

**SCOTTISH  
NATURAL  
HERITAGE**



**Sound of Arisaig  
(Loch Ailort to Loch Ceann Traigh)  
Special Area of Conservation**

**Advice under Regulation 33(2)**  
of The Conservation (Natural Habitats, &c.) Regulations 1994  
(as amended)

30 March 2006

**About this Package:**

Section 1 of this document provides a general introduction and Sections 2 and 3 fulfil Scottish Natural Heritage's duties under Regulation 33(2) of The Conservation (Natural Habitats, &c.) Regulations 1994 (Habitats Regulations) (as amended by The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2004). This requires that SNH advises other relevant authorities as to the conservation objectives of the site (see Section 2) and any operations which may cause deterioration of natural habitats or the habitats of species, or disturbance of species, in so far as such disturbance could be significant, for which the site has been designated (see Section 3).

Annexes A and B provide supplementary, non-statutory information. Annex A gives information on the sensitivity and vulnerability of the qualifying interest: 'Sandbanks which are slightly covered by sea water all the time'. Annex B gives some indication as to the extent, distribution, structure, function and processes that affect the qualifying interests. It should be noted that this is indicative and not definitive, and as more site information is gathered these sections may be updated.

The Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) was designated by Scottish Ministers as a Special Area of Conservation (SAC) on 17<sup>th</sup> March 2005. This site is also referred to as a 'European site' (Regulation 10(1)). A 'European marine site' is a 'European site' which is wholly or in part marine (Regulation 2(1)) and is hereafter referred to as a marine SAC.

Although the following statutory information is for the benefit of relevant authorities (see below for explanation of their role), it can also be used by other competent authorities when assessing plans or projects.

# 1 Introduction

## 1.1 Background

The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended by The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2004), commonly referred to as the Habitats Regulations, transpose the EC Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) into domestic legislation. Regulation 33(2) gives Scottish Natural Heritage a statutory responsibility to advise other relevant authorities as to the conservation objectives for marine SACs in Scotland, and any operations which may cause deterioration of natural habitats or the habitats of species, or disturbance of species for which the site has been designated.

This document presents the Regulation 33 advice, plus supporting information, for the Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) SAC to assist relevant and competent authorities, local interest groups and individuals in considering management (including the management scheme) of the site. This advice, plus supporting information, will also help to determine the scope and nature of any “appropriate assessment”, which the Habitats Directive requires to be undertaken for proposed plans and projects that are not connected to the conservation management of the site and are considered likely to have a significant effect. Where necessary Scottish Natural Heritage will also provide more detailed advice to relevant, and other competent, authorities to inform assessment of the implications of any such plans or projects.

## 1.2 Relevant and competent authorities

Within the context of a marine SAC, a relevant authority is a body or authority that has a function in relation to land or waters within or adjacent to the site (Regulation 5) and include: a nature conservation body; a local authority; water undertakers; a navigation authority; a harbour authority; a lighthouse authority; a river purification board (SEPA); a district salmon fishery board; and a local fisheries committee. *All relevant authorities are competent authorities.*

A competent authority is defined in Regulation 6 as “any Minister, government department, public or statutory undertaker, public body of any description or person holding a public office”. In the context of a plan or project, the *competent authority* is the authority with the power or duty to determine whether or not the proposal can proceed.

## 1.3 The role of relevant authorities

The Habitats Regulations require relevant authorities to exercise their functions so as to secure compliance with the Habitats Directive. A management scheme may be drawn up for each marine SAC by the relevant authorities as described under Regulation 34. For marine SACs with overlapping interests, a single management scheme may be developed.

Where a management scheme is in place the relevant authorities must ensure that all plans for the area integrate with it. Such plans may include shoreline management plans, Sites of Special Scientific Interest (SSSI) management plans, local Biodiversity Action Plans (BAPs) and sustainable development strategies for estuaries. This must occur to ensure that only a single management scheme is produced through which all relevant authorities exercise their duties under the Habitats Regulations.

#### **1.4 Responsibilities under other conservation designations**

Other designations within or adjacent to the Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) marine SAC are: Kentra Bay and Moss SSSI; Loch Moidart SSSI; Loch Moidart and Loch Shiel Woods SAC; Morar, Moidart and Ardnamurchan National Scenic Area. The obligations of relevant, and other competent authorities and organisations under such designations and legislation are not affected by the advice contained in this document.

#### **1.5 Conservation objectives**

Section 2 of this document contains the conservation objectives for the Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) marine SAC, a site which consists entirely of a marine qualifying interest. The conservation objectives have been developed to ensure that the obligations of the Habitats Directive are met.

#### **1.6 Advice as to operations**

The operations, set out in Section 3, are those which SNH advise may cause deterioration of natural habitats for which the site has been designated. This does not necessarily mean that the operations are *presently* ongoing or, if they are, that they are at levels incompatible with the conservation objectives.

#### **1.7 Plans and projects**

The Habitats Regulations require that, where an authority concludes that a development proposal is unconnected with the nature conservation management of a Natura site and is likely to have a significant effect on that site, it must undertake an appropriate assessment of the implications for the qualifying interest for which the area has been designated.

#### **1.8 Review of Consents**

Competent authorities are required by the Habitats Regulations to undertake a review of all consents and permissions for activities affecting the site as soon as reasonably practicable after it becomes a European site. This will have implications for discharge and other consents, which will need to be reviewed in the light of the conservation objectives.

## 2 Statutory advice given by SNH under Regulation 33(2) Conservation Objectives

### 2.1 Introduction

This section provides conservation objectives, which have been developed by SNH in agreement with the Scottish Executive and are to be provided to the relevant authorities in fulfilment of the requirements under Regulation 33(2) of The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended by The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2004).

The conservation objectives ensure that the obligations of the Habitats Directive are met; that is, there should not be deterioration or significant disturbance of the qualifying interest. This will also ensure that the integrity of the site is maintained and that it makes a full contribution to achieving favourable conservation status for its qualifying interest.

The Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) marine SAC has been designated for the habitat 'Sandbanks which are slightly covered by sea water all the time', which is listed on Annex I of the Habitats Directive.

The Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) SAC consists entirely of a marine qualifying interest.

### The conservation objectives for the Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) marine SAC are as follows:

To avoid deterioration of the qualifying habitat ( <b>Sandbanks which are slightly covered by sea water all the time</b> ) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for the qualifying interest.
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To ensure for the qualifying habitat that the following are maintained in the long term:
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| <ul style="list-style-type: none"> <li>• Extent of the habitat on site</li> <li>• Distribution of the habitat within site</li> <li>• Structure and function of the habitat</li> <li>• Processes supporting the habitat</li> <li>• Distribution of typical species of the habitat</li> <li>• Viability of typical species as components of the habitat</li> <li>• No significant disturbance of typical species of the habitat</li> </ul> |
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### **3 Statutory advice given by SNH under Regulation 33(2) Operations**

The following advice as to operations to be considered by relevant authorities is provided by SNH with respect to the Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) marine SAC in fulfilment of the requirements under Regulation 33(2)(b) of The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended by The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2004). The advice identifies those operations, either on or affecting the SAC, which may cause deterioration of the marine natural habitats or the habitats of species, or disturbance of species, for which the site has been designated. These include operations that may not be currently affecting the Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) marine SAC.

#### **Operations (in alphabetical order)**

##### **Aquaculture**

Finfish farming  
Shellfish farming

##### **Coastal Development**

Agriculture  
Civil engineering  
Forestry operations

##### **Discharges / Waste Disposal**

Discharge of commercial effluent  
Discharge of sewage

##### **Fishing**

Hydraulic fishing  
Mobile gear: Dredging  
Mobile gear: Trawling  
Static gear: Creel / Pot fishing

##### **Gathering / Harvesting**

Diver collection of shellfish

##### **Marine Development**

Aggregate extraction

##### **Marine Traffic**

Commercial vessels

##### **Recreational Activities**

Boat anchorages  
Boat moorings  
Charter / recreational vessels  
Scuba diving

##### **Scientific Research**

Scientific Research

## Annex A

### Non-statutory advice given by SNH Sensitivity and Vulnerability of the Sound of Arisaig (Loch Ailort to Loch Ceann Traigh) SAC 'Sandbanks which are slightly covered by sea water all the time' to activities listed in Section 3

The comments below are general and should not be considered to be definitive. They are made without prejudice to any comments SNH may provide or any assessment that may be required for specific proposals to be considered by a relevant authority. The level of any impact will depend on the location and intensity of the relevant activity. This advice is provided to assist and focus the relevant authorities in their consideration of the management of these operations.

Operations	Comments
<b>Aquaculture</b>	
Finfish farming	<p>Finfish farming has the potential to cause deterioration of sandbank habitats and communities through changes in water quality (organic enrichment), smothering from waste material and physical disturbance from moorings. There is also potential for accidental introduction of new non-native species and increasing the spread of existing non-native plants and animals (e.g. <i>Caprella mutica</i> Japanese skeleton shrimp), which are already widely distributed in the UK. Invasive species have the potential to cause deterioration of the qualifying interest by altering community structure and quality.</p> <p>The associated environmental effects mentioned above are usually localised and may be exacerbated in areas of low tidal exchange.</p>
Shellfish farming	<p>This activity has the potential to cause deterioration of the sandbank habitats and communities through physical disturbance (e.g. installation of mooring blocks and continued scouring by riser chains) and changes in community structure caused by smothering from pseudo-faeces (undigested waste products) and debris (including dead shells) falling from the farm. There is also potential for accidental introduction of new non-native species and increasing the spread within the UK of existing non-native plants and animals (e.g. <i>Sargassum muticum</i> Wireweed) through importation and translocation of shellfish stocks. Invasive species have the potential to cause deterioration of the qualifying interest by altering community structure and quality.</p> <p>The associated environmental effects mentioned above are usually localised and may be exacerbated in areas of low tidal exchange.</p>
<b>Coastal Development</b>	
Agriculture	<p>Diffuse run-off from agricultural practices has the potential to cause deterioration of sandbank habitats and communities through the smothering of the qualifying interest, and / or altering water quality through discharge of organic and inorganic pollutants.</p>

Civil engineering	The construction and maintenance of structures, both within and adjacent to the sea have the potential to cause direct loss and / or disturbance of sandbank habitats and communities as tidal currents, and therefore coastal processes, are affected. For example coastal structures such as linear coastal defences or erosion control measures (e.g. gabions) can affect local sediment suspension and deposition patterns and therefore have the potential to cause deterioration of sandbank habitat through smothering. Installation, replacement and maintenance of undersea cables have the potential to cause direct loss or disturbance of sandbank habitats as well as local deterioration of associated habitats and communities.
Forestry operations	Increased concentrations of dissolved nutrients from fertiliser and herbicide run-off has the potential to cause deterioration of sandbank habitats and communities. Large-scale run-off of terrestrial sediment, from forestry operations, has the potential to cause deterioration of sandbanks through smothering. Loading operations in the intertidal and subtidal areas have the potential to cause deterioration of sandbank habitats and communities through physical disturbance and sedimentation.
<b>Discharges / Waste Disposal</b>	
Discharge of commercial effluent	Commercial effluent has the potential to cause deterioration of sandbank habitats and communities. This would be through the effects of pollution and / or nutrient enrichment, which may cause subsequent changes in community structure.
Discharge of sewage	Sewage effluent (whether treated or untreated) has the potential to cause deterioration of sandbank habitats and communities. This would be through the effects of pollution and / or nutrient enrichment, which may cause subsequent changes in community structure.
<b>Fishing</b>	
Hydraulic fishing	Hydraulic fishing has the potential to cause deterioration of the sandbank habitats and communities, in particular maerl and eelgrass beds, by disturbing large volumes of sediment, which could result in smothering or direct loss of the qualifying interest. This activity also has the potential to cause deterioration of sandbanks by affecting target species and associated communities.
Mobile gear: Dredging	Benthic dredging has the potential to cause deterioration of sandbank habitats, in particular maerl beds, and communities through direct contact with dredge gear. Other impacts include causing disturbance to the water quality and target species, which have the potential to indirectly cause deterioration to the sandbanks.
Mobile gear: Trawling	Benthic trawling has the potential to cause deterioration of sandbank habitats and communities, in particular maerl beds, through direct contact with trawling gear, and disturbance and affects on the water column, target species and associated animal and plant communities.
Static gear: Creel / Pot fishing	The use of creels and / or pots in a localised area has the potential to cause deterioration of qualifying sandbank habitats and communities, in particular maerl and eelgrass beds, through direct contact (particularly during their deployment and / or recovery) and adverse impacts on target populations that are associated with the qualifying interest.
<b>Gathering / Harvesting</b>	
Diver collection of shellfish	Collection of shellfish by diving has the potential to cause deterioration of the sandbank habitats and communities where the target species is a key component of that community, or where the collection method involves the use of invasive techniques (e.g. hydraulic equipment).
<b>Marine Development</b>	

Aggregate extraction	Extraction of subtidal maerl, sand and gravel has the potential to cause deterioration of sandbank habitats and communities, and destruction of maerl beds through direct loss and impact within the extraction site. Such operations could result in the redistribution and deposition of significant quantities of fine particulate sediment, which could alter the sediment characteristics of adjacent sandbank areas and their associated plant and animal communities.
<b>Marine Traffic</b>	
Commercial vessels	The pumping of bilges, discharge of ballast, accidental grounding, or accidental oil (or other chemical) spillage from commercial vessels could occur within or close to this SAC. Such incidents have the potential to cause deterioration of sandbank habitats and communities through direct and / or indirect impacts. Local authority emergency plans and oil spill contingency plans should take into account specific qualifying interests and recognise the importance of marine SACs should such incidents occur.
<b>Recreational Activities</b>	
Boat anchorages	Anchors and continual scouring by riser chains have the potential to cause deterioration of sandbank habitats and communities through direct contact with the qualifying interest and associated sensitive seabed communities.
Boat moorings	Moorings and continual scouring by riser chains have the potential to cause deterioration of sandbank habitats and communities through direct contact with the qualifying interest.
Charter / recreational vessels	Boats have the potential to cause deterioration of sandbank habitats and communities through repeated launching and recovery in specific areas, accidental grounding, and accidental fuel spillages.
Scuba diving	Recreational diving in specific areas has the potential to cause deterioration of qualifying habitats and communities, in particular to maerl and eelgrass beds.
<b>Scientific Research</b>	
Scientific Research	Research activities have the potential to cause deterioration of qualifying habitats and communities (in particular to maerl beds) through direct alteration, removal or manipulation of this qualifying interest and its associated species.

## Annex B

### Non-statutory Advice given by SNH Site account

#### Site description

The Sound of Arisaig SAC, on the west coast of Scotland, extends from the north-east coast of the Ardnamurchan peninsula, encompassing the inner reaches of the Sound of Arisaig, part of Loch Ceann Traigh, both the North and South Channel entrances to Loch Moidart, and part of Loch Ailort at the SAC's northern boundary. The site is sheltered, with low turbidity, and has an unusually high diversity of sublittoral sediment habitats within a relatively small area. These range from very soft mud in Loch Ailort to coarse, clean shell sand in the more exposed parts of the site, each supporting a representative range of communities and species. The site is particularly significant in that it supports some of the most extensive beds of maerl in the UK, with very rich associated communities that include several rare and scarce species. The Sound of Arisaig supports species of both northern and southern distributions and is an important component of the transition from southern to northern communities that occurs along the coast of the UK.

#### Qualifying marine interest

##### Annex I Habitat:

##### **Sandbanks which are slightly covered by sea water all the time**

Large areas of shallow sediment are found throughout the site, grading from soft, burrowed mud and muddy sands at the head of Loch Ailort to coarse, clean sand on the exposed coast. The sediments support a rich range of communities and species. Of particular interest in Lochs Ailort, Ceann Traigh and Moidart are some of the most extensive beds of clean gravel, sand and maerl *Phymatolithon calcareum* in the UK. The very rich associated communities of the maerl beds include several rare species such as the alga *Gloiosiphonia capillaris* and the hydroid *Halecium plumosum*. The seagrass *Zostera marina* is found on shallow sand in outer Loch Ailort, whilst other areas of muddy sand scattered throughout the site support characteristic algal communities. Mixed sediments are widely distributed and include, in the muddy sands of inner Loch Ailort, a population of the rare echiuran worm *Amalosoma eddystonense*, a nationally scarce species. More widely distributed in the site, and highly characteristic of Scottish sealochs, are mixed muddy sediments with the seapen *Virgularia mirabilis* and burrowing brittlestars *Amphiura* spp.

In the more exposed parts of the site in Loch Ceann Traigh and outside Loch Ailort, the sediments are coarser and cleaner, and grade into muddier more mixed sediments with increasing depth and shelter. The deeper regions, generally beyond the 20 m limit of the outer reaches of the site, contain soft mud with burrowing megafauna, including the Norway lobster *Nephrops norvegicus* and the burrowing urchin *Brissopsis lyrifera*.

The inner part of Loch Moidart is estuarine with some freshwater influence, particularly at the southern entrance. The South Channel contains tide swept shell gravel and stones, supporting communities indicative of brackish conditions. Further into Loch Moidart there are sublittoral estuarine sediments with characteristic communities.

The site supports species of both predominantly southern origin, such as the sipunculan worm *Sipunculus nudus*, and predominantly northern distributions, such as the starfish *Luidia sarsi*.