SCOTTISH NATURAL HERITAGE

Sunart
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 marine qualifying interests: 'Otter *Lutra lutra*' and 'Reefs'. 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.

Sunart was designated by Scottish Ministers as a Special Area of Conservation (SAC) on 17th 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 Sunart SAC to assist relevant and competent authorities, local interest groups and individuals in considering management (including any 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 Sunart marine SAC are: Ariundle National Nature Reserve (NNR); Glencripesdale NNR; Sunart SSSI. The loch is a Marine Consultation 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 marine components of the Sunart SAC, a site which consists of both marine and terrestrial qualifying interests. 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 or the habitats of species, or disturbance of species, 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 interests.

The Sunart SAC has been designated for the species 'Otter *Lutra lutra*' which is listed on Annex II of the Habitats Directive, as well as for the Annex I habitat 'Reefs'. It should be noted that although otters within the SAC partly feed in the marine environment they are also dependent on terrestrial habitats.

The Sunart SAC also consists of terrestrial qualifying interests, which are listed below the conservation objectives (see the SNH website www.snh.org.uk for more information).

The conservation objectives for the marine qualifying interests of the Sunart SAC are as follows:

To avoid deterioration of the habitats of qualifying species (**Otter *Lutra lutra***) or significant disturbance to the qualifying species, 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.
To ensure for the qualifying species that the following are maintained in the long term:
• Population of the species as a viable component of the site
• Distribution of the species within site
• Distribution and extent of habitats supporting the species
• Structure, function and supporting processes of habitats supporting the species
• No significant disturbance of the species

To avoid deterioration of the qualifying habitat (**Reefs**) 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.
To ensure for the qualifying habitat that the following are maintained in the long term:
• Extent of the habitat on site
• Distribution of the habitat within site
• Structure and function of the habitat
• Processes supporting the habitat
• Distribution of typical species of the habitat
• Viability of typical species as components of the habitat
• No significant disturbance of typical species of the habitat

The terrestrial qualifying interests of the Sunart SAC are as follows:

- Dry Heaths
- Wet heathland with cross-leaved heath
- Western acidic oak woodland
- Mixed woodland on base-rich soils associated with rocky slopes

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 Sunart 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 Sunart marine SAC.

Operations (in alphabetical order)

Aquaculture
Finfish farming
Shellfish farming

Coastal Development
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
Static gear: Netting

Gathering / Harvesting
Bait gathering
Diver collection of shellfish
Intertidal collection of seaweed
Intertidal collection of shellfish

Marine Development
Extraction of beach material

Marine Traffic
Boat maintenance and antifoulant use
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 Sunart SAC 'Otter *Lutra lutra*' and 'Reefs' 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
Aquaculture	
Finfish farming	**Otters:** The development of finfish farming sites has the potential to cause disturbance to resident otter individuals or populations in the vicinity of such farms, mainly as a result of human activities such as noise and boat usage and through the use of acoustic deterrent devices (ADDs). The construction, use and maintenance of shore bases built to support finfish farms have the potential to disturb otters and cause deterioration of their habitats through destruction and physical damage to shoreline holts.
	Reefs: Finfish farming has the potential to cause deterioration of reef habitats and communities through changes in water quality, smothering from waste material and physical disturbance from mooring systems. There is potential for accidental introduction of new non-native species and increasing the spread of existing non-native plants and animals (e.g. *Caprella mutica* Japanese skeleton shrimp), which are already widely distributed in the UK. Invasive species have the potential to cause deterioration of the qualifying interests by altering community structure and quality. The associated environmental effects mentioned above are usually localised but the reduced water exchange within sea lochs may exacerbate these effects and cumulative impacts should be considered.
Shellfish farming	**Otters:** The development of shellfish farming sites has the potential to cause disturbance to resident otter individuals or populations in the vicinity of such farms, mainly through human activities such as noise and boat usage and through the use of ADDs. The construction, use and maintenance of shore bases built to support shellfish farms have the potential to disturb otters and cause deterioration of their habitats through destruction and physical damage to shoreline holts.

Aquaculture contd.		
Shellfish farming contd.		**Reefs:** This activity has the potential to cause deterioration of the reef habitats and communities through physical damage (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. *Sargassum muticum* Wireweed), through importation or translocation of shellfish stocks. Invasive species have the potential to cause deterioration of the qualifying interests by altering community structure and quality. The associated environmental effects mentioned above are usually localised but the reduced water exchange within sea lochs may exacerbate these effects and cumulative impacts should be considered.
Coastal Development		
Civil engineering		**Otters:** Civil engineering has the potential to disturb otters and cause deterioration of their habitats through destruction and physical damage to shoreline holts.
		Reefs: The construction and maintenance of structures, both within and adjacent to the sea have the potential to cause direct loss of reef habitat and deterioration of adjacent reef 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 reef habitat through smothering. Installation, replacement and maintenance of undersea cables have the potential to cause direct loss of reef habitat as well as local deterioration of reef habitats and communities.
Forestry operations		**Reefs:** Increased concentrations of dissolved nutrients from fertiliser run-off have the potential to cause deterioration of reef habitats and communities. Large-scale run-off of terrestrial sediment, from forestry operations, has the potential to cause deterioration of reefs through smothering.
Discharges / Waste Disposal		
Discharge of commercial effluent		**Reefs:** Commercial effluent has the potential to cause deterioration of reef 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		**Reefs:** Sewage effluent (whether treated or untreated) has the potential to cause deterioration of reef habitats and communities. This would be through the effects of pollution and / or nutrient enrichment, which may cause subsequent changes in community structure.
Fishing		
Hydraulic fishing		**Reefs:** Hydraulic fishing has the potential to cause deterioration of the reef habitats and communities through the large volumes of sediment disturbed by this method smothering the qualifying interest.
Mobile gear: Dredging		**Reefs:** Benthic dredging has the potential to cause deterioration of reef habitats and communities through direct contact with dredge gear, and sedimentation when dredging occurs close to the qualifying interest.
Mobile gear: Trawling		**Reefs:** Benthic trawling has the potential to cause deterioration of reef habitats and communities through direct contact with trawling gear, and sedimentation when trawling occurs close to the qualifying interest.

Fishing contd.		
Static gear: Creel / Pot fishing		**Otters:** The use of creels and / or pots in water shallower than 10m has the potential to cause injury or mortality to otters should they get caught in creels when attracted to bait, as this will normally result in drowning.
		Reefs: The use of creels and / or pots in a localised area has the potential to cause deterioration of qualifying reef habitats and communities through direct contact, particularly during their deployment and / or recovery.
Static gear: Netting		**Otters:** The use of nets such as gill nets in water shallower than 10m has the potential to cause injury or mortality to otters through entanglement as this will normally result in drowning.
		Reefs: The use of bottom-set nets has the potential to cause deterioration of reef habitats and communities, particularly fragile and erect species, mainly during deployment and / or recovery.
Gathering / Harvesting		
Bait gathering		**Otters:** Bait gathering on the foreshore has the potential to cause disturbance to otters in the vicinity of the collection area, as a result of intense and prolonged human presence.
		Reefs: Bait gathering on the foreshore has the potential to cause deterioration of reef habitats and communities through physical damage and disturbance of intertidal habitats and communities. This may cause deterioration of the qualifying interest by indirect impact through loss or imbalance of associated species, communities and ecosystems.
Diver collection of shellfish		**Reefs:** Collection of shellfish by diving has the potential to cause deterioration of the reef 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). Diving amongst reefs could cause deterioration and physical damage, in particular to erect and fragile species.
Intertidal collection of seaweed		**Otters:** Intertidal collection of seaweed has the potential to cause disturbance to otters in the vicinity of the harvesting area, mainly caused by intense and prolonged human presence and effects on prey species.
		Reefs: Intertidal collection of seaweed has the potential to cause deterioration of reef habitats and communities by physical damage or through the loss of target species, which can cause imbalances in community and ecosystem structures.
Intertidal collection of shellfish		**Otters:** Collection of shellfish from intertidal areas has the potential to cause disturbance to otters in the vicinity of the collection area, mainly caused by intense and prolonged human presence.
		Reefs: Collection of shellfish from intertidal areas has the potential to cause deterioration of reef habitat and communities through physical damage and disturbance to qualifying habitat (trampling and turning stones), and removal of the target species, which can cause an imbalance of communities and ecosystems.
Marine Development		
Extraction of beach material		**Otters:** Extraction of beach material for agricultural and construction use has the potential to cause deterioration of habitats associated with otters, or disturbance to otters that rest and forage in the vicinity of the operation through physical damage to shoreline holts and habitat destruction.

Marine Development contd.		
Extraction of beach material contd.		**Reefs:** Extraction of beach material for agricultural and construction use near to reefs has the potential to cause deterioration of reef qualifying interest through direct loss of habitat and associated species, and impact within the extraction site. Such operations could result in the redistribution and deposition of quantities of fine particulate sediment, smothering by re-suspended sediments, and changes in water circulation and sediment transport. Gaining mechanical access to sand and gravel has the potential to cause deterioration to adjacent reefs through direct loss of intertidal reef habitat, or sedimentation and local deterioration of any reef habitats and communities.
Marine Traffic		
Boat maintenance and antifoulant use		**Reefs:** Most antifoulant products are designed to kill or discourage naturally occurring organisms and, as such, cause damage to the water environment if used carelessly. Under such circumstances use of antifoulant has the potential to cause deterioration of reef habitats and communities within this site.
Commercial vessels		**Otters:** The pumping of bilges, discharge of ballast 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 disturbance to otters or deterioration to their habitats. 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.
		Reefs: 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 reef 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.
Recreational Activities		
Boat anchorages		**Reefs:** Anchors and continual scouring by riser chains have the potential to cause deterioration of reef habitats and communities through direct contact with the qualifying interest.
Boat moorings		**Reefs:** Moorings and continual scouring by riser chains have the potential to cause deterioration of reef habitats and communities through direct contact with the qualifying interest.
Charter /recreational vessels		**Otters:** Charter / recreational vessels have the potential to cause disturbance to foraging or resting otters if appropriate guidelines are not adhered to. Such disturbance may cause temporary displacement of otters from their territory.
		Reefs: Charter / recreational vessels have the potential to cause deterioration of reef habitats and communities through repeated launching and recovery in specific areas, accidental grounding, and accidental fuel spillages.
Scuba diving		**Reefs:** Recreational diving in specific areas has the potential to cause deterioration of reef habitats and communities, in particular to erect and fragile species.
Scientific Research		
Scientific Research		**Otters:** Otters are a European Protected Species and some research will require a licence. Advice should be sought from SNH if there is any doubt as to whether a licence is required.
		Reefs: Research activities have the potential to cause deterioration of reef habitats and communities 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

Loch Sunart is an elongate fjordic-type sea loch separating the Ardnamurchan and Morvern Peninsulas on the west coast of Scotland. Loch Sunart is long and narrow: It has a length of 31 km and a maximum width of about 3.5 km at its mouth, the remainder of the loch being between 1 and 2 km wide. Its maximum depth is 124 m below chart datum. Six shallow sills divide the loch into a series of steeply shelving basins, which complicate the movement of water within the loch. Loch Teacuis, a small, extremely sheltered sea loch entering the south side of Loch Sunart, is included within the SAC boundary. The site experiences a wide range of exposure to wave action along its length, from moderately exposed conditions at the mouth of the loch to extremely sheltered conditions at its eastern most end. The input of freshwater to the loch from the surrounding catchment produces a halocline with a more brackish surface layer 3-5 m in depth. In addition to a clear vertical zonation in community structure, there is also a strong horizontal gradient from the exposed mouth of the loch to the sheltered areas at its easterly end.

Qualifying marine interests

Annex I Habitat: Reefs

Reef habitats largely extend along the length of the loch and site boundary, although they do occur through some central areas of the loch. Habitats vary from the vertical bedrock cliffs and steep boulder and sediment slopes at the loch's exposed westerly mouth, to the more sheltered areas at its closed easterly end. As a result of changes in exposure along the length of the loch, there is a strong horizontal gradient in species. There is also a clearly defined vertical zonation, a result of the loch's sizeable tidal range and basin division by shallow sills.

The more exposed westerly end supports a well defined zonation of fucoids (channel *Pelvetia canaliculata*, spiral *Fucus spiralis*, and serrated wrack *Fucus serratus*), with the kelp *Laminaria digitata* dominating the sublittoral fringe. The more sheltered rocky shores along the loch support mid-shore communities of egg wrack *Ascophyllum nodosum* and the rare form of egg wrack *Ascophyllum nodosum* ecad. *mackaii*. The less stable boulder and cobble areas include patches of bladder wrack *Fucus vesiculosus* and spiral wrack *Fucus spiralis*. Along the length of the loch, shallow bedrock and boulders down to 10-15 m below chart datum support a kelp forest of *Laminaria hyperborea* and *Laminaria saccharina*. The boulder shores also support a rich community of sponges, hydroids and sea squirts in the damp under-boulder spaces and crevices created by the substratum.

The sublittoral rocky reef areas show a marked transition in community type along the length of the loch. Loch Sunart's outer basin, with its vertical and

overhanging bedrock cliffs, very steep bedrock and boulder slopes, and sediment slopes experiences considerable water movement. This has enabled the development of very rich marine communities with a large variety of filter-feeding organisms such as sea squirts and sponges. Many of the species found within this area, such as the elephant sponge *Pachymatisma johnstonia* and *Suberites carnosus,* are more typical of exposed areas of open coast. Soft corals found in these areas include dead-man's fingers *Alcyonium digitatum* and red sea fingers *Alcyonium glomeratum*, a species uncommon within sealochs. Other characterising fauna include cup corals *Caryophyllia smithii*, anthozoans *Swiftia pallida* (typical of exposed or tideswept conditions), anemones *Parazoanthus anguicomus* (white cluster anemone) and *Protanthea simplex* (sea loch anemone).

Further eastwards, the narrows between the islands of Oronsay, Risga and Carna are subject to moderate tidal streams, and reef communities are characterised by filter feeding and erect organisms including hydroids, echinoderms, brittlestars, featherstars and solitary sea squirts. Rock faces support a fauna including dead-man's fingers *Alcyonium digitatum*, cup corals *Caryophyllia smithii* and calcareous tubeworms. Very sheltered, deep, silty bedrock areas support a sparse fauna characterised by the brachiopod *Neocrania anomala* and the keel worm *Pomatoceros triqueter*. Dense fields of the crinoid *Leptometra celtica* occur to the north-east of Carna and in Laga Bay. Biogenic reefs of the flame shell *Limaria hians* in the tide-swept narrows to the north of Carna and Rigsa, and in the Laudale Narrows are the most extensive recorded in Scotland. There are also localised patches of *Limaria hians* between Carna and Salen. The rare calcareous tubeworm *Placostegus tridentatus,* which has been recorded from only three other Scottish sealochs, has been found in Loch Sunart , SE of Torr Molach, Salen.

Annex II Species: Otter *Lutra lutra*

The west coast of Scotland is a stronghold for otters. Sunart supports a relatively high density of the species and records show that the site has supported consistently strong populations. The incidence and distribution of otters in the site reflects the high quality of the coastal habitat. For example, the otters mainly forage in the extensive algal beds that occur throughout the shallow areas of the loch and which serve as a habitat for important prey species. High densities of otter holts have been recorded in many terrestrial areas bordering the edge of the loch and on the main islands, typically in areas of dense vegetation and rock boulder cover. There is also a large influx of freshwater from numerous streams and rivers around the site, which is essential to otters for washing.