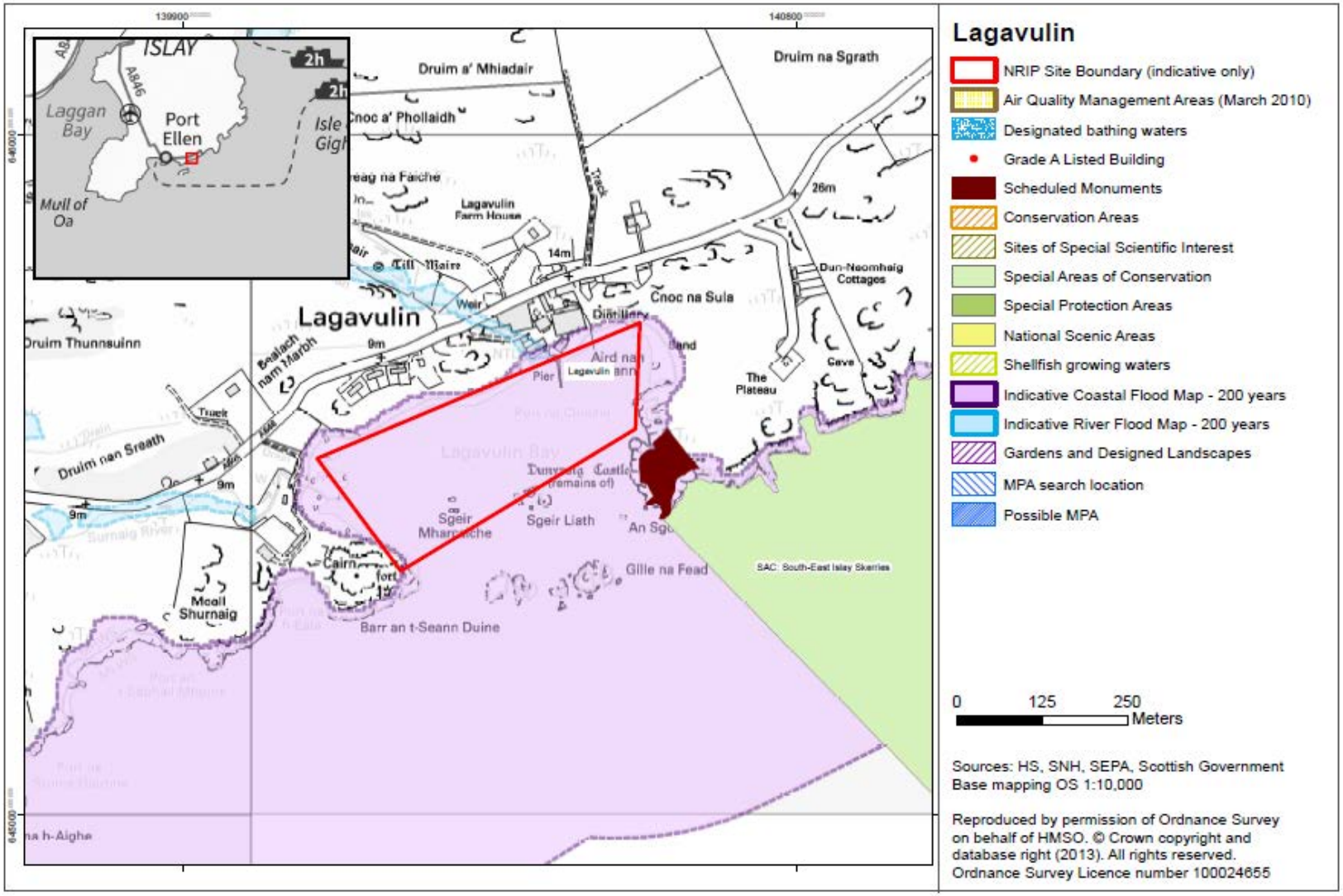
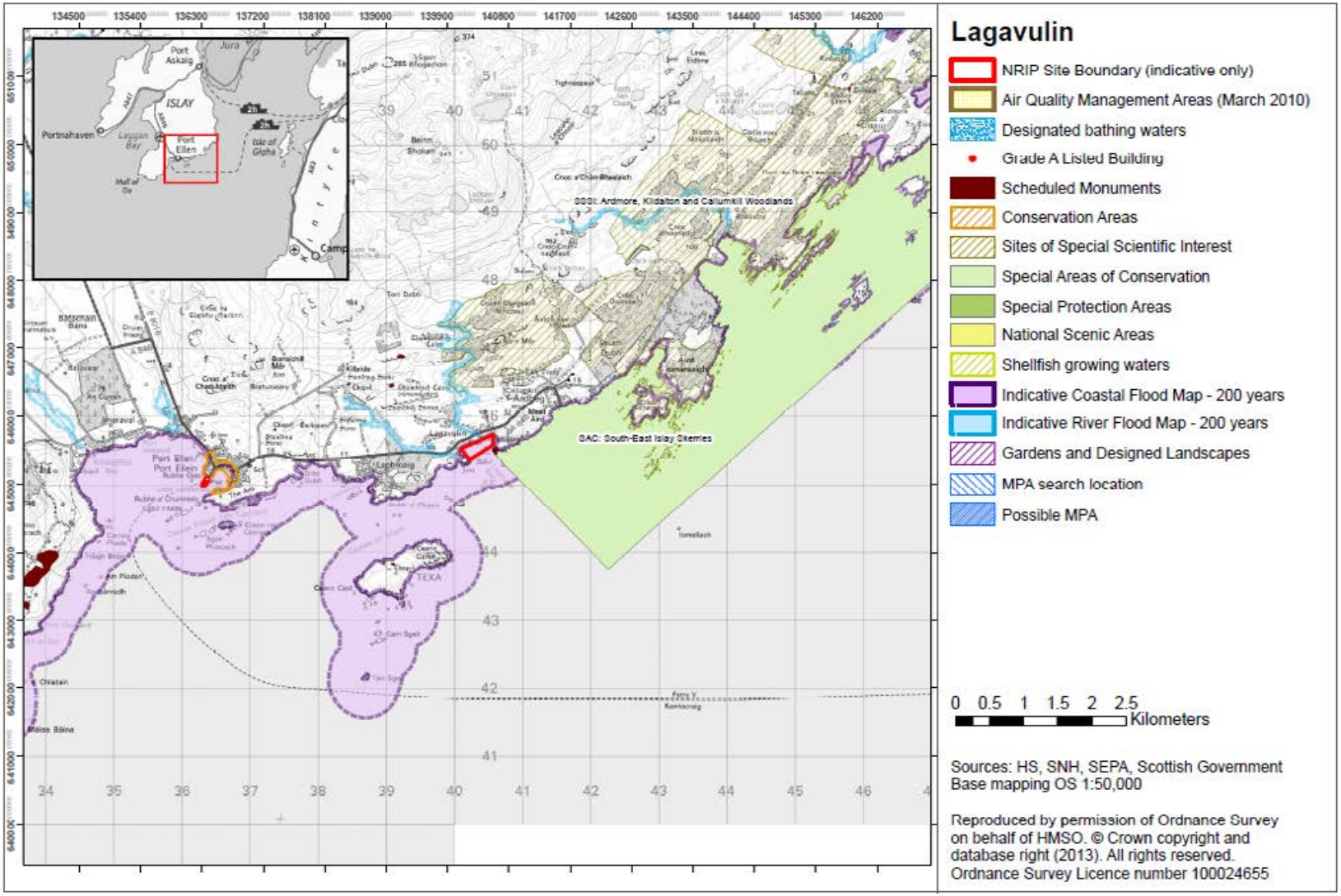
Appendix 7. MRIP Support Sites - Maps & Assessment Tables – Argyll

1. **Campbeltown/Machrihanish** assessed in NRIP 2010 SEA
2. **Lagavulin**
3. **Glensanda**
4. **MRC Barcaldine**
5. **Port Ellen**
6. **Tiree**
7. **Tobermory**

Site Map: Lagavulin



Wider Map: Lagavulin



Assessment Table: Lagavulin

SITE USE – Possible Operations and Maintenance; Refuge/wet storage/unplanned maintenance.

POTENTIAL DEVELOPMENT

Operations & Maintenance

- Within the existing port, new buildings are likely to be required. (Few existing buildings available to re-use.) No further infrastructure upgrade required.
- Wet storage of devices may be employed at this location as part of O&M activities.

Refuge/Wet Storage/Unplanned Maintenance

For unplanned maintenance, it may be necessary to provide a portacabin (or similar) within the existing port. No further infrastructure upgrade required.

There are three scenarios for wet storage:
(a) Company that manufactures the devices cannot store them as it needs the laydown space so the developer needs to move the devices to a wet storage site which is both close to the lease site and sheltered.
(b) The developer wants to store the devices close to the lease site until the installation vessel they wish to use is available, which means they store them in the loch.
(c) Refuge site needed when devices are being towed to the installation site and need to take shelter during bad weather (for a day or two) before resuming progress.

See Section 3 of the Environmental Report for assumptions about wet storage.

ENVIRONMENTAL BASELINE – LAGAVULIN

Biodiversity, flora and fauna –

South-east Islay Skerries SAC – Harbour seal (approximately 200 m east of pier).

Ardmore, Kildalton and Callumkill Woodlands SSSI – Woodland features (approximately 1 km north of pier, 2 km east of pier).

The Oa SPA – Aggregations of breeding birds – Chough (approximately 7 km west of pier).

Seals – Potential designated haul-out sites for both harbour and grey seals around Islay and Jura[1]. Indications are that this general area is well used by both harbour and grey seals[2], e.g. South-east Islay Skerries SAC near to the pier.

[1] The Scottish Government (2011) Consultation on Seal Haul-out Sites, March 2011.
[2] SMRU (2013) Marine Mammal Scientific Support Research Programme MMSS/001/11, Grey and harbour seal usage maps [online] Available at: http://www.scotland.gov.uk/Resource/0043/00437053.pdf [accessed 5/12/2013]

ENVIRONMENTAL BASELINE – LAGAVULIN

European Protected Species – Cetaceans are likely to be passing through the area. Otters may be found using this area of coast.

Waterbirds – An Area of Search developed to identify possible marine SPAs is located in Islay. While these areas do not as yet represent formal designations, they provide additional information for identifying important aggregations of waterbirds in Scotland and complement the existing network of SPAs[3].

Population and Human Health – Residents in Lagavulin may have views of devices located in Lagavulin Bay.

Water and marine environment – Coastal waters classification (2011): Good.

Climatic Factors – The site is within an Indicative 200 year Flood Zone.

Air – No air quality issues identified.

Soil, Geology & Coastal Processes – Site is not within an area designated as a geological SSSI.
Sections of Islay's southern coastline in the vicinity of Lagavulin Bay have been identified as having the potential for erosion or accretion (e.g. sandy beaches, soft cliffs, etc.), including the Lagavulin Bay itself and nearby Port Ellen. However, no significant coastal erosion or accretion has been identified in this area.

Cultural heritage –
There is a Scheduled Monument at Lagavulin - Dunivaig Castle (SM4747) - located on the headland at the east end of the bay. The seascape/landscape plays a significant role in defining the setting of Dunivaig Castle[4].

There are no listed buildings in the immediate vicinity of Lagavulin. The nearest is the distillery in Laphroaig (Ref: 12435, Category C-listed).
Lagavulin Distillery and its pier are included on the RCAHMS site (Canmore ID 38022 and 303186). Other features identified around Lagavulin include Barr an T-seann Duine Fort (Canmore ID 38001), Cill Mhoire burial ground (Canmore ID 38003) and Lagavulin Church (Canmore ID 141196).

There are several recorded wreck sites in the bay at Lagavulin, as well as along the south-east coast of Islay, approximately 2 km offshore from Lagavulin, Ardbeg and Port Ellen, including the Serb (Canmore ID 102493) and Luneda (Canmore ID 102607), amongst others.

Landscape / Seascape – No national designation identified.

Material Assets – Fishing and recreational vessels frequent the waters off southern Islay, and small vessels often access Lagavulin Bay.

[3] The Scottish Government (2011) Special Protection Areas (SPAs) [online] Available at: http://www.scotland.gov.uk/Topics/Environment/Wildlife-Habitats/protectedareas/NATURA/SPAs (accessed 5/4/2014)
[4] information received from Historic Scotland during pre-consultation in January 2014

ENVIRONMENTAL BASELINE – LAGAVULIN
Issues Scoped Out: *Air* – There is likely to be increased boat traffic due to the movement of devices, which could result in increased atmospheric emissions. However, given existing levels of boat movements, these additional emissions are unlikely to result in significant effects. *Soil, Geology & Coastal Processes* – Given the vessel movements and numbers of devices assumed for this assessment, it is considered unlikely that changes to wave patterns would be such that they would result in significant alterations of coastal processes or in significant impacts on soil and marine geology.

ASSESSMENT – LAGAVULIN				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Biodiversity, Flora and Fauna Waterbirds – Areas of Search	Potential disturbance (vessel noise and human presence) from wet storage activities. Presence of new features likely to disturb and possibly displace birds from feeding.	Temporary, depending on location, duration and frequency of activity.	Time storage activities and vessel movements to avoid bird breeding season, overwintering, etc.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.
Biodiversity, Flora and Fauna Seals – South-east Islay Skerries SAC.	Risk of corkscrew injury from slow-moving vessels with certain types of ducted propeller or those using dynamic positioning; disturbance to seal haul-out locations.	Death of individual seals may affect overall population numbers/ viability, given that the harbour species in particular, is generally in decline; displacement of seals.	Avoid using vessels with ducted propellers for slow-speed activities, e.g. manoeuvring, particularly during breeding season. If necessary, consider using vessel routes passing SAC when accessing the harbour. Avoid storage of devices near seal haul out locations during moulting times and breeding season if relevant.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided.
European Protected Species: otters	Potential disturbance of otters (noise during storage, physical presence of devices and human presence) from storage of devices.	Effects will be temporary but, depending on duration and frequency of storage, may be medium-term.	Devices should not be stored on or near habitat used by otters.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.

ASSESSMENT – LAGAVULIN				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
European Protected Species: cetaceans	Risk of collision with vessels; entanglement in mooring lines (e.g. minke whale); disturbance and displacement	Risk of these events occurring is unclear, thus significance of effect is unknown. Injury and/or death of individuals may affect overall population numbers/viability	Avoid cetacean habitat and migration routes. Use high-visibility mooring lines.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided
Woodland features - Ardmore, Kildalton and Callumkill SSSI	Sites will not be affected due to distance from pier.	None.	None.	No residual effects are considered likely.
Population / Human Health Residential developments within 35m of the site	Noise disturbance during site operations. Due to the nature of existing activities at the pier (distillery), it is unlikely this will add significantly to existing levels of noise and disturbance.	Effects are likely to be localised	Site operation protocols and/or good neighbour agreements would set out conditions for controlling noise and/or disturbance from activities.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.
Water & Marine Environment Coastal waters classification	Increased turbidity from the anchorage or storage of gravity devices directly on the seabed. Introduction of devices into the waterbody.	Effects are likely to be localised and temporary	Increased turbidity: as above. No mitigation proposed for temporary morphological effects.	Increased turbidity: as above. Temporary morphological effects.
Climatic Factors Site within designation on SEPA Indicative Flood Map 200 years	Potential for the coastline at Lagavulin to be at risk of flooding from the sea	This will be a permanent threat given the long-term impacts of climate change and the potential volatility this could have on micro-climates.	Ensuring suitable design measures to increase defensibility and mitigate adverse effects of potential sea level rises	Assuming mitigation is implemented, significant adverse environmental effects could be avoided.
	Increase in GHG emissions due to vessel movements associated with wet storage.	Emissions from vessels are unlikely to contribute significantly to those from the existing Scottish fleet.	Vessel operators may wish to implement energy- and fuel-efficiency measures to reduce fuel consumption and consequent GHG emissions.	Emissions from vessels would continue but are unlikely to contribute significantly to those from the existing Scottish fleet.

ASSESSMENT – LAGAVULIN				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Cultural Heritage Scheduled Monuments	Wet storage of devices is likely to significantly affect the setting of Dunivaig Castle.	Significant adverse	Avoid wet storage in Lagavulin Bay. At the very least, store at other end of the bay from Dunivaig Castle.	Avoiding wet storage in Lagavulin Bay will result in no residual effects; wet storage in the bay will result in significant adverse residual effects on Dunivaig Castle.
Wreck sites	Storage of devices could affect wreck sites through destruction of features.	Permanent loss of wreck features	Avoid storage on these areas.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Landscape / Seascape	Residents in Lagavulin are likely to have views of stored devices which are on or break the water surface.	Effects may be significant but are likely to be local in nature and temporary.	Locate devices away from overall views of Lagavulin Bay. It may be difficult to find a suitable location along this coast.	The potential for significant adverse visual effects remains, given the difficulty of achieving mitigation.
Material Assets Lagavulin Bay access and Navigation	Possible effects on navigational safety, e.g. recreational vessels. Devices could block access to the harbour and displace harbour users.	Collisions could result in injury/death of human beings, oil spills etc. Potential displacement of harbour activities.	Ensure that devices are located away from access points to the harbour. Wet storage sites will need to be appropriately lit and/or marked. Liaison with MCA, Harbour Authority and other vessel operators to agree storage areas and navigable channels.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Fishing grounds	Possible disturbance and/or displacement of local fishing grounds by wet storage of devices.	Temporary loss of fishing grounds during storage operations. Potential displacement of fishing activities – adverse socio-economic and community effects; potential intensification of fishing	Ensure that devices are located away from these areas. Liaison with Inshore Fisheries Group and/or local fishermen as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.

ASSESSMENT – LAGAVULIN				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
		elsewhere		
Recreational areas	Possible disturbance and/or displacement of recreational areas by wet storage of devices.	Temporary loss of recreational areas during storage operations, with concomitant local economic loss.	Ensure that devices are located away from these areas. Liaison with Royal Yachting Association Scotland as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
OTHER DEVELOPMENT None known.				
Cumulative Effects	Potential for cumulative effects on marine mammals (i.e. corkscrew seal injuries). No other adverse cumulative effects are anticipated.			

Implications for development:
The following requires further examination at the project level:

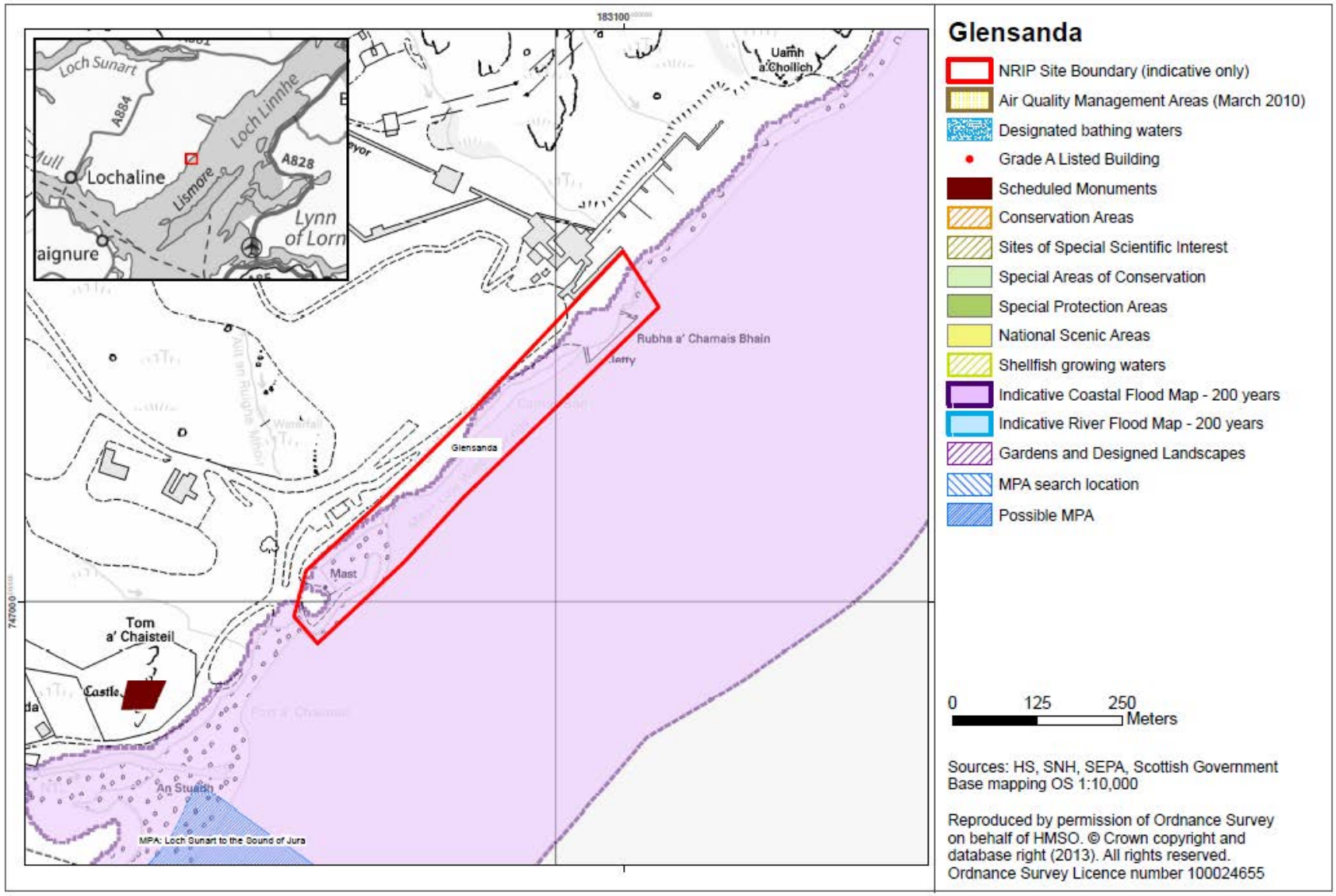
- risk of disturbance to seal haul out locations and corkscrew injury to seals.
- need to alleviate flood risk through project planning and design.
- planning and design to avoid and/or reduce landscape/visual effects and effects on historic environment, including wrecks. Early discussions should be held with Historic Scotland.
- if wreck sites cannot be avoided, undertake survey and recording of wrecks prior to wet storage;

Early discussions should be held with SNH, SEPA, the Local Planning Authority, Harbour Authority, MCA, Inshore Fisheries Group and/or local fishermen, Royal Yachting Association Scotland and other vessel operators as required.

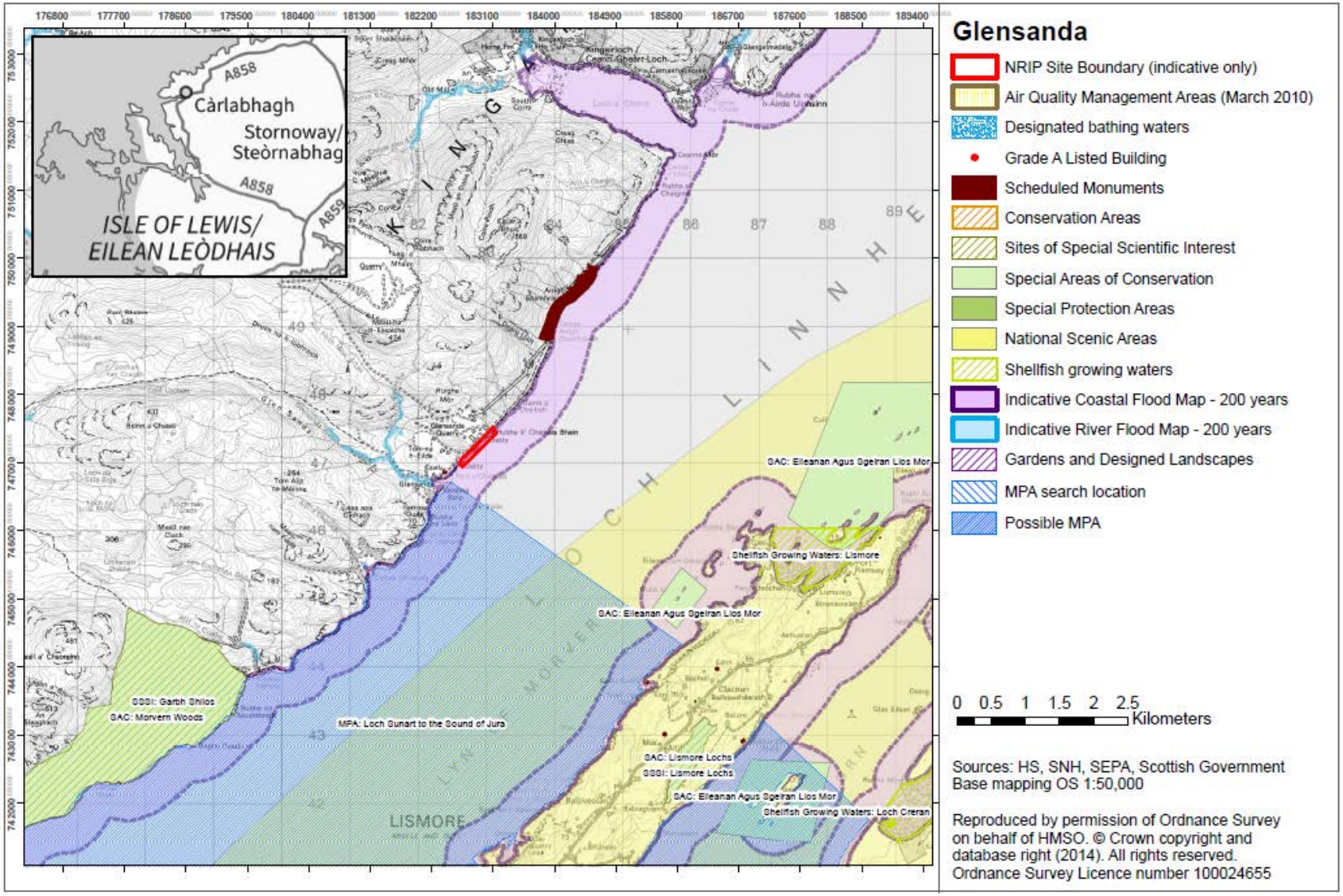
Habitats Regulations Appraisal
It is likely that Habitats Regulations Appraisal will be required at the project level, given the potential to affect seals (disturbance and corkscrew injuries) from the Ascrib, Isay and Dunvegan SAC.

Early discussions should be held with SNH.

Site Map: Glensanda



Wider Map: Glensanda



Assessment Table: Glensanda

SITE USE – Possible Assembly/Construction and Installation; Wet Storage

POTENTIAL DEVELOPMENT

Assembly/Construction & Installation

- Within the existing port, re-use existing buildings, where possible, or provide new ones. No further infrastructure upgrade required (development is about to be proposed).
- Wet storage of devices may be employed at this location.

Refuge/Wet Storage/Unplanned Maintenance

For unplanned maintenance, it may be necessary to provide a portacabin (or similar) within the existing port; re-use existing buildings if possible. No further infrastructure upgrade required.

There are three scenarios for wet storage:
(a) Company that manufactures the devices cannot store them as it needs the laydown space so the developer needs to move the devices to a wet storage site which is both close to the lease site and sheltered.
(b) The developer wants to store the devices close to the lease site until the installation vessel they wish to use is available, which means they store them in the loch.
(c) Refuge site needed when devices are being towed to the installation site and need to take shelter during bad weather (for a day or two) before resuming progress.

See Section 3 of the Environmental Report for assumptions about wet storage.

ENVIRONMENTAL BASELINE – GLENSANDA

Biodiversity, flora and fauna –

Morvern Woods SAC – woodlands and otter (approximately 4 km south-west of the site).

Eileanan agus Sgeiran Lios mor SAC – Harbour seal (approximately 3.5 km south-east and 4 km east of the site). Comprises several discrete areas.

Lismore Lochs SAC/SSSI – The SAC is designated for calcium-rich nutrient-poor lakes, lochs and pools (approximately 5 km south-east of the site). The SSSI covers three separate freshwater lochs (Loch Fiart, Kilcheran Loch and Loch Baile a' Ghobhainn); features include base-rich lochs and open water transition fen, which support an assemblage of invertebrates and marsh fritillary butterfly.

Loch Creran SAC - Inshore sublittoral rock (Marine) – reefs.

Moidart and Ardgour SPA, Cnuic agus Cladach Mhuile SPA and Glen Etive and Glen Fyne SPA – breeding golden eagle.

ENVIRONMENTAL BASELINE – GLENSANDA

Loch Creran Marine Protected Area (MPA) – flame shell beds.

Loch Sunart and Sound of Jura Marine Protected Area (MPA) – common skate.

Seals – Potential designated haul-out site for harbour seals is located on Mull to the south-west of the site[5]. The presence of SACs designated for harbour seals (e.g. Eileanan agus Sgeiran Lios mor SAC), amongst other features, indicates that Loch Linnhe, Sound of Mull and surrounding waters are well used by harbour and grey seals[6].

European Protected Species – Cetaceans are likely to be passing through the area. Otters may be found using this area of coast (see above).

Population and Human Health – Site is isolated; the nearest dwellings appear to be on Lismore, approximately 4 km east of Glensanda.

Water and marine environment – Coastal waters classification (2011): Good/Moderate. There are no designated Shellfish Waters in the environs of Glensanda; the nearest are in Loch Creran and Lynn of Lorn[7].

Climatic Factors – The site is within an Indicative 200 year Flood Zone.

Air – No air quality issues identified.

Soil, Geology & Coastal Processes – Site is not within an area designated as a geological SSSI. Loch Creran MPA - Quaternary of Scotland.
Much of the north west coastline of Loch Linnhe has been identified as having the potential for erosion or accretion (e.g. beaches, soft cliffs, etc.), including the significant parts of the coastline in the north near Fort William (approximately 35 km north east of the site). Coastal erosion has been identified along this coastline to the north east of the site, on the east coast of the Loch at the north of the Isle of Lismore, and large areas of coastline reported as being affected by erosion and/or accretion to the north near to Forth William.

Cultural heritage –
There is one Scheduled Monument at Glensanda, Glensanda Castle (No 4358), which consists of an oblong 15th century tower house of two main storeys, the foundation of a building to its south and the knoll top, on which the tower house is built. Glensanda Castle is also a Category B-listed building (Ref: 4338). The castle appears to be immediately adjacent to part of the quarry infrastructure. There is another Scheduled Monument, approximately 2 km north-east of Glensanda, the remains of a house, enclosures and field system at Airigh Shamhraidh (No 5679).

[5] The Scottish Government (2011) Consultation on Seal Haul-out Sites, March 2011.
[6] SMRU (2013) Marine Mammal Scientific Support Research Programme MMSS/001/11, Grey and harbour seal usage maps [online] Available at: http://www.scotland.gov.uk/Resource/0043/00437053.pdf [accessed 5/12/2013]
[7] Sites 32 and 63 of Shellfish Water Designation 2013

ENVIRONMENTAL BASELINE – GLENSANDA

There is a wreck site in the Lyn of Morvern, approximately 4 km south of Glensanda, La Naide (Canmore ID 118082). There are several other wreck sites further south (8-10 km south of Glensanda).

Landscape / Seascape – Lynn of Lorn NSA located approximately 2 km east of Glensanda.

Material Assets – The site is located adjacent to the operating Glensanda Quarry and its pier facilities. There are no aquaculture sites in the immediate environs of Glensanda; the nearest are three finfish and three shellfish farms on the coast of Lismore.

A RYA medium recreational cruising route runs through the Lyn of Morvern; this connects to several heavy and light recreational cruising routes. The nearest marinas are at Dunbeg (Dunstaffnage Bay) and Oban.

Issues Scoped Out:

Population and Human Health – Site operations and the likely increase in boat traffic due to the movement of devices could result in noise and disturbance to residents around the loch (none in Glensanda itself). However, given existing levels of boat movements, this effect is unlikely to be significant.

Air – There is likely to be increased boat traffic due to the movement of devices, which could result in increased atmospheric emissions. However, given existing levels of boat movements, these additional emissions are unlikely to result in significant effects.

Soil, Geology & Coastal Processes – Given the vessel movements and numbers of devices assumed for this assessment, it is considered unlikely that changes to wave patterns would be such that they would result in significant alterations of coastal processes or in significant impacts on soil and marine geology.

ASSESSMENT – GLENSANDA

Environmental Receptor	Effect	Characteristic	Mitigation	Residual Effects
Biodiversity, Flora and Fauna	Potential disturbance of otters (noise during storage, physical presence of devices and human presence) from storage of devices.	Effects will be temporary but, depending on duration and frequency of storage, may be medium-term.	Devices should not be stored on or near habitat used by otters.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.
Otters – Morvern Woods SAC and elsewhere (European Protected Species)				
Golden eagles	Potential disturbance (vessel noise and human presence) from wet storage activities. Presence of new features may disturb and possibly displace birds from feeding.	Temporary, depending on location, duration and frequency of activity.	Time storage activities and vessel movements to avoid bird breeding season.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.

ASSESSMENT – GLENSANDA				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Seals, including Harbour seal from Eileanan agus Sgeiran Lios mor SAC	Risk of corkscrew injury from slow-moving vessels with certain types of ducted propeller or those using dynamic positioning; disturbance to seal haul-out locations.	Death of individual seals may affect overall population numbers/ viability, given that the harbour species in particular is generally in decline; displacement of seals.	Avoid using vessels with ducted propellers for slow-speed activities, e.g. manoeuvring, particularly during breeding season. Avoid storage of devices near seal haul out locations during moulting times and breeding season if relevant.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided.
Loch Creran SAC and MPA	O&M activities on land will not affect the protected features of the SAC/MPA. Should O&M involve anchorage or storage of devices directly on the seabed, there is a risk of loss of and/or damage to sensitive benthic habitats. Given the distance of the SAC/MPA from Glensanda, it is unlikely that devices would be stored here.	Effects may be temporary or longer term, depending on the ability of the habitat to recover from disturbance. Recovery will also depend on the number of devices, the methods of anchoring and storage location/duration.	Ensure that wet storage of devices in the SAC/MPA is avoided.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.
Loch Sunart and Sound of Jura MPA	O&M activities on land will not affect the protected features of the MPA. Should O&M involve anchorage or storage of devices directly on the seabed, there is a risk of disturbance and displacement of biodiversity features (e.g. common skate).	Effects may be temporary or longer term, and is likely to depend on the ability of features to recover from disturbance, the number of devices and the duration of storage.	Avoid wet storage of devices in the MPA.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.
Lismore Lochs SAC/SSSI; Garbh Shlios & Bernera Island SSSIs	No mobile species interests. Sites will not be affected due to distance from pier.	No effect	None required	None

ASSESSMENT – GLENSANDA				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
European Protected Species: cetaceans(for otters, see above)	Risk of collision with vessels; entanglement in mooring lines (e.g. minke whale); disturbance and displacement	Risk of these events occurring is unclear, thus significance of effect is unknown. Injury and/or death of individuals may affect overall population numbers/viability	Avoid cetacean habitat and migration routes. Use high-visibility mooring lines.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided
Water & Marine Environment Coastal waters classification	Increased turbidity from the anchorage or storage of gravity devices directly on the seabed. Introduction of devices into the waterbody.	Effects are likely to be localised and temporary	Increased turbidity: as above. No mitigation proposed for temporary morphological effects.	Increased turbidity: as above. Temporary morphological effects.
Designated shellfish waters	Increased turbidity from the anchorage or storage of gravity devices directly on the seabed. Distance between Glensanda and designated shellfish waters means that adverse effects are unlikely.	No effects	None required	None
Climatic Factors Site is within an Indicative 200 year Flood Zone	Potential to be at risk of flooding from the sea	This will be a permanent threat given the long-term impacts of climate change.	Ensuring suitable design measures to increase defensibility and mitigate adverse effects of potential sea level rises	Assuming mitigation is implemented, significant adverse environmental effects could be avoided.
	Increase in GHG emissions due to vessel movements associated with O&M.	Emissions from vessels are unlikely to contribute significantly to those from the existing Scottish fleet.	Vessel operators may wish to implement energy- and fuel-efficiency measures to reduce fuel consumption and consequent GHG emissions.	Emissions from vessels would continue but are unlikely to contribute significantly to those from the existing Scottish fleet.

ASSESSMENT – GLENSANDA				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Cultural Heritage Scheduled Monument/Listed Building	O&M operations are unlikely to affect the setting of Glensanda Castle (particularly given its location near the existing quarry). Distance between Glendsanda and Airigh Shamhraidh means that no effects are anticipated.	No effect	None required	None
Wreck sites	It is unlikely that O&M works would affect existing wreck sites, given their location. Storage of devices could affect wreck sites through destruction of features.	Permanent loss of wreck features	Avoid storage on these areas.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Landscape/Seascape Lynn of Lorn NSA	It is unlikely that storage would affect the special qualities of the National Scenic Area, given the nature of the devices. Storage of devices which are on or break the water surface could have adverse local landscape and visual effects; given the distance between Glensanda and residential populations, significant adverse effects are unlikely.	No effects	None required	None
Material Assets Harbour access	Possible effects on navigational safety. Devices could block access to the harbour and displace harbour users.	Collisions could result in injury/death of human beings, oil spills etc. Potential displacement of harbour activities.	Ensure that devices are located away from access points to the harbour. Wet storage site will need to be appropriately lit and/or marked. Liaison with MCA,	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.

ASSESSMENT – GLENSANDA				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
			Harbour Authority and other vessel operators to agree storage areas and navigable channels.	
Fishing grounds	Possible disturbance and/or displacement of fishing from local grounds by wet storage of devices.	Temporary loss of fishing grounds during storage operations. Potential displacement of fishing activities – adverse socio-economic and community effects; potential intensification of fishing elsewhere	Ensure that devices are located away from these areas. Liaison with Inshore Fisheries Group and/or local fishermen as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Recreational areas	Possible disturbance and/or displacement of recreational areas by wet storage of devices.	Temporary loss of recreational areas during storage operations, with concomitant local economic loss.	Ensure that devices are located away from these areas. Liaison with Royal Yachting Association Scotland as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Shellfish and finfish interests	Possible damage to existing aquaculture infrastructure, e.g. in the event of devices breaking loose. Such effects are unlikely, given distance between Glensanda and nearest finfish/shellfish farms.	No effects	None required	None
OTHER DEVELOPMENT Possible development at Glensanda in support of offshore wind infrastructure.				
Cumulative Effects	Assuming that mitigation measures are implemented, adverse cumulative effects are not anticipated.			

Implications for development:
The following requires further examination at the project level:

- effects on otters from SAC; golden eagles using nearby SPA habitat. Early discussions should be held with SNH regarding timing, extent and duration of wet storage activities.
- risk of disturbance to seal haul out locations and corkscrew injury to seals, including those from Eileanan agus Sgeiran Lios mor SAC
- need to alleviate flood risk through project planning and design.
- planning and design to avoid and/or reduce effects on benthic features of SAC/MPA in Loch Creran and on wrecks.
- if wreck sites cannot be avoided, undertake survey and recording of wrecks prior to wet storage

Early discussions should be held with SNH, SEPA, Historic Scotland, the Local Planning Authority, Harbour Authority, MCA, Inshore Fisheries Group and/or local fishermen, Royal Yachting Association Scotland and other vessel operators as required.

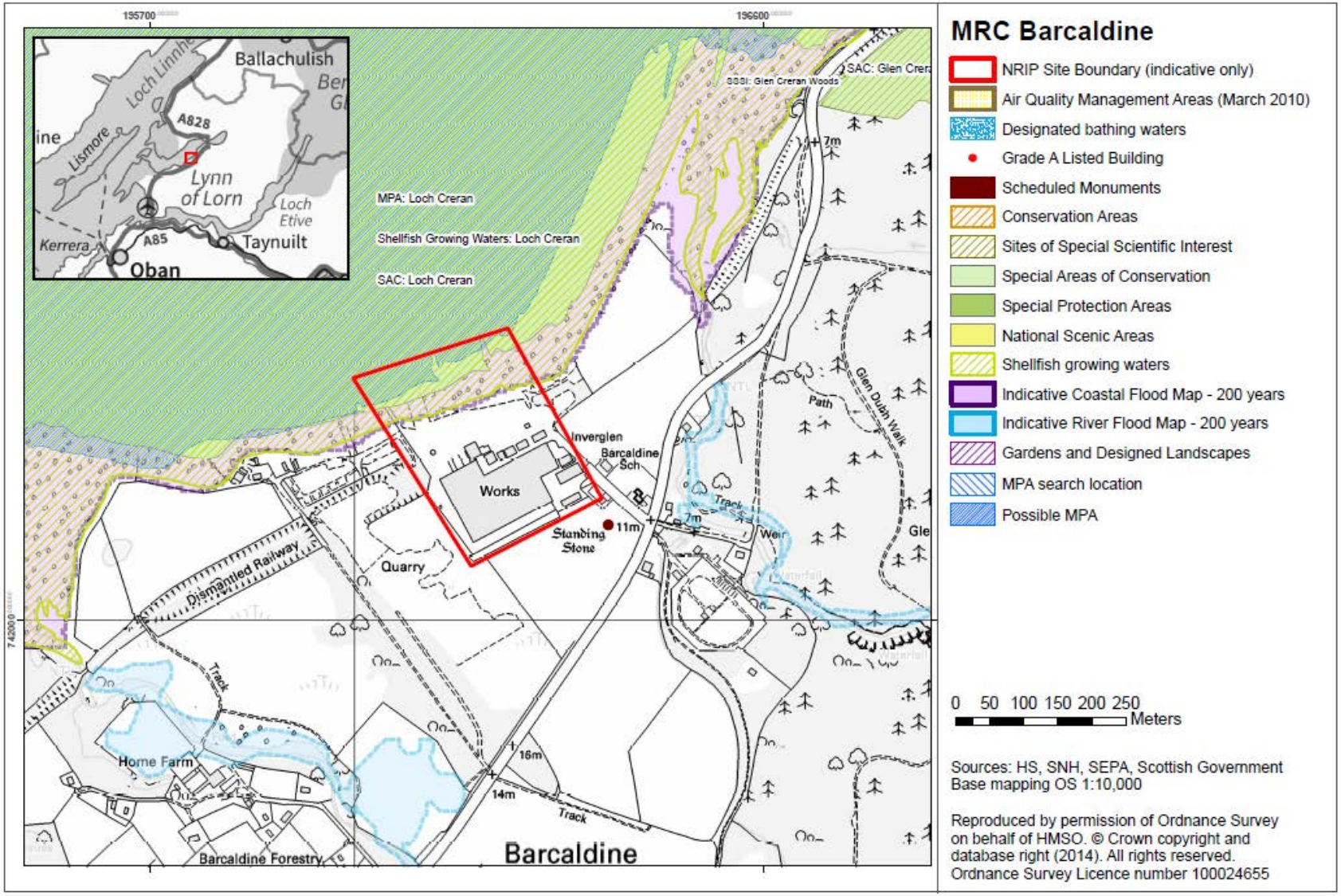
Habitats Regulations Appraisal

It is likely that Habitats Regulations Appraisal will be required at the project level, covering at least the following issues:

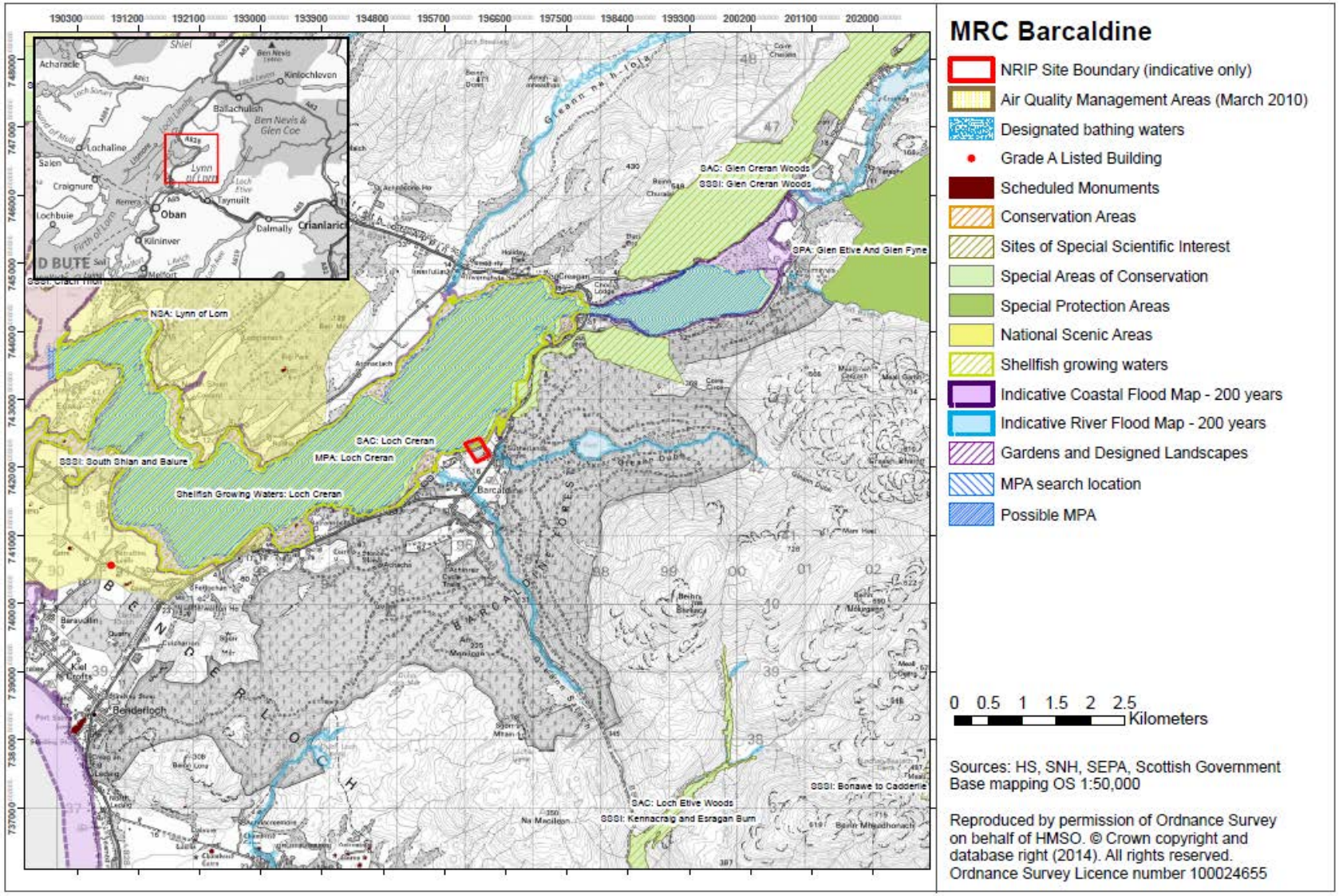
- effects of site operations on breeding golden eagles birds from nearby SPAs.
- effects on otter from Morvern Woods SAC
- effects on harbour seals from Eileanan agus Sgeiran Lios mor SAC

Early discussions should be held with SNH.

Site Map: MRC Barcaldine



Wider Map: MRC Barcaldine



Assessment Table: MRC Barcaldine

SITE USE – Assembly/Construction and Installation

POTENTIAL DEVELOPMENT

Assembly/Construction & Installation

- Within the existing port, re-use existing buildings, where possible, or provide new ones. No further infrastructure upgrade required.
- Wet storage of devices may be employed at this location.

See Section 3 of the Environmental Report for assumptions about wet storage.

ENVIRONMENTAL BASELINE – MRC BARCALDINE

Biodiversity, flora and fauna –

Glen Creran Woods SAC - Mixed woodland on base-rich soils associated with rocky slopes, western acidic woodland and otter. (approximately 2 km north-east of port).

Loch Creran SAC – Reefs (within Loch Creran adjacent to the site).

Loch Creran MPA (MPA) – Flame shell beds and Quaternary of Scotland (approximately 250 m west of the site).

South Shian and Balure SSSI – Quaternary of Scotland (approximately 5 km west of the site).

Seals – Potential designated haul-out sites for both harbour and grey seals are located around the Scottish coast, with several designated SACs for harbour seals located at Lismore Island in the Lynn of Morvern and Lynn of Lorn to the west of the Loch Creran[8]. Indications are that the Shetland waters are well used by both harbour and grey seals[9].

European Protected Species – Cetaceans are likely to be passing through the area. It is likely that otters are using the coast in this area.

Population and Human Health – The nearest building is located approximately 500 m to the west and a caravan park approximately 200 m south-east of the pier.

Water and marine environment – Shellfish and finfish aquaculture licensing consents have been approved in Loch Creran[10]. Coastal waters classification (2011): Good.

[8] The Scottish Government (2011) Consultation on Seal Haul-out Sites, March 2011.

[9] SMRU (2013) Marine Mammal Scientific Support Research Programme MMSS/001/11, Grey and harbour seal usage maps [online] Available at: http://www.scotland.gov.uk/Resource/0043/00437053.pdf [accessed 5/12/2013]

ENVIRONMENTAL BASELINE – MRC BARCALDINE

Climatic Factors – The site is within an Indicative 200 year Flood Zone.

Air – No air quality issues identified.

Soil, Geology & Coastal Processes – The site is not located within a designated geological SSSI.
Much of the coastline within Loch Creran has been identified as having the potential for erosion or accretion (e.g. beaches, soft cliffs, etc.). However, no significant coastal erosion has been identified in this area.

Cultural heritage – Scheduled Monument Barcaldine School Standing stone 46 m south west of (SM3905) adjacent to the eastern boundary of the site. Listed Building Barcaldine Bridge (Abhain Leithil) (Category C Index Number 4720) is located approximately 250 m east of pier and sheds. The Alginate Works (Canmore ID 93348) is located on the proposed site, and other historic features are scattered throughout the surrounding area.

Landscape / Seascape – Lynn of Lorn NSA is located approximately 1.5 km west of the site.

Material Assets – Aquaculture interests have been identified in the area, with the nearest shellfish site located approximately 1 km north of the pier and finfish sites around 3 km west of the pier. The pier is also currently utilised by leisure vessels with winter storage of craft and commercial marine services, including fishing trips[11].

Issues Scoped Out:
Air – There is likely to be increased boat traffic due to assembly/construction and installation activities, which could result in increased atmospheric emissions. However, given existing levels of boat movements, these additional emissions are unlikely to result in significant effects.
Soil, Geology & Coastal Processes – Given the vessel movements and numbers of devices assumed for this assessment, it is considered unlikely that changes to wave patterns would be such that they would result in significant alterations of coastal processes or in significant impacts on soil and marine geology.

[10] Site 62 of Shellfish Water Designations 2012 – Lynn of Lorn
[11] Ports and Harbours of the UK – Barcaldine [online] Available at: http://www.ports.org.uk/port.asp?id=848 (accessed 14/01/2014)

ASSESSMENT – MRC BARCALDINE				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Biodiversity, Flora and Fauna Otter – Glen Creran woods SAC and elsewhere (European Protected Species).	It is unlikely that proposed activities will add significantly to existing levels of noise and disturbance, due to the nature of existing activities in the harbour. Otter are unlikely to be affected (if they are using the waters adjacent to the Barcaldine pier).	No effects.	None required.	None.
Biodiversity features including reefs and flame shell beds – Loch Creran SAC/Loch Creran MPA	O&M activities on land will not affect the protected features of the SAC/MPA. Should site activities involve anchorage or storage of devices directly on the seabed, there is a risk of loss of and/or damage to sensitive benthic habitats.	Effects may be temporary or longer term, depending on the ability of the habitat to recover from disturbance. Recovery will also depend on the number of devices, the methods of anchoring and storage location/duration.	Where vulnerable benthic habitats have been identified the storage of devices should be avoided.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.
Seals	Risk of corkscrew injury from slow-moving vessels with certain types of ducted propeller or those using dynamic positioning; disturbance to seal haul-out locations.	Death of individual seals may affect overall population numbers/ viability, given that the harbour species in particular is generally in decline; displacement of seals.	Avoid using vessels with ducted propellers for slow-speed activities, e.g. manoeuvring, particularly during breeding season. Avoid storage of devices near seal haul out locations during moulting times and breeding season if relevant.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided.
European Protected Species: cetaceans (for otters see above)	Risk of collision with vessels; entanglement in mooring lines (e.g. minke whale); disturbance and displacement	Risk of these events occurring is unclear, thus significance of effect is unknown. Injury and/or death of individuals may affect overall population numbers/viability	Avoid cetacean habitat and migration routes. Use high-visibility mooring lines.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided

ASSESSMENT – MRC BARCALDINE				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Population / Human Health Residential developments within 250 m of site.	Noise disturbance during site operations.	Effects are likely to be localised	Site operation protocols and/or good neighbour agreements would set out conditions for controlling noise and/or disturbance from activities.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.
Water & Marine Environment Shellfish licensing consents have been approved in Loch Creran[12]	Increased turbidity from the anchorage or storage of gravity devices directly on the seabed could affect shellfish growing waters.	Effects are likely to be localised and temporary.	Developers should consider whether there are anchoring methods which would not result in increased turbidity.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided.
Coastal waters classification	Increased turbidity from the anchorage or storage of gravity devices directly on the seabed. Introduction of devices into the waterbody.	Effects are likely to be localised and temporary	Increased turbidity: as above. No mitigation proposed for temporary morphological effects.	Increased turbidity: as above. Temporary morphological effects.
Climatic Factors Site is within the Indicative 200 year Flood Zone.	Potential for coastal areas to be at risk of flooding from the sea.	This will be a permanent threat given the long-term impacts of climate change and the potential volatility this could have on micro-climates.	Ensuring suitable design measures to increase defensibility and mitigate adverse effects of potential sea level rises	Assuming mitigation is implemented, significant adverse environmental effects could be avoided.
	Increase in GHG emissions due to vessel movements associated with assembly and installation (if needed).	Emissions from vessels are unlikely to contribute significantly to those from the existing Scottish fleet.	Vessel operators may wish to implement energy- and fuel-efficiency measures to reduce fuel consumption and consequent GHG emissions.	Emissions from vessels would continue but are unlikely to contribute significantly to those from the existing Scottish fleet.

[12] Site 62 of Shellfish Water Designations 2012 – Lynn of Lorn

ASSESSMENT – MRC BARCALDINE				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Cultural Heritage Scheduled Monument, Listed Building and historic features in the environs of the site.	As no new infrastructure is required, effects on the site or setting of these features are not anticipated.	No effect	None required	None
Landscape / Seascape Site is approximately 1.5 km from an NSA local views	Storage of devices which are on or break the water surface may have adverse local landscape and visual effects. It is unlikely that storage would affect the special qualities of the NSA, given its distance from the pier.	Effects are likely to be local in nature and temporary, and are unlikely to be significant.	At the local level, it may be desirable to locate devices in a sheltered bay away from overall views from Loch Creran. This could affect nearby SAC and MPA biodiversity features, and locations should be selected to avoid this.	Assuming mitigation is implemented, the potential for significant adverse effects at the local level should be reduced.
Material Assets Harbour access and Navigation	Possible effects on navigational safety, e.g. recreational vessels. Devices could block access to the pier and displace users.	Collisions could result in injury/death of human beings, oil spills etc. Potential displacement of pier activities.	Ensure that devices are located away from access points to the harbour. Wet storage site will need to be appropriately lit and/or marked. Liaison with MCA, Harbour Authority, and other vessel operators to agree storage areas and navigable channels.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Fishing grounds	Possible disturbance and/or displacement of local fishing grounds by wet storage of devices.	Temporary loss of fishing grounds during storage operations. Potential displacement of fishing activities – adverse socio-economic and community effects; potential intensification of fishing	Ensure that devices are located away from these areas. Liaison with Inshore Fisheries Group and/or local fishermen as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.

ASSESSMENT – MRC BARCALDINE				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
		elsewhere		
Recreational areas	Possible disturbance and/or displacement of recreational areas by wet storage of devices.	Temporary loss of recreational areas during storage operations, with concomitant local economic loss.	Ensure that devices are located away from these areas. Liaison with Royal Yachting Association Scotland as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Shellfish and finfish interests	Possible damage to existing aquaculture infrastructure, e.g. in the event of devices breaking loose.	Permanent loss of equipment/facilities	Storage sites will need to be located away from aquaculture sites. Liaison with The Crown Estate and aquaculture operators to agree a suitable distance.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
OTHER DEVELOPMENT Users of Loch Creran and the pier including fishing vessels, recreational vessels and aquaculture operations.				
Cumulative Effects	Possible cumulative effect with existing activities in Loch Creran including fishing and recreational vessels, aquaculture operations, etc. Potential for cumulative effects on the benthic habitat within the MPA and on marine mammals (i.e. corkscrew seal injuries). However, significant adverse effects potentially arising from site operations could be avoided through appropriate mitigation.			

Implications for development:

The following requires further examination at the project level:

- potential effect on benthic habitat within the MPA.
- otter survey will likely be required as part of the marine licence process.
- risk of disturbance to seal haul out locations and corkscrew seal injuries.
- preparation and agreement of construction protocols/good neighbour agreements.
- need to alleviate flood risk through project planning and design.
- planning and design to avoid and/or reduce landscape/visual effects and effects on historic environment, including wrecks.
- if wreck sites cannot be avoided, undertake survey and recording of wrecks prior to wet storage;

Early discussions should be held with SNH, SEPA, Historic Scotland, the Local Planning Authority, Harbour Authority, MCA, Inshore Fisheries Group and/or local fishermen, The Crown Estate, aquaculture operators, Royal Yachting Association Scotland and other vessel operators as required.

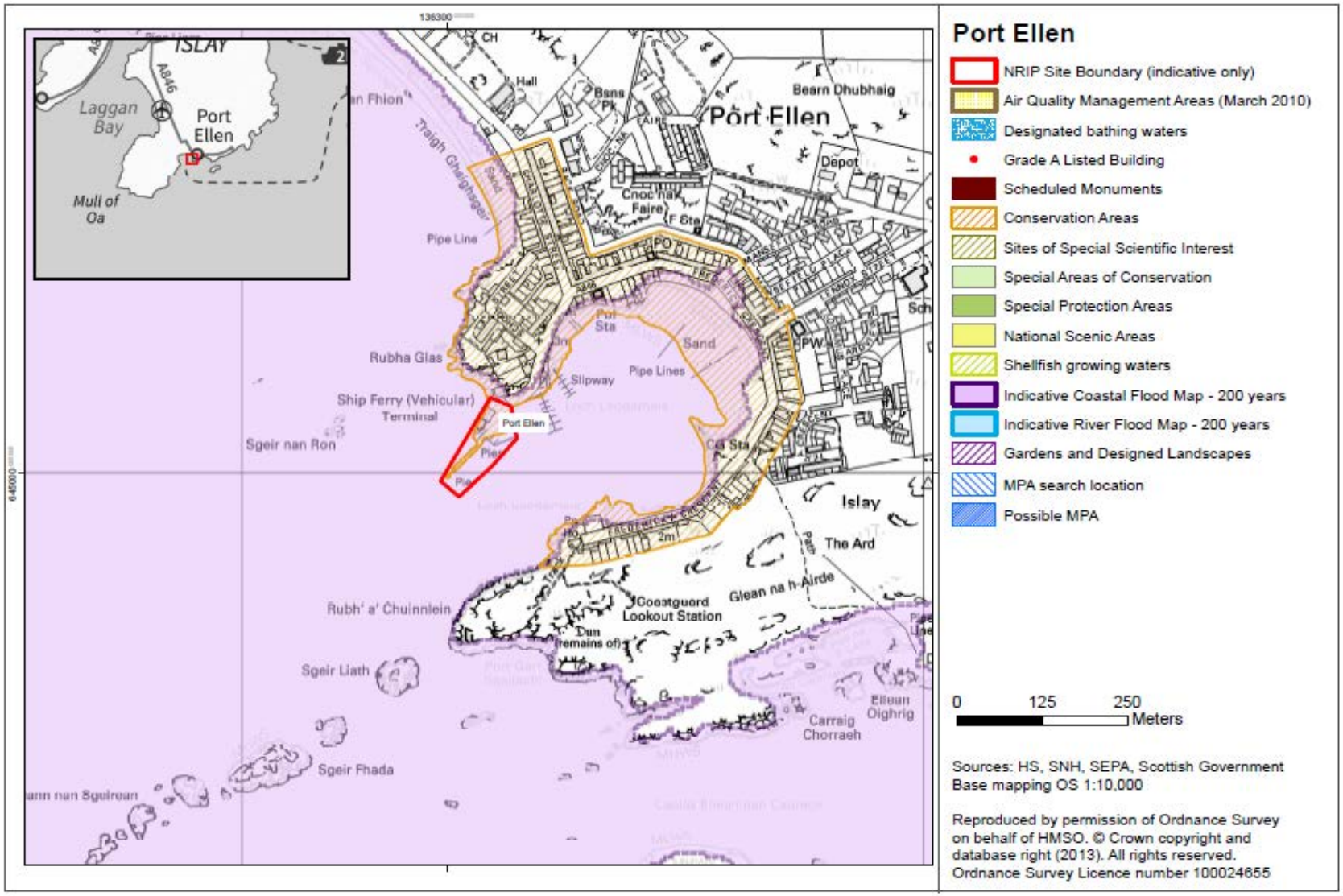
Habitats Regulations Appraisal

It is likely that Habitats Regulations Appraisal will be required at the project level, covering at least the following issues:

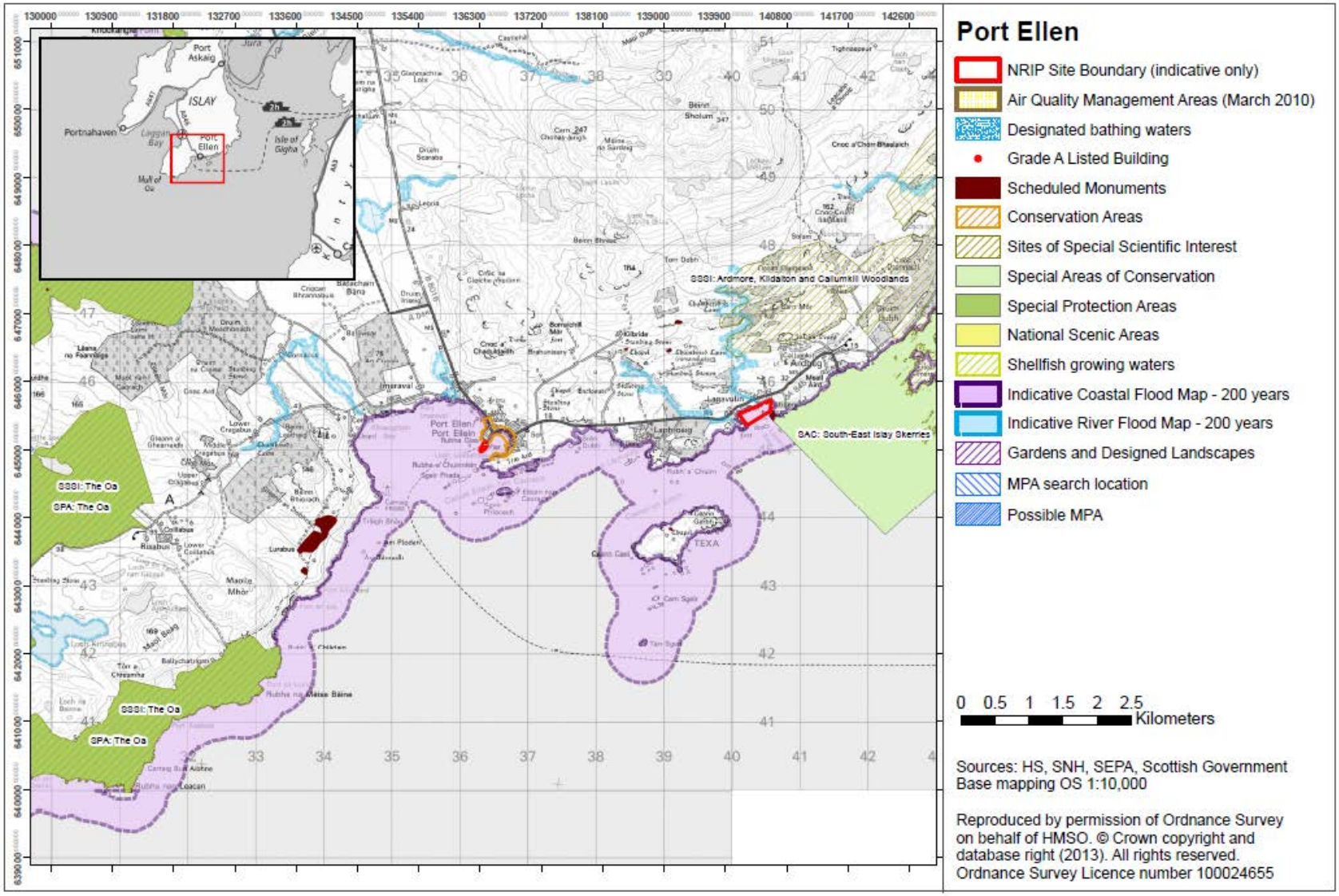
- effects of site activities on adjacent SAC features.

Early discussions should be held with SNH.

Site Map: Port Ellen



Wider Map: Port Ellen



Assessment Table: Port Ellen

SITE USE – Refuge/wet storage/unplanned maintenance.

POTENTIAL DEVELOPMENT

Refuge/Wet Storage/Unplanned Maintenance
For unplanned maintenance, it may be necessary to provide a portacabin (or similar) within the existing port re-use existing buildings if possible. No further infrastructure upgrade required.

There are three scenarios for wet storage:
(a) Company that manufactures the devices cannot store them as it needs the laydown space so the developer needs to move the devices to a wet storage site which is both close to the lease site and sheltered.
(b) The developer wants to store the devices close to the lease site until the installation vessel they wish to use is available, which means they store them in the loch.
(c) Refuge site needed when devices are being towed to the installation site and need to take shelter during bad weather (for a day or two) before resuming progress.

See Section 3 of the Environmental Report for assumptions about wet storage.

ENVIRONMENTAL BASELINE – PORT ELLEN

Biodiversity, flora and fauna –

Ardmore, Kildalton and Callumkill Woodlands SSSI – Upland oak woodland (approximately 4 km east of pier).

The Oa SPA and SSSI – Breeding birds – chough (approximately 4.5 km south-west and north-west of pier).

South-East Islay Skerries SAC – Harbour seal (approximately 4.5 km east of pier).

Seals – Potential designated haul-out sites for both harbour and grey seals around Islay and Jura[13]. Indications are that this general area is well used by both harbour and grey seals, particularly the coastline to the east of the site (e.g. vicinity of South-east Islay Skerries SAC) [14].

European Protected Species – Cetaceans are likely to be passing through the area. Otters may be found using this area of coast.

[13] The Scottish Government (2011) Consultation on Seal Haul-out Sites, March 2011.
[14] SMRU (2013) Marine Mammal Scientific Support Research Programme MMSS/001/11, Grey and harbour seal usage maps [online] Available at: http://www.scotland.gov.uk/Resource/0043/00437053.pdf [accessed 5/12/2013]

ENVIRONMENTAL BASELINE – PORT ELLEN

Waterbirds – An Area of Search developed to identify possible marine SPAs are located in Islay. While these areas do not as yet represent formal designations, they provide additional information for identifying important aggregations of waterbirds in Scotland and complement the existing network of SPAs[15].

Population and Human Health – Residents within Port Ellen and in coastal areas around Kilnaughton Bay likely have views of the pier.

Water and marine environment – Coastal waters classification (2011): Good.

Climatic Factors – The site is within an Indicative 200 year Flood Zone.

Air – No air quality issues identified.

Soil, Geology & Coastal Processes – Site is not within an area designated as a geological SSSI.
Sections of Islay's southern coastline have been identified as having the potential for erosion or accretion (e.g. sandy beaches, soft cliffs, etc.), including the Port Ellen itself and sections of coastline to the east. However, no significant coastal erosion or accretion has been identified in this area.

Cultural Heritage – The pier and the township of Port Ellen have been designated as a Conservation Area, containing a range of Category B and C listed buildings and other recorded sites including the pier itself (Canmore ID 121745). Some nine recorded wreck sites have been identified in the proximity of the site within Kilnaughton Bay, and a further 20 sites located near to the entrance to the Bay.

Landscape / Seascape – No national designation identified.

Material Assets – The pier is currently utilised by other marine users including fishing vessels and leisure craft. Ferry services from Port Ellen to the Scottish mainland also operate from the harbour. Port Ellen is also an important port for tourism and recreational sailing[16].

Issues Scoped Out:
Air – There is likely to be increased boat traffic due to the movement of devices, which could result in increased atmospheric emissions. However, given existing levels of boat movements, these additional emissions are unlikely to result in significant effects.
Soil, Geology & Coastal Processes – Given the vessel movements and numbers of devices assumed for this assessment, it is considered unlikely that changes to wave patterns would be such that they would result in significant alterations of coastal processes or in significant impacts on soil and marine geology.

[15] The Scottish Government (2011) Special Protection Areas (SPAs) [online] Available at: http://www.scotland.gov.uk/Topics/Environment/Wildlife-Habitats/protectedareas/NATURA/SPAs (accessed 5/4/2014)
[16] The Scottish Government (2011) Scotland's Marine Atlas: Information for the National Marine Plan, pg. 153, 173.

ASSESSMENT – PORT ELLEN				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Biodiversity, Flora and Fauna Birds – The Oa SPA and SSSI, Areas of Search.	There is suitable feeding habitat closer to the SPA, but waterbirds may feed in and around in Kilnaughton Bay and therefore be disturbed and/or displaced by new devices in the water, should wet storage be employed. Given the nature of existing activities in the harbour and vessel movements, it is unlikely this will add significantly to existing levels of noise and disturbance.	Effects are likely to be temporary, but will depend on the number of devices, and the location and duration of storage.	If necessary, time storage activities and vessel movements to avoid bird breeding season, overwintering, etc.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided.
Woodland features - Ardmore, Kildalton and Callumkill Woodlands SSSI.	Sites will not be affected due to distance from pier.	No effects	None required	None
Seals – including South-East Islay Skerries SAC	Risk of corkscrew injury from slow-moving vessels with certain types of ducted propeller or those using dynamic positioning; disturbance to seal haul-out locations.	Death of individual seals may affect overall population numbers/ viability, given that the harbour species in particular is generally in decline; displacement of seals.	Avoid using vessels with ducted propellers for slow-speed activities, e.g. manoeuvring, particularly during breeding season. Avoid storage of devices near seal haul out locations during moulting times and breeding season if relevant.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided.
European Protected Species: Otters	Potential disturbance of otters (noise during storage, physical presence of devices and human presence) from storage of devices.	Effects will be temporary but, depending on duration and frequency of storage, may be medium-term.	Devices should not be stored on or near habitat used by otters.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.

ASSESSMENT – PORT ELLEN				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
European Protected Species: cetaceans	Risk of collision with vessels; entanglement in mooring lines (e.g. minke whale); disturbance and displacement	Risk of these events occurring is unclear, thus significance of effect is unknown. Injury and/or death of individuals may affect overall population numbers/viability	Avoid cetacean habitat and migration routes. Use high-visibility mooring lines.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided
Water & Marine Environment Coastal waters classification	Increased turbidity from the anchorage or storage of gravity devices directly on the seabed. Introduction of devices into the waterbody.	Effects are likely to be localised and temporary	Increased turbidity: as above. No mitigation proposed for temporary morphological effects.	Increased turbidity: as above. Temporary morphological effects.
Climatic Factors Site within designation on SEPA Indicative Flood Map 200 years	Potential for Port Ellen pier and surrounds to be at risk of flooding from the sea	This will be a permanent threat given the long-term impacts of climate change.	Ensuring suitable design measures to increase defensibility and mitigate adverse effects of potential sea level rises	Assuming mitigation is implemented, significant adverse environmental effects could be avoided.
	Increase in GHG emissions due to vessel movements associated with wet storage operations.	Emissions from vessels are unlikely to contribute significantly to those from the existing Scottish fleet.	Vessel operators may wish to implement energy- and fuel-efficiency measures to reduce fuel consumption and consequent GHG emissions.	Emissions from vessels would continue but are unlikely to contribute significantly to those from the existing Scottish fleet.
Cultural Heritage Listed Buildings and historic features in the environs of the site including Port Ellen Pier and the Township.	Storage of devices which are on or break the water surface is unlikely to affect the setting of the listed buildings or other historic features.	No effect	None required	None
Wreck sites	Storage of devices could affect wreck sites through destruction of features.	Permanent loss of wreck features	Avoid storage on these areas.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.

ASSESSMENT – PORT ELLEN				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Landscape / Seascape local views	Residents in Port Ellen and around Kilnaughton Bay are likely to have views of stored devices which are on or break the water surface.	Effects are likely to be local in nature and temporary, and are unlikely to be significant.	If necessary, locate devices in a sheltered bay away from overall views of Port Ellen.	Assuming mitigation is implemented, the potential for significant adverse visual effects should be reduced.
Material Assets Harbour access	Possible effects on navigational safety, e.g. ferries, fishing vessels, etc. Devices could block access to the harbour/ferry terminal and displace harbour users (e.g. require ferries to be re-routed).	Collisions could result in injury/death of human beings, oil spills etc. Inefficient operation of ferry terminal and/or ferries. Potential displacement of harbour activities.	Ensure that devices are located away from access points to the harbour. Wet storage site will need to be appropriately lit and/or marked. Liaison with MCA, Harbour Authority and other vessel operators to agree storage areas and navigable channels.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Fishing grounds	Possible disturbance and/or displacement of local fishing grounds by wet storage of devices.	Temporary loss of fishing grounds during storage operations. Potential displacement of fishing activities – adverse socio-economic and community effects; potential intensification of fishing elsewhere.	Ensure that devices are located away from these areas. Liaison with Inshore Fisheries Group and/or local fishermen as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Recreational areas	Possible disturbance and/or displacement of recreational areas by wet storage of devices.	Temporary loss of recreational areas during storage operations, with concomitant local economic loss.	Ensure that devices are located away from these areas. Liaison with Royal Yachting Association Scotland as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
OTHER DEVELOPMENTS Ferry services and other marine users such as fishing vessels, recreational vessels and tourism operators, amongst others, operate from Port Ellen Harbour.				
Cumulative Effects	Possible cumulative effects with existing vessel traffic and anchorages in and around Port Ellen Harbour identified.			

ASSESSMENT – PORT ELLEN				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
	Assuming mitigation is implemented, the risk of significant adverse cumulative effects should be reduced.			

Implications for development:
The following requires further examination at the project level:

- effects on birds using harbour from nearby SPA habitat.
- risk of disturbance to seal haul out locations and corkscrew seal injuries.
- preparation and agreement of construction protocols/good neighbour agreements.
- need to alleviate flood risk through project planning and design.
- planning and design to avoid and/or reduce landscape/visual effects and effects on historic environment, including wrecks.
- if wreck sites cannot be avoided, undertake survey and recording of wrecks prior to wet storage

Early discussions should be held with SNH, SEPA, Historic Scotland, the Local Planning Authority, Harbour Authority, MCA, Inshore Fisheries Group and/or local fishermen, The Crown Estate, Royal Yachting Association Scotland and other vessel operators as required.

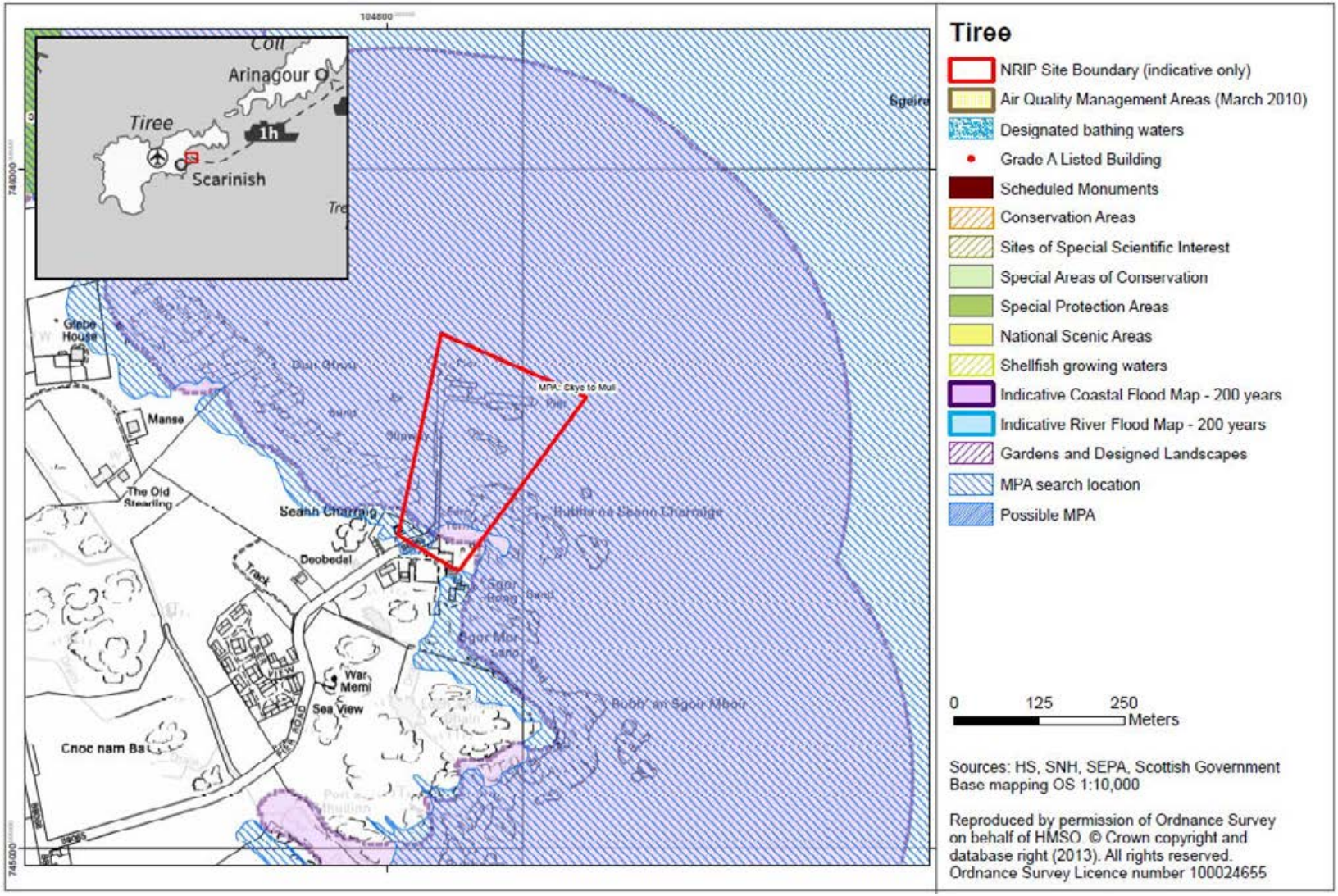
Habitats Regulations Appraisal

It is likely that Habitats Regulations Appraisal will be required at the project level, covering at least the following issues:

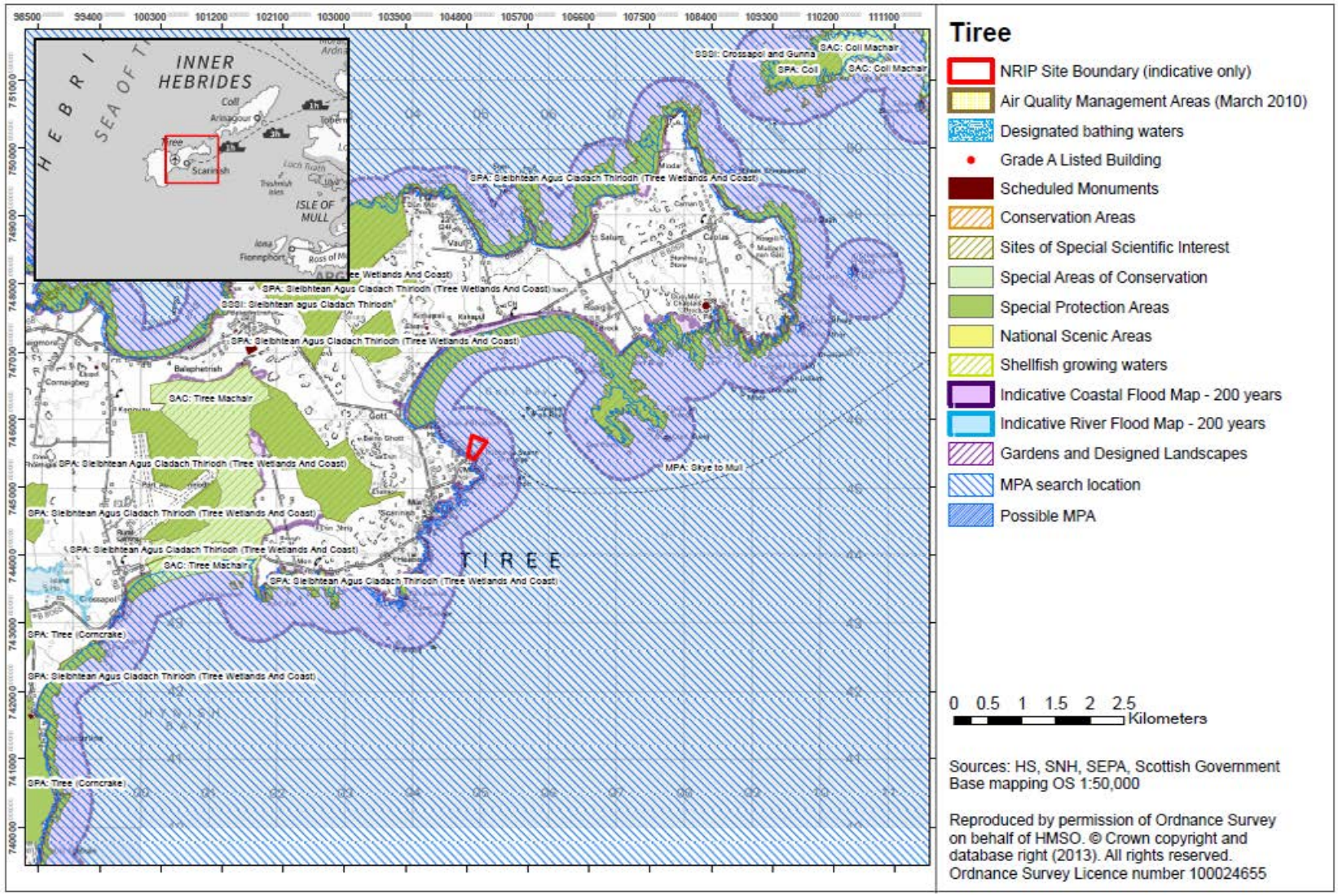
- effects of site operations on birds using habitat within the SPA

Early discussions should be held with SNH.

Site Map: Tiree



Wider Map: Tiree



Assessment Table: Tiree

SITE USE – Refuge/wet storage/unplanned maintenance.

POTENTIAL DEVELOPMENT

Refuge/Wet Storage/Unplanned Maintenance
For unplanned maintenance, it may be necessary to provide a portacabin (or similar) within the existing port; re-use existing buildings if possible. No further infrastructure upgrade required.

There are three scenarios for wet storage:
(a) Company that manufactures the devices cannot store them as it needs the laydown space so the developer needs to move the devices to a wet storage site which is both close to the lease site and sheltered.
(b) The developer wants to store the devices close to the lease site until the installation vessel they wish to use is available, which means they store them in the loch.
(c) Refuge site needed when devices are being towed to the installation site and need to take shelter during bad weather (for a day or two) before resuming progress.

See Section 3 of the Environmental Report for assumptions about wet storage.

ENVIRONMENTAL BASELINE – TIREE

Biodiversity, flora and fauna –

Sleibhtean agus Cladach Thiridoh SSSI - Aggregations of breeding and non-breeding birds – dunlin, oystercatcher, redshank, ringed plover, Greenland barnacle goose, Greenland white-fronted goose, purple sandpiper, ringed plover, sanderling and turnstone (approximately 1 km north-west/west of harbour).

Sleibhtean agus Cladach Thiridoh SPA/RAMSAR - Aggregations of breeding and non-breeding birds – redshank, oystercatcher dunlin, ringed plover, Greenland white-fronted goose, turnstone, Greenland barnacle goose and ringed plover – open water fen, oligotrophic loch, maritime cliff and machair (approximately 1 km north-west/west of harbour).

Tiree Machair SAC - Naturally nutrient-rich lakes for lochs which are often dominated by pondweed, shifting dunes, dune grassland, humid dune slacks, machair and shifting dunes with marram (approximately 3 km west of harbour)

Skye to Mull MPA search location – basking shark; fronts; minke whale.

Seals – Potential designated haul-out sites for harbour seals around Tiree and Coll, the nearest being Vaul Bay on Tiree and Soa, Friesland Bay and Arinthluic on Coll. Indications are that the Sea of the Hebrides and coastal waters in the region are well used by both harbour and grey seals, evidenced by

ENVIRONMENTAL BASELINE – TIREE

the presence of haul-out sites for grey seals such as Hough Skerries on Tiree and the designation of the Treshnish Isles for grey seal interests, amongst others[17].

European Protected Species – Cetaceans are likely to be passing through the area. Otters may be found using this area of coast.

Waterbirds – Areas of Search developed to identify possible marine SPAs are located near Tiree, Coll and Mull. While these areas do not as yet represent formal designations, they provide additional information for identifying important aggregations of waterbirds in Scotland and complement the existing network of SPAs[18].

Population and Human Health – Harbour is close to a residential area with the closest buildings approximately 500 m to the south-west.

Water & Marine Environment – Coastal waters classification (2011): Good.

Climatic Factors – The site is within an Indicative 200 year Flood Zone.

Air – No air quality issues identified.

Soil, Geology & Coastal Processes – Site is not within an area designated as a geological SSSI. Skye to Mull MPA search location - marine geomorphology of the Scottish Shelf Seabed (components to be confirmed). Sections of the Tiree coastline have been identified as having the potential for erosion or accretion (e.g. sandy beaches, soft cliffs, etc.) including Gott Bay located immediately north of the pier, and Hynish bay to the south-west. Accretion has been identified within Gott Bay and in Crossapol Bay on Coll (approximately 10 km north east of the pier).

Cultural Heritage – The site contains the Scarinish Pier and Ferry Terminal (Canmore ID 294065). Many Listed Buildings are located around the Gott Bay, with the nearest located within Scarinish. Those in proximity to the site include Dun Beag Cottage (Category B Index Number 17845) and Pierview Cottage (Category B Index Number 17844) located approximately 750 m south-west of (ferry) harbour; Tishabet, formerly (Tiree Manse) Gott (Category B Index Number 17843) located approximately 250 m north-west of (ferry) harbour and Iona View; and Scarinish (Category B, Index Number 19837) approximately 1 km south-west of (ferry) harbour. A wreck (Japonica Canmore ID 118776) located in Gott Bay north of the site.

Landscape / Seascape – No national designation identified.

Material Assets – Local fishing and recreational sailing interests use local harbour facilities, and the Tiree to Coll and Tiree to Oban ferries operate from the Harbour.

[17] SMRU (2013) Marine Mammal Scientific Support Research Programme MMSS/001/11, Grey and harbour seal usage maps [online] Available at: http://www.scotland.gov.uk/Resource/0043/00437053.pdf [accessed 5/12/2013]

[18] The Scottish Government (2011) Special Protection Areas (SPAs) [online] Available at: http://www.scotland.gov.uk/Topics/Environment/Wildlife-Habitats/protectedareas/NATURA/SPAs (accessed 5/4/2014)

ENVIRONMENTAL BASELINE – TIREE
Issues Scoped Out: *Population and Human Health* – There is likely to be increased boat traffic due to the movement of devices, which could result in noise and disturbance to local residents. However, given existing levels of boat movements, this effect is unlikely to be significant. *Air* – There is likely to be increased boat traffic due to the movement of devices, which could result in increased atmospheric emissions. However, given existing levels of boat movements, these additional emissions are unlikely to result in significant effects.

ASSESSMENT – TIREE				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Biodiversity, Flora and Fauna Birds - Sleibhtean agus Cladach Thiridoh SSSI/SAC/RAMSAR, Areas of Search	Potential disturbance (noise and human presence) from site operations to birds using the harbour area and wet storage activities. Due to the nature of existing activities in the harbour, it is unlikely this will add significantly to existing levels of noise and disturbance. Presence of new features (e.g. wet storage of devices) likely to disturb and possibly displace birds from feeding.	Effects from site operations – localised, unlikely to be significant. Wet Storage Activities – temporary, depending on location, duration and frequency of wet storage activities.	Time storage activities and vessel movements to avoid bird breeding season, overwintering, etc.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.
Tiree Machair SAC	Site is unlikely to be affected due to distance from harbour.	None.	None required.	None.
Seals	Risk of corkscrew injury from slow-moving vessels with certain types of ducted propeller or those using dynamic positioning; disturbance to seal haul-out locations.	Death of individual seals may affect overall population numbers/ viability, given that the harbour species in particular is generally in decline; displacement of seals.	Avoid using vessels with ducted propellers for slow-speed activities, e.g. manoeuvring, particularly during breeding season. Avoid storage of devices near seal haul out locations during moulting times and breeding season if relevant.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided.

ASSESSMENT – TIREE				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
European Protected Species: otters	Potential disturbance of otters (noise during storage, physical presence of devices and human presence) from storage of devices.	Effects will be temporary but, depending on duration and frequency of storage, may be medium-term.	Devices should not be stored on or near habitat used by otters.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.
European Protected Species: cetaceans (minke whale are also an MPA search location feature)	Risk of collision with vessels; entanglement in mooring lines (e.g. minke whale); disturbance and displacement	Risk of these events occurring is unclear, thus significance of effect is unknown. Injury and/or death of individuals may affect overall population numbers/viability	Avoid cetacean habitat and migration routes. Use high-visibility mooring lines.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided
basking shark (MPA search location feature)	Risk of collision with vessels; disturbance and displacement	Risk of these events occurring is unclear, thus significance of effect is unknown. Injury and/or death of individuals may affect overall population numbers/ viability.	Avoid basking shark "hot spot" areas.	Assuming mitigation is implemented, significant adverse effects may be avoided.
fronts (MPA search location feature)	Fronts may be sensitive to changes in tidal currents/ removal of hydrodynamic energy (e.g. from marine renewables arrays). Wet storage of one or two devices in the environs of Mallaig Harbour is unlikely to result in such effects.	None	None needed	None
Water & Marine Environment Coastal waters classification	Increased turbidity from the anchorage or storage of gravity devices directly on the seabed. Introduction of devices into the waterbody.	Effects are likely to be localised and temporary	Increased turbidity: as above. No mitigation proposed for temporary morphological effects.	Increased turbidity: as above. Temporary morphological effects.

ASSESSMENT – TIREE				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Climatic Factors Site is within the Indicative 200 year Flood Zone.	Potential for the Tiree harbour area to be at risk of flooding from the sea.	This will be a permanent threat given the long-term impacts of climate change and the potential volatility this could have on micro-climates.	Ensuring suitable design measures to increase defensibility and mitigate adverse effects of potential sea level rises	Assuming mitigation is implemented, significant adverse environmental effects could be avoided.
	Increase in GHG emissions due to vessel movements associated with wet storage operations.	Emissions from vessels are unlikely to contribute significantly to those from the existing Scottish fleet.	Vessel operators may wish to implement energy- and fuel-efficiency measures to reduce fuel consumption and consequent GHG emissions.	Emissions from vessels would continue but are unlikely to contribute significantly to those from the existing Scottish fleet.
Soil, Geology & Coastal Processes Wave patterns and coastal processes	Given the vessel movements and numbers of devices assumed for this assessment, it is considered unlikely that changes to wave patterns would be such that they would result in significant alterations of coastal processes or in significant impacts on soil and marine geology.	No significant adverse effect	None required	None
Cultural Heritage Listed Buildings and Historic features at the site and in its environs including the Pier and Listed Buildings surrounding Gott Bay.	As no new infrastructure is required, effects on the site or setting of the listed buildings are not anticipated.	No effects	None required	None
Wreck sites	Storage of devices could affect wreck sites through destruction of features.	Permanent loss of wreck features	Avoid storage on these areas.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.

ASSESSMENT – TIREE				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Landscape / Seascape residents in Tiree	Residents in Tiree are likely to have views of stored devices which are on or break the water surface.	Effects are likely to be local in nature and temporary, and are unlikely to be significant.	If necessary, locate devices in a sheltered bay away from overall views of Gott Bay. This could affect the MPA biodiversity features and locations should be selected to avoid this.	Assuming mitigation is implemented, the potential for significant adverse visual effects should be reduced.
Material Assets Harbour access	Possible effects on navigational safety, e.g. ferries. Devices could block access to the pier/terminal and displace harbour users (e.g. delay or require other vessels to be re-routed).	Collisions could result in injury/death of human beings, oil spills etc. Inefficient operation of ferry terminal and/or ferries. Potential displacement of harbour activities.	Ensure that devices are located away from access points to the harbour. Wet storage site will need to be appropriately lit and/or marked. Liaison with MCA, Harbour Authority and other vessel operators to agree storage areas and navigable channels .	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Fishing grounds	Possible disturbance and/or displacement of local fishing grounds by wet storage of devices.	Temporary loss of fishing grounds during storage operations. Potential displacement of fishing activities – adverse socio-economic and community effects; potential intensification of fishing elsewhere	Ensure that devices are located away from these areas. Liaison with Inshore Fisheries Group and/or local fishermen as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Recreational areas	Possible disturbance and/or displacement of recreational areas by wet storage of devices.	Temporary loss of recreational areas during storage operations, with concomitant local economic loss.	Ensure that devices are located away from these areas. Liaison with Royal Yachting Association Scotland as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
OTHER DEVELOPMENTS Ferry services and other marine users (e.g. fishing and recreation vessels) also utilise Tiree Harbour facilities.				
Cumulative Effects	Possible cumulative effects with existing vessel traffic and anchorages in and around Tiree			

ASSESSMENT – TIREE				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
	and Gott Bay identified. Assuming mitigation is implemented, the risk of significant adverse cumulative effects should be reduced.			

Implications for development:
The following requires further examination at the project level:

- effects on birds using nearby SPA/SSSI habitats.
- planning and design to avoid and/or reduce effects on Skye to Mull MPA search location features.
- risk of disturbance to seal haul out locations and corkscrew seal injuries.
- need to alleviate flood risk through project planning and design.
- planning and design to avoid and/or reduce landscape/visual effects and effects on historic environment, including wrecks.
- if wreck sites cannot be avoided, undertake survey and recording of wrecks prior to wet storage

Early discussions should be held with SNH, SEPA, Historic Scotland, the Local Planning Authority, Harbour Authority, MCA, Inshore Fisheries Group and/or local fishermen, The Crown Estate, Royal Yachting Association Scotland and other vessel operators as required.

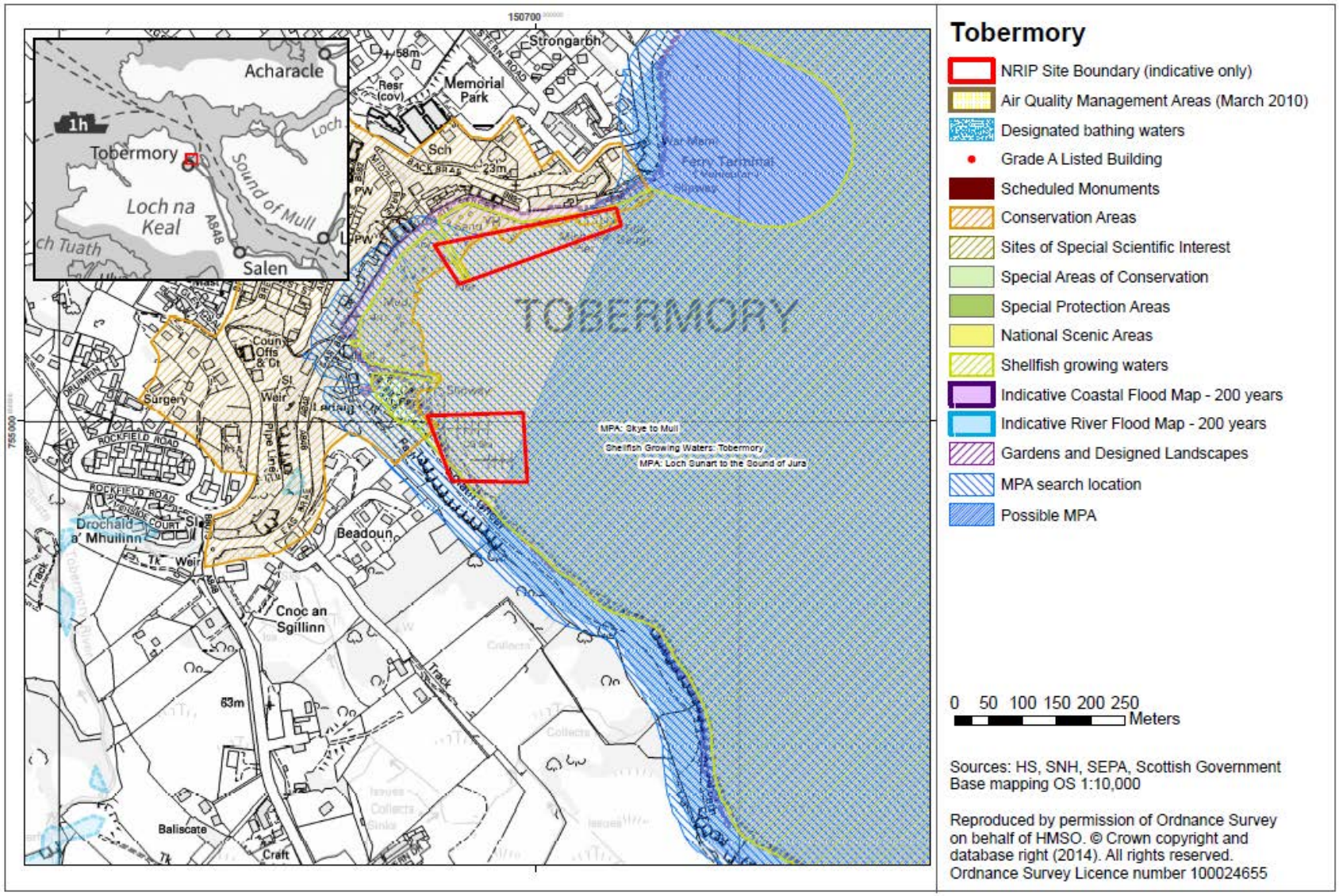
Habitats Regulations Appraisal

It is likely that Habitats Regulations Appraisal will be required at the project level, covering at least the following issues:

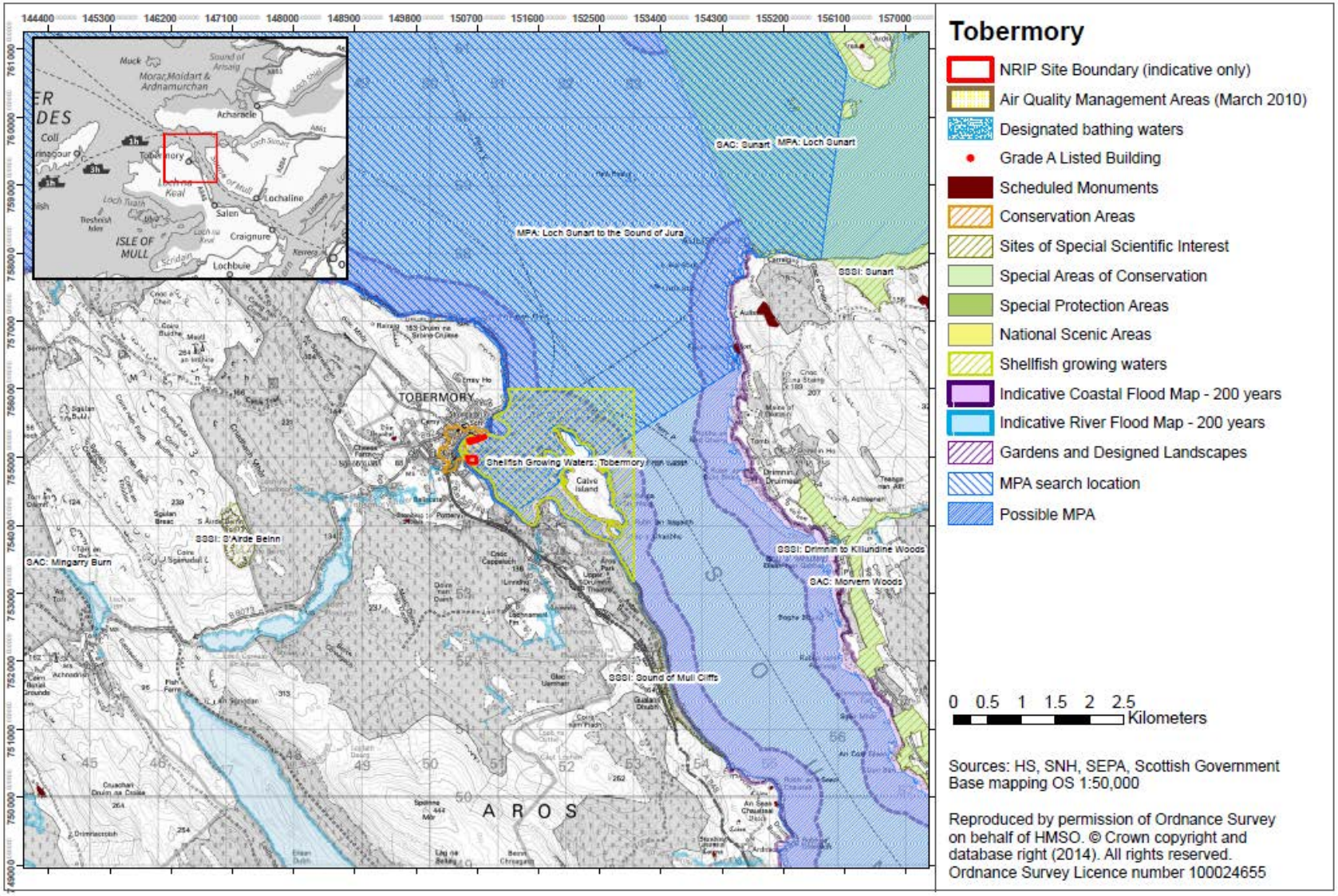
- effects of wet storage activities on birds using habitats in the vicinity of the site including that of the SPA

Early discussions should be held with SNH.

Site Map: Tobermory



Wider Map: Tobermory



Assessment Table: Tobermory

SITE USE – Refuge/wet storage/unplanned maintenance.

POTENTIAL DEVELOPMENT

Refuge/Wet Storage/Unplanned Maintenance
For unplanned maintenance, it may be necessary to provide a portacabin (or similar) within the existing port. Few existing buildings appear available to re-use. No further infrastructure upgrade required.

There are three scenarios for wet storage:
(a) Company that manufactures the devices cannot store them as it needs the laydown space so the developer needs to move the devices to a wet storage site which is both close to the lease site and sheltered.
(b) The developer wants to store the devices close to the lease site until the installation vessel they wish to use is available, which means they store them in the loch.
(c) Refuge site needed when devices are being towed to the installation site and need to take shelter during bad weather (for a day or two) before resuming progress.

See Section 3 of the Environmental Report for assumptions about wet storage.

ENVIRONMENTAL BASELINE – TOBERMORY

Biodiversity, flora and fauna – No designated sites near the potential development site.

Skye to Mull MPA search location – basking shark; fronts; minke whale.

Seals – Potential designated haul-out sites for grey and harbour seals around Mull, including a number of sites on its west coast, on Tiree and Coll and at Gobner in the Sound of Mull, and seal interests have been identified in the Lynn of Lorn and Loch Linnhe (e.g. Eileanan agus Sgeiran Lios mór SAC designated for harbour seal interests) located approximately 35 km east of the harbour. Indications are that the Sound of Mull and nearby waters are well used by both harbour and grey seals[19].

European Protected Species – Cetaceans are likely to be passing through the area. Otters may be found using this area of coast.

Population and Human Health – Harbour is located within residential area.

Water & Marine Environment – Coastal waters classification (2011): Good. Tobermory Shellfish Growing Waters are located on the eastern side of Tobermory Bay near Calve Island.

[19] SMRU (2013) Marine Mammal Scientific Support Research Programme MMSS/001/11, Grey and harbour seal usage maps [online] Available at: http://www.scotland.gov.uk/Resource/0043/00437053.pdf [accessed 5/12/2013]

ENVIRONMENTAL BASELINE – TOBERMORY

Climatic Factors – The site is within an Indicative 200 year Flood Zone.

Air – No air quality issues identified.

Soil, Geology & Coastal Processes – **Skye to Mull MPA** search location – marine geomorphology of the Scottish Shelf Seabed (components to be confirmed).

S'Airde Beinn SSSI – Tertiary igneous and mineralogy features (approximately 5 km west of the site).
Sections of coastline to the north west and south east of Tobermory within the Sound of Mull, and in Loch Sunart to the north east of the pier, have been identified as having the potential for erosion or accretion (e.g. beaches, soft cliffs, etc.). Coastal erosion has been identified on the Mull coastline to the south of Calve Island. Erosion surveys reported a lack of data relating to some nearby areas, including Loch Sunart.

Cultural heritage – Scheduled Monument St Mary's chapel and tombstones (SM4348) approximately 500 m west of harbour area.
Listed Building Old Pier, Main Street, Tobermory Harbour (Category B Index Number 42064) and numerous Listed Buildings in residential areas, including Main Street which is immediately adjacent to harbour areas.
Listed Buildings Distillery Ledaig (Category B Index Number 42071) approximately 100 m north-west of slipway and Court House (Category B Index Number 42072) approximately 200 m north-west of slipway. Several wreck sites identified in Tobermory Bay including several near to the harbour.

Landscape / Seascape – No national designation identified.

Material Assets – Active Shellfish aquaculture sites are located within Tobermory Bay. Local fishing, recreational sailing interests and ferry services also use the Tobermory harbour facilities.

Issues Scoped Out:
Air – There is likely to be increased boat traffic due to the movement of devices, which could result in increased atmospheric emissions. However, given existing levels of boat movements, these additional emissions are unlikely to result in significant effects.

ASSESSMENT – TOBERMORY				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Biodiversity, flora and fauna Skye to Mull MPA search location	Potential risk of loss of and/or damage to sensitive benthic habitat from anchorage or storage of devices directly on the seabed.	Effects may be temporary or longer term, depending on the ability of the habitat to recover from disturbance. Recovery will also be dependent on the number of devices, the methods of anchoring and the location and duration of storage.	Where vulnerable benthic habitats have been identified the storage of devices should be avoided.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.
Seals	Risk of corkscrew injury from slow-moving vessels with certain types of ducted propeller or those using dynamic positioning; disturbance to seal haul-out locations.	Death of individual seals may affect overall population numbers/ viability, given that the harbour species in particular is generally in decline; displacement of seals.	Avoid using vessels with ducted propellers for slow-speed activities, e.g. manoeuvring, particularly during breeding season. Avoid storage of devices near seal haul out locations during moulting times and breeding season if relevant.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided.
European Protected Species: otters	Potential disturbance of otters (noise during storage, physical presence of devices and human presence) from storage of devices.	Effects will be temporary but, depending on duration and frequency of storage, may be medium-term.	Devices should not be stored on or near habitat used by otters.	Assuming mitigation is implemented, significant adverse environmental effects should be avoided.
European Protected Species: cetaceans (minke whale are also an MPA search location feature)	Risk of collision with vessels; entanglement in mooring lines (e.g. minke whale); disturbance and displacement	Risk of these events occurring is unclear, thus significance of effect is unknown. Injury and/or death of individuals may affect overall population numbers/viability	Avoid cetacean habitat and migration routes. Use high-visibility mooring lines.	Assuming mitigation is implemented, significant adverse environmental effects may be avoided
basking shark (MPA search location feature)	Risk of collision with vessels; disturbance and displacement	Risk of these events occurring is unclear, thus significance of effect is	Avoid basking shark “hot spot” areas.	Assuming mitigation is implemented, significant adverse effects may be

ASSESSMENT – TOBERMORY				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
		unknown. Injury and/or death of individuals may affect overall population numbers/ viability.		avoided.
fronts (MPA search location feature)	Fronts may be sensitive to changes in tidal currents/ removal of hydrodynamic energy (e.g. from marine renewables arrays). Wet storage of one or two devices in the environs of Mallaig Harbour is unlikely to result in such effects.	None	None needed	None
Population / Human Health Residential developments in proximity to harbour.	Noise disturbance during site operations. Due to the nature of existing activities in the harbour, it is unlikely this will add significantly to existing levels of noise and disturbance.	Localised	Site protocols and/or good neighbour agreements would set out conditions for controlling noise and/or disturbance from construction activities and site operations.	Assuming mitigation is implemented, significant adverse environmental effects could be avoided.
Water & Marine Environment Coastal waters classification	Increased turbidity from the anchorage or storage of gravity devices directly on the seabed. Introduction of devices into the waterbody.	Effects are likely to be localised and temporary	Increased turbidity: as above. No mitigation proposed for temporary morphological effects.	Increased turbidity: as above. Temporary morphological effects.
Climatic Factors Site is within the Indicative 200 year Flood Zone.	Potential for the harbour area and its surrounds to be at risk of flooding from the sea.	This will be a permanent threat given the long-term impacts of climate change.	Ensuring suitable design measures to increase defensibility and mitigate adverse effects of potential sea level rises	Assuming mitigation is implemented, significant adverse environmental effects could be avoided.
	Increase in GHG emissions due to vessel movements associated with wet storage activities.	Emissions from vessels are unlikely to contribute significantly to those from the existing Scottish fleet.	Vessel operators may wish to implement energy- and fuel-efficiency measures to reduce fuel consumption and	Emissions from vessels would continue but are unlikely to contribute significantly to those from the existing Scottish fleet.

ASSESSMENT – TOBERMORY				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
			consequent GHG emissions.	
Soil, Geology & Coastal Processes Skye to Mull MPA search location.	Short-term anchorage or storage of devices directly on the seabed during O&M is unlikely to result in significant adverse effects on geodiversity features.	No significant adverse effect	None required	None
Wave patterns and coastal processes	Given the vessel movements and numbers of devices assumed for this assessment, it is considered unlikely that changes to wave patterns would be such that they would result in significant alterations of coastal processes or in significant impacts on soil and marine geology.	No significant adverse effect	None required	None
Cultural Heritage Scheduled Monuments, Listed Buildings and historic features including St Mary's Chapel and tombstones, Tobermory Pier and those based around the harbour.	As no new infrastructure is required, effects on the site or setting of the listed buildings are not anticipated.	No effects	None required	None
Wreck sites	Storage of devices could affect wreck sites through destruction of features.	Permanent loss of wreck features	Avoid storage on these areas.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Landscape / Seascape local residents	Residents in Tobermory are likely to have views of stored devices which are on or break	Effects are likely to be local in nature and temporary, and are unlikely to be significant.	If necessary, locate devices in a sheltered bay away from overall views of the Harbour	Assuming mitigation is implemented, the potential for significant adverse visual effects

ASSESSMENT – TOBERMORY				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
	the water surface.		and Tobermory Bay. This could affect the MPA biodiversity features and locations should be selected to avoid this.	should be reduced.
Material Assets Harbour access	Possible effects on navigational safety, e.g. ferries, aquaculture craft, etc. Devices could block access to the pier/terminal and displace harbour users (e.g. delay or require other vessels to be re-routed).	Collisions could result in injury/death of human beings, oil spills etc. Inefficient operation of ferry terminal and/or ferries. Potential displacement of harbour activities.	Ensure that devices are located away from access points to the harbour. Wet storage site will need to be appropriately lit and/or marked. Liaison with MCA, Harbour Authority and other vessel operators to agree storage areas and navigable channels.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Fishing grounds	Possible disturbance and/or displacement of local fishing grounds by wet storage of devices.	Temporary loss of fishing grounds during storage operations. Potential displacement of fishing activities – adverse socio-economic and community effects; potential intensification of fishing elsewhere	Ensure that devices are located away from these areas. Liaison with Inshore Fisheries Group and/or local fishermen as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
Recreational areas	Possible disturbance and/or displacement of recreational areas by wet storage of devices.	Temporary loss of recreational areas during storage operations, with concomitant local economic loss.	Ensure that devices are located away from these areas. Liaison with Royal Yachting Association Scotland as required.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.

ASSESSMENT – TOBERMORY				
Environmental Receptor	**Effect**	**Characteristic**	**Mitigation**	**Residual Effects**
Shellfish and finfish interests	Possible damage to existing aquaculture infrastructure, e.g. in the event of devices breaking loose.	Permanent loss of equipment/facilities	Storage sites will need to be located away from aquaculture sites. Liaison with The Crown Estate and aquaculture operators to agree a suitable distance.	Assuming mitigation is implemented, the risk of significant adverse effects should be reduced.
OTHER DEVELOPMENTS Ferry services and other marine users (e.g. fishing, recreation and aquaculture activities, etc.) also utilise Tobermory Harbour facilities.				
Cumulative Effects	Possible cumulative effects with existing vessel traffic and anchorages in and around Tiree and Gott Bay identified. Assuming mitigation is implemented, the risk of significant adverse cumulative effects should be reduced.			

Implications for development:

The following requires further examination at the project level:

- planning and design to avoid and/or reduce effects on Skye to Mull MPA search location features.
- risk of disturbance to seal haul out locations and corkscrew seal injuries.
- need to alleviate flood risk through project planning and design.
- planning and design to avoid and/or reduce landscape/visual effects and effects on historic environment, including wrecks.
- if wreck sites cannot be avoided, undertake survey and recording of wrecks prior to wet storage

Early discussions should be held with SNH, SEPA, Historic Scotland, the Local Planning Authority, Harbour Authority, MCA, Inshore Fisheries Group and/or local fishermen, The Crown Estate, aquaculture operators, Royal Yachting Association Scotland and other vessel operators as required.

Habitats Regulations Appraisal

It is likely that Habitats Regulations Appraisal will not be required at the project level, as there are no Natura interests in the vicinity of this harbour that are likely to be affected.