UNIT 3

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Management of Underwater Cultural Heritage

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Training Manual for the UNESCO Foundation Course on the Protection and
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Author Martijn R. Manders

Management of Underwater Cultural Heritage

Core Knowledge of the Unit

This unit introduces the basic elements of underwater cultural heritage management and provides guidance on how students can learn to facilitate the process.

> **Upon completion of the Management of Underwater Cultural Heritage unit, students will:**
>
> • *Have an understanding of mitigation in maritime and underwater archaeology*
> • *Be familiar with different types of management plans*
> • *Know how to identify stakeholders*
> • *Know how to deal with identified stakeholders*
> • *Have some insight on the ethics in the protection of underwater cultural heritage*

Introduction to the Unit

It is imperative that our underwater cultural heritage is carefully managed over time to ensure its protection. Sites provide us with an abundance of information regarding our shared history and the development of civilizations. Therefore, they cannot remain ever under the sea, ignored, forgotten or only observed. Having been assessed for their significance (see Unit 6: *Significance Assessment*), each site requires an appropriate plan of action, such as (limited) excavation, *in situ* preservation or alternatively removed from our archive of significant archaeological sites. The decisions and evaluations that are made, the people involved and their influence on the way underwater cultural heritage is treated, all play an important role in the overall management. This can be done at the local, regional, national and even international level.

1 What is Underwater Cultural Heritage?

In accordance with Article 1 of the UNESCO Convention on the Protection of Underwater Cultural Heritage (Paris 2001), 'underwater cultural heritage' means 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 such as:

> *(i) sites, structures, buildings, artefacts and human remains, together with their archaeological and natural context;*
>
> *(ii) vessels, aircraft, other vehicles or any part thereof, their cargo or other contents, together with their archaeological and natural context; and*
>
> *(iii) objects of prehistoric character.*
>
> *(b) Pipelines and cables placed on the seabed shall not be considered as underwater cultural heritage.*
>
> *(c) Installations other than pipelines and cables, placed on the seabed and still in use, shall not be considered as underwater cultural heritage.*

For the purpose of the 2001 Convention, 100 years was adopted as the benchmark, though some countries may have their own minimum age of sites that they consider to be the heritage. For example, the Netherlands used to adhere to 50 years as a minimum age while the United Kingdom (UK) does not use a minimum age at all, opting to protect sites based on an assessment on their significance. In 2012, the Netherlands has followed the UK's practice to only assess on significance and to remove the minimum age.

📖 *Suggested Reading*

Forrest, C. 2002. Defining 'Underwater Cultural Heritage'. *The International Journal of Nautical Archaeology,* Vol. 31. No.1, pp. 3-11.

2 What is Managing Underwater Cultural Heritage?

In simplified terms the management of underwater cultural heritage can be defined as the attempt to balance the protection of underwater archaeological sites with, for example, the availability of funds, human resources, time and also economic development pressures such as fishing. To be able to successfully manage sites several factors have to be taken into account. These can include different heritage resources (known, unknown and future), threats, influences from outside, ethics, site accessibility, documentation, reconciliation of conflicts of interests, the willingness to preserve our heritage, etc. Foremost management is about structuring all of the information available to us, prioritising the needs and importance of each site and making well founded decisions based on all factors.

3 Why Management?

In recent decades underwater cultural heritage has faced growing threats due to its increasing accessibility to the larger public and more extensive exploitation. Added to this, the natural conditions in and around a site can alter due to climate change or natural erosion.

With the beds of open seas, rivers and lakes becoming more accessible with modern diving equipment, the number of stakeholders who may have direct or indirect impacts on the underwater archaeological resource is increasing.

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Some important things to consider in the management of underwater cultural heritage are:

- *It is a part of the overall land management which includes natural and cultural land and seascapes.*
- *Other parties may not consider the site significant or worthy of safeguarding.*
- *Underwater cultural heritage needs advocates to fight for its protection.*
- *It is our shared heritage and a part of national identity, a cultural source that we can appreciate and learn from.*
- *Legislation and policy guidelines are being developed, not only for the protection of underwater cultural heritage, but also for associated concerns such as the exploitation of the seabed.*
- *Underwater cultural heritage has to be considered in a broad context that goes beyond individual sites. It is important to remember that sites are not only also intrinsically connected with the environment, but also to each other.*

The preservation of underwater cultural heritage has to be approached in a proactive, rather than reactive way. A mission vision and a clear set of values need to be defined, alongside the development of strategic and financial plans for managing the resource as a whole assemblage, rather than just individual sites. In many countries underwater cultural heritage is still being managed on a day to day basis; if a site is discovered, it must be surveyed to collect relevant information and protective measures should be undertaken to mitigate risk to the site.

Heritage resources on land have been rather efficiently protected. With more and more underwater archaeological sites discovered each year, the need for urgent protection has now been realised for those sites on the seabed. With the increasing threats from on shore and off shore infrastructure development, commercial fishing and exploitation of marine resources, underwater archaeological sites must be protected and managed sustainably, not only for known resources, but also for the unknown and future resources (See Unit 4: *Underwater Archaeological Resources*). If the management of underwater cultural heritage is carefully planned in advance, time, money and human resources can be more effectively utilized.

ABOVE: The news heading reported, 'Treasure under the Sea! Treasure seekers find a ceramic hoard underwater and sell the artefacts at 1,000 Thai Baht (US$30) each.'
© UAD, Thailand

OPPOSITE AND RIGHT: The management of the underwater cultural heritage considers many factors. It deals with single objects as well as complete sites, in different countries with different protective legislations. It also includes, for example, awareness raising, legislation, research and physical in situ preservation.
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4 How is Underwater Cultural Heritage Managed?

4.1 Structuring Processes

Processes within the management of underwater cultural heritage need to be clearly defined. They can not only be done on a site level (such as management plans from MoSS or English Heritage, see *Additional Information*), but also on a regional, national (see Unit 4: *Underwater Archaeological Resources*) and international level (such as MACHU-GIS, see Unit 7: *Data Management in Maritime and Underwater Archaeology*).

4.1.1 Site Level

Underwater cultural heritage sites are usually found through extensive research and active searches by archaeologists or by others for commercial purposes. Individually, each of these sites has to be registered, surveyed, assessed their significance, potentially excavated or protected and monitored. There are various ways of undertaking these processes, but regardless of choice it is most important that it is done in a structured and consistent manner. For this reason detailed management plans on a site level are developed.

There are many existing guidelines on how to facilitate specific elements of the management process. The best known guidelines are provided in the Annex of the UNESCO Convention on the Protection of Underwater Cultural Heritage (Paris 2001), the ICOMOS Charter on the Protection and Management of Underwater Cultural Heritage (Sofia 1996), and for European citizens, The European Convention on the Protection of the Archaeological Heritage (Valletta 1992). Each of these conventions contains a detailed set of rules concerning activities directed at underwater cultural heritage.

📖 **Suggested Reading**

Forrest, C. and Gribble, J. 2006. Perspectives from the Southern Hemisphere – Australia and South Africa in Joint Nautical Archaeology Policy Committee. The *UNESCO Convention for the Protection of the Underwater Cultural Heritage.* Proceedings of the Burlington House Seminar, October 2005. Portsmouth, Nautical Archaeology Society, pp. 30-35.

Tilburg, H. 2006. Japanese Midget Sub at Pearl Harbor: Collaborative Maritime Heritage Preservation. *Heritage at Risk Special Edition.* Grenier, R. Nutley, D. and Cochran, I. (eds.). ICOMOS, p. 67.

4.1.2 Regional Level

An archaeological site *in situ* has a unique relationship with its environment which has to be taken into account when managing it. Managers have to consider a number of pertinent questions: what is the history of the area and can the site be connected to it? Are there more sites lying adjacent? How is the area presently used? Are the identified threats or the stakeholders typical for this region? Are the individuals or institutes on a regional level (e.g. provinces, states or municipalities) responsible for the management of underwater cultural heritage?

4.1.3 National Level

Managing underwater cultural heritage on a national level also presents a set of particular considerations. At this level one must take into account many aspects including the maritime history of a country, people who are involved (the stakeholders), the protective legislation, the responsible institution in the protection of the heritage and the establishment of an active central database.

ADDITIONAL INFORMATION

For more information on Monitoring, Visualizing and Safeguarding North European Shipwreck Sites (MoSS) see: www.mossproject.eu

English Heritage (EH) is officially known as the Historic Buildings and Monuments Commission for England. English Heritage is the Government's statutory adviser on the historic environment and is a non-departmental public body sponsored by the Department for Culture, Media and Sport. Their principal powers and responsibilities are laid out in the National Heritage Act (1983), which was amended by the National Heritage Act 2002 to include functions relating to underwater archaeology, and created maritime and underwater management function.

These central databases contain detailed documentation for each site and are called the 'known resource'. Using the information available from the central database, one can visualize the unknown and future resources The unknown resource, for example, can provide information about what can be expected to be found when an area, such as the sea, river or lake bed is disturbed, while the future resource can help to develop future plans to ensure that over time there will be still be heritage left to protect (see Unit 4: *Underwater Archaeological Resources*).

National databases containing the known resource differ from country to country, which may prove problematic if it is necessary to compare sites from several possible origins (many countries do have underwater cultural heritage, usually shipwrecks, which have a verifiable link to other countries). Keeping these databases up to date in a consistent manner (e.g. by using thesauri) is the most essential, although discrepancies can often easily be solved by using standard software and systems that are available on the market or at fellow institutes.

At the national, regional and international levels, the management of underwater cultural heritage can even be structured to a higher level. Databases with information of not only the archaeological resources, but also the geology, the sedimentology, the history etc., can be combined in a Geographic Information System (see Unit 6: *Geographical Information Systems (GIS) in Underwater Archaeology*). The information collected from these combined data sets often provides more than the sum of the individual data sets, thus generating new data and a broader understanding.

It is also possible to also think of structuring underwater cultural heritage on a scientific level by developing national research agendas. These documents describe what is already known and what kind of information is lacking about underwater cultural heritage from certain periods or regions. A national research agenda can help not only to structure research, but also to help to prioritize what is really important to preserve and whether to investigate or not. Documents such as these are not static and have to be updated constantly to remain a valuable source of insight. Within infrastructure projects they play an integral role in the chain that starts the design of a spatial development and finishes with its implementation. Within underwater cultural heritage management it ensures that our knowledge is enhanced and that the care of the heritage continues to be improved.

📖 **Suggested Reading**

Bazelmans, J.G.A. 2006. To What End? For What Purpose? The National Archaeological Research Agenda (NOaA) and Quality Management in Dutch Archaeology. *Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek,* Vol. 46. Heeringen, R.M. and Lauwerier, R.C.G.M (eds.). Proceedings of the National Service for Archaeological Heritage in the Netherlands, pp. 53-67.

English Heritage 2005. *English Heritage Research Agenda: An Introduction to English Heritage's Research Themes and Programmes 2005-2010.*

4.1.4 International Level

Managing underwater cultural heritage at the international level can be a complex task. Shipwrecks (that constitute a large component of underwater cultural heritage), are almost by definition relics of international history, having crossed many borders during their voyages for reasons of trade, war, culture and religion. Some management plans that are used on individual site level are used in several countries, making it possible to compare multiple sites.

On a legislative level, some international laws and regulations make it possible to implement the same policy over several countries. Examples are the European Convention on the Protection of the Archaeological Heritage (Valletta 1992), also known as the Treaty of Valletta, and the UNESCO Convention on the Protection of the Underwater Cultural Heritage (Paris 2001).

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Ultimately the extent to which our underwater cultural heritage is managed depends on the sum total of willingness, budget, legislation, knowledge and time. With effort, each of these elements can be improved as long as awareness is created. To successfully raise awareness it is necessary to be able to correctly identify all the possible stakeholders and know how to reach and influence them.

Suggested Reading

Coroneos, C. 2006. The Four Commandments: The Response of Hong Kong SAR to the Impact of Seabed Development on Underwater Cultural Heritage. *Heritage at Risk Special Edition.* Grenier, R. Nutley, D. and Cochran, I (eds.). ICOMOS, pp. 46-49.

Harrison, R. (ed.) 1994. *Manual of Heritage Management.* Oxford, Butterworth & Heinemann.

Leshikar-Denton, M. E. 2006. Foundations in Management of Maritime Cultural Heritage in the Cayman Islands. *Heritage at Risk Special Edition.* Grenier, R. Nutley, D. and Cochran, I (eds.). ICOMOS, pp. 23-26.

Nutley, D. 2006. Protected Zones and Partnerships: Their Application and Importance to Underwater Cultural Heritage Management. *Heritage at Risk Special Edition.* Grenier, R. Nutley, D. and Cochran, I (eds.). ICOMOS, pp. 32-35.

Prott, L. V. 2006. Finishing the Interrupted Voyage. *Papers of the UNESCO Asia-Pacific Workshop on the 2001 Convention on the Protection of the Underwater Cultural Heritage.* Bangkok, UNESCO.

4.2 Dare to Select

The fact that some underwater cultural heritage is so rich carries with it both advantages and disadvantages. How can we ensure that the available budgets will be used in the right way? Time and money does not always allow for all that we would ideally set out to achieve. It is therefore imperative that we select and prioritise what can be done and discard what cannot be accomplished. Given this, assessments and management plans can be our most valuable tools.

The process of selecting and prioritizing is subjective, but as the formats that are used to measure the quality and importance of sites make the process transparent, they are much more readily accepted by others.

Although it is common practice to leave archaeological sites underwater unattended, it has proven to be extremely difficult for an archaeologist to openly declare their intention to 'abandon' a shipwreck, leaving it to nature (or by other means) to deteriorate and vanish. The same is true for sites that are being protected by law through, for example, designation.

There are many delicate issues to consider when managing underwater cultural heritage and deciding what is important to preserve. Should we only focus on old sites or begin to take into consideration the more recent ones such as these two fishing vessels? (Fishing vessels left behind on a shore on the Isle of Mull, Scotland). © Martijn R. Manders

Another difficult issue is that of *in situ* preservation versus excavation (see Unit 9: *In Situ Preservation*). There are many national and international regulations such as the UNESCO Convention on the Protection of the Underwater Cultural Heritage (Paris 2001), which promote the protection of sites *in situ* as being the first option for managers to consider. There is nothing wrong with this approach considering its many advantages. However, the *in situ* preservation is only one part of overall management plan and it may not be possible or desirable in some cases. Archaeological knowledge is derived principally from scientific investigation of the archaeological resource, using a whole range of techniques from non-destructive research to full excavations.

Archaeology is the systematic study of past human life and culture by the recovery and examination of remaining material evidence, such as graves, buildings, tools and pottery. It is important to understand this history to be able to determine what is and is not important, and as source orientation and identification in the present. Therefore, it is necessary to be careful with this source, but not to be too afraid to use it.

Suggested Reading

Bernier, A. 2006. To Dig or Not to Dig? The Example of the Shipwreck of the *Elizabeth and Mary*. *Heritage at Risk Special Edition.* Grenier, R. Nutley, D. and Cochran, I. (eds.). ICOMOS, pp. 64-67.

4.3 Mitigation

Mitigation is another important element of archaeological resource management. Again this is a broad term and is essentially all about avoiding unnecessary risks by implementing a series of simple, proactive interventions taken prior to the impact of a disaster to minimize its effects, and by doing so protect cultural heritage. Hazards, such as earthquakes, cannot be reduced, but the risk from such a hazard can be mitigated, for example, by constructing earthquake resistant buildings or shelves that prevent objects from sliding off (i.e. by reducing their vulnerability). For underwater cultural heritage, mitigation measures can be employed on the excavated or unexcavated resource; undertaken *in situ* (e.g. underwater) or *ex situ* (as a planning measure).

There are many ways to mitigate when managing cultural heritage. Some measures are more effective than others and may have to be built into preservation measures or the design of the development project (See Unit 5: *Desk-based Assessment* and Unit 6: *Significance Assessment*). The implication of such measures can be seen on site or at a higher (e.g. national and international) level.

Structural mitigation methods have a more a permanent character. Some are operational in nature and include the use of work flows, processes and quality norms for people involved in the business, while others are strategic. Legislation, for example, is very important and is often focused on making the archaeological resources resistant against disasters.

Less structural mitigation methods are usually the ones executed on a smaller scale, such as negotiation and implementation on a project and site level. Here choices have to be made about avoidance, the protection of heritage *in situ* or the excavation of a site. It is important to remember that although a method may be sustainable for one site, it may not be applicable for the overall archaeological resource management.

When mitigation is first carried out on archaeological sites, the aim should be to avoid all adverse impacts. If this is not possible, then the next best thing is to minimize these impacts as much as possible and only in the event that this cannot be achieved, should compensation be mitigated for those unavoidable impacts.

Suggested Reading

Maarleveld, T. J. 2000. Mitigation. *Background Materials on the Protection of the Underwater Cultural Heritage,* Vol. 2. Prott, L. V., Edouard, P. and Rochelle, R. H (eds.). UNESCO, pp. 299-305.

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LEFT: Windmill farms built at sea may disturb large areas of the seabed. (Wind farms in the North Sea, Netherlands).
© Martijn R. Manders

BELOW: Looting does not only have a negative impact on sites, but also sends out misleading messages that cultural heritage does not belong to all of us and can be sold to the highest bidder. (Stone jars confiscated from looters in Thailand).
© UAD, Thailand

5 Ethics

Ethics are the norms and values that both bring and bind a group (community) together, distinguishing the group from others. After a period of time the ethics of a group can be implicit and unspoken, however, this does not mean it does not exist.

As a community grows larger, the norms and values have to be made explicit so that each member can know who belongs to the group and who does not. This process can be initiated and implemented by elder group members on the basis of what has been learned in the past, or it can be a democratic process where the whole group decides on what is good or what is bad.

Communities within the field of underwater cultural heritage work in a similar way. Their ethics, norms and values might look more or less the same but can differ, often as a result of socio-economic factors. When different groups have to work together it is not only important to identify the business side of the deal, but also to spend some time on the ethical similarities and differences. Only when the ethics of both groups remain unviolated can cooperation be possible. This is especially relevant in the field of underwater cultural heritage, given the multiple stakeholders involved. Archaeologists themselves also have to play different roles. An archaeologist working for a commercial archaeological company has different corporate norms and values to keep in mind than the archaeologist working for the government. These corporate or government ethics can even differ from that of the archaeologist's own personal ethics, in which case it is not appropriate to force them to take on that particular job.

A general ethical code for underwater archaeologists is included in the Annex of the 2001 UNESCO Convention. All countries which participated during the negotiation of the UNESCO Convention on the Protection of the Underwater Cultural Heritage (Paris 2001) agreed upon a code of good practice

which had been adapted from the ICOMOS Charter on the Protection and Management of Underwater Cultural Heritage (Sofia, 1996). Although it has been accepted as a code of good practice by many countries, professional underwater archaeologists' organizations should also adopt the Annex as part of their ethical code.

📖 Suggested Reading

Coroneos, C. 2006. The Ethics and Values of Maritime Archaeology, Maritime Archaeology: Australian Approaches. *The Springer Series in Underwater Archaeology.* Staniforth, M and Nash, M (eds.), pp. 111-122.

Elia, R. J. 1999. The Ethics of Collaboration: Archaeologists and the Whydah Project. Background *Materials on the Protection of the Underwater Cultural Heritage.* Prott, L. V. and Ieng, S (eds.). UNESCO/Nautical Archaeology Society, pp. 107-119.

ICOMOS. 1996. ICOMOS Charter on the Protection and Management of Underwater Cultural Heritage. Sofia, ICOMOS.

Ransley, J. 2007. Rigorous Reasoning, Reflexive Research and the Space for 'Alternative Archaeologies'. Questions for Maritime Archaeological Heritage Management. *International Journal of Nautical Archaeology,* Vol. 36. No. 2, pp. 221-237.

UNESCO. 2001. *Annex of the UNESCO Convention on the Protection of Underwater Cultural Heritage.* Paris.

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Recreational divers visit underwater sites out of curiosity, interest and enjoyment. © Martijn R. Manders

6 Stakeholders

As there are many individuals and organisations involved both directly and indirectly in the management of underwater cultural heritage, one of the most successful methods to safeguard sites is to make sure that stakeholders (or at least the most important ones) are being heard and that they are encouraged to become active partners. Ultimately if only archaeologists think the underwater cultural heritage is worth protecting, they may be fighting a losing battle, as there is always likely to be other things regarded by other stakeholders as more essential. This is what makes creating awareness among scientists (or scholars), policy makers and the general public so crucial. Archaeologists also have to consider the broader picture and realise that they are not protecting underwater cultural heritage only for themselves, but for others and for future generations.

6.1 Identifying Stakeholders

Anybody involved (either directly or indirectly) in the management of underwater cultural heritage is a stakeholder. Since each stakeholder can either be a friend or an opponent, it is important to accurately identify all those involved in the project. By gaining an insight into their needs, vision, values, culture and ethics, it becomes possible to approach each in the appropriate manner with which to successfully negotiate, influence and involve them.

6.2 Involving Stakeholders

Managers should always try to involve the different stakeholders to both aid understanding and to make it easier to develop solutions for the protection of underwater cultural heritage. It is important to keep in mind that a group is formed and bound together because of its common ethics and sustained cooperation is only possible when each party can maintain their own. If not, then there is no other option than for people to move from one group (with one set of ethics), to another group with a (slightly) different set of ethics. This by its very nature is not cooperation in its truest sense as it is asking the individuals of one group to give up the thing that binds them by convincing them they are 'wrong' and requesting that they choose the 'right' group.

Suggested Reading

- MACHU Project Team. 2008. How MACHU helps European Citizens, Planners, Policy Officers and Scientists. *MACHU Report* 1. Amersfoort, pp. 8-10.
- Taylor, K. 2006. *Cultural Mapping: Engaging with Communities.* Asian Approaches to Conservation Research Conference Proceedings 3-5 October 2006, pp. 152-161.

*TOP: Transporters, ship owners, captains and crews are often stakeholders in the management of underwater cultural heritage.
© Martijn R Manders*

*MIDDLE: Yacht owners or those sailing for pleasure are also potential stakeholders.
© Martijn R. Manders*

*ABOVE LEFT: There are several stakeholders involved with the protection and management of underwater cultural heritage. Local fishermen are knowledgeable about their area and can |also tell us where to find shipwrecks. (Chanthaburi, Thailand).
© Martijn R. Manders*

*ABOVE RIGHT: The crew from a large fishing vessel in Rayong, Gulf of Thailand.
© Martijn R. Manders*

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6.3 Addressing the Stakeholders

All stakeholder groups have to be addressed in a manner that fits their own unique language, goals and ethics, as each group will play a particular role in the process and may want different outcomes.

For example:

Fishermen

Fishermen use the seas for economic gain and seldom do they only fish for their own consumption. There are many different types of fisherman. The lone fisherman with a single line is not likely to be a big threat to underwater cultural heritage, however, fishing trawlers may present a very real danger. Primarily, fishermen are not interested in the archaeological value of shipwrecks, but wrecks are considered important as they are often the places where fish gather en masse. In this context, fishermen may very well have a vested interest in protecting these areas. Also, as people who depend on the sea for their livelihood they have an intrinsic historical connection to it and may value maritime heritage more than most.

Conversely, what has also been experienced is that archaeological objects caught in fisherman's nets are being sold for financial gain, creating some interest in 'fishing' for artefacts. In some sites old nets are being used purposely to catch cultural objects which leads to significant site disturbance. This raises a number of questions. How can these stakeholders be made aware of the archaeological value of the place and the objects? Can they become partners in the protection of underwater cultural heritage? And, if so, how?

Raising awareness is one of the most important tools that can be used to engage the fishing community as a partner in the protection of sites. Using the fishing communities shared history and common ancestries can often be a powerful route of communication coupled with a reminder on how shipwrecks can serve as breeding places for fish. When wrecks are destroyed there is usually a marked effect on the biodiversity in an area leading to a decline in economic potential for the fisherman. By cooperating with these communities it is possible to find balanced solutions that not only protect sites, but also protect the livelihoods of the fishermen.

By physically protecting sites, nets do not get entangled or damaged and it is sometimes possible for the site to be used to cultivate mussels and oysters. There is also the potential for opening up wreck sites to the public (recreational divers) thus providing the local fishing community with an additional role (and revenue stream) in the protection of the site and guiding the visitors.

Policy makers

Policy makers are vital for the protection of our underwater cultural heritage as they are the ones who can formulate appropriate policies and protective legislation, which are essential components of heritage management. Policy makers can create these components if they are influenced to do so. However, they must know how to strike a balance between budgets, politics and output. How can they be made aware of the importance of underwater cultural heritage?

In this case raising awareness can be facilitated by developing detailed overviews of the overall resources (known, unknown and future). Indicative maps can be created that combine all the information about the resources with planned infrastructural projects and reveal not only the threats, but also the possibilities for protection.

Policy makers and politicians are also very concerned with international cooperation and legislation, so it is essential that they are fully informed in this regard.

For more information see also Unit 17: *Public Archaeology, Raising Awareness and Public Participation Projects in Underwater and Maritime Archaeology.*

Suggested Reading

McMullen, P.H. 2011. Underwater Cultural Heritage, an Assessment of Risks from Commercial Fishing. *Seafish Report*. CR 643.

6.4 Negotiating

When all stakeholders are known, their ethics understood and there is a clear picture of what they are fighting for, then there is a basis for negotiating with them for the purpose of protecting underwater cultural heritage. It is by knowing how to approach various differing groups while keeping a clear sight of their goals, that site managers can have a stronger position in the negotiations.

Unit Summary

The management of underwater cultural heritage is a complex process that cannot be facilitated by archaeologists alone. Cooperation among concerned stakeholders is therefore essential.

Inevitable choices have to be made on each site; some will be selected to be preserved *in situ*, some to be excavated and some will be left unattended. Assessments can be made and plans managed on a local, regional, national and even international level.

It is not only the archaeologist who is involved; it may also be the fishermen, the coastal community or recreational divers and some (or all) of these groups may not agree with the archaeologist's point of view. However, the better the aims and ethics of each group of stakeholders are understood, the greater the chance that they will cooperate with one another, leading to a fruitful negotiation.

The different stakeholders may have other reasons to be involved in cultural heritage, but the goals may be the same. It is therefore important to identify all stakeholders, to negotiate with and involve each of these groups in the management and protection of underwater cultural heritage. The involvement of all concerned parties has to be well-managed in order to ensure that the right sites are preserved, researched and appreciated.

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Suggested Timetable

30 mins	Introduction to the Management of Underwater Cultural Heritage - *What is Underwater Cultural Heritage?* - *What is Managing Underwater Cultural Heritage?* - *Why Management?*
60 mins	How do we Manage Underwater Cultural Heritage? - *Structuring Processes* - *Creating Overview* - *Mitigation* - *Management Plans* - *Dare to Select*
	Break
90 mins	Ethics
	Break
90 mins	Stakeholders - *Identifying Stakeholders* - *Involving Stakeholders* - *Addressing the Stakeholders* - *Negotiating with Stakeholders* - *Creating Awareness*
	Break
90 mins	Role Play
30 mins	Concluding Remarks and Closure

Teaching Suggestions

Throughout this unit students are provided with a short overview of the different elements that play a role in the management of underwater cultural heritage. Discussions can help deepen the student's understanding and although it is not possible to cover all the aspects and views surrounding heritage management, a few topics that are useful to discuss are listed below.

4.1.1 Site Level

Students should be made familiar with the Annex of the UNESCO Convention on the Protection of the Underwater Cultural Heritage (Paris 2001) and the ICOMOS Charter on the Protection and Management of Underwater Cultural Heritage (Sofia 1996).

In particular it is important to explain Rule 10 and Rule 25 of the UNESCO Convention. The ICOMOS Charter is almost identical to the Annex of the UNESCO Convention, however, it is important to highlight Rule 2 and Rule 10 of the ICOMOC Charter.

A comparison of the management plans is covered in Unit 6: *Significance Assessment*, but it is worth introducing students to this topic during this earlier unit.

6.1 Identifying Stakeholders

Students should be asked to name some universal stakeholders in underwater cultural heritage. Stakeholders can be: archaeologists, policy makers, politicians, fisherman, dredgers, looters, sports divers, tourists, environmentalists, etc.

Once the participants have completed this small exercise the trainer should introduce an example site, such as the Bay of Chanthaburi, and ask students to identify the stakeholders that they would expect to find there.

Students should also try to identify whether or not the mentioned stakeholders are partners in the protection of underwater cultural heritage. Trainers should remember to emphasize to the students that stakeholders can be a partner, but may also be against the site manager's points of view. It is important to mention to students that even though some stakeholders are not partners, they can be convinced to be advocates for site protection in the future.

6.2 Involving Stakeholders

After covering this topic, it may be useful for trainers to have the students name a few stakeholders and discuss what kind of role those stakeholders play in the management of underwater cultural heritage. It is important for the participants to consider what they think archaeologists or policymakers would want to gain from a relationship with these groups.

6.3 Addressing the Stakeholders

Trainers should provide students with two examples of stakeholders and discuss how these groups should be involved and addressed during potential negotiations.

6.4 Negotiating

One of the most effective ways to facilitate an understanding of negotiation is to use a role play exercise. A role play can be a perfect tool for students to practice identifying the needs of different stakeholders and improve their negotiation skills. Some examples of role play exercises that have been specially developed for this unit are described in the 'Practical Sessions' section below.

Training Manual for the UNESCO Foundation Course on the Protection and
Management of Underwater Cultural Heritage in Asia and the Pacific

UNIT 3 MANAGEMENT OF UNDERWATER CULTURAL HERITAGE

UNIT 3

Practical Sessions

A role play is the most effective way to place both the trainer and students in different situations and in the role of different types of stakeholders. This practical training technique is also flexible both in terms of difficulty and time. A role play can last anywhere from 10 minutes to a full day, depending on how the exercise is facilitated.

For this unit we have developed a role play that lasts approximately half a day.

Role Play Exercise 1

Background: a small coastal town has been a traditional fishing centre for centuries. It is an idyllic place, where fishing boats and a handful of dive operators leave from the old harbour daily to visit spectacular dive spots where three shipwrecks are also found.

The town is a bit sleepy and to stimulate the economy the city council has decided to do a feasibility study on a potential extension of the harbour. An extension would allow for the use of large fishing trawlers and means that the harbour can also be used as a cargo terminal for the cargo ships that may then supply the inner land beyond this coastal town.

The community is primarily divided into these stakeholder groups:

- *The local small scale fishermen*
- *The harbour front inhabitants*
- *The city council*
- *The dive operators*
- *The (national) cultural heritage office*
- *Environmentalists*
- *Developers/construction company*

The trainer should divide the students into the stakeholder groups above and provide each with material depicting the area. Each of the groups should be supplied with different infor-

*Role plays provide students with an opportunity to look at things from different perspectives. Understanding the viewpoint of stakeholders leads to more effective management of underwater cultural heritage. (Foundation Course 3, Chanthaburi Thailand).
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Role Play Exercise 2

Another role play for the management of underwater cultural heritage has been developed by Flatman & Young (2008) and is called 'Seascapes'. Although most of the material is based on European experiences, the majority of them can be applied to the Asian Region as well.

There is a teacher and student handbook available to accompany the exercise that can be easily obtained. It is recommended that students work on three of the cases, with each lasting approximately 15 minutes, to keep the group stimulated and focused on the outcomes.

The first section of the exercises requires students to create a series of case studies, inspired by real world examples. Each case study has to include the possible management options for maritime archaeological sites, particularly those discovered, managed or investigated as a result of commercial activities such as fishing, dredging, aggregates or hydrocarbon extraction.

The students are then required to package these case studies in the form of user-friendly 'trading cards' (plus supporting documentation). The 'trading cards' describe each of the various stakeholders involved in these archaeological sites and provide the basis for a role play exploration of the different management strategies that exist for each.

📖 ***Teacher and student handbooks***

Flatman, J. 2006. *Seascapes: a Maritime Archaeology Role Play.* Staff Handbook. UCL Institute of Archaeology.

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