

Commonwealth of the Northern Mariana Islands: A Case Study in Developing a Program of Protecting Underwater Cultural Heritage

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Abstract

This paper outlines a specific example, the Commonwealth of the Northern Mariana Islands (CNMI), and its effort to create and maintain a program for identifying, protecting and interpreting underwater cultural heritage (UCH). This paper suggests the process of developing such a program is most successful when it occurs in cooperation with all branches of the government that deal with marine/water resources and the local community who are stakeholders in the protection of their heritage.

Key words: Commonwealth of the Northern Mariana Islands, Underwater Cultural Heritage, Shipwrecks, Saipan, Sustainable

Introduction

The Mariana archipelago is located east of the Philippines and south-southeast of Japan. Saipan, the capital of the Commonwealth of the Northern Mariana Islands (CNMI) and the largest and most populated island, is 19 km long by 9km wide and is fringed by a barrier reef on its western side which creates a large, shallow lagoon (Figure 1). On the eastern side of the island the water is much deeper, although Lau Lau Bay offers some shallower water. The clarity and consistently warm temperatures of the water make SCUBA diving in the waters of Saipan possible year-round. Historic shipwrecks and submerged underwater cultural heritage (UCH) in the CNMI are protected by both Commonwealth and US federal laws.

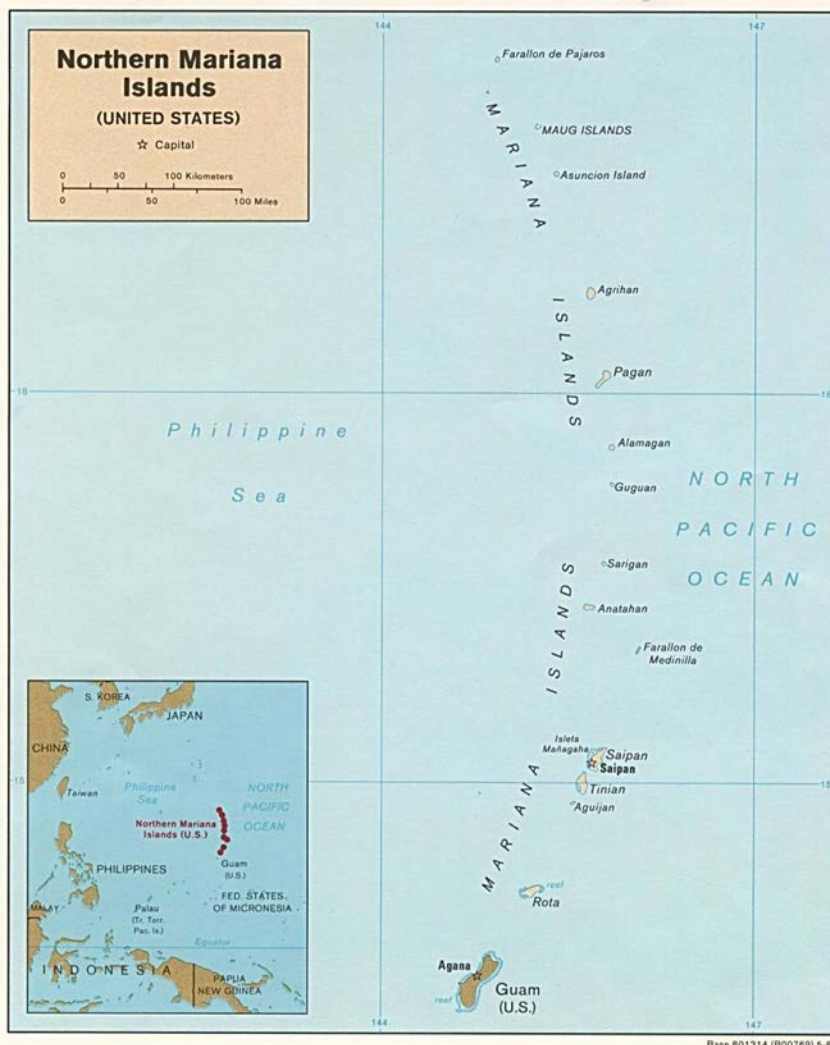


Figure 1. The Mariana Islands (Perry-Castaneda Library).

Several UCH surveys and assessments have been conducted in the waters surrounding Saipan from 1979 to the present which provide invaluable baseline data for identifying and conducting further research on UCH sites in the Marianas. More

recently in 2008, remote sensing and diver identification surveys in Saipan were conducted by Southeastern Archaeological Research (SEARCH) (SEARCH, 2008a; SEARCH, 2008b). The remote sensing surveys, including magnetometry and side scan sonar, were broad in nature; however the focus of the historical research and diver identification was on WWII heritage. The surveys were intended to be a baseline inventory for future investigations to build upon and were funded through a historic preservation grant provided to the Historic Preservation Office (HPO) and administered by the National Park Service (NPS). A total of 1,543 anomalies were located and, “The majority of identified anomalies represents material culture from WWII and offers a unique opportunity for Saipan to interpret its history through maritime heritage and dive trails” (SEARCH, Inc. 2008b:i).

In 2009, a comprehensive overview of the maritime history and archaeology of the CNMI was completed by Ships of Discovery (SHIPS) (Carrell, 2009). The project was undertaken as part of the CNMI’s on-going efforts to meet its historic preservation and inventory mandates and also was funded through a historic preservation grant administered by the NPS. The maritime context document provided an in-depth discussion of the history of the CNMI from the pre-historic period to the present, and pulled together currently available information on UCH sites in the islands.

Together these two projects provided the background information and emphasis for the development of a more intensive archaeological investigation and a public interpretation program for UCH in Saipan. In fact, at the same time that SEARCH, Inc. was conducting survey in 2008, staff and students from Flinders University were on the island working with the HPO to create a plan for developing a “maritime unit” within their existing program. In an earlier trip to Saipan in 2007, the HPO voiced concerns about their lack of ability to manage UCH (due to a lack of training in underwater archaeological techniques), and the pressing need due to the amount of tourist divers visiting the WWII sites. They also were interested in developing a maritime heritage trail which would provide two favourable outcomes: 1) developing a presence on the water as the agency charged with managing the resources and 2) developing a heritage tourism product that could promote sustainable use of the already heavily visited sites. Thus the idea was formulated to develop a plan to

accomplish a number of objectives that would assist HPO in better managing their UCH. These objectives included:

- Training staff in underwater archaeological methods in order to create a team of diving archaeologists
- Conducting more intensive archaeological research and recording known and heavily visited sites
- Developing a maritime heritage trail for the purposes of creating sustainable heritage tourism

All of the objectives have been achieved and even more developments have taken place. Below are some of the projects and initiatives that were instigated and a discussion on some of the obstacles encountered and ways forward.

Training staff in underwater archaeological methods

The first objective of developing a training opportunity was accomplished in January 2009 when Flinders University and HPO supported archaeological technician John Castro to travel to Australia and participate in the Flinders University Maritime Archaeological Field School in South Australia. Castro's extensive diving and archaeological background allowed him to participate as a supervisor in the two-week field school where he gained additional underwater archaeology experience.

A new training was developed by Flinders University specifically for the Mariana Islands context and was held in July 2009 on Saipan for staff from several government agencies, including HPO, Coastal Resources Management (CRM), the NMI Museum of Culture and History, and Department of Environmental Quality (DEQ), as well as local interested divers. A total of 20 diving and non-diving participants took part in the two-day course. Based on the Flinders University's Underwater Archaeology Methods topic, it included classroom lectures, practical terrestrial exercises, a diving exercise and an intertidal exercise for those not SCUBA certified (Figure 2). The training was a great success and provided participants with information about the importance of preserving UCH.

Another type of training was offered later when two Heritage Awareness Diving Seminars (HADS) were run in April 2011. HADS is a specialty course run through the three largest diver certification agencies in the world, NAUI, PADI and SSI, and is training intended for course directors, instructor trainers, instructors, dive masters, boat captains and dive shop owners. It was developed to provide diving industry

professionals with a greater knowledge of how to proactively protect shipwrecks and other UCH sites (Scott-Ireton, 2008). The goal of HADS is to increase awareness of the fragility of UCH, teach proper anchoring, mooring and diving behaviour on such sites, as well as demonstrate the need for preservation of such resources for future generations and the economic benefits of heritage diving tourism. A total of 16 participants took part in the HADS training, including dive shop owners, the president of a local dive professional organization, boat captains, dive instructors and dive masters, U.S. Coast Guard staff, and a staff member from the NMI Humanities Council. This training was funded through a National Oceanic and Atmospheric Administration Pacific Region Grants Cooperative grant awarded to Pacific Marine Resources, a local non-profit organisation concerned with environmental and historical research and sustainability. HPO and CRM staff presented lectures during this training. The training was seen as a crucial element to the development of the heritage trail and its sustainability. It aimed at educating the end users to protect the sites and educate their students and clients about using the sites appropriately.



Figure 2. Herman Tudela and John Starmer drafting during training.

Conducting more intensive archaeological research and recording known and heavily visited sites

In January 2009 SHIPS applied for an American Battlefield Protection Program (ABPP) grant for the archaeological and historical investigation of submerged WWII heritage and the collection of data for the development of a proposed maritime heritage trail. Funding was announced for \$49,900 in August 2009 and the project quickly took shape. HPO, CRM, and DEQ provided an invaluable amount of in-kind assistance during the project including: staff support both on and off the water, boats and vehicles, equipment and fuel. Their support was instrumental to the success and completion of the project. To date, nearly 50 UCH sites have been recorded or investigated and several of these sites are included in the heritage trail that was developed.

Developing a maritime heritage trail for the purposes of creating sustainable heritage tourism

The planning for a maritime heritage trail began in 2007-2008 and included a great deal of local consultation. Public lectures were given to gauge local interest, and meetings were held with several stakeholders including local divers and dive clubs, HPO, CRM, DEQ, NMI Humanities Council, and the Marianas Visitors Authority (MVA). This consultation centred on the needs and wants of the community and government in terms of their heritage and a heritage tourism product. As a result, three agencies (HPO, CRM, and DEQ) pledged their assistance to the project. The demographics of diving tourists were also sought from the MVA. Several leading experts in the field of heritage trail development were sought to provide input. More discussions were had with the agencies charged with managing environmental and biological resources; particularly useful were relationships with CRM and DEQ. These agencies provided research permits and worked alongside the project staff to develop a program for placing moorings on all the sites for use by boaters and tour operators – a necessity for reducing anchor impacts to sites.

This trail was conceptualized as part of a plan to aid in the preservation and protection of UCH sites that were already being impacted through tourist visitation. By providing interpretive literature which outlined each site's history and importance, legal protection and proper etiquette for visiting such heritage sites, it was hoped that divers, snorkelers, and swimmers would be better educated and develop a greater appreciation for the heritage, thus avoiding impacting or harming the sites further. In total nine sites were chosen for the trail including aircraft, landing vehicles,

amphibious assault vehicles and shipwrecks of both Japanese and US forces. Printed waterproof dive guides were produced as well as four color posters, a website and an eighteen-minute interpretive video to be shown at the NPS American Memorial Park (Figure 3).



Figure 3. Japanese aircraft poster for heritage trail.

Management plan and in situ conservation survey

The need to develop a management plan for submerged WWII maritime heritage in Saipan's waters was identified during the implementation of the trail. Throughout the archaeological survey and subsequent development of the trail, it was noted by archaeologists that certain UCH sites were being negatively impacted by both natural and cultural factors (for a full review see McKinnon and Carrell, 2011). These impacts were identified as contributing to an overall loss of archaeological and historical context and affecting the structural integrity of the sites and their long-term survival. While some of these impacts were recorded during the archaeological survey for the development of the trail in 2010, they were not the primary focus of the project and were treated cursorily. Upon completion of the trail it was deemed important to revisit selected sites and record baseline data to develop a plan to monitor, mitigate and manage the sites into the future. A plan to conduct further archaeological survey and initiate *in situ* conservation surveys was developed and supported by a follow up ABPP grant for \$72,000 in 2011.

In situ conservation surveys are different from standard archaeological surveys because they include the collection of data related to the natural environment (chemical and physical), which can allow for a better understanding of the destructive forces affecting sites and artifacts (MacLeod and Richards, 2011). They also record modern cultural impacts that can be used in the management of sites, including allowing or restricting access to sites and controls for altering behaviors of visitors. Finally, they often collect specific cultural information including data on material composition of objects. This data is vital to understanding the construction of these sites from an archaeological or cultural perspective, but also contributes to understanding the longevity of sites with relation to the material composition of metals and organics, how they react to and survive within the environment, and their overall structural integrity.

In situ surveys and studies are critical to regions such as the Pacific because there are limited resources (i.e. funding, staff, and facilities) to conduct recovery and conservation of submerged objects and sites. While the CNMI does benefit from grant funds distributed by the NPS, this funding is limited and often only covers a small portion of the compliance needs of the HPO (Ronnie Rodgers personal

communication, 2010). This means that the conservation and management of the resources must be done *in situ*.

Further, understanding the condition of the resources through *in situ* and archaeological surveys is an important step in the management process. An agency cannot manage a site if they have no knowledge of its condition. The HPO needs information about the condition of the sites in order to make informed decisions about their management.

Additional archaeological survey was conducted alongside the conservation survey in order to locate, record and identify new “control” sites not on the trail that could be monitored long-term for comparison purposes. Baseline data collected on new sites is useful because they can help managers understand the differential impacts of site visitation on those included in the trail.

Currently the *in situ* conservation survey report and management plan is under review by the granting agency and cannot be discussed until approval is sought.

Indigenous seascapes and intangible heritage

The idea for a project to record Indigenous maritime sites began during discussions in 2008 about the development of the WWII maritime heritage trail, when community members expressed their desire to further investigate their own “maritime-related” heritage. Thus, a conversation began with local historian Genevieve Cabrera (Chamorro and Carolinian descent) and Herman Tudela (a traditional fisher and archaeological technician of Chamorro and Carolinian descent), who is, about the possibility of recording sites that are significant to their maritime past and present. Flinders University graduate student Julie Mushynsky used the idea and project as part of her thesis research and worked directly with Cabrera, Tudela and others to record selected sites. The result was a community archaeology project to record the tangible and intangible “seascape” of the island of Saipan in the Mariana Islands (McKinnon et al. in press). The project recorded archaeological sites, oral histories, lived experiences and contemporary understandings of maritime-related heritage and lifeways in conjunction with community members (Figure 4). Rock art, potential fish procurement sites, access points, oral histories and other heritage, both tangible and intangible, were recorded and investigated as a result of this project. This type of project is critical to ensuring that colonial maritime history is not privileged over

Indigenous maritime heritage and provides a balance to previous research conducted on the island.



Figure 4. Colleagues Genevieve Cabrera and Fred Camacho leading site visits.

Obstacles and moving forward

While the CNMI has the ability to utilize and enact any and all of the legislation outlined above and they do so effectively on terrestrial sites, the island is in need of a review of the possible ways that this legislation can be made most effective for UCH. This is not a call for harsher restrictions but a reference to applying the legislation most effectively. It is also important to investigate complementary forms of protection. This means recognizing the location of the sites within, for example, a Conservation Area or National Landmark, both of which exist. Further, it would be ideal if the Rules contained in the UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001 were used as a model in formulating this process.

An obstacle in the effectiveness of the laws listed above is that at present there are no effective means by which the sites can be protected due to a lack of trained staff and equipment. Unfortunately, while there were three staff members at HPO who had the dive qualifications and training to conduct underwater archaeological survey

(took training in 2009), today there is only one, and that person is no longer physically able to dive. Further the HPO does not own a boat or diving equipment for accessing the sites. This situation is contradictory to Part II, Guideline 5 of the Abandoned Shipwreck Act 1987 which states “The agencies responsible for the management of State-Owned waters should have (or have access to) adequate professional staff, office and laboratory facilities, vessels, diving and underwater survey equipment to carry out assigned responsibilities.” As a result, the community currently relies on off-island resources and expertise to assist them with the management of their submerged archaeological heritage through monies and projects such as those described in this paper, which is not an ideal situation.

More archaeologists and archaeological technicians (a minimum of three) need to be hired, or existing staff needs to be trained in SCUBA and the ability to conduct archaeological assessments underwater. Further the HPO would be better equipped if they hired or purchased SCUBA gear and a boat for the purpose of conducting monitoring and assessment of underwater sites and investigating infractions. An alternative approach through interagency cooperation may provide a quicker solution as outlined below.

Interagency Cooperation

The involvement of other government bodies in the management of UCH is critical in the Pacific where resources and funding can be limited. In Saipan many UCH sites are located within the Mañagaha Marine Conservation Area. The management plan for this conservation area could include provisions for the protection and management of UCH. To accomplish the legislative purpose of the Mañagaha Marine Conservation Act, the CNMI Department of Lands and Natural Resources (DLNR) was delegated the exclusive authority to manage the Mañagaha Marine Conservation Area, as well as other marine conservation areas in the CNMI (Section 6 of PL 12-12).

The role of the DLNR in regard to the management of UCH is to promote public access to the sites while protecting the physical remains. The 2005 management plan for the conservation area outlines DLNR has a role in providing logistic and financial support for placing moorings on sites to reduce impacts by anchoring.

CRM was established on 11 February 1983, with the implementation of Public Law 3-47 within the Office of the Governor. The CRM program was established in order

to promote the conservation and sustainable development of coastal resources. CRM is responsible for general permitting activities which impact coastal resources in Saipan and in particular permits for dive boats and dive tour operations. As a result the agency should develop language for permits that supports the protection of UCH.

An effective way to increase enforcement of heritage laws is to train and enlist other agency staff whose job description includes enforcement of natural or environmental legislation. Agencies such as CRM, DLNR, DFW, and DEQ, which already operate boats and conduct regular inspections on water-related activities, could be trained in identifying infractions of cultural heritage law. Alternatively intra-agency agreements in which HPO staff accompany other agency enforcement officers during inspections would allow for increased regulation. Section 6 of Public Law 12-12 states that "...the Department [of Lands and Natural Resources] may coordinate and assist other Commonwealth or Federal agencies in performing their emergency or other agency functions within marine conservation areas, if the exercise of such functions is deemed prudent or necessary by the Department, or the performance of such functions is clearly permitted by law within marine conservation areas." Thus there is a precedent set in law that allows for collaborative efforts in management of marine resources.

The local natural environment in which a wreck is located and the assemblages that make a wreck have direct impact on the marine environment. A wreck can create a unique local environment for fauna and flora to thrive, and this has a bearing on defining the site's significance and issues of research and interpretation. Therefore there is a need for further understanding of UCH sites' local marine environment and the habitat they create for marine life.

Recent biological research was conducted in conjunction with the development of the heritage trail by a research from Sydney University. Fowler conducted two years of fish assemblage studies on the sites included within the trail. His research determined that "well- established vessel-reefs are capable of approximating fish abundances and assemblage parameters on natural coral reefs" (Fowler and Booth, 2012). This research indicates that UCH sites are of natural and environmental significance and should be protected as such. There are no provisions within Public Law 12-12, which regulates the Mañagaha Marine Conservation Area, to identify

UCH as aquatic reserves or equivalent. However access to the sites, if they are environmentally sensitive, maybe be controlled under provisions of the Mañagaha Marine Conservation Area management plan.

Community

Traditionally there has been little communication between local divers and CNMI HPO. Local divers report being frustrated when trying to report new sites to HPO and receive information about their history or significance. This disconnect is a result of HPO's inability through training, equipment and funding to be involved in the management of submerged sites. However, the HPO could benefit from partnering or working with local divers, dive groups and dives shops in the location and identification of new sites. Those who know the waters best are those who use it regularly. It would be beneficial if HPO developed a public profile and engaged with divers, dives shops and dive groups. Education programs, meetings, information sessions and the development of a site-reporting program are all options for increasing communication.

Conclusion

In concluding this paper, it is pertinent to re-state that the CNMI, and the Pacific region in general, has its own unique set of challenges and issues that are quite different from other parts of the world. Therefore, it is important when developing a UCH management program that other "models" or "programs" are not applied wholesale to this region. An approach that considers the challenges and difficulties CNMI is facing and a program that is suited to deal with these challenges and resolve them into the future is the most likely successful long-term management approach.

This paper was written with the intention of outlining some of the successes of CNMI's HPO and exploring ways in which they may move forward. The option of involving other interested agencies in managing UCH is likely the best immediate solution, but a long-term approach of hiring staff, increase funding and additional training will need to be undertaken. The information in this paper is meant to empower and encourage the local community to continue the positive steps they have made in protecting their UCH and to move forward.

While much of the work on UCH has been on WWII UCH, it is important to remember that there are many more sites from previous and later periods that are

significant to the history of the island. It is hoped that the HPO can continue to develop a program for managing those sites as well. Inclusive and collaborative efforts should be made with all regulatory agencies that deal with the marine environment, as well as other stakeholders such as tourism companies and divers. Further, it is important to understand that not only the interests of the U.S. and Japanese government are at the core of this heritage, but a local perspective that incorporates Chamorro, Carolinian, Filipino and Korean values should be considered (McKinnon 2013).

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Biography

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