

Preservation and Management of Underwater Archaeological Resources: Role of Agency

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Abstract

Underwater archaeological resources within the Republic of Palau (henceforth referred to as the Republic) cover a wide array of types from famous World War II wrecks, to Yapese stone money disks which sank to the bottom of the sea during their transport, and to traditional sites - which includes but not limited to semi-submerged docks/piers, fish traps, burials, and a sunken city mentioned in traditional folklore. These resources are protected under the Cultural and Historical Preservation Act (henceforth referred to as Title 19) mandated by the Palau Bureau of Arts and Culture (henceforth referred to as the Bureau). More specifically, Chapter 3 of Title 19 known as the "Palau Lagoon Monument" is exclusively reserved for all submerged and semi-submerged foreign vessels located within the Republic's territorial waters. Four agencies play a proactive role in monitoring the health and condition of the wrecks, report new site locations, and notifies the Bureau of possible looting activities. A Geographic Information System database maintained by the Survey and Inventory/Archaeology Section within the Bureau keeps an inventory of underwater sites obtained from earlier works plus data from affiliated tour agencies. This paper will examine the current situation within the Bureau and its subdivisions particularly the Survey and Inventory/Archaeology Section. It will provide details of efforts, challenges and goals, and gaps pertaining to the preservation and management of underwater archaeological resources. In addition, present case studies where the "Palau Lagoon Monument" clause was enacted. Lastly, we will discuss the measures and other aides available within the Bureau aimed towards assisting the state government establish medium-term goals for preservation and management plus effective long-term objectives beneficial for their state in terms of underwater cultural resources. In addition, give an overview of the latest UCH training, sponsored by UNESCO, which was held in Palau and plans moving forward to increasing the advocacy of UCH in the Pacific Region, particularly Micronesia.

Key words: Palau, WWII, Pacific, Micronesia, Yapese Stone Money

Introduction

Cultural heritage protection by means of public education is an effective medium for the positive awareness at local community level. In addition, it provides enough force for capacity building of key stakeholders or advocates and other leaders to set the stage for community level goals towards cultural resource management mechanisms. This will

promote effective and sustainable resource management, training, public education and awareness, and advocacy that will instigate community based efforts and goals in preserving archaeological heritage sites. Cultural resource management will allocate the awareness of traditional cultural heritage that would embody sustainability and sensitivity towards cultural heritage. Underwater cultural heritage offer a vast selection of heritage wealth for the understanding and interpretation of our past. Underwater archaeology has yet to receive its much-needed recognition and appreciation within the Palauan community since the field is not fully popularized. This report examines the current situation within the Bureau of Arts and Culture (BAC) and its subdivisions particularly the Survey and Inventory/Archaeology Section of their efforts and goals pertaining to the management of underwater cultural resources. In addition, provide the outcome of the most recent Palau Underwater Archaeology Training in 2013.

Palau Island Brief History, Geography and Geology

The Palau Island is the westernmost archipelago in the Caroline chain approximately 7 degrees North of the equator, consisting of six island groups totaling more than five hundred high and low islands (only 16 of which are inhabited) including World War II battleground of Peleliu and world-famous mushroom shaped rock islands. The inhabited islands of Palau including from north to south is Kayangel, Babeldaob, Koror, Peleliu, Angaur and the Southwest Island groups. Most of the Islands are encompassed in a barrier reef that stretches for approximately 105 km except for the Southwest Islands. Palau lies on a subduction zone causing *Babeldaob*, the largest island, to submerge about a half millimeter per year. Consequently, it is hypothesized according to paleoenvironmental studies that the earlier colonization and settlement sites along the coast of *Babeldaob* are underwater (Dickinson and Stephen, 2007). More archaeological data is needed from other possible sites for examination and identification pending comparative analysis. The possibility to access other sites around Micronesia is needed for a further reexamination to cement together a proposed hypothesis of early settlement and exclude others.

Role of Agency: Bureau of Arts and Culture

The Bureau of Arts and Culture is a branch of the Palau National Government responsible for identifying, documenting, protecting, preserving and managing all

cultural and historical resources within the Republic. First established in 1978, the Bureau of Arts and Culture - then called the Division of Cultural Affairs - and later renamed under the Executive Order No. 203 since 2001- is a Palau governmental entity under the Ministry of Community and Cultural Affairs, which mandates a framework for the adequate protection of archaeological sites and tangible cultural resources (Emesiochel, 2008: 4). Additionally, the Bureau implements Section 106 of the US National Historic Preservation Act of 1966, as amended. The Bureau helps in the implementation of acceptable historic preservation laws in the 16 states of the Republic of Palau. The Bureau receives funds from the Palau National Government and the Historic Preservation Funds from the U.S. National Parks Service, Department of the Interior. The Bureau has nine staff members. It operates with the advice and assistance from the 16 members Palau Historical and Cultural Advisory Board, 16 members Society of Historians, and 5 members Technical and Professional Review Committee. The mission of the Bureau is to protect and preserve all the Republic's cultural and historical resources to enhance, enrich, and foster the Palauan heritage now and into the future. To achieve this mission, the Bureau had four main goals: First, to preserve and foster cultural and historical resources for the benefit of Palauan people; second, to preserve and educate Palauan tradition that are threatened with extinction; third, to protect cultural and historical resources from destruction; and finally, to preserve culture and tradition in the face of inevitable increasing foreign contact and interaction.

Historical and Cultural Preservation Act Title 19 PNC § 102.

Created in 1974, the Palau Historic Preservation Act (PNC Title 19) is administered by the Bureau of Arts and Culture that is intended to serve as the official inventory of all those historical sites and tangible cultural properties, which are deemed of significance to the Palauan people and culture. Their significance makes them worth preserving, and protecting from destruction and impairment. The Palau Register is the legal instrument to ensure that registered properties or properties that may be eligible, threatened by public or private development will be subject to comment and review in accordance with the procedures prescribed by law. Title 19 PNC § 134: Each state reserves to itself the exclusive right and privilege of ownership and control over historical sites and tangible cultural property located on the lands and *waters* owned or controlled by the state.

Section 134 allows the state government to create legislations for the protection of their UCH sites not limited to the foreign vessels located within their boundaries. The creation of the legislation is however at the discretion of the state. If the state does not have legislation in place, the state would comply with the procedures outlined in PNC Title 19. Sites located underwater that may suffer potential damage or displacement during a development project are subject to and must comply with the rules, regulations, and provisions outlined in the PLM Act of PNC Title 19 through the project review process. Currently, all WWII wreck sites as well as the Yapese stone money disks on the shores of rock islands and the bottom of the sea plus other known or unknown submerged landscapes are not listed on the Palau Register of Historic Places. The BAC Survey and Inventory/Archaeology section has yet to perform a thorough underwater survey of the sites.

Survey and Inventory/Archaeology

The Survey and Inventory/Archaeology Section is the leading responsible body for the identification and inventory of all cultural and historical resources within the Republic. To carry out this responsibility, we have divided our survey into three phases: First, *Babeldaob* survey; second, rock island survey; then, underwater survey. The basis for determining and prioritizing our survey this way is based on economical, developmental, and policy factors, as well as a lack of staff, training and funding to do both surveys at the same time, especially Underwater Cultural Heritage that requires a more technical set of skills. The issue and plan of GIS in Palau and plan is to centralize a main information office that manages all data. Each relevant government agency should be interconnected to the Information office and have their own GIS program they manage and provide data to the central office. This will allow all agencies to share and upload files from different agencies. But due to lack of funding, only few government offices and NGOs are able to acquire a GIS program.

Short-term Goals

- Revisit identified underwater archaeological sites/resources for further analysis of site condition, assessment, and verification of information, and inventory
- Identify immediate threat (deterioration, looting,) affecting underwater cultural resources

- Develop community and local state government interest and collaboration

Long-term Goals

- Method of conservation and preservation
- Establish a database for underwater archaeological sites/resources
- Create an underwater cultural resource management plan to be implemented at the state and national level
- Continuous management, protection, and preservation of underwater cultural resources

This section assist in public education in “disseminating information and educating the public through presentations and site visits, in order to foster awareness and importance of protecting, preserving, and conserving our cultural heritage that is our national identity for our future generations” (Emesiochel, 2008: 8).

Palau Lagoon Monument 19 PNC § 306

It is hereby declared that it is a policy of the Republic to preserve forever-historic landmarks, structures, and other sites and objects of significance to the Republic of the Trust Territory situated within the jurisdiction of the Republic for the inspiration and benefit of the people of the Republic.

All ships, other vessels and aircraft, and any and all parts and contents thereof, which formerly belonged to or were part of the armed forces or commercial fleet of Spain, Germany, Japan, and the United States or any other nation, which were sunk to or otherwise deposited on the bottom of the Palau Lagoon and its territorial waters, subject to applicable salvage laws, shall be and hereby are set apart as monuments which shall be collectively called the “*Palau Lagoon Monument*”.

The administration, protection, and development of the monument shall be exercised under the direction of the President of the Republic or his duly authorized representatives. The strictness of this law, give us enough time to seek assistance and trainings to accomplish the survey and inventory of the underwater cultural heritage of Palau. In order to convict someone for violating the Palau Lagoon Monument, the government must prove that the individual (1) removes, appropriates, damages, or

destroys (2) ships, other vessels or aircraft (or parts thereof), which formally belonged to the armed forces or commercial fleet of any nation and which are at the bottom of the Palau lagoon.

Types/Categories of Underwater Cultural Resources

The most notable types of UCH sites within the Republic are the WWII wrecks located mostly in the Rock Island Southern Lagoon (World Heritage Site – 2012). There are more than 60 WWII ship and aircraft (see Fig. 1 for sample aircraft) wreck sites in Palau (Bailey, 1991). The wrecks sites are popular tourists dive spots. Tourists who decide to dive the wrecks are educated on the types of ship, ship content, and their components. In the form of myths, locally known UHC sites and folklore for instance is the sunken City of Ngibtal. Fish trapping sites, stone docks/piers, underwater burial sites, and submerged landmarks (Olsudong et al., 1997 and 2000) are known UCH sites that are found in different parts of Palau – all are protected under Title 19 PNC Chapter 1. Other known material that is not fully documented is the numerous Yapese stone money disks (Fig. 2) which sank to the bottom of the sea during their transport from Palau to Yap. Yapese islanders quarried these large stones or “megaliths” in Palau prior to European contact (Hazell and Scott, 2006: 12). During their oceanic voyage to Yap, which expanded several hundred kilometers, some vessels transporting the money disks capsized, leaving a trail of money disks from several trips on the ocean floor. It is not yet certain where exactly these money disks are located. There has yet to be a full documented, mapping, and surveyed report of the Yapese stone money disks under the waters of Palau.

Recent work by Fitzpatrick (2008a, 2008b) in the management and protection of the quarry sites provides the opportunity for the local communities in Palau and Yap to take lead in the preservation of such sites. The proposed management plan covers sites located inland. Sites or money disks underwater are also given the same amount of attention and protection it deserve once the sites have been identified. Francis Toribiong, one of Palau’s local community leaders and a well-known scuba diver, has taken the lead in the advocacy and protection of UCH sites in the Republic. As part of public education and outreach projects, BAC in collaboration with PVA, the Belau National Museum, and local state government aims to promote community awareness

of the types of underwater cultural heritage. From the shipwrecks to sunken city and to the Yapese megaliths, Palau aims to increase the fascination and value into the preservation and conservation of UCH sites.



Fig. 1 (left) Jake Seaplane - History: A Japanese - Aichi E13A1-1 Navy Floatplane, built in 1941. The seaplane is a long range and high speed reconnaissance seaplane, 3-seat, single engine, twin float, 15 hr maximum endurance, range of 1,128 nautical miles. Primary role – bombing missions against land and shipping targets, air-sea rescues, staff transport and kamikaze sorties and destroyed in 1944. Today, the seaplane sits upright, mostly intact; artifacts around the site are radios, ammunition – small bomb inside cockpit to the right of the aft seat. Marine life surrounding the site consists of crocodile fish, Batfish, Octopus, Cuttlefish, whitecap Shrimp and Nudi branches. The marine life in surrounding shallow patch reef – Sponges, Staghorn Lettuce, Brain, and Table corals, small sea whips and colorful juvenile tropical fish. (Bailey, 1991; Emesiochel 2013 Palau Underwater Archaeological Training field notes)

Fig. 2 (right) The site is Uet el Daob ma Uet el Chutem, a Yapese Quarry site on Orrak Island, Airai state. The Orrak Island site is undergoing UNESCO World Heritage nomination process as a Transboundary site with Mangyol Money Bank in Yap. (Scott M. Fitzpatrick, 2002, Airai, Palau)

Tourism, location and accessibility

Palau was the headquarters of the Japanese command in Micronesia and was heavily fortified by the Japanese in the years leading up to WWII in the Pacific. Malakal Harbor was a major forward supply base for Japanese shipping. On March 31, 1944 U.S. dive-bomber strikes from aircraft carriers Yorktown and Bunker Hill, of Carrier Task Force 58 destroyed over 50 warships and airplanes of the Japanese Imperial Forces, making Palau's western lagoon their final resting place (Bailey, 1991). Most of the wreck are located within a few minutes of Sam's Tours dive center and remain in excellent condition for diving. Each year in March, Sam Scott of Sam's Tours hosts Palau Wreck Week to mark the anniversary of the sinking of the Japanese fleet. WWII shipwreck sites are mainly located in Palau's Southern Lagoon in Koror, the states of Peleliu and

Angaur and other sites around the coast of Babeldaob. Most of Palau's dive shops offer services, kayak, and dives to these WWII wrecks. Provided in the tour, the dive operator educates the tourist on basic information about the wreck. There are 10 popular wreck dive sites, which Sam's Tour takes their clients for diving. Accessibility to the sites is not restricted; tour operators can freely access the wreck for photo taking, kayak, and other recreational activities. Most of the Palau tour agencies with the assistance of Palau Visitors Authority (PVA) promote eco-tourism and eco-heritage. Such promotion provides incentive to state legislatures to create or strengthen exciting laws pertaining to UCH sites within their boundaries.

Current legislation, Preservation and Management of Underwater cultural resources

Aside from PLM, local conservation legislations and regulations pertaining to the protection and management of UCH sites are minimal. The permit or MOA is administered by the office of the President for the stipulations of the management and treatment of UCH sites are only created in the event such salvage and research arises. With the exception of PNC 19 and PLM, the Protected Areas Network Act (PAN) and the Micronesia Challenge established in 2007 aims to protect not only terrestrial area up to 20% but also includes a 30% of marine areas where possible UCH sites are located. Since there is not a definite line where the 30% occupies, it would be logical to deduce that such percentage would be broken accordingly to where high concentrations of UCH sites are found. Included in the 30% there should be space reserved for the protection and preservation of high marine biodiversity areas. To be protected under PAN, local state government has to endorse the PAN Act and agree to the stipulations and guidelines under the Act to ensure full resource safeguarding. In turn, the sites designated by the states as PAN sites are eligible for funding and other opportunities for the effective management of the sites. Local state governments take full responsibility in the protection of the UCH sites located within their municipal boundaries. Such legislation, rules and regulations must address the proper protection, monitoring, and research around the areas. Special cases such as the salvage of a particular vessel or parts thereof will be under the unified consensus and understanding between the

foreign entity, the state government, and the President with the cooperation and guidance from the BAC office.

“Public involvement and interest in the underwater cultural heritage is at an all-time high, but, paradoxically, one of the major problems as regards marine-zone development and the historic environment remain that of convincing the government and the general public alike to consider cultural heritage within environmental impact assessments, and to see the protection of cultural heritage as not only a moral, social imperative but also as an economic one” (Flatman, 2009).

UCH conservation is relatively new. Nevertheless, Palau is willing to take part in any capacity building opportunities for training to effectively manage underwater heritage. This will provide a foundational guidance to the local stakeholders and state government the necessary tools to build their conservation program to include the proper management of their known (and unknown) UCH sites.

Threats

The ever changing climatic changes, erosion, and looting are potential yet inevitable threats to marine cultural heritage. Climate change is a slow inevitable threat to semi-submerged sites and other coastal properties as it continues to change the physical characteristics of the area. This either alters the features or displaces them from the site. Unexploded Remnants of War (ERW) that leaks out picric acid, oil, and maybe other harmful elements are increasing threats to the livelihood of wreck divers and local community, environment as well as the heritage itself. There is an ongoing project at the famous Helmet Wreck dive site to remove fused depth charges. There are no thorough survey of all the wrecks to understand the extent of EWR and its impact on marine life. Salvage of particular artifacts, relics, or components of a UCH site when exposed to the elements may oxidize, which damages the objects. This possibility will hinder any salvage attempts but will not impede any foreign entity to reclaim their objects.

Available expertise and Current Trainings

Currently, there are only two staff members within the Palau HPO with adequate training on maritime archaeology. With the assistance from UNESCO's Participant Program, Palau through the Bureau of Arts and Culture was able to secure funding to

perform a three-week training course on Underwater Cultural Heritage from November 18 to December 06, 2013. Through this training, we were able to achieve valuable lessons:

- i. Educate local partners the benefits of the UNESCO 2001 Convention for the Protection of Underwater Cultural Heritage
- ii. Nautical Archaeology Society (NAS) training program
 - a. Introduction to Foreshore and Underwater Archaeology
 - b. Part 1, Certificate in Foreshore and Underwater Archaeology
 - c. Part 2, Intermediate Certificate in Foreshore and Underwater Archaeology
- iii. Study Tours – Peleliu and Koror State Southern Lagoon World Heritage Sites
- iv. Development of a Palau Underwater Cultural Heritage Team (PUCHT)
 - a. Recording and documentation of UCH in Palau

Through the Underwater Archaeology Training program, Dr. William Jeffrey of Flinders University and his associate Luis Cabral from the Guam Department of Education were able to train and certify 10 Palauans and 1 American environmental graduate student from the University of Guam in UCH surveying, conservation and preservation techniques.

The UCH training gained a great number of supports from the local state governments, environmental NGO's in Palau, as well as the Palau National Congress. This amount of support from the Bureau of Arts and Culture partner agencies encourages the Bureau to seek more funding from UNESCO to do more UCH trainings beyond technical skills. More importantly, this would help toward the completion of the Nautical Archaeology Society (NAS) certificate training program of Part 3 and Part 4. This request came through the Bureau by the state government if there is a possibility to do more training in 2014. The success of the training will be shared during the 2014 Asia-Pacific Conference on Underwater Cultural Heritage in Honolulu. It is hoped that more publicity could build solid networking and interest to bring in more training opportunities to Palau. Training outcomes included:

- i. Trained 10 Palauans who have worked together very effectively in conducting a 3-Dimensional survey and two quick 2-D surveys of 3 underwater cultural heritage (UCH) sites in Koror and Airai States.

- ii. Can now work together on future Palauan UCH projects in combination of further training.
- iii. Well recorded and documented the Jake Seaplane that with further research could be nominated for the Palau National Register of Historic Places or the US National Register of Historic Places.
- iv. The cohorts have the capacity to conduct surveys of all types of underwater cultural heritage (tangible and intangible).

Conclusion

In conclusion, we are a small island nation and still in the process of getting ourselves to improve our capacity building and awareness regarding our UCH. We are hoping that the participants who just finished the UCH training will help the agency on both human resource and public awareness. We are also looking forward to seek any other sources to expand the capacity and awareness to the states so we can assist both working side by side to enhance the protection and preservation of our underwater cultural heritage.

Acknowledgement

We would like to take this opportunity and to extend our deep appreciation to the organizer of the conference that gave us the opportunity to participate and share the Role of the Agency regarding UCH heritage in the Republic of Palau. We would like to also thank all the participants for their contribution and experiences that will help paved us our way to improve and enhance our approach to our heritage.

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Biography

Sunny O. Ngirmang is currently the Director/HPO of the Bureau of Arts and Culture, also known as Palau Historic Preservation Office of the Ministry of Community and Cultural Affairs of the Palau National Government. Ever since in her post in the Bureau four years ago, she has attended several trainings, conferences, workshops and other activities related to managing, preserving and protecting historical and cultural heritage both in the state, national, regional and international level. She is passionate about cultural resource management of Palau's tangible and intangible heritage.

Calvin T. Emesiochel is currently the Deputy HPO of the Bureau of Arts and Culture, also known as Palau Historic Preservation Office of the Ministry of Community and Cultural Affairs of the Palau National Government. Emesiochel has over 12 years of extensive archaeological experience including extensive knowledge in GIS and Access database management, Section 106, surveying, and CRM. He is a certified PADI diver since 2002 with experience in underwater archaeological surveying techniques and also NAS Part 1 and Part 2 certified since 2006. He is passionate about the preservation and protection of the Palauan tangible and intangible heritage.