

# Preservation and Management of Underwater Archaeological Resources: Role of Agency

Sunny O. Ngirmang and Calvin T. Emesiochel<sup>1</sup>

## **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 & 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. Tour 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 & 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 & Inventory/Archaeology Section. It will provide detail of their efforts and goals, challenges, 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.

## **Palau Island Brief History, Geography & 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 kilometers 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 Athens 2007). More archaeological data are needed from other possible sites for examination and identification pending comparative analysis. The possibility to access other sites around

---

<sup>1</sup>Bureau of Arts & Culture, Palau Historic Preservation Office, Koror, Republic of Palau 96940



Micronesia is needed for a further reexamination to cement together proposed hypothesis of early settlement and exclude others.

### ***Bureau of Arts & Culture***

The Bureau 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, then called the Division of Cultural Affairs and is presently the Bureau of Arts and Culture through Executive Order No. 203 since 2001, is a Palau governmental entity under the Ministry of Community & 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 a total of 11 staff members. It operates with the advice and assistance from the 16-member Palau Historical and Cultural Advisory Board, 16-member Society of Historians, and 5-member 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.

### **A. Historical & Cultural Preservation Act 19 PNC § 102**

Created in 1974, the Palau Historic Preservation Act (PNC Title 19) is administered by the Bureau 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 hence worth preserving, plus be protected 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.

**19 PNC § 134:** Each state (and national government) 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.

### **A.1 Survey, Inventory and Archaeology**

The Survey, Inventory and Archaeology Section are the leading responsible for the identification and inventoried 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 of determining and prioritizing our survey in this way was based on economical, developmental, policy, as well as not enough staff, training and funding to do both surveys at one time. Especially Underwater Cultural Heritage that require more technical skills.

Even though data haven't input into the database, the information of underwater cultural heritage but we do have readily available hard copies that provide descriptive information including coordinates, maps, drawings, and photos. There are records of more than 60 wreck sites are submerged around the Palau lagoons. Some of these sites are very popular for tourist diving spots which are shown on the map. Diving tour companies are really strict as to preserve these sites for their own benefit. They usually report to our office as they found new wrecks or even suspicious action of looting.

The issue of Geographic Information System (henceforth referred to as GIS) in Palau and future plan is to centralize a main information office that manages all data. Each 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 GIS program.

Right now, the office of PALARIS - Palau Automated Land and Resource Information System is the office that has well trained and full GIS operation staff. This office is the one that supposedly be the central GIS information office.

#### *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, etc) 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 a underwater cultural resources 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).

## **B. 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.

### **C. Types/Categories of Underwater Cultural Resources**

The most notable types of UCH sites within the Republic are the WWII wrecks located mostly in the Southern Lagoon. There are more than 60 WWII ship and aircraft wrecks sites in Palau. The wrecks sites are popular tourists dive spots. Tourists who decide to dive the wrecks are educated in the types of ship, ship content, and their components. Captain Wilson's shipwreck of 1783 off the Coast of Ulong Island is also a well-known site. The *Antelope* shipwreck site is under the control of the Koror State Government. Some of the ship's remnants can be seen during low tide.

Other UCH sites are locally known by the form of myths and folklore for instance is the sunken City of Ngibtal. Fish trapping sites, stone docks/piers, underwater burial sites, and submerged landmarks are known UCH sites which are found in different parts of Palau – all are protected under Title 19.

Other known but not fully documented is the numerous Yapese stone money disks which sank to the bottom of the sea during their transport from Palau to Yap. These large stones or "megaliths" were quarried in Palau by Yapese islanders prior to European contact (Hazell and Fitzpatrick 2006:12). During their several hundred kilometers of oceanic voyage to Yap, 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 documentary, mapping, and surveying of the Yapese stone money disks under the waters of Palau.

Recent work by Scott M. Fitzpatrick 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. One of Palau's local community leader and well-known scuba diver Francis Toribiong takes lead in the advocacy and protection of UCH sites in the Republic.

As part of public education and outreach, the Bureau in collaboration with Palau Visitors Authority, the Belau National Museum, and local state government aims to promote community awareness on 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.

#### **D. 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.

Most of the wrecks 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 shop, naming for instance Sam's Dive Tour offer services, kayak, and dives to the WWII wrecks. Provided in the tour, the dive operator educates the tourist basic information of 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.

#### **E. 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 very minimal. The permits or MOA's administered by the office of the President of stipulations of the management and treatment of UCH sites are only created in the event such salvage, research, etc arises.

With the exception of Title19 and PLM, the Protected Areas Network Act (henceforth referred to as PAN) and the Micronesia Challenge established in 2007 aims to protect not only terrestrial cultural heritage but up to 20% of marine areas including where such UCH sites are located. Since there is not a definite line where the 20% occupies, it would be logical to deduce that such percentage be broken accordingly to where high concentration of UCH sites are found. Included in the 20% however should be reserved also for the protection and preservation of high marine biodiversity areas. To be protected under PAN, local state government endorses the PAN Act and agrees to the stipulations and guidelines under PAN 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 or guidelines 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 Bureau.

## **F. Threats**

The ever changing climatic changes, erosion, and oil spills are potential yet inevitable threats to marine cultural heritage. The supposed submerged landscape such as the City of Ngibtal is prone to heavy silt erosion due to development projects inland. As Palau is eagerly searching for economic and financial stability during this present-day world financial crisis, Palau may explore other sources of renewable sources of energy such as water currents which could inevitably have serious impacts to UCH sites.

The lack of or minimal legislation in place which specifies the integrity of UCH sites makes these sites at risk of improper handling and inadequate recording or data recovery.

Salvage of particular artifacts, relics, or components of a UCH site when exposed to the elements may oxidize hence damage to the object. This possibility will hinder any salvage attempts but will not impede any foreign entity to reclaim their objects.

The parts of some vessels of WWII ships are exposed during low tide. This exposure speeds up oxidation and the deterioration. More attention needs to be made from the administrative center in charge of and mandates UCH sites within the Republic.

## **G. Status of Salvage**

Any foreign entity wishing to salvage parts of or contents of any submerged vessel shall comply with the provisions outlined in the rules and regulations of the Palau Lagoon Monument section of Title 19. A signed memorandum of agreement between the foreign entity and the Republic of Palau government must agree to the outlined stipulations in the memorandum. Usually before any salvage, proper research and documentation of the wreck site, the parts, and contents to be salvage are conducted.

Salvage instances seldom occurs in Palau. The expense of research and data recovery rests on the foreign entity wishing to repatriate their artifacts. Entities wishing to repatriate goes through a series of negotiation with the Palau Government stating intention and the need of such artifacts being returned.

## **H. Case Study**

### **Republic of Palau (*plaintiff*) v. Cameron James Avenell, Matthew Young, Richard Sumor, David Tansey, and Ian McCombie; *ROP vs. Avenell, 13 ROP 272 (Tr. Div. 2006) Criminal Action No. 06-072***

Mr. Cameron Avenell and Mr. Matthew Young, the remaining defendants where charged for removing pieces of artifacts from shipwrecks. These shipwrecks have been declared by law to be preserved as "Palau Lagoon Monument". The Government charged the defendants for their conduct with counts based on the Palau Lagoon Monument Act. The divers took artifacts from Amatsu Maru wreck, Chuyu Maru wreck, Ryuku Maru wreck and an unidentified forth wreck. Amongst the artifacts found during the search resulted in the recovery of a porthole, a compass, a frame, lanterns, light bulb covers, and porthole frames. The artifacts were recovered from the *Lionwind* vessel operated by divers.

**Francis Toribiong and the Republic of Palau (*plaintiffs*) v. John C. Gibbons, Koror State Executive Administrator, et al. Civil Action No. 451-91; 24 September 1993**

Plaintiffs allege that Koror State intends to dismantle or remove a World War II Zero fighter airplane which is located under the Palau lagoon at the depth of approximately sixty feet. They allege that such removal would violate the provisions of 19 PNC § 301 *et seq.* because the Zero is part of the Palau Lagoon Monument. The relief sought by the Plaintiffs is a declaratory judgment that Koror State may not remove or dismantle the Zero without complying with the Lagoon Monument Act and that it be permanently enjoined from the removing or dismantling the Zero unless it obtains a permit to do so pursuant to the Lagoon Monument Act. Plaintiffs have proven by a preponderance of the of the evidence that the airplane at issue herein is a Zero formerly a part of the armed forces of Japan and that it has been sunk or otherwise deposited on the bottom of the Palau lagoon. Section 304 of the Lagoon Monument Act requires that, before a person may gain access to a monument aircraft to examine it or gather objects from it, a permit must be obtained from the President or his duly authorized representatives. Similarly, section 306 provides for penalties for any person who removes such aircraft or any part thereof without first obtaining permission from the President. Koror State contends that it does not have to comply with the Lagoon Monument Act by obtaining a permit to gain access to or otherwise deal with the Zero because (1) under Article I, Section 2 of the ROP Constitution, Koror State is the owner of the Zero, and the owner can “do what he pleases with what he owns”; (2) the Republic of Palau’s regulatory power are limited by Koror State’s right to own and derive revenues from exploiting state resources; (3) the Lagoon Monument is unconstitutional as sought to be applied here because, without compensation, it takes away Koror State’s right to exploit and derive revenues from the Zero; and (4) absent regulations, the Republic of Palau has no rights under the Lagoon Monument Act.

***Conclusion***

Currently, there is only three staff within the Bureau with adequate training on maritime archaeology. The minimal expertise available within the Bureau reduces the speed of anticipated surveys and monitoring.

In addition, there is no other available expertise on island particularly in maritime archaeology. Due to a very few certified trainees in underwater archaeology and courses on island, the support of such discipline is minimal. Public interest is high however there is a lack of available resources for the proper education and awareness of underwater archaeology. The Bureau is always looking for opportunities plus welcomes any opportunity that offers the adequate training, education, and the right tools in assessing, monitoring, and managing UCH sites.

The Palau Community College offers a course in archaeology but short of the resources to expose students in underwater archaeology. The college aims to seek available programs that are geared towards the protection of marine cultural heritage which is a much needed field in Palau. In addition, such opportunity will help increase in the public awareness and advocacy and the potential push needed to help create new

or strengthening existing legislations for the protection of UCH sites at the state and national level.

### ***Bibliography***

Bailey, D. E., 1991	<i>WWII Wrecks of Palau</i> , North Valley Diver Publications, California.
Dickinson, W. R., and Athens J. S., 2007	Holocene Paleoshoreline and Paleoenvironmental History of Palau: Implications for Human Settlement. <i>Journal of Island and Coastal Archaeology</i> 2(2):175-196
Fitzpatrick, S. M., 2008	Maritime interregional interaction in Micronesia: Deciphering multi-group contacts and exchange systems through time. <i>Journal of Anthropological Archaeology</i> 27 (2008) Pp. 131-147
	Preservation and management for Yapese Stone Money sites in Palau and Yap.
Flatman, J., 2009	Editorial. Conserving Marine Cultural Heritage: Threats, Risks, and Future Priorities. <i>Conservation and Management of Archaeological Sites</i> (11):1 Pp. 5-8
Emesiochel, C. T., 2008	Palau County Report: Training Course on Cultural Heritage Protection: Research, Analysis and Preservation of Archaeological Sites and Remains. Nara: Japan
Hazell, L. C., and Fitzpatrick, S. M., 2006	The maritime transport of prehistoric megaliths in Micronesia. <i>Archaeol. Oceania</i> 41 (2006) Pp. 12-24
Liston, J., 2009	Cultural Chronology of Earthworks in Palau, Western Micronesia. <i>Archaeol. Oceania</i> 44 (2009) Pp. 56-73
Olsudong, R., (M.A.) et al.,	Draft: Inventory of Cultural Sites and Oral History in Melekeok and Irai. Palau: Bureau of Arts & Culture (1997)
	Draft: Inventory of Cultural & Historical Sites and Oral History in Ngarrard State. Vol. I: Inventory of Cultural and Historical sites. Palau: Bureau of Arts & Culture (2000)
Palau National Code Title 19 1982	Cultural and Historical Preservation Act
Sam's Tours	<a href="http://www.samstours.com">www.samstours.com</a> , accessed Oct 11