, historical or archaeological character which have been partially or totally under water, periodically or continuously, for at least 100 years» (UNESCO, 2001). This definition includes structures,

buildings, artifacts and human remains, vessels, aircraft, other vehicles or any part thereof, their cargo or other contents, together with their archaeological and natural context; and objects of prehistoric character.

Maritime and Underwater Cultural Heritage (MUCH) research combines several approaches such as archaeology, anthropology, cultural heritage management, and marine sciences, and focuses on tangible and intangible heritage (Center For International Heritage Activities, 2014). Research on MUCH is largely focused on underwater sites, but may be combined with adjacent land-based maritime facilities to offer a more holistic approach.

### **1.3 Maritime Archaeology**

Maritime archaeology is a sub-discipline of the general field of archaeology. It is a discipline that specifically studies human interaction with the sea, lakes and rivers. These interactions are established through the study of physical remains: shoreside facilities, material remains, human remains and submerged landscapes. Shipwrecks are the most common example of maritime archaeological sites (Gibbins & Adams, 2001). The study of underwater archaeology began in the early 1930s, and then developed in the 1960' (Center For International Heritage Activities, 2014), when developments in diving technology made underwater sites more accessible by archaeologist but also more vulnerable to commercial exploitation. Dr. Bruno Werz introduced the study of maritime archaeology in South Africa in the late 1980's. The field can therefore be considered as still in development and evolving in South Africa.

### **1.4 Interest in Underwater Cultural Heritage management**

The practice of archeology stems from the natural curiosity of man to explore the past through artifacts, stories and legends. Study of archeological sites found in the marine environment can help increase knowledge and understand the history of these places, and such activities as boat building, commerce and trade routes offer insight into the maritime landscapes of coastal areas (Gaur and Vora, 2004), (Westerdhal, 1992). This heritage landscape can reflect thousands of years of settlement, exploration, immigration and maritime traditions. Conservation allows future

generations to be aware of and appreciate the past history told by these underwater sites, and gain some understanding of their cultural identity.

UNESCO estimates that over 3 million shipwrecks are spread across world's ocean floor. Some of these wrecks are over thousands of years old, a rare trace of civilization for the time period. Each wreck has a story, and the potential historical information it contains is unique and irreplaceable (Smith & Couper, 2003). The protection of shipwrecks is of serious concern and faces major challenges. These sites can be seen as common assets, with great potential for knowledge sharing and public enjoyment. Therefore, the main tool for protection lies in prohibiting commercial exploitation of heritage sites (UNESCO, 2014).

The available literature on threats and impact on underwater heritage is relatively well studied. Threats include fishing, farming, and development of renewable energy (Evans, Staniforth and al., 2009). But underwater heritage sites can also be a source of disturbance for natural living resources, and may pose hazards to navigation, interfering with shipping and impacts to recreational and commercial fisheries. More recent shipwrecks can also impact the esthetic of the coastal area (Symons, 2004). Therefore, management of such sites must be understood as wider than just conservation.

## **1.5 Robben Island**

### **1.5.1 Physical setting**

Robben Island is the largest of the Islands along the coastline of South Africa. It is a 3.4 by 2 km Island located in Table Bay. The Island's shore is mostly rocky with a stretch of sandy beach on its Eastern shore. Rocky beds and shallow sandy grounds characterize the marine area around the Island (RIM, 2012). The wave action is considerable with waves up to 6 meters around the Island and seasonal strong winds, which offer some indication as to why there are sunken vessels surrounding the Island (Werz, 1993).

### **1.5.2 History of the Island**

The earliest trace of human presence on the Island is by Indigenous Khoisan people prior to colonial occupation. This has resulted in the hypothesis that lower sea level created a connection to the mainland (RIM, 2012). From 1498 onwards, the Island, providing food and shelter to the first European explorers, was used as a gateway to the continent by sailors (Werz, 1994). With the first Dutch settlement in the Cape Town area being established in 1652, Robben Island served as a re-supply station for the Dutch East India Company ships en route to and from Asia (RIM, 2012). Following this period, the Island was used as a colonial prison from 1657 to 1921. During this period the Island also hosted a colonial hospital from 1846 to 1931. The hospital served as a banishment facility for the mentally ill and lepers. From 1939 to 1959, during World War 2, a military installation and naval base replaced the former facilities. It was strategically designed to be the first point of defense against a potential attack on Table Bay (RIM, 2012).

During the Apartheid era, the Island was home to the high security prison where political prisoners, as well as common law criminals, were detained. Several political prisoners detained on Robben Island became public figures including former South African President Nelson Mandela, who spent 18 of his 27 years in jail on Robben Island. Table 1 illustrates the history of the Island prior to 1994.

After the abolition of Apartheid and the election of Nelson Mandela as its first democratically elected president, Robben Island became a symbol of the oppression of Apartheid on the non-white communities (Corsane, 2006). In 1996, The Island was declared a National monument due to its symbolic importance (RMI, 2012). The following year it became a National Museum with the status of a Declared Cultural Institution as part of “the Legacy Projects” instituted by President Nelson Mandela (Corsane, 2006). The significance of the Island’s historical heritage and symbolic meaning was then internationally recognized when, in December 1999, the Island was inscribed as a UNESCO World Heritage Site.

Period	Main historical events	Maritime importance
Pre-1488	<ul style="list-style-type: none"> <li>• Possible habitation and exploitation of the natural resources by the Khoisan people.</li> </ul>	<ul style="list-style-type: none"> <li>• Fluctuating sea levels linking the Island to the mainland.</li> </ul>
1488- 1652	<ul style="list-style-type: none"> <li>• Passing of European exploration ships.</li> <li>• First recorded landing by Vasco da Gama's fleet in 1498.</li> </ul>	<ul style="list-style-type: none"> <li>• Robben Island is used as a communication outpost by sailors for other passing ships.</li> </ul>
1652-1795	<ul style="list-style-type: none"> <li>• Robben Island is used by Dutch colonist as a prison for common law and political prisoners from 1657.</li> </ul>	
1795-1802	<ul style="list-style-type: none"> <li>• British annexed the Cape.</li> <li>• Robben Island functioned as a prison mainly for military prisoners.</li> <li>• Island used as quarantine site for those with smallpox.</li> </ul>	<ul style="list-style-type: none"> <li>• Whaling rights granted to John Murray.</li> </ul>
1803- 1806	<ul style="list-style-type: none"> <li>• Peace Treaty of Amiens returns the Cape to Batavian Republic.</li> <li>• Convict prison re-established.</li> </ul>	<ul style="list-style-type: none"> <li>• John Murray forced to close the whaling station on the Island.</li> </ul>
1806-1910	<ul style="list-style-type: none"> <li>• Britain reoccupied the Cape after the defeat of Batavian soldiers at Battle of Blouberg.</li> <li>• Robben Island used as a prison for military, common law and political prisoners.</li> <li>• Robben Island as an infirmary for people with leprosy, mentally ill patients and the chronically sick.</li> </ul>	<ul style="list-style-type: none"> <li>• Whaling station re-established and re-closed.</li> <li>• Restrictions placed on fishing vessels to minimize opportunities for escape.</li> </ul>
1910-1961	<ul style="list-style-type: none"> <li>• Convict prison closed</li> <li>• Sanitary facilities closed</li> <li>• South Africa fought as member of the Allied Forces in WW2.</li> <li>• Decision to change the role of the Island from that of a Naval training base to a maximum security prison.</li> </ul>	<ul style="list-style-type: none"> <li>• Military and naval defenses established on Robben Island to protect Table Bay.</li> </ul>
1961- 1994	<ul style="list-style-type: none"> <li>• Apartheid era</li> <li>• High Security prison</li> </ul>	<ul style="list-style-type: none"> <li>• Creation of the 1 nautical restricted zone.</li> </ul>

Table 1: Events of Historical significance, from pre-1488 to 1994.



### 1.5.3 Maritime Cultural Landscape

Developed in 1992 by Christer Westerdahl, the concept of maritime cultural landscape was introduced for a more holistic understanding of underwater archaeology through the study of “human utilization of maritime space by boat: settlement, fishing, hunting, shipping and its attendant sub-cultures” (Westerdahl, 1992). The incorporation of ancient monuments on land improved the understanding of underwater sites but also, in a more general perspective, local maritime history.

The concept of maritime cultural landscape appears relevant to the study of Robben Island, as many heritage sites on land are largely sea-oriented. Before the opening of the Suez Canal in 1869 the safest sea route between Europe and the East ran past the southern tip of Africa, and South Africa played a critical role in world trade economy. Several major trade routes passed along the shore of the Western cape, and Robben Island played a role by resupplying ships (RMI, 2012). This explains the presence of shipwrecks of different nations in South African territorial waters. To this day, the Island’s location in Table Bay and proximity to the Cape Town harbor creates traffic close to its shore. Therefore, there are, not surprisingly, remains of shipwrecks along the inhospitable intertidal coastal areas of the Island (see Figure 1). These onshore wrecks include:

- *Chanson de la Mer*, (1986) at Shelly Beach
- *Han Cheng 2*, (1998) in Rangatira Bay
- *Sea Challenger*, (1998) in Rangatira Bay
- *Fung Thu*, (1977) on the South of the Island (Wikitravel.org, 2014)



*Figure 1:* Shipwreck on the Shore of Robben Island. Reprinted from Panoramio Google maps, 2014.

The Whaling station of Robben Island, established and operated by John Murray, ran discontinuously from the 1790s to 1906, and is a testimony of South Africa's whaling history (Deacon, 1996). Figure 2 illustrates the presence of whaling in Table Bay. The location of this station's owner, John Murray, later gave its name to Murray's Bay Harbor.



*Figure 2:* Whaling in Table Bay in the early nineteenth century. Reprinted from *The island*, by H. Deacon, 1996, Cape Town: Mayibuye Books, Univ. Of The Western Cape.

Murray's Bay Harbor, an important component of the maritime landscape of the Island, is situated on the east coast of the Island. It is a relatively small harbor, built in historical phases, with the first major works completed during WW2 (RMI, 2012). The harbor represents a key component of the maritime landscape as it acts as a gateway to the Island.

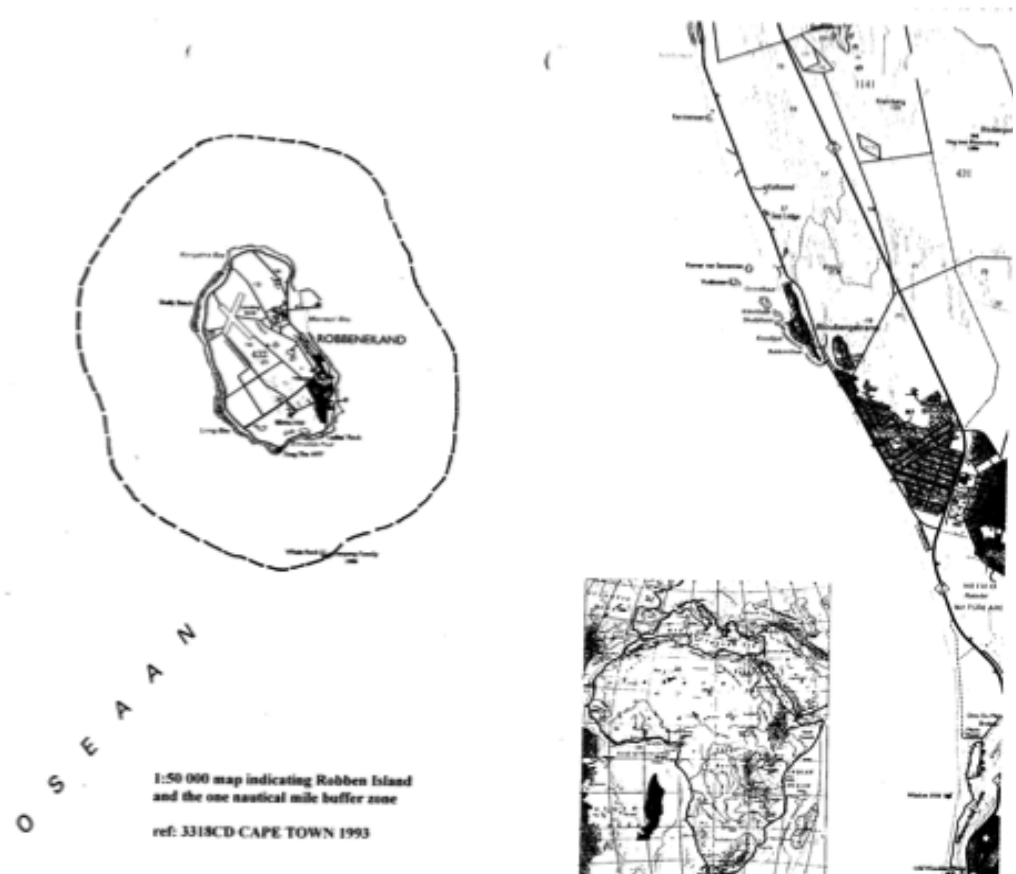
#### **1.5.4 Maritime natural resources**

Marine resources are protected under the Marine Living Resources Act 18 of 1998. Robben Island is a small part of the large and dynamic Table Bay environment. Marine living resources include seabirds, Cape fur seals and African Penguins. Eight species of whales and dolphins pass through the waters surrounding the Island, including southern right, humpback and common dolphins (RIM, 2013). The Island is prone to accumulation of marine debris and vulnerable to oil spills due to the proximity of the Cape Town harbor and the ship traffic going into and out of this major commercial harbor. Threats to marine living resources include illegal poaching, marine litter and insufficient breeding habitat. Robben Island has been identified as an Important Bird Area (IBA) under the Birdlife International programme, as nine species of seabird breed on the Island, of which two subspecies are endemic to southern Africa (RIM, 2013). Whereas seabird conservation has been seen by RIM as in direct conflict with human activity and the conservation of heritage resources (RMI, 2013), it would appear that conservation of coastal underwater cultural sites may have possible mutual benefits. This will be discussed later in the thesis. The protection of the natural living resources within the one nautical mile buffer zone has not yet been formalized (RIM, 2013).

#### **1.5.5 One Nautical mile buffer zone**

During the time the Island was used as a high security prison, a one nautical restricted zone was created as a security perimeter (Werz, 2013). No ship could approach the Island without authorization from the prison authorities, making escapes virtually impossible. The security perimeter around the Island increases the symbolic oppression conveyed by the presence of the political prison, which explains why it was included in the boundary of the UNESCO Robben Island World Heritage Site (UNESCO, 2014) (see Figure 3). Research into shipwreck incidents has identified 68 maritime casualties within the one nautical mile zone surrounding the Island, of which 22 have been documented as resulting in wrecks, (Werz, 1998). A number of these shipwrecks have been identified and documented within the one nautical mile buffer zone. Research conducted

by the South African Government, Military and Heritage Agency in 1991-1992 and 2004 has shown great potential as several sites were identified as largely intact (Werz, 1998).



*Figure 3:* Map of Robben Island World Heritage Site including its one nautical mile zone. Reprinted from Robben Island World Heritage Webpage, UNESCO, 2014.

## **1.6 Research Questions**

The aim of this thesis is to provide information on the current state of maritime and underwater cultural heritage management in the one nautical mile buffer zone, the opportunities for future management and use of sites, and to explore the possible benefits of better protection for conservation of natural resources.

- What is the current status of the underwater cultural landscape in the one nautical mile buffer zone around Robben Island?
- Does the current management of these sites provide proper protection?
- Is there currently any implementation of the WHS regulatory framework, or other South African law or policy relevant to preservation of natural or cultural resources within this buffer zone?
- Are there opportunities for improved use of sites and integration in the RMI visitor experience?
- Are there potential benefits for the underwater natural resources from better protection and management of the underwater cultural heritage?

## **1.7 Thesis Objectives and Outcomes**

The thesis aims at clarifying the current status and management of the site. This research also has the potential to provide better information to guide and inform the current managing authority of the Island, Robben Island Museum, as well as the South African Heritage Resource Agency. Therefore, not only does the research offer important information and recommendations regarding possible improvements to the integrated, comprehensive management plan of this globally significant heritage resource site, but will also address an important management perspective that seems to have received little attention in the past. The thesis will explore the possibility for public access to sites and inclusion in the current Robben Island visitor experience.

The possible linkage between the benefits of effectively conserving and protecting underwater cultural resources and conserving ecosystem resources has not been the subject of much previous research. Therefore the benefits of this thesis on this topic will remain limited.

## **2 Contextual overview**

### **2.1 The South African Heritage Resource Agency**

The South African Heritage Resource Agency (SAHRA), established under the National Heritage Resources Act, No. 25 of 1999, is the national administrative body responsible for the protection of South Africa's cultural heritage (National Heritage Resources Act, 1999). SAHRA is responsible for the identification and management of the national heritage sites, in collaboration with provincial and local authorities. This agency is the competent authority for the protecting of wrecks over 60 years old found in South Africa's maritime cultural zone (SAHRA, 2014).

The Maritime and Underwater Cultural Heritage (MUCH) Unit at the South African Heritage Resources Agency is the responsible entity for the management of underwater heritage sites, including those in lakes, rivers and dams. The South African Minister for Arts and Culture, Lulu Xingwana and the Ambassador for the Netherlands to South Africa, Mr Rob de Vos, officially launched the Unit on the 16 October 2009. The Centre for International Heritage Activities has been collaborating with SAHRA on the development of the MUCH Unit (Center For International Heritage Activities, 2014). The Unit deals with permit applications to conduct activities in areas of cultural significance. In addition, the MUCH Unit assesses or comments on Environmental and Heritage Impact Assessments. Site inspections and monitoring is also a mandated responsibility of the MUCH Unit (SAHRA, 2014).

The policies behind MUCH management in South Africa all issue from the National Heritage Resources Act as well as global trends in MUCH management including UNESCO guidelines. The MUCH unit's experience throughout the years has lead to the evolution of national policy for better management of the multifaceted resources located underwater. This evolution aims at better mitigation of unchecked looting and treasure hunting (SAHRA, 2014). The Unit works in co-operation with several partners, including UNESCO. Even though South Africa has not ratified the 2001 Convention on the Protection of Underwater Cultural Heritage, it follows its guidelines and principles (Center For International Heritage Activities, 2014). The MUCH Unit collaborates with

other different entities, including the Iziko Maritime Centre, which features an overview of shipping in Cape Town, for the promotion of maritime related history.

The MUCH Unit has been little involved in Robben Island management despite collaboration with Robben Island Museum. The Ministry of Arts and Culture has mentioned the interest of SAHRA in greater involvement in the management of the MUCH around the Island (Xingwana, , 2009).

## **2.2 Robben Island Museum**

Robben Island as been declared over the years:

- A South African National Monument in 1996
- A National Museum in 1996
- An associated institution of the Department of Arts, Culture, Science and Technology in 1997
- A National Heritage Site in 2006.
- A World Heritage Site in 1999

To manage the site, and the implication of these different designations, the Robben Island Museum (RIM) was created in 1997. Two years later the Site was designated a UNESCO a World Heritage site. RIM aims “to develop the Island as a national and international heritage and conservation institution”, and, “strive to maintain the unique and universal symbolism of the Island, nurture creativity and innovation as well as to contribute to the socio-economic development and transformation of the South African society and enrich humanity” (RIM, 2009).

RIM’s missions include:

- Maintaining the political and universal symbolism of Robben Island.
- Promoting Robben Island as a platform for critical debate and life-long learning.
- Managing the Robben Island Museum in a manner that promotes economic sustainability and development.
- Conservation and management Robben Island’s diverse natural and cultural resources in an integrated manner (RIM, 2013).

The institution is responsible for publishing the Integrated Conservation Management Plan that provides a framework to conserve both the cultural and natural heritage of the site (see 3.2.3). The

cultural heritage includes the built heritage and material collection, the Island's landscape, archaeological sites, and related stories allowing a holistic approach (RIM, 2014), (Corsane, 2006).

## **2.3 World Heritage Site designation**

Inscription on the UNESCO WHS list establishes the expectation that the management authority must apply the ten management standards defined by the WHS Convention. Listed sites are required to have effective management systems in place specifying how the “Outstanding Universal Value, authenticity and integrity” of each site are to be maintained (UNESCO, 2014). The WHS Management Plans should contain both long-term and day-to-day actions to protect and conserve the Site, while offering a visitor experience.

According to UNESCO, an effective management system includes:

- A thorough shared understanding of the property and its significance by all stakeholders;
- A cycle of planning, implementation, monitoring, evaluation and feedback
- The involvement of partners and stakeholders;
- The allocation of necessary resources;
- Capacity building;
- An accountable, transparent description of how the management system functions are discharged;

This WHS site consists of a number of interdependent but isolated heritage resource complexes distributed throughout the site, all of which were identified in the Inscription as having outstanding values and qualities deserving of protection (RIM, 2014). However, inscription information published by UNESCO does not currently reflect the underwater heritage resources within the site boundary (one nautical mile zone) (UNESCO, 2014).



## **3 Theoretical Overview**

### **3.1 Literature Review**

#### **3.1.1 Introduction to literature review**

This review of current literature seeks to provide a context for the research and results presented in the subsequent sections. This literature review will focus, generally, on publications related to the theme of MUCH management, MUCH management in South Africa and publications focusing on Robben Island's surrounding waters. Several publications resulting from the 1991-1992 operation "Sea Eagle", assessing Robben Island's underwater sites, will be highlighted in this section.

#### **3.1.2 MUCH management**

Throughout the world, authorities have often failed to address the threats to UCH sites by the absence of protective legislation or implementation of existing legislation (Grenier & Nutley et al., 2006). In countries where regulations exist, lack of implementation of protective measures is largely attributed to capacity issues. At the same time, existing legislation is often based on outdated trends in MUCH management leading to authorized salvage, often seen as incompatible with scientific and educational interests (Smith & Couper, 2003).

Threats to UCH sites can be both human induced or caused by natural phenomenon. Human induced deterioration is often the result of salvage activities. Commercial enterprises have justified the need for salvage by claiming that "wrecks are at risk, threatened by the forces of nature and by time, there are many of them, and time is pressing. Archaeologists are not available in sufficient number, nor do they have the time or the technical and financial means to save these wrecks, and we have saved more wrecks than all of the archaeologists put together" (Grenier & Nutley et al., 2006). With increased knowledge of UCH sites, this argument appears obsolete, as it is now known that UCH site conditions tend to stabilize after a few decades (Grenier & Nutley et al., 2006). The current trend in MUCH management has therefore been to forbid salvage. But solutions are not unique, as it appears that on sites threatened by natural phenomenon, controlled salvaged can be utilized as a solution for conservation. Other threats to underwater sites include fishing,

aquaculture, and development of renewable energy (Evans, et al., 2009).

In MUCH management, the concept of establishing protected areas that provide sustainable access versus preservation by permitting no public access is often discussed. Whereas multiple use protected areas often improve and facilitate public access to submerged heritage resources, it appears undesirable from a purely archaeological perspective, potentially increasing stress on the resource (Spirek & Scott-Ireton, 2003). The approach to preservation of MUCH favored by archaeologists has been focused on the establishment of fully protected underwater reserves and sanctuaries and in-situ preservation (i.e. documenting and protecting the UCH without disturbing the site or recovering artifacts), which is recommended in the UNESCO UCH Convention and guidelines. The goals of preserving underwater sites while encouraging public access has often been seen as contradictory (Spirek & Scott-Ireton, 2003), but benefits from opening cultural resource sites to the public under some strict management oversight can include increased public awareness, economic benefits and increased preservation for sites under threat. Part of the heritage resource community believes in the idea that providing public with access to heritage site may be a greater use of site than restricting access for future research resulting in more information.

Ultimately, management of UCH emphasizes three major points: the identification of the cultural richness and diversity of the UCH, providing knowledge on multiple uses of the sea at different periods; the need for a stable legal and management framework for conservation as advanced technology improves access to these UCH sites making them more accessible to salvors (Smith & Couper, 2003); and, the development of integrated management system to manage UCH along with other activities, avoiding conflict as a result of contested claims (Smith & Couper, 2003).

### **3.1.3 MUCH management in South Africa**

It is estimated that around 3,000 maritime incidents took place along the South African coastline between 1550 and 1984 involving ships of over 25 nations (Werz, 1998). The field of underwater archaeology in South Africa was introduced in the late 1980's. Before this time, very few publications were available and they dealt with now obsolete policies and practices. It should be noted that the field has known financial constraint throughout the years (Werz, 1998). The work of the National Monument Council on heritage legislation has led to better use and understanding of the South African legislation on UCH sites (Werz, 1998). The lack of national control of UCH sites has led to treasure hunting operations around the country. The authorities have been accused of

being lethargic on the issue for many years, as no offender has been successfully convicted (Werz, 1998). The National Heritage Resources Act of 1999 introduced more appropriate legislation despite the lack of monitoring and enforcement. Indeed funding has often been identified as an issue in the field of UCH preservation in South Africa (Werz, 1998). Major threats to UCH sites in the country can be categorized as either related to impacts from marine industries or illegal salvage (Werz, 1998). The Offshore diamond industry in South Africa may have caused serious damage to sites. SAHRA is now responsible for undertaking assessment studies related to submerged resources when industrial prospectors apply for land permitting. But its dual role, controller and consultant to industry, has been criticized as inappropriate for effective and proper management (Werz, 2003).

#### **3.1.4 MUCH around Robben Island**

Located in Table Bay, a place where international ships have transited for centuries, Robben Island's surrounding waters reflect the status of the Bay, a place of refuge and replenishment, but also a place of storms. The first documented visit to Table Bay can be dated as early as 1503 by Portuguese sailor Antonio de Saldanha (Werz, 1998). A minimum of 358 UCH sites can be found in Table Bay, attesting to its rich maritime history (Werz, 2003). The maritime archeological potential of the Island was investigated by an operation initiated by the South African cabinet in conjunction with the South African Navy. "Operation Sea Eagle", launched in February 1991 and completed in May 2012, was conducted to assess underwater cultural resources of the waters surrounding the Island through archival research (see Figure 4, example of archival findings) and underwater fieldwork. The main result of the research showed great potential for further studies on the underwater wrecks despite apparent deterioration (Werz, 1993). The assessment of UCH sites also showed potential for research other than "cultural", including biology and oceanography (Werz, 1998). Fifteen wrecks were located during "Operation Sea Eagle" in three main areas: The northwest, the southeast, and south of Robben Island. The state of sites differed from reasonably coherent structures to completely dispersed sites (Werz, 1994).

CAPE TOWN, FRIDAY, NOVEMBER 21, 1856.

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SALES BY AUCTION.

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## Wrecked Ship "Sea Eagle."

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A PUBLIC SALE

Of the Cargo saved from the Wreck of the American Ship "Sea Eagle,"  
CAPT. WILLIAMS, WILL BE HOLDEN AT H. M. CUSTOM-HOUSE YARD,

## This Morning, Friday,

AT 11 O'CLOCK,

The Original Cargo consisting of:

- 2 BOXES, containing a PLATFORM SCALE
- 535 TONS OF ICE
- 13 BOXES and 1 BUNDLE SUNDRIES
- 1 GARDEN ENGINE, 1 SEED SOWER
- 4 CASES MERCHANDIZE
- 5 CASES and 2 KEGS OF MERCHANDIZE
- 16 PACKAGES OF MERCHANDIZE
- 1 CASE OF TOBACCO
- 94 BOXES OF TOBACCO
- 301 SPARS, various sizes
- 100 BARRELS OF ROSIN
- 150 BARRELS OF PITCH
- 60 CARBOYS SPIRITS OF TURPENTINE
- 1 TIN BOX and 8 BOATS' MASTS
- 34 BOXES,
- 13 PACKAGES,
- 10 IRON PIECES,
- 4 FLY WHEELS,
- 2 BOARDS,
- 4 BOXES OF MERCHANDIZE
- 36 PACKAGES

Do. } MACHINERY

AFTER WHICH WILL BE DISPOSED OF

The Hull of the said Ship, as she now lies in Murray's Bay, Robben Island,  
TOGETHER WITH HER

SAILS, RIGGING, CHAINS, ANCHORS, &C., &C.

DEANE & JOHNSON.

Figure 4: Newspaper advertisement of a public sale of items recovered from the "Sea Eagle" (1856), Reprinted from "Searching for shipwrecks off Robben Island: exercise in cultural resource management", B.E. Werz, 1994. *Southern African Field Archaeology*.

The stories associated with these incidents are part of the Island's history. Wrecks identified around Robben Island included the 1856 American cargo ship *Sea Eagle* that carried ice from Boston to Calcutta, the British general cargo ship *Bernica* that sank in 1861 killing a number of passengers while other survivors were assisted by mentally insane patients on the Island, or the Dutch East-India company vessel *Dagraad* that was pushed on the rocky shores by strong winds in 1694 (Werz, 1994). The research established that a minimum of 22 ships from eight different countries were lost around Robben Island during the period 1694-1976, but only fifteen were located. These wrecks not only provide information on the history of South Africa and other nations, but also highlight the potential for recreational value of this site.

Operation "Sea Eagle's" final report contained several recommendations including a ban on all salvage and the establishment of a maritime archaeological reserve to enhance educational and recreational values (Werz, 1993). Salvage is still permitted under South African Law with permit

delivered by SAHRA. Operation “Sea Eagle” has been regarded as the first large-scale project of its kind in Africa.

## **3.2 Policy Review**

### **3.2.1 International policy**

At the international policy level, the 1982 United Nations Convention on the Law of the Sea (UNCLOS) is an important reference text. It includes a provision (Article 303) that creates an obligation for States Parties to protect historical and archaeological objects underwater, as it recognizes their specificity. Under Article 303, the coastal state may presume that the removal of archaeological material is an infringement of its customs laws within the Contiguous Zone which stretches 12 nm beyond the Territorial Sea (United Nations, 1982). Article 303.3 states: “Nothing in this article affects the rights of identifiable owners, the law of salvage or other rules of admiralty, or laws and practices with respect to cultural exchanges”, while 303.4 goes on to say that “this article is without prejudice to other international agreements and rules of international law regarding the protection of objects of an archaeological and historical nature” (United Nations, 1982).

The Convention on the Protection of the Underwater Cultural Heritage is a treaty adopted on 2 November 2001 by the General Conference of the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2001). The treaty provides basic principles for the protection of underwater cultural heritage, along with guidance for the treatment and research and State cooperation systems. The content of the treaty places emphasis on four main principles: Obligation to preserve underwater cultural heritage, Preservation as first option, no commercial exploitation, and training and information sharing (UNESCO, 2001).

South Africa has not yet ratified the treaty, but could perhaps be in the early stages of the ratification process. Indeed, the Centre for International Heritage Activities (CIE), an independent, non-profit organization for international knowledge exchange about the heritage of European expansion and international heritage cooperation, has been collaborating with SAHRA on the development of the MUCH Unit. This collaboration has led to the 2009 workshop on the Protection of Underwater Cultural Heritage in Cape Town, organized by UNESCO and the South Africa Department for Arts and Culture (Center For International Heritage Activities, 2014). The outcome of the partnership with the CIE in the creation of the MUCH Unit has been to building up the capacity of a competent authority as required under the UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001. The MUCH Unit has developed in a manner consistent

with the principles and practices of the UNESCO Convention (Center For International Heritage Activities, 2014) (SAHRA, 2014).

### **3.2.2 National policy**

The management policy on a national level establishes a framework for the management of underwater cultural heritage. Three main acts can be identified as offering tools for MUCH management:

- National Heritage Resources Act 25 of 1999;
- Cultural Institutions Act 98 of 1978;
- National Archives and Records Services Act 43 of 1996.

The main principal legislation for heritage management in South Africa is the National Heritage Resources Act of 1999. This law defines general principles for heritage resources management, assessment criteria and grading, and defines responsibilities and competence of heritage resources authorities. The 1999 Act includes a definition of “archaeological” resources:

“wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artifacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation;”.

The maritime cultural zone of the republic is defined in the Maritime Zones Act, 1994 (Act No. 15 of 1994), as “the sea beyond the territorial waters referred to in section 4, but within a distance of twenty four nautical miles from the baselines”. The 1999 Act further states that the protection of any wrecks in the territorial waters and the maritime cultural zone shall be the responsibility of SAHRA.

Ultimately, the South African legislation on underwater cultural heritage appears very protective despite one loophole allowing salvage. Salvage is authorized by permits reviewed and issued by SAHRA under conditions, introduced in a new regulation, that any salvage team working under that permit must have a maritime archeologist involved with the project, and needs to collaborate with a museum on that project. SAHRA also requires a full report on the salvage operation after the

project has been completed (SARHA, 2014). These conditions seem to offer some additional protection for UCH in the face of short-term mercantile oriented salvage. The creation of the MUCH Unit at SAHRA has been a fundamental step in the interpretation process of this legislation as it is applied to underwater sites (SAHRA, 2014).

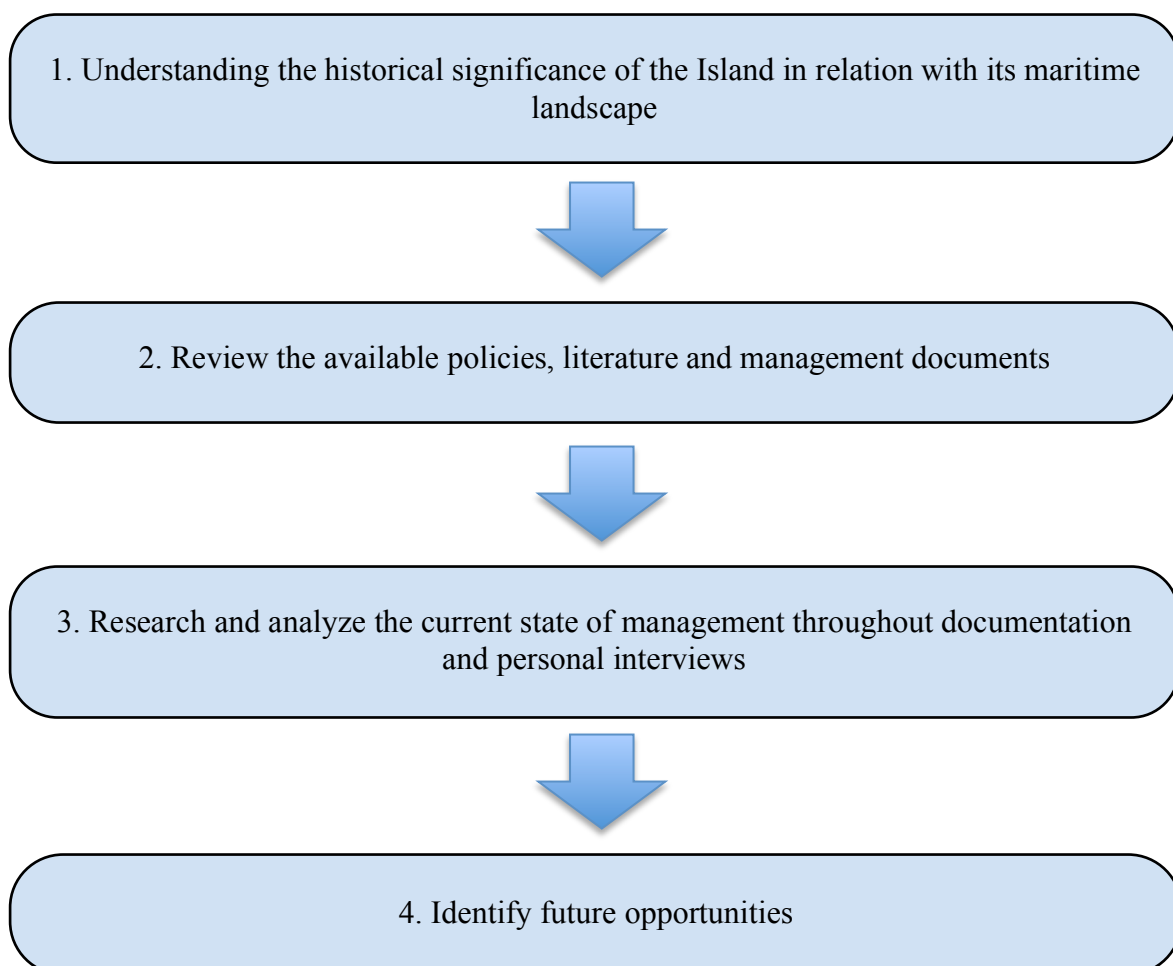
### **3.2.3 Local policy**

The Integrated Conservation Management Plan (ICMP) published by RIM acts as a working plan, with an Action Plan schedule for the museum. The document complies with the management requirements arising from the WHS designation. It is revised and updated throughout its application, and is subject to formal evaluation and review on a yearly basis. The current ICMP for the period 2013-2018 is only the second ICMP implemented. Therefore, this process is fairly new to the RIM. The ICMP addresses issues related to the Island's conservation both from a cultural and natural perspective, addressing short term and long term projects. Management of the one nautical mile zone is included in this document. The ICMP includes a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis for the different objectives identified (RIM, 2012).

## 4 Methodology

### 4.1 Introduction to Research Methods

The following sections contain information regarding the data collection and other research methods used in this master's thesis. Research objectives include collecting information contributing to the understanding of current state of management of the underwater cultural heritage sites in the one nautical mile zone around Robben Island, as well as understanding unexploited opportunities. This research also aimed to better understand the perspective and opinions of different stakeholders. Methods of data collection included the gathering of previously published research and semi-structured individual interviews. Information was also gathered through personal communication with Robben Island guides, peers in academics and personal settings. The following diagram depicts the overarching objectives of each research step.





## **4.2 Individual interviews**

### **4.2.1 Selected Population Interviewed**

The possibilities for conducting interviews with people having adequate knowledge of the site in question were limited. The field of UCH in the area appears to be still underdeveloped in South Africa. Two main knowledgeable interviewees were identified. These included an interviewee with contacts with the management structure and input in the management process and the other being not involved in the current management process, but having issued several publications on UCH around the Island.

The inner management structure interviewee will remain anonymous. He confirmed being knowledgeable about UCH management around Robben Island. The second interviewee was Dr. Bruno Werz. Dr. Werz has a doctoral degree in history and in maritime archaeology. He has published several articles on Robben Island underwater cultural heritage and led the 1992 Operation “Sea Eagle” that aimed at identifying shipwrecks location and assessing state of conservation around Robben Island and identifying management opportunities. He is today the CEO at the African Institute for Marine and Underwater Research, Exploration and Education. A second more informal meeting with Dr. Bruno Werz acted as a review session. Dr. Werz agreed to being cited in this thesis.

In addition to the selected population interviewed, a series of personal communications took place including with RIM guards for more accurate understanding of the MUCH incorporation opportunities in the visitor experience.

### **4.2.2 The Writing of Interview Questions**

The interviews conducted followed a general interview guide approach ensuring that the same general areas of information were collected from each interviewee, allowing a degree of freedom and adaptability in obtaining the information required (Turner, 2010). This limited flexibility in approach can be justified by the fundamental difference of the interviewees and their relationship to the management structure for Robben Island, the topic and the type of information required. The interviews can be considered a mix between standardized, open-ended interview, as a series a predetermined question were asked, and an informal, conversational interview, as part of the interviews remained open to the interviewee’s nature and priorities. The areas of interest covered by

the interviews were general management and its evolution, conservation issues, academic interest, tourism, integrated management and future opportunities.

### **4.3 Cross analysis of policy documents and interview results**

The review and interpretation of the different documents available for management of the heritage sites located in the nautical zone was cross-referenced with the interview results and the literature available. This allowed a more contextual approach to the possibilities offered and described in the legislations and management plan and interviewee comments.

Several reports and management plans have mentioned the issues regarding UCH integration in the management process. Analysis of these documents cross-referenced with the current ICMP and interview results provided an understanding of the real degree of integration of UCH by RMI to date. The result and discussion section focused on 4 different management issues: conservation, academics, tourism and synergy with natural resource management. By identifying these different fields, the results were discussed by addressing each issue separately.

## 5 Results

### 5.1 Conservation

The degradation of underwater sites by human intervention seems to be occurring around Robben Island, although the site integrity may have been sustained as a result of the one nautical mile high-security zone established during the Apartheid era. Deterioration of sites is recognized by the managing structure, by SAHRA in the ‘Maritime Archaeological Assessment of Robben Island’, and by RIM (RIM, 2012). The current ICMP refers to the underwater sites with a perspective solely based on the potential for expanding the tourism niche of the Island. No mention can be found on potential threats to the integrity of the sites.

Since the prison was shut down and the RIM established, there has been a change in management objectives and fewer funds are now available for in the high-security area. Indeed, the security purpose of the nautical perimeter no longer exists. Discussion with interviewee Dr. Werz on the matter highlighted this potential salvage in the area even though no clear idea of the extent of the damage can be offered, due to a lack of adequate documentation of the state of the site, past and present.

Werz suggested that there might have been unpermitted excavation of artifacts when the Island was a high-security prison, facilitated by bribes to guards at the prison. It also appears that professional salvagers could have taken advantage of a period of transition, in the country as a whole and on the Island, with the shutdown of the prison, to illegally salvage wrecks (Werz, 2013). At this time, lack of effective control and management of the Island, and the focus on bigger issues related to the transition, created the opportunity for unpermitted salvage in the waters around the Island, and in the coastal waters of South Africa generally. It is also recognized by both Government managers and external stakeholders that the historical integrity of the sites could suffer from recreational diving resulting in “souvenir” taking. This could possibly be correlated with another illegal activity found around the Island, involving the poaching of protected natural resources, including abalone and rock-lobster (News 24, 2014). This correlation will be further discussed in a later section.

The damage caused by these activities has not been further investigated. These activities were undoubtedly minimized by the location of the Island, in Table Bay, a highly patrolled area, both on

water and in the air, due to its strategic location and the presence of the Cape Town harbor, as an interviewee pointed out. Therefore, one could reasonably expect that any major illegal salvage operation would not avoid notice considering the level of human activity in this area.

Interviewees discussed what they viewed as the benefits of the World Heritage Site designation on the preservation of UCH. One interviewee pointed out that the World Heritage Site designation is believed to have had a positive influence on the protection of UCH. However, it was mentioned during interviews that no additional measures were established subsequent to the designation to more effectively manage these UCH resource sites in the area, minimizing the positive impact of the designation.

Overall, it would appear that the WHS designation had a limited but positive impact on the UCH within the nautical zone. Indeed, while salvage is still permitted under South African Law by permit delivered by SAHRA, WHS standards are not compatible with commercial salvage (UNESCO, 2014). Therefore SAHRA refuses permit delivery for commercial salvage within the one nautical mile zone. But this impact appears limited, as Werz pointed out, as no funds are available for proper protection and control of underwater sites creating a possibility for small-scale illegal salvage.

Even though minimal intervention is encouraged at these wreck sites for conservation purposes, the legal framework authorizes archaeological work by a qualified archaeologist under the control of SAHRA. In the case of archaeological excavation, all material recovered from any wreck will become part of the national estate and be held under the guardianship of Robben Island Museum and it should be curated, housed and displayed at Robben Island or in consultation with Robben Island Museum. Conservation and academic opportunities have often been opposed in the field of MUCH management, but if proper mitigation measures are applied, on site research could enhance the value of sites without degrading them for future generations.

## **5.2 Academic opportunities**

Both evaluations, by operation “Sea Eagle” in 1991 and by SAHRA in 2004, concluded that the sites have potential for further research. However, the lack of academic publications on the area and its resources was also noted (Werz, 2013). Despite this apparent lack of interest, several programs have used the Island and its surrounding waters for academic purposes. Collaboration between the CIE and SAHRA resulted in the conduct of MUCH field school training on Robben Island from 17

January to 3 February 2012. This was financed by SAHRA using Maritime Archaeology Development Program funding from the South African Embassy of the Kingdom of the Netherlands. The field school, attended by 30 participants, was considered successful by CIE and SAHRA in building the capacity of participants (Center For International Heritage Activities, 2014). The CIE also highlighted the positive support brought throughout this initiative to RIM in enhancing the land-based maritime cultural landscape of the Island. Several other programs have shown interest in the rich area around the Island including the Nautical Archaeology Society for training programs.

## **5.3 Tourism**

In the current visitor experience offered by the RIM when tourists visit the Island, no attention is given to the underwater cultural heritage and the presence of shipwrecks on the Island's coast. The only acknowledgment of such presence and related history is when the local guides point out one of the wrecks on the shoreline of the Island when the bus tour passes (RIM guide, personal communication, 2014).

The potential for recreational use was recognized in the RIM Integrated Conservation Management Plan 2007-2012 as it is mentioned that the different sites "include wrecks that are sufficiently intact to warrant being used for recreational visits under controlled conditions". The local authorities mention other possibilities. The Chapter 7 of the ICMP 2007-2012 discusses the possibility for incorporation of the wrecks in the visitor experience of the Island with a potential "shipwreck trail", but the plan also clearly stated that these possibilities were not a priority.

The current ICMP refers to the existence of an unfinished Draft Marketing Plan for the diversification of the tourism possibilities, but without specifically referring to any specific sector. This plan includes:

- Processes and 'Distribution' plan
- Pricing plan
- A detailed Promotion Plan and strategies
- Facilities
- Training of personnel

Despite these references, no further details, including a timeframe, objectives or mitigation measures, are provided in that plan,

Dr. Bruno Werz submitted a 12-page document to RIM authorities in 2004, describing the opportunity for an underwater diving trail with signage and historical information on different sites. The proposition is considered by its author as a form of sustainable tourism, incorporating sites into this proposed shipwreck trail with high education and recreational value for participants. The document was described as a comprehensive proposal including details such as mapping of the trail, restriction numbers, diving levels required for participants, amenities and related cost, and mitigation measures for potential negative impact on sites. According to the author, the receipt of the document was never acknowledged by RIM (Werz, 2013).

## **5.4 Synergy between natural and cultural resource preservation**

Information gathered during interviews seems to suggest that the issue of poaching around the Island is considered minimal by the managing authority due to the strategic location of Robben Island, and frequent patrols. Nevertheless, the existence, in recent years, of local newspaper reports of poaching in this area and several mentions of such behavior in the ICMP suggests otherwise. This is considered a management challenge throughout the country, and these reported poaching incidents around Robben Island indicate that this area is likely not immune to this problem. The poaching of protected natural resources, including abalone and rock-lobster around the Island (News 24, 2014), may be correlated with the salvage of ancient artifacts. As suggested in interviews, this appears to be a reasonable assumption, as poachers do not seem to distinguish between resources. Encountering a potentially valuable artifact while diving, it is highly plausible that the diver would recover the artifact (Werz, 1993, 2013) recognizing its potential value. This possibility would highlight the potential synergy between illegal activities involving the removal of protected natural and cultural resources around the Island, as well as the potential implications of enhanced protection of one or the other of these resources.

In addition, the current ICMP sets the objective to “explore the possibility of formalising the protection of marine living resources within the one nautical mile zone, as currently only the cultural resources are protected”. Once again the two resources are treated separately, when it appears clear that the protection of UCH would have benefited living resources. The need for more formal protection is clearly correlated to the issue of ongoing poaching. The issue of poaching itself

reflects the lack of implementation measures to accompany the protection of UCH sites within the boundaries of the WHS designation.

Management authorities, focusing greater attention on the preservation of UCH resources around Robben Island, may result in an integrated management solution that could have positive benefits for both natural and cultural resource protection. As “poachers do not distinguish resource”, neither could “patrollers”. Limited research is available on this potential synergy but it is reasonable to suggest that better protecting one resource would have some impact on protecting the other. Further investigation would result in more effective integrated tools, increasing efficiency.

## **6 Discussion**

### **6.1 General context**

The emerging public interest in underwater heritage in the last decade calls for more effective solutions to management challenges. There is a growing need to balance several interests, including protection, research and tourism potential.

The results of this thesis need to be contextualized in a broad spectrum. Indeed RIM has been facing nearly continuous accusations of mismanagement, including gross financial mismanagement, leadership battles, corruption, theft and environmental incompetence (Bamford, 2009). The South African government has recognized this and RIM is now under continuous audit by South Africa's Auditor General to monitor the management transition after the resignation of the management team in 2010 (Khan, 2013). Although unrelated, at least directly, to UCH management, these issues have delayed the evolution of the museum and its management practices and priorities.

The positive contribution of ratifying the UNESCO Convention on the Protection of Underwater Cultural Heritage would appear limited from a solely regulatory perspective, as the South African legislation appears reasonably robust, certainly consistent with the UNESCO convention guidance despite for the commercial salvage possibility under permit. Concerning Robben Island and its one nautical mile zone, the WHS designation has already factually closed this loophole allowing salvage, as the commercial salvage of wrecks appears against the UNESCO standards. Interviews confirm that SAHRA refuses permit delivery in the nautical zone. Despite limited in appearance, ratifying the UNESCO convention may not only benefit the site by highlighting the UCH found around the Island, but also around the country as a whole. It could also enhance the funding possibilities for further research and the development of the field of maritime archaeology in South Africa.



## 6.2 Conservation

As seen in the results, the degradation of underwater sites by human intervention seems to be occurring around Robben Island. Despite potential former degradation as a result of professional commercial salvage, it would appear that today, threats to site integrity would result mostly from recreational diving and synergistically as a result of poaching of natural resources. The poaching of abalone has been linked in South Africa to highly organized illegal trans-national trading schemes involving Chinese organized crime syndicates (Brick, Muchapondwa and al., undated). It can be assumed that part of the poaching around Robben Island can be linked to this organized crime.

Possibilities for further protection in the legislation appear limited, as the issue here, more than lack of formal protection, seems to be a lack of control within the nautical zone. As part of the WHS boundaries, measures are needed to protect the UCH in the area. There have been several reports that have addressed this issue. It has been recommended that RIM secure an arrangement with Portnet Radar (associated with the Cape Town Harbor Authority), to alert RIM staff to unidentified vessels anchoring within the 1 nautical mile zone (Archaeology Contracts Office, 2001). And indeed, the presence on the Island in the strategic area of Table Bay provides RIM with opportunities for strategic partnerships for more effective control of human activities within the nautical zone.

While RIM recognized this issue raised by the managing authority (RIM, 2012), no further attention has been directed in the current ICMP to this issue of ongoing deterioration. This appears to be a direct result of the complete decentralization of all management of cultural heritage within the one nautical mile zone to SAHRA (ICMP, 2013). This appears somewhat surprising, as the former ICMP dealt with this issue more extensively. Decentralization towards SAHRA appears risky for RIM. Whereas SAHRA is a specialized authority with a dedicated unit to deal with MUCH management, interviews highlighted that it also lacks funding and manpower to properly manage the entire coast, river, lakes and dams of South Africa.

The lack of available fund for controlling the nautical perimeter should encourage the authorities to explore holistic approaches into UCH preservation, incorporating the possible benefits from tourism, exploring the synergy between natural and heritage management within the nautical zone. This can only be done if RIM shows some greater interest in UCH and coordinates collaboration between government entities, local entities and the academic community.

## 6.3 Academics

The result of both interviews showed a marked difference in perspective. These differences seem to be influenced by the background of the interviewees, whether they are part of or external to the management structure. These differences are often found and can appear natural due the institutional origin of the interviewee. These differences are patterns highlighting the role of each stakeholder, the management structure or input structure defending its works and the “outsider” advocating for further results. But they also reflect an apparent lack of communication. This relationship could be considered dysfunctional and not in anyone’s best interests. If prominent academics in South Africa in the field of maritime archaeology and the government agency charged with managing UCH resources around Robben Island cannot cooperate, many opportunities for acquiring information and needed expertise could be lost. Overall, a dysfunctional relationship may alter the possibilities for improved effectiveness of the management practices. This would appear to be the case here, as very little communication seems to exist. Increased communications is widely regarded as necessary for good management and increased effectiveness (Kaplan & McCay, 2004). Enhancing the research interest as well as funding available is often a hard task for the authorities.

## 6.4 Tourism

Archaeological sites are very fragile and sensitive to human disturbance, and therefore tourism focused on such resources requires strict control and effective management. Heritage tourism is the most rapidly growing international sector in tourism (UNESCO, 2014). Opportunities lie in the use of such areas and sites when potential impacts from the additional human activity is managed and mitigated effectively.

The 2001 UNESCO convention recognizes the potential for tourism. The “attraction of the historic significance, beauty and authenticity of underwater sites can have a considerable economic importance” (UNESCO, 2001). Factors for the attraction and sustainability of sites are defined by UNESCO and include:

- 1.The state of preservation
- 2.The authenticity and historic importance
- 3.The presentation to the public (dive trails, maps or signposts)
- 4.Accessibility and security and
- 5.Responsible site management to ensure the long-term sustainability of the site.

UNESCO seems to be encouraging tourism, including diver access to submerged sites, as long as the integrity of sites is respected, and promoting the idea that “heritage is an asset that should be enjoyed by all and the magnificence and impression of the authentic locations teaches history much better than any classroom stay could do” (UNESCO, 2010).

Many of the proposals for expanding tourism use around Robben Island appear interesting and seem to deserve more attention from the managing authority. The new Integrated Conservation Management Plan seems to be more open today to such a possibility in a near future. Chapter 9 of the ICMP 2007-2012 referred to the current exploration by RIM of “opportunities to offer a variety of new options to visitors”. Discussions with local guides on the Island seem to suggest that the Museum is exploring the possibility of converting old guard houses into overnight stay facilities for visitors willing to expand their experience of the Island (RIM guide, personal communication, 2014). Such a conversion of the old guard houses could potentially facilitate the idea of underwater cultural tourism, both diving opportunities and on-land opportunities such as the shipwreck trail ideas presented in the former ICMP.

Concerning Dr Werz’ proposal for a diving trail, the lack of acknowledgment of the proposal could be explained, at least in part, by this idea not conforming to the current priorities of the management authority. RIM has been focusing on enhancing the visitor experience related on the Apartheid era and other pressing management issues. The tourism experience proposed might also have been seen as elitist tourism, targeting a category of visitor with a special set of skills and financial possibilities. Despite this, it may be a favorable time to revisit this proposal, especially in light of RIM’s desire to expand the tourism possibilities, with potential overnight stays. Additionally, this proposal appears to conform to the UNESCO factors for recreational diving opportunities. One positive example of such an experience would be Kronprins Gustav Adolf Underwater archaeological Park in Finland, which is considered successful in promoting the safeguarding of underwater cultural heritage at that site. The Finnish experience has shown, with proper management, that impact by diver activity is on such a low level that it can be considered acceptable (Lehtimäki, 2008). The international experience of underwater heritage tourism has also proved to be helpful with the problem of acquiring sufficient funding for safeguarding submerged sites. Tourism-generated funds can serve to supplement site conservation and reduce the cost for the managing authority. European States have been practicing UCH tourism through a license system restricting access to paying enterprises only (UNESCO, 2010).

When discussing tourism opportunities, it has been noted (see 3.1.2) that the debate over “Underwater park or underwater preserves” isn’t always obvious. Whereas parks often improve and

facilitate public access to submerged heritage resources, it appears undesirable from a purely archaeological perspective, potentially increasing stress on the resource (Spirek & Scott-Ireton, 2003). Several tools exist to determine and analyze the potential for an underwater park. Using the current archaeological decision process for establishing underwater park or preserves (see Figure 5 below), it would appear that Robben Island would be a possible candidate for public access as: 1) an argument could be made that at least a portion of the UCH around Robben Island is likely to be archaeologically significant; 2) significant underwater resource seems to be impacted by unregulated human activity; 3) it is unlikely that the government would pursue, or permit, excavation and recovery of the artifacts in these sites; and 4) neither is it likely that the government would close diver access to the area, nor would such a closure be effective. The sites were identified and located in 1991 and 2004. The WHS designation has created a theoretical protection of UCH, but as seen in result section, illegal salvage seems to remain an issue. The establishment of an effectively managed underwater park would therefore benefit the sites by increasing public awareness, increasing protection and creating economic opportunity. The presence of increased tourism could also benefit protection of the natural resource targeted by poachers.

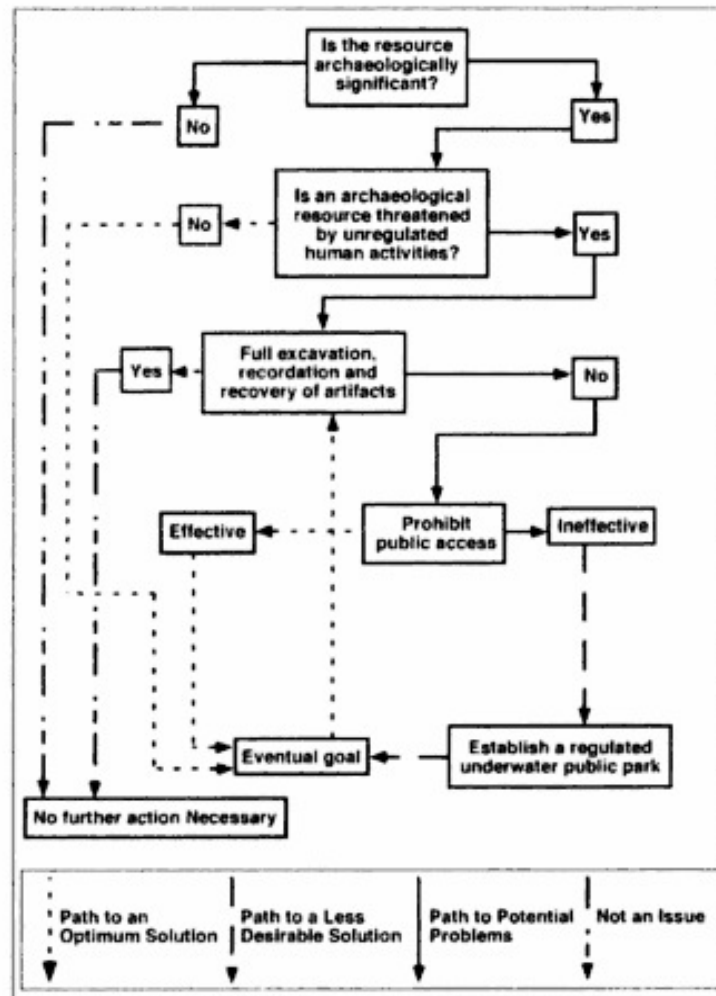


Figure 5: Archaeological decision process for establishing underwater park or preserves. Reprinted from *Submerged cultural resource management*, by J.D. Spirek & D.A. Scott-Ireton, 2003, New York: Kluwer Academic/Plenum Publishers.

## **6.5 Synergy between natural and cultural resource preservation**

The issue of poaching of marine natural resources is a global problem in South Africa (Hauck & Sweijd, 1999). The downplaying of this issue around the Island by government agencies during interviews can be explained by the specificities of the site, making it less accessible to poachers than the general coast of the country. Nevertheless, the presence of local news reports (News24, 2014) and acknowledgment by the academic community and the managing authority in their management plan makes it a real issue.

The current ICMP refers to a memorandum of understanding being developed by the National Department of Agriculture, Forestry and Fisheries's Monitoring, Control and Surveillance (MCS) group to improve collaboration and address illegal removal of marine living resources within Robben Island's coastal waters. Integrating the UCH in the process could allow better understanding of the possible benefits of the protection of one resource on the other. This would imply an inclusion of National Department of Arts and Culture in the memorandum process. In addition, the current ICMP set the objective to "explore the possibility of formalizing the protection of marine living resources within the one nautical mile zone as currently only the cultural resources are protected". By reclaiming interest in management of UCH in the nautical zone, or created a strong communication system between SAHRA and the environmental managing team on Robben Island, an holistic approach to both these issues could be explored.

The specific set of issues confronting managers of Robben Island would make it an ideal pilot area for increased synergy in managing UCH and natural resources in the maritime zone. Indeed the coast and nautical zone around the Island is not only a place of considerable importance with regard to UCH, but species found in the nautical zone are endemic to southern Africa, including African penguins and Cape Fur Seals. RIM currently seems to decentralize all management of cultural heritage within the one nautical mile zone to SAHRA. This appears clearly stated in the ICMP 2013-2018: "SAHRA has jurisdiction over the cultural resources in the one nautical mile buffer zone". By externalizing management to a specific entity, a holistic approach appears more difficult. By reclaiming interest in management of UCH in the nautical zone, or creating a strong communication system between SAHRA and the environmental management team on Robben Island, an integrated approach to both these issues could benefit both entities as well as the museum as a whole.



## **7 Recommendations and Conclusion**

### **7.1 Recommendations**

#### **7.1.1 Conservation**

Further attention should be giving to the conservation of maritime and underwater cultural heritage sites. It is recommended that the one nautical mile buffer zone be more effectively monitored by RIM to avoid illegal salvage of wreck sites. Partnerships should be considered for the patrol and surveillance of the maritime area, opportunities potentially enhanced by the location of the island in the strategic and highly monitored Table Bay. Further incorporation of the sites in the visitor experience would increase presence and therefore reduce the possibility that illegal activities might be conducted. This reflects the need for a more integrated and comprehensive approach in the management process for UCH conservation. As no estimate of the impact of such activities exist, and the last survey of the sites around the island dating back to 2004, control dives to assess the current status of the UCH sites, compared with previous results, could help more clearly articulate the actual threat that illegal salvage is likely to represent for such sites.

#### **7.1.2 Academic**

Improved communication among RIM, SAHRA, and the academic community would help to better identify and enhance opportunities for collaboration, and improve the understanding of UCH sites in this area. The current lack of communication has influenced the conduct and publication of research for this area, as pointed out in interviews. Improved partnerships with academic researchers and institutions could also enhance opportunities for expanding the use of this area as a place where education and training related to natural and cultural resource research, monitoring and management could be conducted more frequently. The ratification of the UNESCO Convention on the Protection of maritime and underwater cultural heritage could raise awareness of the value and threats to UCH, and perhaps enhance opportunities for expanded research in support of management.



### **7.1.3 Investigating the tourism opportunities**

Investigating the tourism potential, both on land and underwater, should be undertaken by RIM. International experience should be considered in the process to avoid past mistakes and facilitate effective partnerships between SAHRA and RIM on UCH. This could build capacity in this field, while promoting training of willing and eager tourists and local visitors. In addition, the potential economic benefits from this practice are consistent with the museum's goal to reach financial independence (RIM, 2014), and, as mentioned previously, possibly raise funds to support expanded research on and management of the resources within the boundary of the WHS.

Possible options include traditional museum displays, a land-based shipwreck trail around the Island, underwater dive trails and dives on selected site. As safety is often a key issue in tourism, and there is a need to effectively manage and control diving on UCH resources, particular wrecks should be identified that can be safely accessed and are less sensitive to disturbance from divers. This would likely require a reevaluation of sites to assess their current status, as the dynamic environment in these waters can alter underwater sites in a short period of time.

### **7.1.4 Promotion of the maritime Landscape**

The promotion of the maritime landscape of the Island appears to be a relatively low-cost way to incorporate the MUCH in the current visitor experience. Throughout the process of understanding the Island's history, it appears clear that the history is directly related to the fact that this is an island, isolated from the mainland by the marine area acting as a natural barrier. Several uses of the Island are directly related to its isolation from the mainland, whether for medical reasons, security or for political oppression. Given the rich history of the maritime landscape of Robben Island, it would not be surprising if visitors would be interested in and would want to learn more about not only the prison, but about this rich and complex maritime landscape. It is mentioned in the WHS application, as "Shipwrecks and the early European and colonial influence upon South Africa in the fifteenth to seventeenth centuries as the modern global economy emerged" will "receive special attention and which will be the focus of exhibitions and displays" (RIM, 1998). However, to date, this important topic has received very little attention by Island managers.

Several unexploited elements could be integrated into the Robben Island visitor experience that could offer opportunities for expanding and enhancing public knowledge and appreciation of the maritime landscape of the Island. On the 1st of December 2001, Former president Nelson Mandela

officially opened the Nelson Mandela Gate on the Victoria & Alfred Waterfront. The Gate acts as a waterfront hub, a visitor center, and an exhibition space. Particularly important for the Island, it also is the location of the pier for the RIM ferry service, which make this the “gateway to Robben Island”. Exhibitions at the Nelson Mandela gate have a broader focus than on the Island, with more contextual information on the site (Pastor Makhurane, 2003). Posters describe the history of the Island in a broader timeframe than the Apartheid area focus found on the Island itself. Detailed exhibits explain the history of the Island from its early use by Dutch explorers to today’s museum. But despite the positive contribution to the experience brought by the Gate, still no clear focus on the Island maritime landscape can be found. Acting as this “gateway” to the Island, The Nelson Mandela Gate would appear as a «natural» setting for more information on the maritime history and archeological sites found around the Island. Given the expanding market for heritage tourism worldwide mentioned above, greater attention in the exhibits and posters to the broader heritage resources of the Island, and more effective marketing of this “gateway” venue, could increase visitation in addition to enhancing the visitor experience.

The Ferry ride to the Island is over 30 min. and currently offers a video focused on Apartheid-era related history of the Island. This time could be another currently unexploited opportunity for an emphasis on the maritime landscape and related history of the Island.

The Victoria & Alfred waterfront is also home to the Iziko Maritime Museum. The museum contains posters, archeological artifacts and ship models depicting the maritime history of Cape Town from early 18th century. However, no trace can be found in these exhibits offering information about the importance of Robben Island in the Cape Town area’s maritime history and the many shipwrecks found around the Island. The Museum would seem to be a suitable place to incorporate such information, although no discussion was conducted with the Museum curator to better understand the perspective of the Museum as to why this topic is not currently addressed at the Museum, nor the opportunity to expand their exhibits in the future to incorporate this part of Cape Town’s, and Robben Island’s, rich maritime heritage.

### **7.1.5 Synergy between natural and cultural resource preservation**

The synergy between effective management of living marine resources and cultural resources should be further explored. The presence of endemic marine species to Southern Africa correlated with the rich UCH makes Robben Island an ideal site for further research on this possible synergy. It is recommended that RIM, in cooperation with SAHRA, investigate this possibility. This would imply further cooperation with the National Department of Agriculture, Forestry and Fisheries Monitoring and the Department of Arts and Culture. Both of these entities should also be included in discussion regarding partnership for surveillance and monitoring of the nautical zone, whether the triggering reason would be nature conservation or cultural preservation. By reclaiming interest in UCH, RIM could instigate a strong and valuable system of cooperation between the managers of natural resources on the Island, the MUCH unit, SAHRA, and the academic community that has the real potential for mutual benefit.

## **7.2 Limitations and Shortcomings**

The limited number of interviews conducted could be a possible shortcoming of this research. Identification and contact of RIM representatives knowledgeable on the studied field was not successful. The topic of management of Robben Island is also a sensitive one, given the past history of possible mis-management, and so it is understandable that the management authority would be reluctant to openly and freely participate in interviews for this research. It appeared that on such matters, RIM refers to SAHRA entirely. Nevertheless, the perspective of the management authority would have benefited the outcome of this thesis.

The entire topic of underwater cultural heritage is one just emerging in South Africa, and while considerable effort was made to find interviewees with relevant expertise and experience, there were simply very few who could provide useful and relevant information and informed opinions. The goal of this research was not to survey a wide variety of stakeholders and the public who might have an interest in this issue, but to particularly seek out those that could make a substantive contribution to understanding the complex and somewhat controversial issues surrounding the management of the UCH in the waters surrounding Robben Island. While this was achieved in the research to the extent possible, the findings might have been more robust had more informed and knowledgeable people been available, and willing to offer their perspective.

The lack of existing scientific research to support the claim of the possible synergy between natural and cultural marine resource also presented something of a challenge in this research. Based on a thorough search of the published literature, somewhat surprisingly, no research seems to have been conducted on this potential synergy, notwithstanding how intuitively attractive the idea might be.

Also, as mentioned above, additional interviews specifically related to the potential for partnership between RIM and the Iziko Maritime Museum could have been explored more fully. This would be important to do in any follow-up research that might be conducted in the future, as this possible partnership with a maritime museum so near the “Gateway” to Robben Island has great potential.

## **7.3 Conclusions**

The interest in UCH has increased throughout the years. This can be measured by expanding academic interest, but also general public interest. Therefore, the need to balance these interests is greater today than ever, as well as to preserve UCH sites from deterioration, both human induced and by natural processes. Robben Island’s UCH sites show great potential for both academic purposes and public enjoyment, despite what appears to be ongoing problems affecting sites integrity.

The result showed that throughout the different processes that have left an imprint on the Island in the last 20 years (e.g. the creation of RIM, World Heritage Site inscription; the various management strategies adopted) there has been a lack of inclusion and even recognition of the underwater heritage sites within the one nautical mile zone. Potentially explained by the predominance of the symbolic importance of the Island and the rightful focus on the political prison and the Nelson Mandela legacy, the underwater sites have great potential historical significance. This lack of inclusion seems to have resulted in degradation of sites, but no estimate of the extent of the damage can be determined because the sites have not been routinely monitored and assessed. The tourism potential for the MUCH on land and underwater have been mentioned in the past, and continue to be mentioned, by the management authority, but no real evidence has been found to suggest that progress is being made on the topic despite interest and involvement by outsiders. Considering guidelines from UNESCO and past international experiences at WHS, the recommendations being made here are worth additional attention, and have the potential to result in both conservation and economic benefits. The tourism potential may also benefit from the recommendations to promote,

expand and enhance public opportunities to appreciate and better understand the maritime landscape of the Island through the visitor experience offered by RIM.

Despite the recognized potential for further knowledge on the history of the area, lack of relevant research and publication of findings regarding the UCH and maritime landscape of the Island is worthy of special mention. Improved communication between the management authorities and the academic community is likely to increase the opportunities for future research and expand knowledge required to support effective management. Stricter protection of sites is needed to avoid degradation of sites, offering great potential academic, educational and economic benefits. The potential for further partnership by local authority and SAHRA regarding the maritime heritage of the Island shows great potential. This includes partnerships that could enhance the very likely synergy between living marine resources conservation and maritime and underwater cultural heritage resource preservation. It is hoped that a more holistic and effective integration of MUCH and the maritime landscape will be adopted by RIM at some point in the future to improve and expand the effective management of this globally-important World Heritage Site.

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# Appendix A

List of shipwrecks identified by operation Sea Eagle (Werz, 1994)

	Name	Flag	Type	Date sinking
1	A.H.Stevens	American	clipper ship	07-02-1862
2	Bernicia	British	barque	16-06-1861
3	Bittern	British	snow or brig	18-01-1848
4	Daeyang Family	Korean	carrier	30-03-1986
5	Flora	Dutch	ship (proper)	17-11-1821
6	Fong Chung No.11	Taiwanese	tunny boat	04-07-1975
7	Forfarshire	British	ship (proper)	15-09-1864
8	Goel No.1	Canadian	research ship	27-01-1976
9	Golden Crown	British	steam trawler	18-07-1923
10	Hypatia	British	cargo steamer	29-10-1929
11	Il Nazareno	Italian	barque	02-12-1885
12	Kingston	American	barque	23-12-1852
13	Natal	Norwegian	steam whaler	24-05-1914
14	Perseverance	British	ship (proper)	12-03-1826
15	Rangatira	British	steam liner	31-03-1916
16	Sea Eagle	American	ship (proper)	16-11-1856
17	Solhagen	British	steam whaler	11-09-1936
18	Tantallon Castle	British	mail steamer	07-05-1901
19	Timor	Dutch	barque	22-12-1856
20	isolated boiler			
21	metal plates			
Sites not located				
	C.de Eizaguirre	Spanish	mail steamer	26-05-1917
	Dageraad	Dutch	jacht	20-01-1694
	Gondolier	British	brig	07-02-1836

