Historic environment guidance for wave and tidal energy

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Overview

Part 1

• Who are we?
• What do we do?
• Why was the guidance produced?

Part 2

• What does the marine historic environment look like?
• What are the key interactions with wave and tidal energy projects?
• How can we manage change effectively?
Who are we?

- Historic Scotland is an agency of the Scottish Government
- Historic Scotland has a role in delivering the Scottish Government’s marine vision
- Vision includes protecting and where appropriate, enhancing our most important coastal and marine heritage sites.
Historic Scotland’s approach

Historic Scotland’s Marine strategy 2012-15 identifies priorities under three strategic aims

• Advancing knowledge about marine heritage and make information widely available

• Improving stewardship of key marine heritage sites

• Developing wider understanding and enjoyment of marine heritage
Advancing knowledge and making information available
Improving stewardship – Historic Marine Protected Areas

Drumbeg Historic Marine Protected Area
Developing wider understanding

Why focus on wave and tidal?

Geographical scope

Who was involved?

• Joint funding from three national historic environment bodies

• The Crown Estate

• Developers and consultants

• Public consultation
Scope of the guidance

- Policies and guidance
- Roles and processes
- The marine and coastal historic environment
- Status and trajectory of the wave and tidal industry
- Consideration of effects
- Other key issues including enhancing public benefit, data management and archiving and publication
Can archaeology survive in high energy environments favoured for wave/tidal renewables?

Adelaar, Barra, images courtesy RCAHMS/Colin Martin
### Historic environment interactions with wave/tidal renewables

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<thead>
<tr>
<th>Direct</th>
<th>Construction</th>
<th>Operation</th>
<th>Decommissioning</th>
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<tbody>
<tr>
<td>Coring/Sampling</td>
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<td>Setting of heritage assets</td>
<td>Removal of device foundations/moorings</td>
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<td>Moorings for sensors</td>
<td>Cable trenches</td>
<td>Landscape/seascape</td>
<td>Removal of cabling</td>
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<td>Sub-station foundations/cables</td>
<td>Movement of moorings/cables</td>
<td>Decommissioning vessels</td>
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<td>Onshore cabling</td>
<td>O&amp;M vessels</td>
<td>Temporary works</td>
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<td>Construction vessels and vehicles</td>
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<td>Temporary works: access roads; hardstanding</td>
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<td>Indirect</td>
<td>Erosion prompted by site preparation</td>
<td>Local scouring</td>
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<td>Changes to bedforms</td>
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<td>Coastal erosion</td>
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<td>Changes in water table/salinity (tidal range schemes)</td>
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**Magnitude of Impact** × **Significance of Heritage Asset** = **Significance of Effect**
Visual impacts

- ‘Setting’ of coastal heritage assets can be affected by wave and tidal developments

- Visual impacts needs to be considered for devices offshore and coastal infrastructure

- Impacts strongly related to the appearance of energy devices and structures (those at sea, and onshore infrastructure)

- Impacts likely to be more localised than for offshore wind installations which can be visible from far afield.
Dealing with uncertainty and risk

• ‘…..much can be done to reduce costs and risks through early and thorough integration of archaeological objectives with other site investigations…..’
Opportunities for enhancing public benefit

- Enhancing knowledge and understanding about heritage for social/economic benefit:
  - Making information and data from surveys available to the public through effective archiving (RCAHMS; MEDIN)
  - Promoting marine renewables and heritage through effective outreach (e.g. reports; leaflets; interpretation; publications; news media).
…closing comments

• Information about heritage sites
  • PastMap – http://pastmap.org.uk
  • Heritage designations - www.historic-scotland.gov.uk
  • NMPi - http://marinescotland.arkinsgeospatial.com/nmpi/

• Guidance

• Advice
  • Historic Scotland Heritage Management Directorate - www.historic-scotland.gov.uk
  • Association of Local Government Archaeological Officers (ALGAO) - http://www.algao.org.uk/membership#scotland