MANAGING CHANGE IN THE HISTORIC ENVIRONMENT: CONSERVING OUR UNDERWATER HERITAGE

PART 1: GETTING STARTED

This section covers the background, status and context of this guidance. It includes:

- Key messages
- Relevant policies
- Understanding underwater heritage
- Cultural significance
- Protecting underwater heritage

Introduction

This guidance is about conserving underwater heritage around the coasts of Scotland and in freshwater environments such as lochs and rivers.

Underwater heritage is the physical evidence of the human past which survives under water. It enriches Scotland's landscape, charts an important part of our history, and makes a positive contribution to wellbeing and the economy.

This guidance is primarily for practitioners and decision-makers who encounter underwater heritage in the course of their duties. This includes individuals or organisations involved in:

- heritage management
- terrestrial and marine planning
- water-body management
- archaeological and environmental consulting or development

This guidance may also be of interest to those who interact with underwater heritage for recreation, for example, scuba diving, or in the course of their work, such as commercial fishers.

This is a practical guide on how to assess and manage the impacts of change while respecting the cultural significance of underwater heritage sites. It looks at:

- Understanding underwater heritage
- How underwater heritage is protected
- Impacts on underwater heritage
- Considerations for undertaking activities that are directed at underwater heritage

Key messages

1. Underwater heritage enriches Scotland's landscape, charts an important part of our history, and makes a positive contribution to wellbeing and the economy.

2. The cultural significance of underwater heritage sites is an important consideration when assessing and managing the impacts of change.

3. Underwater heritage has intrinsic value due to its cultural significance but will also have value due to other factors such as its contribution to underwater habitats, biodiversity and the economy.

4. Underwater sites, as well as terrestrial sites, areas and buildings with underwater elements, have equal status with land-based sites in national policy and strategy for the historic environment.

5. Development in and use of freshwater and marine environments should protect, and where appropriate, enhance underwater heritage in a manner proportionate to its significance.

6. Our underwater heritage is still poorly understood and there are practical difficulties in implementing policies to investigate and protect it. This is largely because of the relative inaccessibility of underwater sites and the generally higher costs and complexity of conducting work under water.

7. Our underwater heritage is in an environment that is dynamic and changing.

Further information – cultural significance

In the Historic Environment Policy for Scotland, we use the meaning of 'cultural significance' set out in the Burra Charter:

Cultural significance means aesthetic, historic, scientific or social value for past, present or future generations. Cultural significance can be embodied in a place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. (Australia ICOMOS Burra Charter 2013)

Our 'Talking about heritage' guides have advice on understanding significance which will be helpful if you're new to the idea. They also have more detailed advice on writing about significance.

Our Designation Policy and Selection Guidance explains how we consider cultural significance when we designate scheduled monuments and advise the Scottish Government on historic marine protected areas (MPAs).

Further information - terrestrial and marine planning

We use the term terrestrial planning to refer to elements of the land use planning system. It encompasses the National Planning Framework, Local Development Plans and land use plans. It covers areas of land, including freshwater bodies. It extends to the mean low water mark which is the average line of low tide. For marine aquaculture, the terrestrial planning system additionally covers areas out to 12 nautical miles offshore.

The term marine planning refers to a process that considers multiple users of the sea to make informed and coordinated decisions. It covers the area to the mean high water mark which is the average line of high tide. Its aim is to enable sustainable development and use of our marine area in a way which will protect and enhance the marine environment. Relevant plans and policies include the UK Marine Policy Statement, Scottish National Marine Plan, sectoral marine plans and regional marine plans.

The foreshore is an area where the terrestrial and marine planning systems overlap. Close cooperation, through integrated coastal zone management, helps to ensure that terrestrial plans take account of impacts on the marine environment and its users. It also ensures marine plans take due account of their impact on the terrestrial environment and on terrestrial policy objectives. You can read more on this in the Planning Circular on the relationship between the statutory land use planning system and marine planning and licencing.

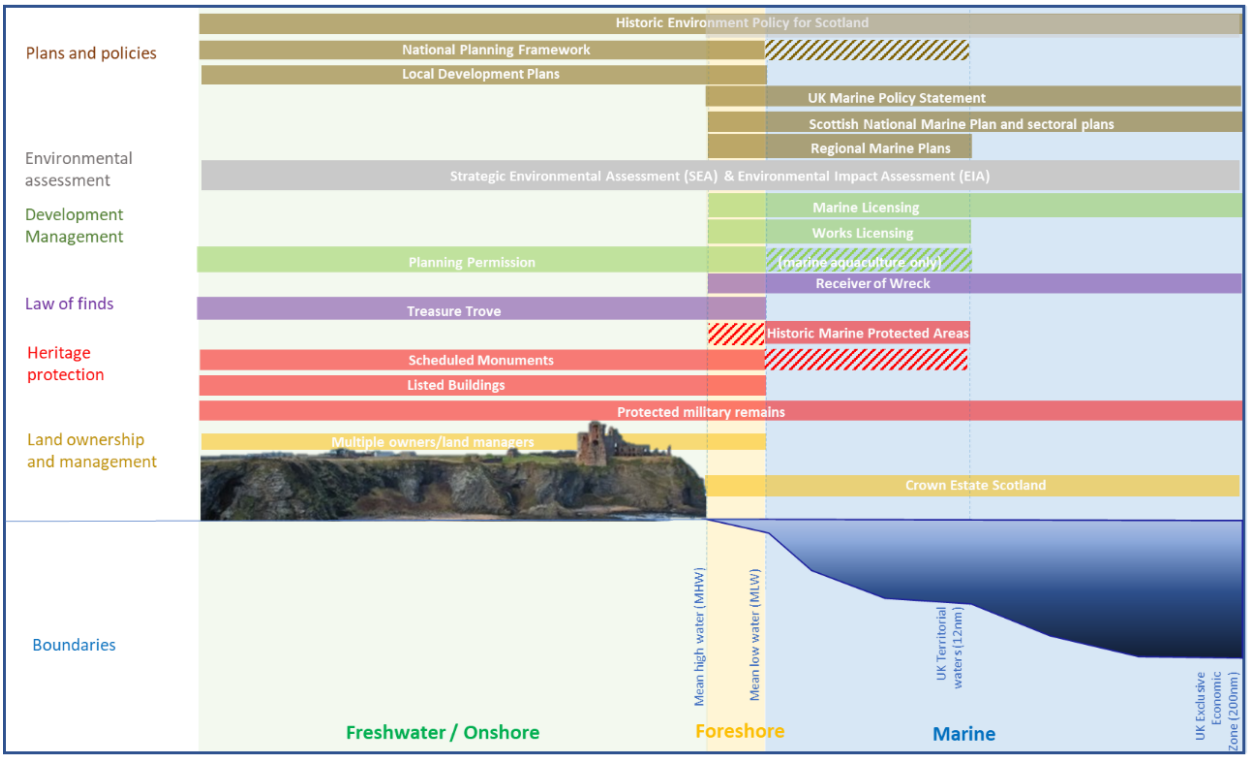

Figure 1: Frameworks relevant for conserving underwater heritage in Scotland from land out to sea (1 nautical mile = 1.852km).

Status

This guidance should inform planning policies relating to the management of change affecting underwater heritage in freshwater environments such as lochs and rivers, and in the marine environment. It forms part of a suite of national guidance on managing change in the historic environment.

This guidance is a material consideration for decisions in the terrestrial and marine planning systems, including planning permission, marine licensing, and other types of consent. This means that decision-makers should take it into account when coming to a decision.

This guidance applies from land out to sea, covering areas where different legal and policy frameworks apply, and where many organisations have roles and responsibilities (see figure 1).

The Historic Environment Policy for Scotland (HEPS) outlines the key policy considerations for making decisions about works that affect our historic environment, whether on land or under water. It underpins this guidance.

Further information – key policy references

HEPS Key Policies

The Historic Environment Policy for Scotland (HEPS) should be taken into account whenever a decision will affect the historic environment, including in relation to freshwater or marine underwater heritage.

HEP1 – Decisions affecting any part of the historic environment should be informed by an inclusive understanding of its breadth and cultural significance.

HEP2 – Decisions affecting the historic environment should ensure that its understanding and enjoyment as well as its benefits are secured for present and future generations.

HEP3 – Plans, programmes, policies and strategies, and the allocation of resources, should be approached in a way that protects and promotes the historic environment. If detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be put in place

HEP4 – Changes to specific assets and their context should be managed in a way that protects the historic environment. Opportunities for enhancement should be identified where appropriate. If detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be put in place.

NPF4 Key Policies

National Planning Framework 4 (NPF4) is the national spatial strategy for Scotland. It sets out principles, regional priorities, national developments and national planning policy. It covers terrestrial planning.

Policy 7 of NPF4 outlines policies on historic assets and places and includes specific policies for assets such as listed buildings and scheduled monuments. This includes Policy 7k which states, “Development proposals at the coast edge or that extend offshore will only be supported where proposals do not significantly hinder the preservation objectives of Historic Marine Protected Areas.”

The suite of policies in NPF4 should be read as a whole, and Policy 10 and Policy 32 are particularly relevant to underwater heritage.

UK Marine Policy Statement
The UK Marine Policy Statement (UKMPS) provides a framework for preparing marine plans and making decisions affecting the marine environment

All three policies advocate appropriate consideration for both designated and undesignated sites and places.

Understanding underwater heritage

What is our underwater cultural heritage?

Underwater heritage is the physical evidence of the human past that survives under water. This includes beneath fresh, or inland, waters or beneath salt, or marine, waters around Scotland’s coasts. It may be visible on the bed of the water body or sea or buried beneath sediment.

Our underwater heritage includes:

- the remains of vessels or aircraft, and items dropped or lost overboard from them
- the remains of structures which were originally built wholly or partly under water, such as fishtraps and crannogs
- the remains of human activity which originally took place on dry or marshy land which has since been inundated, either by water levels rising relative to land or by marine or fluvial (river) erosion

In some cases, analysis of biological or chemical remains in sediments can provide evidence of past environments, and therefore have archaeological value. There are also many coastal buildings like piers and bridges which have portions of their structure permanently below water.

Many wrecks are known about from historic sources, but the actual sites still await discovery. Given the low level of awareness and knowledge, the challenges of gaining access, and the generally higher costs of conducting work underwater, we know less about our underwater heritage than we do about heritage on land.

Finding out about underwater heritage

The following key sources may provide information about underwater heritage. However, the quality of records is likely to be variable.

- Canmore – the website for the National Record of the Historic Environment – includes information on known sites and recorded maritime losses.
- Some local authority Sites and Monument Records (SMR)/ Historic Environment Records (HER) available through PASTMAP provide information on underwater heritage.

A small number of Scotland's underwater heritage sites are currently designated under various statutory designation systems. It is important to be aware of these designated sites, and of any legal restrictions that apply. The following resources can help you find out more:

- The HES Heritage Portal provides information on historic marine protected areas (MPAs), scheduled monuments and listed buildings.
- National Marine Planning interactive (NMPi) provides a map-based information source to assist with marine planning. NMPi includes a layer of information on protected military remains.

Why is it important?

The historic environment is our surroundings as they have been shaped, used and valued by people in the past, and continue to be today. Heritage assets are physical elements of the historic environment – buildings, monuments, sites, places, areas or landscapes, that have cultural significance.

Underwater heritage assets hold cultural significance as they play a part in Scotland's cultural identity. Since prehistory, Scotland's coasts, seas, lochs and rivers have been of immense importance to the communities who lived close to them. Underwater heritage assets can also hold international significance as they demonstrate the history of peoples, nations, and their relations with each other concerning their common heritage.

Our underwater heritage has the potential to reveal wide-ranging information about people and the environment from all periods of the past. Given the right circumstances the underwater environment is ideal for long-term preservation, particularly of organic materials like wood, leather and fabric. As a result, information from underwater sites can yield fascinating information that is usually missing from land-based sites.

Underwater heritage sites have cultural, social, environmental and economic value and make a positive contribution to Scotland's blue economy vision. Many heritage assets which incorporate features under water, such as historic harbours, bridges and lighthouses, remain in commercial use. Others generate economic value from tourism, for example visiting historic shipwrecks.

Our underwater heritage can also contribute to and support biodiversity by providing structural diversity to our aquatic ecosystems. For instance, a shipwreck can act as an artificial reef, supporting a wide range of organisms, including crustaceans (such as crabs or lobsters), echinoderms (for example, star fish), and cold-water corals.

Protecting underwater heritage

There are several different mechanisms used to protect Scotland's underwater heritage. Designations protect some sites and places. Different types of designation give different types of protection. Some types of protection require consents.

Plans, programmes, policies and strategies

Public authorities consider underwater heritage in the Strategic Environmental Assessment processes for plans, programmes, policies and strategies. These aren't necessarily spatial. This helps to ensure underwater heritage is appropriately considered at an early stage in strategic planning processes.

An example includes the Scottish National Marine Plan. The plan:

- ensures increasing demands on our marine environment are managed in a sustainable way
- encourages marine industries to develop appropriately
- incorporates environmental protection into marine decision making
- plays a role in managing adaptation to climate change

Marine Planning Partnerships can take forward regional marine plans in 11 Scottish Marine Regions. These allow more local ownership and decision making about specific issues within these local areas out to 12 nautical miles offshore.

Law relating to finds

Issues of ownership and reporting of archaeological finds can be complex. Recoveries of artefacts from inland waters, from within harbours, and from the coast and other tidal waterways down to mean low water must be reported to the Treasure Trove Unit. Where finds are claimed as treasure trove for their archaeological or historical importance, the finder is eligible for an award.

In addition, all 'wreck' recovered from UK waters, or outside UK waters and landed in the UK, must be reported within 28 days to the Receiver of Wreck. Wreck material includes things found on the seashore or in tidal water that have come from a ship, aircraft or hovercraft (vessels). This could be parts of the vessel, its cargo or equipment.

Historic marine protected areas

The Scottish Government designate marine protected areas (MPAs) under the Marine (Scotland) Act 2010. Historic Environment Scotland (HES) advises Scottish Government. Historic MPAs protect marine historic assets of national importance in the territorial seas around Scotland (out to 12 nautical miles). This includes historic shipwrecks. Public authorities must take account of preservation objectives of MPAs in their decisions.

Within a Historic MPA it is a criminal offence to:

- intentionally or recklessly remove, alter or disturb marine historic assets
- carry out activities which could damage or interfere with a marine historic asset

- carry out activities which could significantly impact the Historic MPA and hinder its 'preservation objectives'

Controlled Sites and Protected Places

The Ministry of Defence (MoD) administers Controlled Sites and Protected Places. These sites are designated under the Protection of Military Remains Act 1986.

- Protected Places are the remains of any aircraft lost in military service and designated vessels that sank or stranded in military service after 4 August 1914
- Controlled Sites cover the remains of military aircraft or vessels sunk or stranded in military service within the last 200 years. This includes non-UK vessels and aircraft if the remains are in the UK or UK territorial waters

Divers may visit a Protected Place on a 'look but don't touch' basis, however they are prohibited from visiting Controlled Sites without a license from MoD.

In both Controlled Sites and Protected Places, it is an offence to:

- undertake salvage operations or excavation
- tamper with, damage, remove or unearth any remains
- enter any hatch or opening

Dangerous wrecks

The Maritime and Coastguard Agency (MCA) administers dangerous wrecks. These sites are designated under section 2 of the Protection of Wrecks Act 1973. Under the act, designation of prohibited areas prevents interference with dangerous wrecks. There are currently no designations in Scottish waters. It is an offence to enter a prohibited area without permission from MCA.

Scheduled monuments

HES designate scheduled monuments under the Ancient Monuments and Archaeological Areas Act 1979. Scheduling is primarily used for monuments on land, on the foreshore and around the edge of water bodies, but occasionally it applies to sites that are fully under water.

You can find out more in the Designations Policy and Selection Guidance on our website.

Listed buildings

HES designate listed buildings under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997. They can be applied to the low water mark and are regularly used for built structures that may have underwater components such as bridges, lighthouses and harbours.

You can find out more in the Designations Policy and Selection Guidance on our website.

Further information – International conventions

International conventions such as the European Valletta Convention and the European Landscape Convention require a responsible approach to the management of the historic environment including underwater heritage.

The UK has not ratified the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage, but the Annex to the 2001 Convention – Rules Concerning Activities Directed at the Underwater Cultural Heritage provides an accepted model of 'best practice' for underwater archaeology.

Permissions and consents

There are many forms of development management decision making and consents that may be required. These might place conditions that are relevant for underwater heritage. The mechanisms may differ between freshwater and marine sites.

Heritage consents

In both terrestrial and marine environments, specific permissions are required for activities in certain designated sites and places.

Our Regulatory Framework outlines the responsibilities and approach of HES in its regulatory and advisory services in the planning and other consenting systems.

Scheduled monument consent is required from HES for works to scheduled monuments. It is an offence to undertake works without scheduled monument consent, or to damage the monument in any way. Metal and mineral detecting consent is required for certain geophysical surveys. You can find out more in the Scheduled Monuments Consents Policy.

Listed building consent is required from planning authorities for listed buildings. Consent is required to demolish, alter materially or extend a listed building. You can find out more in the Guidance on the Principles of Listed Building Consent on our website.

For historic MPAs, public authorities with responsibilities for issuing any type of authorisation must take preservation objectives for the area into account and seek advice from HES.

Permission from the Ministry of Defence (MoD) is required in relation to protected military remains.

Permission from owners

In freshwater areas permission is required from the landowner. In the marine environment, the Crown Estate Scotland manages the foreshore and seabed, and their permission is required.

Wrecks on the seabed may still have an owner. Their permission needs to be sought where interventions involving wrecks occur. Wrecked naval warships, state vessels, aircraft and associated artefacts have protection through Sovereign Immunity as outlined in the guidance Protection and Management of Historic Military Wrecks outside UK Territorial Waters. It is UK Government policy that no artefacts should be recovered from UK military wrecks without the written permission of the MoD.

Further information – The Crown Estate

The Crown owns around half of the foreshore around Scotland and almost all the seabed in UK territorial waters. The Crown Estate consists of assets owned by the Monarch 'in right of the

Crown'. The seabed in the area 12-200 nautical miles is ownerless but the UK holds sovereign rights over this zone.

Development consents

The Scottish Government's Marine Directorate administer the marine licensing for many development-related activities. In addition to this:

- in harbour areas, specific consents may also be required from the statutory harbour authority
- in Shetland and Orkney, the local authority also regulates certain local activities through works licenses
- in lochs and rivers, planning permission is the main process for consenting development – planning permission also applies to marine aquaculture around the coasts
- applications for offshore electricity generation require consent under Section 36 of the Electricity Act 1989

Some applications for planning permission or marine licenses will require Environmental Impact Assessment (EIA). This helps ensure that there is early consideration of impacts on underwater heritage where projects fall within the scope of the EIA requirements.

PART 2: IMPACTS ON UNDERWATER HERITAGE

This section sets out relevant information for dealing with impacts from human activities. It covers:

- how you can identify impacts
- how to manage impacts through a staged approach

The management of impacts will need to consider the cultural significance of the underwater heritage asset.

Impacts on underwater heritage

Heritage assets located in environments under water undergo degradation over time due to complex interplay of natural and human factors.

Degradation rates of underwater cultural heritage may depend on:

- the nature of the heritage asset, for example the type and construction of a vessel
- environmental influences such as biological, chemical or physical factors
- cultural influences, such as human interventions – for examples see Figure 2 below

Impacts can be direct or indirect. Direct impacts are where an activity directly interacts with the asset or place, such as by removing or altering it.

Indirect impacts can be:

- associated changes to the environment as a result of the activity, this could include alterations to water quality or levels
- impacts to the asset from activities nearby, for example, exposure of a wreck due to changes in sedimentation caused by a nearby development

This table (Figure 2) gives some examples of human interventions that have the potential to result in impacts on underwater heritage.

Operation type	Area			
	Freshwater	Coast-edge	Foreshore	Offshore
Extraction	• alteration to water courses • gravel extraction	• alteration to water courses • gravel extraction	• gravel extraction	• capital dredging • aggregate extraction • dumping at sea
Construction (site-specific)	• transport infrastructure • dams and reservoirs • hydro-electric power	• housing • transport infrastructure, for example, bridges, causeways • ports and harbours	• ports/ harbours/ marinas • aquaculture • transport (causeways/ bridges) • some wave energy technologies	• energy installations – for example, marine and offshore wind renewables • carbon capture storage

Construction (linear)	• flood protection • cables/pipe-laying	• embankments • cable/pipe-laying	• coastal defences • hard landscaping • cable/pipe-laying	• cable/pipe-laying
Fisheries			• shellfish collection • fixed netting	• static gear • mobile gear – for example demersal trawling/ nephrops and scallop dredging
Diffuse activities		• boat-wash • managed retreat • recreation and tourism	• managed retreat • recreation and tourism	• Aquaculture operation • certain types of dumping at sea • salvage • treasure- hunting • archaeological excavation • water ballast transfer • recreation and tourism, especially recreational diving • anchoring/ moorings

Figure 2: Interventions by operation type and terrestrial and marine area

Climate change impacts

Our historic environment, including underwater heritage, is on the frontline of the dual climate and nature crises. The Historic Environment Scotland (HES) statement, Pointing the Way to the Future, outlines that the historic environment can and must be part of our response to our changing world and the challenges we face.

Environmental changes, such as the climate and nature crises, pose many threats to underwater cultural heritage sites. These changes are already having impacts on our coastal and underwater heritage.

Scotland's coastlines are already experiencing an increased frequency and extent of coastal flooding which has caused damage to historic assets. Increasing sea temperatures and ocean acidification are intensifying rates of corrosion in metal shipwrecks, structures and artefacts.

Although the biological degradation of wooden wrecks occurs naturally, the climate and nature crises may contribute to this by causing the spread of invasive species into new areas.

Any change which impacts underwater heritage is an opportunity to consider ways to maximise the contribution the historic environment can make to our climate response. Changes should aim to protect the historic environment as part of our wider environment and contribute to our understanding of climate change impacts through recording and monitoring.

Identifying potential impacts

It is important to understand impacts on underwater heritage for any proposed construction developments and extraction operations in marine and freshwater environments. Decision-makers should take these impacts into account when they consider proposals.

Unexpected discoveries late in a project can have significant implications for costs and timescales. Underwater heritage should therefore be considered at the outset of any proposed development. This can be cost effective and good for public relations.

Scoping studies at an early stage can be useful to identify all the necessary work that will need to be undertaken to meet regulatory requirements. This is often best achieved by contracting appropriate professional archaeological expertise, following industry standards.

Information gathering

Investigations often start from a low baseline of information due to the lack of knowledge about underwater heritage.

As part of the initial information-gathering process, developers should seek advice on potential impacts to underwater heritage from the appropriate archaeological advisors. For developments in freshwater and on the foreshore, the first point of contact is the local authority archaeology service. Below mean low water, some local authority archaeologists may also be willing to offer advice.

Where this is not the case, you should contact HES. HES should also be the first point of contact for advice on scheduled monuments and historic MPAs. The Ministry of Defence (MoD) should be the first point of contact for protected military remains.

Studies should assess the likely level of impact of proposals on underwater heritage. This should include information on the proposed operations, the cultural significance of any known underwater heritage sites likely to be affected, and the potential for unexpected discoveries to occur.

The concept of setting can apply to underwater heritage. Setting is the way the surroundings of a historic asset or place contribute to how it is understood, appreciated and experienced. Setting often extends beyond the property boundary of an individual historic asset into a broader landscape context.

As visual factors are a major consideration in assessing setting impacts, a high level of impact for sites that are wholly underwater will be unusual. However, it is also important to remember that marine features can contribute to the setting of terrestrial assets.

Field investigations

Field investigations are sometimes necessary to fully assess likely impacts. This is often the case in large development projects, for example those involving environmental assessment.

Developers and their archaeological advisors should look for opportunities to integrate underwater heritage when planning investigations of other topics, such as biology. Useful geophysical and geotechnical survey data can often be gathered once, then used many times, by following the relevant technical guidance. Unexploded Ordnance (UXO) surveys can also be useful to archaeologists.

Monitoring of underwater heritage contributes information that can be useful both to archaeologists and to biologists. This could include the distribution of Priority Marine Features, and presence of invasive species due to climate change.

Sharing information

It is important to submit investigation results to improve the quality of information held in national and local databases. Developers and their archaeological advisors should report the results of their survey work through OASIS (Online Access to the Index of Archaeological Investigations).

HES is committed to improving access to and stewardship of marine data coordinated under the Marine Environmental Data Information Network (MEDIN). HES is an accredited MEDIN data archive centre. If you would like to contribute, please contact archives@hes.scot for information and guidelines.

Managing impacts

You should adopt a staged approach when managing impacts on underwater heritage. This follows the principles of the mitigation hierarchy.

In this hierarchy:

- the preferred option is to avoid impacts
- where avoidance is not possible any impacts should be reduced or minimised
- if it is not possible to reduce impacts further, then compensatory and offsetting measures should be explored

Figure 2 – The mitigation hierarchy

Further information – Written schemes of investigation (WSIs)

Where mitigation is necessary, the design and implementation of mitigation should be set out in a written scheme of investigation (WSI). The WSI should make provision for adequate monitoring of mitigation, together with appropriate and timely reporting and archiving of results. The Crown Estate's publication Model Clauses for Archaeological Written Schemes of Investigation gives an example of acceptable industry standards for WSIs.

Avoiding impacts

Avoidance should be the primary objective when dealing with designated sites and places, as well as undesignated sites of equivalent cultural significance. The first option should be to avoid known underwater heritage sites. This is in line with the principle of preservation in situ for heritage assets – leaving sites in their original location. Most known underwater sites are small and discrete, so it is normally possible to avoid direct impacts through careful planning.

Further information – Unknown sites

Many sites under water remain to be discovered, either because they are buried in sediment, or because no survey work has been undertaken to locate them yet. Developers should consider the potential for unexpected discoveries to occur during development. Where potential exists, a Protocol for Archaeological Discoveries (PAD) should be adopted. This should set out a contingency plan for dealing with and reporting accidental discoveries. Crown Estates has developed sector specific guidance on PADs for offshore renewable projects. Elements of this guidance may be useful to other sectors when considering the adoption of a PAD.

Reducing impacts

When it is not possible to completely avoid impacts you should make efforts to reduce or minimise them. In the underwater environment, this can often be achieved through adapting the development area or altering the design or operational methodology to reduce impacts. Practical examples include:

- introducing avoidance zones
- micro-siting wind turbines
- altering routing of cables
- using particular types of equipment and monitoring to ensure interventions are effectively targeted

In freshwater environments, you should consider the impact that any changes in water levels may have on a heritage asset. Small changes can greatly affect the level of preservation on sites such as crannogs.

There may be situations where a level of direct impact cannot be avoided, and some loss is considered acceptable. These situations include where applicants can demonstrate how the benefits of proceeding with development outweigh impacts on the cultural significance of the asset. Benefits may be:

- social or economic, for example, a development that brings new jobs to the area, contributes to climate change objectives, or removes a safety hazard such as unexploded ordnance
- environmental, for example, a wreck that poses a pollution hazard to the marine environment

Compensatory and offsetting measures

Where some loss of historic assets is accepted, interventions should be kept to a minimum to achieve the desired objective. Applicants should also identify actions to offset loss. This should be proportionate to the cultural significance of the site. It may take the form of a very basic level of recording to add knowledge about a site prior to destruction. However, in some cases recovery and conservation may be merited for nationally important sites, either of culturally significant elements, or in extreme cases, entire sites.

Compensatory measures can also take place off site. For example, the removal or partial destruction of a wreck might be offset by the placement of an interpretation panel on a harbour wall, or the development of a publicly available mobile app.

It is also important to identify opportunities to widen understanding. Work should therefore incorporate post-investigation analysis and conservation of important recovered remains. Results of the work should be published and disseminated to widen knowledge.

PART 3: EXPLORATION, INVESTIGATION AND DISCOVERIES

This section sets out relevant information for activities that are directed at underwater heritage such as archaeological excavation and commercial salvage.

It covers:

- the principle of preservation in situ
- excavation and recovery
- recreational activity including scuba diving
- commercial fisheries

Exploration, investigation and discoveries

Archaeological excavation and commercial salvage are activities which are directed at underwater heritage. That means, they have underwater heritage as their primary objective.

The 'Rules concerning activities directed at underwater cultural heritage', which are laid out in the Annex of the 2001 UNESCO Convention on the Underwater Cultural Heritage, provide an accepted model of best practice for regulating these activities in Scotland. These rules set out best practice for any form of activities directed at underwater cultural heritage, or authorisation of these activities through marine licensing and other types of consents and permissions. This might include, scheduled monument consent, or works licenses.

Further information – applying for consents

The Rules set out in the annex of the convention are a relevant consideration for applications for scheduled monument consent on underwater sites or applications within historic MPAs.

Applicants should therefore follow the Annex of the 2001 convention. This means that projects should prepare an appropriate project design setting out how the rules are being followed.

Preservation in situ

Preservation in situ should be the first option for designated sites. This accords with Rule 1 of the Annex, which states:

> The protection of underwater cultural heritage through in situ preservation shall be considered as the first option.

You should also consider preservation in situ as the first option when dealing with:

- undesignated sites of equivalent significance
- sites that meet the UNESCO definition for underwater cultural heritage by virtue of having been underwater for more than 100 years
- other sites which make a positive contribution in terms of cultural significance

Preservation in situ recognises the importance of the interplay between an archaeological site under water and its story and context. It also recognises that heritage sites are finite.

In many cases underwater cultural heritage can survive well under water. The process of excavating and recovering artefacts can yield important information but is also destructive. Without recording and conservation of artefacts, this information is often lost or destroyed.

Advances in technology, including remote sensing and photogrammetry, mean that an excellent standard of recording can often be achieved without disturbing underwater heritage. Advances are also being made to support long-term in-situ preservation of underwater heritage.

Excavation and recovery

While preservation in situ should be considered as the first option, there may be situations where it might not be the preferred option. In such circumstances, excavation and recovery of artefacts may be justified, so long as the level of intervention is the minimum required to achieve the intended objective.

Such situations include where:

- **external prohibitive factors are present**
  For example, where there are wider benefits of removal such as to address a pollution hazard.

- **interventions make a significant contribution to knowledge and enhancement**
  This should consider existing research agendas and collections in registered museums.

- **preservation in-situ is no longer an option**
  This could be due to natural degradation of the asset or wider environmental threats and is when preservation in-situ is not even an option in the short to medium term. In these cases excavation and recovery could help protect significant elements of a site.

In many cases the arguments for excavation will be a combination of these reasons but in exceptional cases, a contribution to a single factor may be sufficient.

Further information – Rule 2 of the Annex

In accordance with Rule 2 of the Annex of the 2001 Convention, the recovery of artefacts or indeed entire wrecks over 100 years old, is not justified where the primary aim of the intervention is to generate a financial return through the sale and dispersal of cultural material recovered.

Items of wreck recovered through archaeological excavation or salvage must be reported to the Receiver of Wreck.

Recreational activity

The public can be instrumental in discovering many underwater heritage sites. We encourage responsible access to Scotland's underwater heritage, where this is consistent with protecting what is culturally significant.

Recreational scuba divers should follow established codes of conduct such as UNESCO's Code of Ethics for diving on underwater cultural heritage sites and the British Sub-Aqua Club (BSAC), Professional Association of Diving Instructors (PADI) and Sub-Aqua Association's (SAA) Respect Our Wrecks code for wreck divers.

This includes:

- being aware of the protected status of underwater sites
- exploring sites where allowed, without damaging or disturbing them
- taking photographs rather than souvenirs, so that our underwater sites remain for future visitors
- reporting any items of wreck that are recovered to the Receiver of Wreck

Scuba divers are in a great position to make a major contribution to recording and conserving our underwater heritage. You can contribute to the National Record for the Historic Environment through our MyCanmore webpages and assist us in monitoring scheduled monuments and sites in historic MPAs. Training schemes such as those run by the Nautical Archaeology Society help recreational divers to develop the necessary skills by participating in underwater archaeology.

Accessibility to our underwater heritage is also important for the majority who cannot dive and visit these sites in person. You can provide virtual access to underwater sites through archives, museums, and online interpretation to address this.

Commercial fisheries

Commercial fishers make many important archaeological discoveries. However, the presence of underwater heritage can pose a hazard to fishers, who risk damage to gear if it snags on underwater sites. There can also be damage to underwater heritage. This is a particular risk for fishing techniques that use mobile bottom gear – like demersal trawling and scallop dredging.

Widespread information sharing helps to enable fishers to avoid known underwater heritage sites, by taking steps to ensure that protected sites appear on Admiralty charts and by working with inshore fisheries bodies to foster collaboration. Fishers should report any archaeological discoveries.

Fishers must observe operational advice within designated historic MPAs and consider whether there are other restrictions in place. For example, marine conservation orders may restrict or prohibit certain types of fishing activity.

References

International conventions
Valletta Convention
European Landscape Convention
Annex of the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage

National policy
UK Marine Policy Statement
Historic Environment Policy for Scotland
National Planning Framework 4 (NPF4)
Scottish National Marine Plan
Designation Policy and Selection Guidance

Laws and regulations
Marine (Scotland) Act 2010
Protection of Military Remains Act 1986
Ancient Monuments and Archaeological Areas Act 1979
Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997
Protection of Wrecks Act 1973

Scottish Government policy and guidance
Scotland's Blue Economy Vision
Planning Circular 1/2015: relationship between the statutory land use planning system and marine planning and licensing

Historic Environment Scotland guidance
Our Regulatory Framework
Managing Change: Setting
Scotland's Historic Marine Protected Areas
Scheduled Monument consent
A guide to Climate Change Impacts

Other guidance and codes of practice
Wreck and salvage law
Protection and Management of Historic Military Wrecks outside UK Territorial Waters
JNAPC Code of Practice for Seabed Developers
Protocols for Archaeological Discoveries: Offshore Renewables Projects
Historic Environment Guidance for Wave and Tidal Energy
COWRIE Geotechnical guidance for the renewables sector
Crown Estate – Model Clauses for Archaeological Written Schemes of Investigation
COWRIE historic environment offshore renewables guidance
Marine aggregate dredging and the historic environment
Marine geophysics data acquisition, processing and interpretation
Marine data management
UNESCO Code of Ethics for Divers
Nautical Archaeology Society
BSAC Respect Our Wrecks code
Marine Climate Change Impacts Partnership
Cultural Heritage Review
Dynamic Coast Cultural Heritage Report Card

Further information – Historic Environment Scotland

We are a public body leading the way in protecting, understanding and sharing Scotland's historic environment, for today and for the future. One of our duties is to manage change to our most significant heritage assets while providing the protection they need. This guidance supports that process.

In every aspect of our work we strive to follow our five organisational values – we are **collaborative**, **professional**, **innovative**, **open**, and **respectful**.

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