

LOCH SUNART



AQUACULTURE FRAMEWORK PLAN

AUGUST 2004

FOREWORD

Fish Farming Framework Plans were introduced by the former Highland Regional Council in the late 1980's as a key part of its development and control strategy for aquaculture. Their purpose is to guide aquaculture development to appropriate locations and to help minimise conflicts of interest. This updated plan for Loch Sunart replaces the version prepared in June 1988 and is one of a second generation of plans designed for the current decade. Like its predecessor, the plan's status is at present advisory rather than statutory. However, the Crown Estate's planning role is in the process of being transferred to local authorities. Marine aquaculture installations are therefore likely to come within the scope of statutory planning control during the anticipated lifetime of this plan.

Another key change is that the EU's Environmental Assessment regulations, updated in March 1999, now embrace aquaculture developments to a much greater extent than before. The plan can help guide prospective developers who are required to submit EA's as to the specific issues which their EA's should address. Although at the time of writing shellfish farming was exempt from EA regulations, large-scale installations may come within the scope of the legislation within the lifetime of the plan. In addition the plan recognises the provisions of guidance and strategy documents produced by the Scottish Executive at national level.

Various improvements on the framework plan format have been introduced with the current series of documents. The visual presentation has been upgraded to include a coloured policy map, more thematic maps and diagrams, and photographs. More information on the area below low water mark has been included where it has been available, e.g. on the hydrography and marine nature conservation interest. There is more attention to the issues associated with shellfish farming and alternative finfish species together with references to other uses and potential developments in the coastal zone.

As the drive towards sustainable use of inshore waters gathers momentum, aquaculture framework plans should be seen as one component of an increasingly comprehensive and integrated coastal planning system. This system will ultimately also embrace area access agreements for inshore fishing and seabed harvesting, management plans for marine nature reserves, the coastal policy elements of Local Plans and Structure Plans, and coastal zone management (CZM) strategies at sub-regional level and above.

This document has been prepared after initial consultation with a wide range of interests and amended in light of comments made on the consultative draft plan which was circulated and advertised for a three-month period from March 2003. A report of the consultation detailing the comments received and the amendments made to the document is also available from the Planning and Development Service.

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Cover Photo: Looking towards Oronsay and Carna from Ardslygnish

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INTRODUCTION

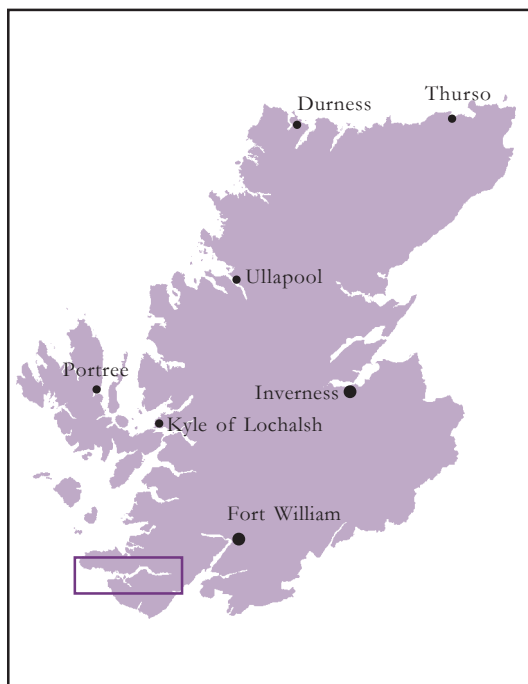
1. Loch Sunart is Highland's longest sea loch (31 kms) and was one of the first in Scotland to be developed for aquaculture. Its sinuous form nestles between the Ardnamurchan peninsula to the north and the Morvern peninsula to the south, with the subsidiary inlet of Loch Teacuis extending south into Morvern itself. It is an area of varied and attractive coastal landscape, much of which is sheltered, intimate and framed by woodland. However for completeness the plan area also includes the rugged, exposed headlands at Ardnamurchan and Maclean's Nose. Most of the local population lives on the north side of the loch whereas the south shore is extensively afforested and lacks metalled roads for most of its length.

2. Aquaculture of both finfish and shellfish has been a significant source of employment in Lochaber for almost 25 years and there are extensive leases in both inner and outer Loch Sunart. The number of sites available for new development is however limited, either because of physical factors or because of the range of other interests in the area which have to be taken into account. A key interest in this regard is nature conservation which is reflected in the designation of the whole loch and considerable areas of the surrounding land as candidate Special Areas for Conservation under the EC Habitats Directive.

3. In recent years Loch Sunart has seen the start of diversification of finfish farming away from salmonids towards other marine species. At the time of writing there were two established farms for halibut within the plan area although production on these sites is to be discontinued. Novel species may require different site conditions from salmon. This combined with continuing pressures for expansion or automation of aquaculture installations in the loch, means an up-to-date framework of planning policies is necessary. These aim to guide potential developers towards suitable sites whilst safeguarding the special character of the loch and its surrounding area.

4. This framework plan for Loch Sunart updates the original plan for Loch Sunart published in 1988. The boundaries of the plan area remain the same as for the 1988 document. The area therefore includes the section of the Ardnamurchan peninsula which faces Mull, ie from the Point of Ardnamurchan to Maclean's Nose on the north side of the mouth of the loch. It then encompasses the whole of Loch Sunart and Loch Teacuis extending to Auliston Point which marks the mouth of the loch on the south side. The area policies set out in the 1988 plan have been reviewed in light of developments in aquaculture practice, new nature conservation designations and policy initiatives in this area, and new information which has become available on the marine zone. Although the area policies relate directly to the areas depicted in the policy map it is important to recognise that finfish farming within the plan area may also influence or be influenced by fish farming activities and site locations outwith the loch, these cumulative impacts must be taken into account in considering applications for modifications to existing leases and lease renewals.

Figure 1: Location of Framework Plan Area



PLANNING POLICY BACKGROUND

◆ National planning guidance

5. The Scottish Executive produced new Locational Guidance for Marine Fish Farms in January 2003. This has a narrower base than its predecessors, focussing mainly on the sensitivity of the more enclosed areas of inshore waters to benthic impacts or nutrient loading from finfish farming. It classifies such areas as Category 1, 2, or 3, with Category 1 indicating the highest level of sensitivity and the least scope for further development. Category 3 indicates better prospects of satisfying nutrient loading and

benthic impact requirements but recognises that the detailed circumstances have to be examined carefully.

6. At the time of writing, the whole of Loch Sunart (east of Maclean's Nose) was classified as category 3. However, these categories may change over relatively short periods. Also, substantial areas of the Highland coastline (eg the Sunart plan area west of Maclean's Nose) are not classified at all in the national guidance. The role of the Council's Framework Plan is therefore important in providing reasonably stable and comprehensive guidance on the range of planning considerations which are relevant to a given area.

7. Other documents such as 'Marine Aquaculture and the Landscape' published by SNH also provide guidance in relation to fish farm location and design and should be taken into account when considering the design of any new sites or modification to existing ones. In addition, in 2003 the Scottish Executive published 'A Strategic Framework for Scottish Aquaculture' this sets out several aims for the Scottish aquaculture industry including the desire to sustain employment within rural communities, whilst recognising the environmental constraints within which the industry must operate.

◆ Environmental Impact Assessment

8. Applications for new finfish leases or significant modifications to existing ones, along with (since March 1999) applications for renewal of leases, require formal Environmental Impact Assessment whenever they are likely to have significant effects on the environment. The requirement for EIA (whether one is necessary, and if so what it should contain) is currently determined by the Crown Estate in consultation with the statutory consultees. Where an EIA is required there is a corresponding requirement for public consultation.

9. The EIA regulations apply to marine fish farming where:

- i) any part of the proposed development is to be carried out in a sensitive area, or
- ii) the proposed development is designed to hold a biomass of 100 tonnes or greater, or
- iii) the proposed development will extend to 0.1 hectare or more of the surface of the marine waters, including any proposed structures or excavations

10. In such instances, applicants are encouraged to submit a basic application to the Crown Estate for screening and scoping of any EIA prior to submission of a detailed Environmental Statement. This helps to ensure that only the information which the Crown Estate and statutory consultees actually need is gathered. It also helps to avoid confusion about when public consultation is required and over what time period.

11. Applications for shellfish farm leases do not as yet come within the scope of the Environmental Impact Assessment legislation. However, shellfish installations, particularly large ones, are not without their environmental impacts. Careful consideration needs to be paid to aspects such as equipment design and location, and the minimisation of marine litter for example from detached buoys and ropes.

◆ Changes since the last framework plan was prepared

12. The previous framework plan for Loch Sunart was produced at a time when there was considerable development pressure for aquaculture within the loch but no clear national strategy. The pattern of existing development at that time included several early leases which had been issued without public consultation. The trend since then has been towards larger, more automated finfish farms on the better-flushed sites taking advantage of economies of scale and requiring less manpower. Some leases have lapsed and others have been converted from shellfish to finfish or from salmon to other species.

13. Improvements in productivity, possibly including fewer larger farms, are important for the industry's competitive position. Automation, combined with electronic feedback systems can reduce the quantity of food wasted by finfish farms. This scaling up can however have a number of disadvantages. Automation may generate greater visual and noise impact than was envisaged at the time that the last plan was prepared. The use of fewer larger farms may also result in disease control and the prevention of escapes being more problematic so should be approached with caution. Automation may also lead to a reduction in the manpower required to operate a farm and the likelihood that local employment opportunities may be reduced. This may be offset to an extent by improvements in the skill base and working conditions of the remaining workforce.

14. The previous plan only considered salmon and scallop farms in the loch as these were the only species being cultivated in the area at the time. Now however, Loch Sunart has a wider range of species being farmed than almost any of the other west coast sea lochs. At the time of writing there were shellfish leases for scallops, mussels, and oysters, and finfish leases for salmon and halibut. Diversification into new marine species could potentially lead to additional jobs. However, the limited supply of juvenile fish for on-growing may prove to be a limiting factor in the short term.

OBJECTIVES

15. The objectives of the framework plan for Loch Sunart are to:

- ◆ promote the operation and development of aquaculture which is environmentally sustainable and in harmony with other interests;
- ◆ sustain and if possible improve employment prospects in this area;
- ◆ raise public awareness generally of the resource value of Loch Sunart and its coastal areas and guide prospective aquaculture developers as to the various interests they should take into account;
- ◆ safeguard the key tourism and recreation assets of the loch;
- ◆ identify infrastructure investment priorities to support the development of aquaculture and to maximise the general economic and recreational value of the loch.

PHYSICAL CHARACTERISTICS OF THE AREA

◆ Topographic Setting

16. The outermost section of the plan area includes the north side of the exposed entrance to the Sound of Mull. This stretch of coastline is characterised by cliffs, rocky headlands and small bays, interspersed with crofting settlements such as Kilchoan and Mingary. Exposure to westerly swell decreases towards the mouth of Loch Sunart. The geology of the Ardnamurchan and Morvern peninsulas is a complex mixture of metamorphic and igneous rocks and is of significant interest in geological terms.

17. The lower reaches of the loch (west of Laga Bay) contain a number of islands which are closely grouped and which provide some natural shelter for the inner loch to the east. Loch Teacuis extends in a south-easterly direction from the south side of Carna and is separated from Loch Sunart itself by two shallow sills.

18. In its middle and upper reaches the loch is a fairly consistent width with shelter from prevailing winds most pronounced on the south side in the stretch between Resipole and Laudale. The shores of the loch, particularly east of Glenborrodale, tend to be well wooded so points of access to the shore from the road are limited.

Wooded shorelines, Loch Sunart



◆ Hydrography

19. Loch Sunart is the second longest of the Scottish sea lochs with six sills dividing the loch into a series of well-defined basins. The second sill, which lies in the inner loch approximately 4km east of Carna, is the deepest having a maximum depth of 70m. The inner sill at Laudale narrows is the shallowest at 6m and the narrowness of the loch at this point can result in strong tidal streams across the sill. Loch Sunart ranks seventh amongst the West Coast sea lochs in terms of depth, with the maximum of 124m being found in the second basin.

20. The underwater features of Loch Sunart include pinnacles and vertical rock at the mouth of the loch and shallow tide-swept channels between the islands. The northern shores of the loch are predominantly of steep sheltered rock indented by coves and gravelly bays.

21. Loch Teacuis is a side arm of Loch Sunart and is more sheltered having its mouth largely blocked by the rugged island of Carna. The entrance to the loch is ill-defined as a result of there being two long, shallow channels. It is approximately 6km long with a maximum depth of 31m and has 3 sills, the deepest of which is just 8m. The short, shallow nature of Loch Teacuis means that it has a short flushing time of one day. The flushing time for Loch Sunart, by comparison, is a relatively slow seven days.

Finfish farm, Achleek



SCALE OF AQUACULTURE DEVELOPMENT AND POTENTIAL

❖ Historical Development

22. At the time the last framework plan was published 33 sites were leased for aquaculture in the area by fourteen different operators. Some individual leases covered 3 kms of coast and over 60% of the coastline of Loch Sunart was leased for aquaculture in one form or another. Three companies operated a total of nine leases for salmon cages although at that time there was no publicly available information regarding the gear permitted on each site. The first lease for salmon farming was granted in May 1981 and the oldest existing finfish lease was approved in July 1987 at the Sunart Sea farm near Achleek. Historically, many of the finfish leases operated with considerably more cages than are currently employed and on many sites permissions remain for much greater cage areas than are currently used. At least seven leaseholders operated shellfish sites in the loch with some apparently experimental and only one operator producing a significant volume. The first shellfish lease in the loch was approved in August 1981 at Rubha Aird Slighnich.

❖ Present level of development

Finfish

23. Salmon farming remains the dominant aquaculture activity within the plan area. However, the number of operators has decreased since the 1988 plan. There are now two salmon leaseholders in Loch Sunart although the bulk of the salmon production in the loch is from one company. The size of cage groups varies greatly. At the time of writing some sites in the bays towards the mouth of the loch have as few as 6 cages whereas the inner loch sites such as Achleek and Invasion Bay have more than 50 cages on each. The larger sites also have permissions for automated feeding barges.

24. In recent years, two sites have been converted from salmon to halibut farms. These are located in the outer basin of Loch Teacuis and in Loch na Droma Buidhe to the south of Oronsay. Unfortunately due to problems with the supply of juveniles for on-growing, and halibut farming being more economically viable in Norway, the company operating these sites recently announced that halibut production in Loch Sunart would be wound down. The finfish sites which remain operational are serviced from shore bases at Achleek, Laga Bay, and Glenmore Bay, with an additional storage facility at Invasion Bay.

Laga Bay



25. The locations of aquaculture leases are shown in Figure 2 and on the policy map at the rear of the document. The gear permitted on each site and the expiry date for each lease is given in Appendix 1.

Figure 2: Aquaculture Leases

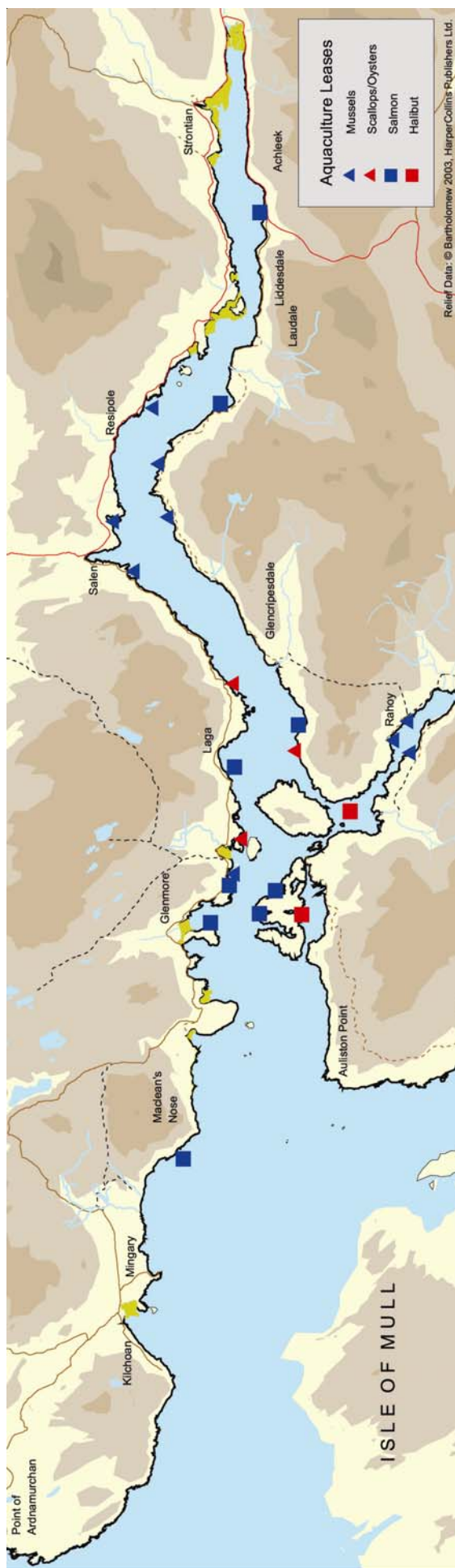
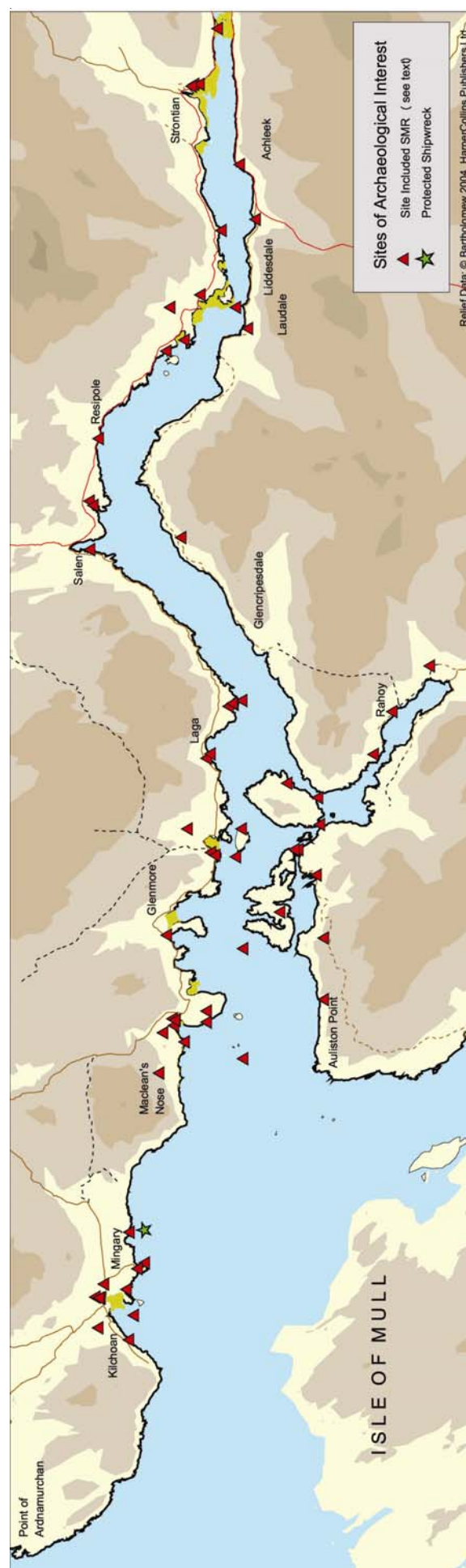


Figure 3: Natural Heritage Designations



Shellfish

26. At the time of writing, shellfish leases within the plan area are held by eight different growers working individually who have leases for scallops, oysters and mussels. However, many of the sites leased are lying undeveloped and the only landings from the loch are of mussels from Loch Teacuis. In normal circumstances all the shellfish farms undertake longline culture with a mixture of single and double headrope systems. The longline headropes support dropper ropes which are seeded with juvenile mussels through natural settlement within the loch. Scallop spat are collected outwith the loch and may be on-grown on longlines similar to those employed for mussel culture, or using sub-surface longlines with submerged headropes. Oysters can be cultivated in a similar manner with seed bought from commercial hatcheries for on-growing.

◆ Future Prospects for Aquaculture Development

27. Some further expansion of finfish and shellfish farming in Loch Sunart is possible but development will have to take into account the need for reasonable separation and it should be compatible with the area's natural heritage and tourism interests. Surface installations for aquaculture development need to be low in profile and of suitable colouration to fit in with their surroundings. Sites which are overviewed at close quarters may be sensitive in this respect and where possible should be avoided. Close liaison between the operators, the local planning authority and Scottish Natural Heritage, and the use of professional landscape design expertise can help to make the most of the opportunities which exist.

28. Concerns have been raised from time to time regarding sites which have been leased but which have not been developed. Given the limited space within the loch, unused leases should be developed or relinquished in order to give others the opportunity to use these sites.

29. The salmon farming industry is increasingly looking towards diversification into new species and there has been much interest in the potential for cultivation of cod as well as halibut in recent years. In the near future it is expected that haddock juveniles will also be available for on-growing in sea cages. Whilst it may be possible to on-grow cod in reasonably exposed sites, including those currently used for salmon in Loch Sunart, halibut require much

more sheltered, inner loch sites. In the main this is due to the fact that as flat fish they spend considerable periods on the floor of the cages which makes them prone to abrasion if there is too much swell. This behaviour also means that a halibut farm currently needs twice the surface area of a salmon farm to produce the same tonnage. The Council is keen to see the aquaculture industry diversify into new species and would encourage the continued use of the existing halibut sites for this species. The potential also exists for some of the salmon sites to be used in rotation with each other and fallowed for extended periods or for salmon to be farmed in rotation with other marine finfish.

30. In addition to alternative species, alternative management practices may be feasible within the loch. This may include site ownership being taken up by locally based companies in order to contract grow fish for the larger companies.

31. In the future, given improving technology, it may become possible to moor fish farm cages in more exposed sites than are currently viable. An early indication of this potential future trend is the recent application for a new site on the west side of Maclean's Nose. It is essential, however, that navigational access is maintained, that there is sufficient separation distance between adjacent sites and that any future developments for salmonids are located away from the entrance to important game fishing rivers. The type of equipment required to service the more exposed sites, such as automated feeding systems, may have an increased visual and noise impact on their surroundings. The noise which has been associated with automated feeding barges can however be reduced through the use of acoustic hoods on generators and associated machinery. The use of automated feeding systems may reduce the frequency of boat movements.

32. Any significant modification to a finfish site within Loch Sunart and Loch Teacuis will require an Environmental Impact Assessment. Any new cage installation which may be sited outwith the loch but still within the plan area is also likely to require an EIA but will be subject to a screening opinion as to whether or not an EIA is required. In addition the marine cSAC designation requires that the potential impact of new or modified fish farm installations on the otter or reef interests should be assessed. This would apply to changes within and adjacent to the cSAC where features within the cSAC would be affected, irrespective of the requirement for an EIA.

33. With regard to shellfish developments there are only a limited number of sites within the inner loch which may be suitable for the longline or raft culture of mussels. These locations are identified in the area policies and policy map. Many of the more suitable sites are occupied by existing but unutilised shellfish leases. In the Council's view all existing shellfish leases that have not been taken up or have not been used for two years should be relinquished. Any resultant debris should be removed from the seabed, and the sites should be made available for local community interests. There is potential for these leases to be brought into production either with more traditional equipment such as longlines or rafts or with novel equipment such as submerged longline systems.

34. The Crown Estate, which acts as landlord in relation to seabed leases produced indicative guidance in the late 1980's as to the minimum separation distances that should exist between fish and shellfish farm sites and between these and various other interests. This guidance recommended a minimum distance between finfish farms of 8km which is less relevant today with the advent of single-year-class stocking. Between a finfish farm and a shellfish farm the recommended separation is 3km and between two shellfish farms 1.5 km although it is acknowledged that closer siting may be possible between small-scale farms and in large loch systems or open water. This was based on a range of factors including amenity considerations and was subsequently included in the Scottish Executive's 'Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters' published in 1999. The revised locational guidelines published in 2003 places greater emphasis on the hydrographic separation between fish farming management areas and the maintenance of firebreaks between adjacent management areas as a mechanism for preventing the spread of disease.

35. Information on the location of management areas is published by the Marine Laboratory Aberdeen on behalf of SEERAD. When consulted on sea bed lease applications the Council is reliant on the advice received from SEERAD in relation to management areas. Potential health risks and welfare issues may in the future also be reduced through the implementation of an industry wide code of practice for Scottish Finfish Aquaculture. When leases expire or are the subject of applications for renewal the opportunity should be taken to increase the separation distance between sites where necessary and appropriate. This is of particular relevance in to the upper basins of the inner loch which are more poorly flushed.

36. It may be possible that in the future it will be economically viable to cultivate other marine species within Highland sea lochs. The Council is supportive of diversification in aquaculture and has in recent years, been involved as funding partner in a number of projects aimed at determining the feasibility of cultivating new species and the techniques that would be required. Species include haddock and lumpsuckers as well as abalone and the green sea urchin *Psammechinus miliaris*. A continental and Far Eastern market exists for the mature roe of this species and it has the potential to be cultivated in trays, lantern nets suspended on sub-surface longlines, or in rock pools, and may prove to be an important aquaculture species in the future. The use of subsurface longlines would also result in reduced surface gear and therefore less visual impact. The introduction of any non-native species to the loch for aquaculture purposes should be carefully evaluated beforehand and if possible avoided.

37. Interest is also increasing in the potential for polyculture. This might involve growing a species such as mussels, or certain marine algae on the same site as finfish. The main argument for this type of aquaculture is that one species may have the potential to utilise some of the waste nutrients produced by the other, leading to less dissolved organic matter entering the water column. This is an idea which clearly requires further investigation, and at the time of writing the Council is part-funding research into finfish/seaweed polyculture. The future introduction of polyculture techniques on a commercial scale would require changes in legislation to allow more than one species to be grown on the same site. It would also necessitate a review of the indicative separation distances.

PLANNING ISSUES/ PROSPECTS

◆ Economic Development

38. Finfish aquaculture in the Loch Sunart area provides full time employment for around 30 people. This is an important component of the local economy but the figure represents a significant decrease on the figure of 45 full-time equivalent jobs when the last framework plan was prepared. This decrease reflects the industry's move towards increasing efficiency and reducing labour costs through automation and reduced manual handling. Automated feeding systems have brought certain environmental benefits, for example reduced impact on the seabed and local roads.

39. The presence of the fish farms supports the local economy through local purchases made by the company and its employees. For example, the filling station in Strontian benefits from the purchase of fuel for vehicles and boats, and local tradesmen benefit from the need to maintain shore bases. Shore bases also generate rental income for local estates. Equivalent figures for shellfish farming tend to be harder to come by. At the time of writing there is only one site in the loch which is actively producing shellfish.

40. Other key sources of employment in the area include tourism, crofting, shellfish processing and forestry. Tourism represents the major income to the area, and includes the sporting estates, hotels, camping and caravan sites, and bed & breakfast establishments. This source of income is very seasonal in nature with a number of opportunities for casual employment during peak periods. Exact numbers of visitors for specific areas are difficult to assess but information for the year 2000 from VisitScotland indicates that there are 15-20,000 visitors a year to Ardnamurchan, with 88% visiting between April and September.

41. Remoteness from urban areas and poor road links make the economy of this area very fragile and services expensive to sustain. This particularly applies to the Ardnamurchan peninsula. It is therefore very important that businesses which develop here should as far as possible be in harmony with the other interests in the area. Aquaculture can be an effective supplement to crofting income and provide downstream jobs in fish and shellfish processing. However there may be potential for friction with tourism and other interests at certain sites in the loch and the plan seeks to minimise the chance of this.

◆ Landscape and visual amenity

42. Although it is a very large sea loch, the landscape of much of Loch Sunart is less dramatic than many of its more northerly counterparts because the relief tends to be more subdued. The exceptions to this are the steep, rugged slopes around Ben Hiant, Glenborrodale and the island of Carna near its mouth. The lower reaches of the loch have therefore been proposed as an Area of Great Landscape Value in the Highland Structure Plan (see Figure 3). The Point of Ardnamurchan also attracts visitors because of its rugged, exposed coastline and the fact that it is the most westerly point on the British mainland. The attractions of Loch Sunart are generally more subtle with native woodland cover and the intimacy of the sheltered, fjord-like coastal landscape being key ingredients.

Looking west across Camas nan Geall towards Ben Hiant



43. The area is popular with visitors as well as local residents on account of its various landscape types. The more exposed outer loch is characterised by its rocky, sparsely vegetated islands and bays, giving way to steep, densely forested shorelines on both sides of the loch's middle section. Towards the head of the loch the land becomes slightly lower lying and the dominant vegetation, in places, is plantation forestry. For most of its length there are reasonable views of the loch from the road on the north side. The notable exception to this is the section of road between Laga Bay and Resipole which winds through mature oak woodland and is quite elevated from the loch.

44. The narrow sinuous nature of Loch Sunart is emphasised when viewed from low vantage points such as the head of the loch. Most of the fish farm developments are set close to the shore and impinge very little on the open water space. The fish farm at Achleek is something of an exception to this being a large site which is overviewed at close quarters by the road to Lochaline as it passes along the south side of the loch and rises up to Liddesdale.

45. The north shore of the loch, particularly to the west of Salen, has a number of small bays containing fish farms, many of which can be viewed from a high vantage point on the Ardnamurchan tourist route. By contrast the farm at Invasion Bay on the south side of the loch is only overviewed from the estate track to Glencripesdale. Views of this site from the road and settlements on the north side of the loch are fairly minimal.

46. In terms of landscape considerations it is important that all aquaculture developments within the loch take appropriate steps to minimise the visual impact of their operations. Under normal circumstances cages should be sited as close as possible to the shores of the loch and orientated as far as possible with the line of the coast. This should not however be at the expense of impact on sensitive habitats and species. Operators should be mindful of cumulative visual impacts and take advantage of natural screening and the landscape contours. This consideration should be extended to the installation of ancillary equipment such as automated feed barges, storage rafts, and shore-based facilities all of these should be sympathetically coloured in relation to their surroundings.

47. The above considerations also apply to the installation of floatation gear for shellfish longlines which should be dark matt colours. Further useful information on the siting and design of aquaculture installations is contained in the SNH publication "Marine Aquaculture and the Landscape"

48. Fish and shellfish farms, as well as other marine users, may also impact on their surrounding environment through marine-related litter. Operators should make every effort to ensure that any waste such as packaging, or obsolete equipment is disposed of appropriately.

◆ Water Quality

49. All aquaculture activities rely on good water quality to support the growth of the species concerned. It is undeniable however that aquaculture can itself have an adverse effect on the quality of surrounding waters. In the case of shellfish farming, the inputs into the water column are minimal since no additional feed is required. Finfish farming on the other hand requires the input of feed and on occasions veterinary medicines and antifoulant chemicals. These result in discharges to the environment along with the faeces of the fish being farmed. It is the responsibility of SEPA to determine

the maximum biomass of fish which may be stocked at a finfish site, the types of medicines and other chemicals which are permissible, and in what quantities they may be used.

50. One of the main reasons why medicines might be used on a salmon farm is the control of sea lice. The large quantities of sea lice associated with caged salmonids have been implicated as one factor in the decline in wild salmon and sea trout on the West Coast. Game fishing interests recognise the importance of using the appropriate medicine to control lice. However, fishermen and shellfish farmers are increasingly expressing concern about the adverse effects that sea lice medicines might have on both wild and cultured stocks of shellfish. At large farms in inner loch sites water flow may be too low to allow sufficient quantities of bath medicines to be used. Where no alternative in-feed treatment is available consideration should be given to reducing the biomass stocked at the site so that the whole stock can be treated effectively.

51. Antifoulant chemicals based on copper or zinc compounds are used to treat cage nets and walkways which would normally attract the growth of marine organisms. Although the actions of these chemicals on farmed shellfish are not fully understood, there are fears that these chemicals can retard the growth of shellfish and lead to higher mortalities. The Council strongly supports alternative methods such as swim-through net changes which reduce fouling on cage nets without the use of chemical treatments. Swim through net changes are currently practiced on all sites in the plan area with square cages but they are difficult to carry out with circular cages.

52. Live shellfish put on the market must by law meet strict criteria in terms of hygiene. Shellfish production areas are classified for this purpose according to the presence in water and shellfish samples of certain types of bacteria. Harvesting classifications are species- and area-specific and may be seasonal. In Highland, harvesting areas are normally classified as 'A' or 'B' grade. Shellfish landed from 'A' classification areas can go direct to market for human consumption provided that they meet the specified end-product standards. There is no legal requirement for any processing other than washing. When the classification is 'B', mussels must be either depurated, heat treated, or re-laid in an area having an 'A' classification in order to meet Category 'A' requirements. These classifications are subject to ongoing monitoring carried out by the Food Standards Agency (Scotland) (FSAS) and are

published annually. The end-product standards are listed on the Agency's web site (www.food.gov.uk).

53. In siting shellfish farms in particular it is important that developments are not close to any significant effluent discharges, including the discharge from septic tanks. The Council therefore consults Scottish Water on all applications related to the siting of marine fish farms.

Finfish farm with feed barge, Achleek



54. Shellfish production can also be affected by the presence in the water column of certain harmful but naturally occurring algae. When these algae occur in high concentrations they can cause the accumulation of toxic compounds within filter-feeding bivalves and can lead to fisheries and aquaculture operations being temporarily closed down on public health grounds. Closures of this nature for Paralytic Shellfish Poisoning (PSP), Amnesic Shellfish Poisoning (ASP) and Diarrhetic Shellfish Poisoning (DSP) are not uncommon in Scottish waters during summer months. Monitoring for toxins in shellfish and for the specific algae causing them is the responsibility of the FSAS who subcontract this work to the Marine Laboratory in Aberdeen. In the event that elevated toxin levels are detected by the monitoring programme, a closure on food safety grounds may be necessary. FSAS contacts the Highland Council Environmental Health Officer for the area (based in Fort William) who then has responsibility for informing the grower or harvester of the closure, and for displaying posters which warn the general public not to gather shellfish from the area.

55. Finfish production may also be adversely affected by algal blooms, with some species of algae, if present in sufficiently large numbers, able to cause damage to the gills of farmed fish. This may result in mortality in the worst cases. Fish are also susceptible to blooms of zooplankton, such as juvenile jellyfish.

❖ Navigation

56. The narrow entrances to both Loch Sunart and Loch Teacuis and the importance of the nearby Sound of Mull as a shipping route means that consideration must be given to the navigational safety of marine traffic, both commercial and recreational. Where aquaculture installations are sited close to navigation channels and anchorages there may be a significant risk to navigation. There may also be a risk to the aquaculture installations themselves. This risk was highlighted in Loch Sunart by the grounding of the freighter 'Lysfoss' on Auliston Point in May 2001. The Sound of Mull and Loch Sunart are seeing increasing use from a range of commercial and recreational vessels. Small cruise ships such as the "Hebridean Princess" and the "Lord of the Isles" visit the loch regularly during the summer months. There is also increasing pressure on sheltered anchorages such as south of Oronsay when the nearest marina, Tobermory, becomes full. Given the likely future increase in recreational boating it is important that all aquaculture installations are appropriately marked to ensure safe access to recognised moorings and anchorages day and night.

Small Cruise Vessel in Outer Loch Sunart



57. There is a requirement under Section 34 of the Coast Protection Act 1949 for all works within Scottish tidal waters below mean high water spring tide to ensure that the proposal will not interfere with or obstruct navigation. Following approval of a lease or planning permission for any marine installation, an application must be made to the Scottish Ministers for their approval of the works proposed.

❖ Infrastructure

Road Access

58. Road links to the head of Loch Sunart are reasonably good with a twin-track road, the A861, running from the Corran Ferry at Ardgour to Strontian. The introduction of a new ferry, the MV Corran, means that 40-tonne articulated lorries can now cross Loch Linnhe at this point. However, there are lower vehicle weight limits on the standby ferry and on occasions heavy vehicles must travel to Ardgour via the single-track road which runs along the south side of Loch Eil and down the west side of Loch Linnhe. At periods of peak traffic there may be considerable delays due to vehicles waiting for the ferry.

59. West of Strontian, the road along the north shore of Loch Sunart is single-track only and west of Salen it drops from A-class to B-class. This narrow, winding road (the B8007) is a designated tourist route and serves a number of the fish farm shore bases on the north side of the loch. Despite its poor alignment it has no weight limit.

60. Road access to and along the south side of the loch is much more limited. Travelling west from the head of the loch, the road is single-track A-class as far as Liddesdale, then an unclassified single-track road for about two miles to the entrance of Laudale Estate. Thereafter, an estate track - narrow and unsurfaced - runs through the forested area and Glencripesdale Wood Nature Reserve to Glencripesdale House. This track provides access for forestry operations and some small vehicle access to the fish farm at Invasion Bay. Other than for access this road is private to motor vehicles but sees some use by walkers and mountain bikers.

61. Loch Teacuis is reached by an unclassified minor road from Claggan on the A844. This road provides access to the head of the loch where it splits into two private estate roads accessing short distances along the east and west sides of Loch Teacuis. The road on the east of the loch becomes a minor track which eventually connects with Glencripesdale on Loch Sunart.

62. Road access to most of the south side of Loch Sunart is so limited that any fish farm development to the west of Liddesdale must be serviced from shore bases on the north side of the loch. This includes Loch Teacuis, with the halibut site that operated in the

outer part of this loch being serviced from Laga Bay. However, the shellfish farming operations in Loch Teacuis are sufficiently small to be serviced from Rahoy.

Landing Facilities

63. There are a number of public slipways and jetties within the plan area which are shown on the policy map. The main ones of note are the public jetty at Kilchoan, the ferry slipway in Mingary Bay, the beach launching access and new slipway development in Salen, and the slipway at Resipol campsite. A table detailing the landing facilities within the plan area is given in Appendix 3. Most of the slipways used for aquaculture activities, particularly finfish farming, are associated with shorebases which are also shown on the policy map. Many of the landing facilities are privately owned, either by estates or fish farming companies. Public access to these slipways may only be possible by prior agreement with the operator.

Mingary Pier



64. With the proliferation of private slipways and landing facilities within the plan area, careful consideration should be given to the servicing requirements of any future aquaculture developments. The building of additional slipways purely for fish farm use should be avoided. Consideration should be given to permitting public use of slipways and jetties where possible in order to facilitate recreational use of the area. The Council accepts however that there may be public liability and disease control considerations in the regular public use of fish farm slipways.

❖ Inshore Fishing

65. A handful of fishing boats operate within the loch targeting fisheries for edible crab, lobster and small numbers of swimming crabs in rocky areas, and Nephrops in the muddy basins (see Figure 5).

However, the Nephrops fishery is considered to have declined in this area and is no longer as important to the local economy as it has been in the past. Reasons for this decline are likely to be complex but overfishing in the past is likely to be a significant contributory factor.

66. A small number of vessels from Kilchoan and Mingary fish for lobster and crab in rocky areas just outside the mouth of the loch off south Ardnamurchan. These fisheries can serve to supplement the crofting income of the local residents. A shellfish merchant with holding and processing facilities is based in Salen and operates vivier lorries to mainland Europe. However, landings to this company are mostly from outwith the plan area with lorries being loaded on Mull and elsewhere within Highland.

67. There are no restrictions on the use of mobile fishing gear in the loch and this means that trawlers may be seen within the plan area, particularly at the north end of the sound of Mull and within Loch Sunart up to the east side of Oronsay. Vessels from the Mallaig, Oban and Western Isles fleets fish in this area, particularly in inclement weather conditions, where they target scallops and Nephrops. There is also a seasonal fishery for sprat in the outer loch.

❖ Nature Conservation

68. There are a range of nature conservation designations within the plan area which cover both the marine and terrestrial zones. In aquaculture terms the most significant is perhaps the candidate Special Area of Conservation which encompasses both the marine and terrestrial features of interest. These include reefs in the marine environment and otters in the marine and terrestrial environments. Terrestrial species and habitats include old oak woodland with *Ilex* and *Blechnum*, *Tillio-Aceron* woodlands, North Atlantic wet and Dry Heath. In addition the whole of Loch Sunart and Loch Teacuis are designated as a marine consultation area. The areas of these designations are shown in figure 3.

69. Sunart cSAC includes the whole of the marine section of the loch, with the marine features of interest being otters and the intertidal and subtidal reefs found throughout the loch. A management

scheme for the cSAC is in preparation through the Sunart cSAC Management Forum. This forum comprises representatives of the statutory bodies having a role in the management of the cSAC, local communities, landowners and users of the area.

70. The SAC designation, if confirmed, will indicate an area of international importance for its wildlife interest which will form part of the Natura 2000 network of sites. In the interim it still has to be treated as if the designation has been approved. This means that proposed developments within the cSAC which are likely to have a significant impact on the designated interest will require an appropriate assessment. The judgement on this will be made by the relevant authority which grants permission, advised by SNH.

Maclean's Nose (west side)



71. An early indication of the marine nature conservation interest of Loch Sunart and Loch Teacuis was given by their designation in 1990 as a Marine Consultation Area. This was in part due to the wide range of habitats and species in the lochs, reflecting the transition from the wave-exposed outer loch to the extreme shelter of the inner loch and the complex hydrographic regime within Loch Sunart. The outer boundary of the Marine Consultation Area is shown in Figure 3. SNH should be consulted on any marine development proposed within this area.

72. There is a wide range of sublittoral communities on both rock and sediments within Loch Sunart. These include some UK Biodiversity Action Plan Habitats such as sea grass beds and mud habitats in deep waters which are well represented within the loch. The National Biodiversity Action Plan species, tall sea pen (*Funiculina quadrangularis*) and the horse mussel (*Modiolus modiolus*) are also present. In each of the deep basins the bed rock gives way to mud sediments which form the habitat of the fireworks

Figure 4: Otter Sensitive Areas

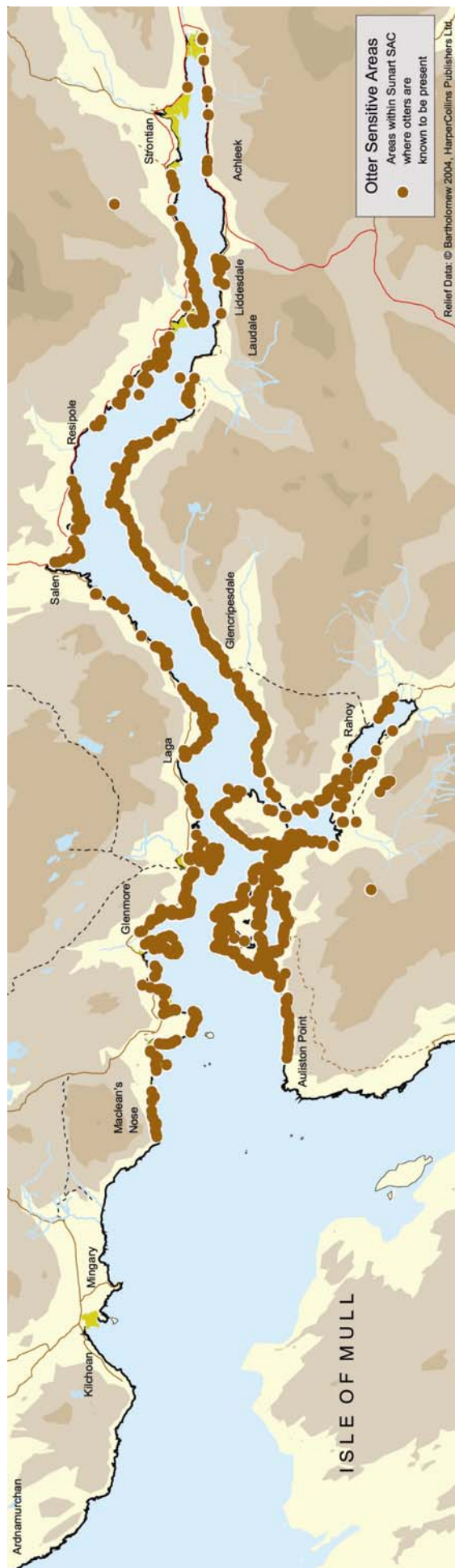
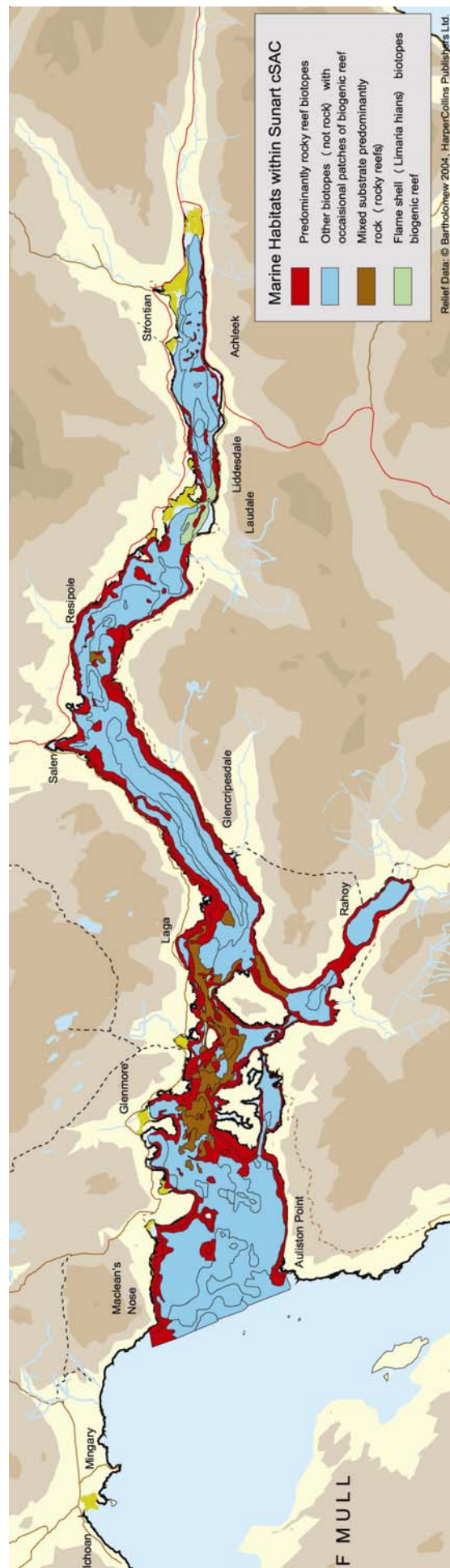


Figure 5: Marine Habitat Mosaic



anemone *Pachymerianthus multiplicatus*, and burrowing crustaceans such as the Norway lobster *Nephrops norvegicus* and the angular crab *Goneplax rhomboides*. These areas are also noted by local sea anglers as being important habitats for large skate and thornbacked rays.

73. Other species of note include the gaping file shell *Limaria lians* which forms dense beds in the Laudale narrows. At the mouth of the loch the rock pinnacles and western walls of Oronsay support many animal species of high interest including the sea fan *Swiftia pallida*, red sea fingers *Alcyonium glomeratum* and the anemone *Parazoanthus anguicomus*. There are also dense populations of the infrequently recorded feather star *Leptometra celtica* which is normally found in deeper water.

74. Loch Sunart is also an important breeding location for a number of different seabirds, including common and arctic terns, merganser, black guillemot, and eider. Mammals are sighted on a regular basis within the loch. As well as the important otter population previously mentioned, these include both Harbour and grey seals which feed and haul out in the loch. The presence of these mammals and birds provides the main draw for wildlife boat trips in the area.

75. Salmon and sea trout are species of national importance found in the Loch Sunart catchment most notably in the rivers Strontian and Carnoch but also in the Laudale River and the Glencripesdale Burn. In common with those of many West Highland rivers, the stocks of these salmonids have undergone a significant decline and are reported to be under threat in the River Carnoch. Survey information from the Strontian river in 2001 also indicated that it's juvenile salmon stocks were at a critical level. This decline has been linked by many to the increase in fish farming activity on the West Coast though a range of factors may be involved. Some of these factors are elaborated on in paragraph 81.

❖ Recreation

76. The Ardnamurchan Peninsula is a designated tourist route with ferry links from Mingarry near Kilchoan to the Isle of Mull. Car and motorcycle-based tourism around Loch Sunart is popular, there is a camping and caravanning site at Resipole and there are a number of bed and breakfast facilities along the peninsula. The major attractions for tourists in this remote area are the Point of Ardnamurchan and the natural history interpretation centre at Glenmore which is open to visitors during the summer.

Point of Ardnamurchan



77. Hill and long-distance walkers visit both sides of the loch year round. The forest tracks are popular with mountain bikers and walkers alike but the tracks on the south side of the loch, particularly beyond Laudale, are remote and the Scottish Rights of Way Society points out that people entering the area should be suitably equipped and experienced. The sense of remoteness and sometimes wildness of parts of the area, particularly around the mouth of the loch. On the north side and on the Ardnamurchan peninsula, is an integral part of their attraction for recreational interests such as walking, sailing and wildlife watching.

78. Recreational activities also take place on loch Sunart itself. Its position, scale, and varied character have long made it popular for seasonal cruising and recreational sailing. The Clyde Cruising Club's Sailing Directions note a number of recognised anchorages within Loch Sunart which are indicated on the policy map. There are permanent visitor moorings at Salen and there is a small chandlery business close to the pier and slipway.

79. Some visitors to Loch Sunart undertake wildlife boat trips and companies based on the north side of the loch offer self-drive boat hire within the loch, or charter boat hire further afield such as the Sound of

Mull or the island of Staffa. As previously mentioned, there are a number of public slipways in the loch allowing small boats to be launched. As a result, the area is sometimes visited by sea anglers who bring their own boats.

80. The interesting underwater topography of the outer loch, notably its pinnacles and steep bedrock walls, means that recreational divers also visit Loch Sunart on a regular basis, particularly the section between Laga Bay and the mouth of the loch. Recognised dive sites are shown on the policy map.

❖ Game fisheries

81. The Loch Sunart and Loch Teacuis catchments have historically supported important sport fisheries for salmon and sea trout. The rivers Strontian and Carnoch both used to support excellent game fisheries, which not only provided an amenity for local people but also offered employment and benefited the local economy. In the surrounding sea, commercial and subsistence netting were once of great economic value to Ardnamurchan and Morvern. Netting rights are still owned and exercised from Ardnamurchan Point to Rubha Aird Druimnich on the north side of Loch Sunart by Fascaidale (Ltd).

82. Current information shows that stocks of both salmon and sea trout have collapsed locally but they were in decline for a long time prior to the development of intensive salmon aquaculture. Factors contributing to this decline are varied but may include increased numbers of predators such as seals, increasing sea temperatures and previous overfishing as well as habitat loss. Salmon aquaculture is however recognised as posing some significant risks. For wild salmon these may include genetic dilution of wild stocks as a result of crosses with farmed escapees and the transfer of sea lice from farmed stock to wild stock. The latter is also a major concern for wild sea trout which spend the majority of their life cycle in coastal waters and therefore have a greater opportunity to come in to contact with sea lice in the coastal waters. Strategic treatments of in-feed sea lice medicines can however greatly reduce sea lice numbers on farmed fish during the first year of production. Co-ordinated treatments between all the sites within a management area and synchronised fallowing may also help to reduce the overall quantities of medicines used.

83. The Tripartite Working Group (TWG) which involves the Scottish Executive, Scottish Quality Salmon, and wild fisheries interests, has recommended that Area Management Agreements (AMA) be drawn up between all fish farm operators and freshwater fisheries interests for a given loch system. The aims of the AMA should be to mitigate or eliminate threats to wild salmonids through:

- ◆ a target of zero egg-bearing sea lice on farms;
- ◆ improved fallowing strategies;
- ◆ effective single-bay management;
- ◆ robust escapes contingency plans;
- ◆ free exchange of relevant information

84. The Council supports the preparation of Area Management Agreements and believes they should be open to public inspection and should include all stakeholders. The TWG and the Joint Government Industry Working Group on ISA have recommended that the whole of the Loch Sunart system should be considered as a single management area in conjunction with the Sound of Mull and Lochs Leven, Linnhe, and Eil. An AMA for Loch Sunart is currently in preparation. However, in order for Sunart to be considered as a separate sub-section of the management area disease firebreaks need to be established or maintained. The approval of sites at MacLean's Nose and at Bloody Bay (Isle of Mull) together with the reactivation of the site at Fiunary in the Sound of Mull, serve to reduce the effectiveness of a stand alone Loch Sunart AMA by reinforcing its linkages with sites in Loch Linnhe, Loch Eil and the Firth of Lorne. Within Loch Sunart and other lochs with mixed species, whole-loch fallows may be problematic as a result of the differing growing cycles for marine species when compared with salmonids.

❖ Archaeology

85. Archaeological remains in the plan area include land-based, intertidal, and underwater sites. Many artefacts are found near the coast because people in earlier times had to take advantage of the flatter land for agriculture, the food resources offered by the sea, or the transportation networks by sea which predated the development of roads in the area. At the time of writing there are over 200 sites listed in the Council's Sites and Monuments Record for the plan area in the zone within 250m of the coast. The significance of these range from the national to the local level. They include forts and castles as well as early Christian sites and deserted townships which mainly appear as 19th century ruined cottages and walls. However, in many

cases they will occupy sites which were inhabited or used much earlier because in general terms the landscape has been occupied and used over many millennia. This area is also important because of its association with the Lordship of the Isles. The contemporary significance of deserted townships should not be underestimated as they are sometimes visited by far-flung descendants of the original township dwellers.

86. On the coast itself there are a number of jetties, piers, and even relatively modern structures such as the Point of Ardnamurchan lighthouse and its related buildings which are considered to be of archaeological significance. There may also be fishing summer stations associated with the 19th century herring busses (Dutch boats which cured the herring and shipped it abroad). Consideration should be given not only to safeguarding the physical remains of structures with archaeological value but also to their landscape setting.

87. Of particular importance in relation to the siting of aquaculture installations is the number of known shipwrecks within the plan area. There are also undoubtedly more awaiting discovery. There is a protected wreck, known as the "Mingary Castle Wreck" situated in Mingary Bay at position 56°41'500' N, 06°04'350' W (WGS84 Datum). It is designated under the Protection of Wrecks Act 1973 and is surrounded by an exclusion zone of 250m radius.

Mingary Castle



88. Shipwreck sites can be adversely affected by the establishment of moorings (for cages, service vessels or ancillary equipment) or by the deposition of waste from cages nearby. Fish farms should not therefore be sited over or near to shipwreck sites, whether legally protected or otherwise, as the effect of effluents and changes to hydrology on these sites are not yet fully understood. This may mean operators

checking the potential of their proposal areas just, as a land-based developer would have to do.

89. Land-based archaeology can be affected by the construction or expansion of shore bases, so decisions on such development proposals should be preceded by a walk-over survey and documentary/map check by an archaeologist. There is a high potential for unrecorded archaeology both onshore and offshore in much of this area as very little systematic survey has been carried out. Developers should contact the Council's Archaeology team for further information in this regard. They should bear in mind that in some cases (Scheduled Ancient Monuments and Designated Shipwrecks) definitive advice may need to be obtained from Historic Scotland and formal consent may be required under the relevant legislation which is separate from planning or other constraints. The key areas of archaeological interest on or near the coast in the Loch Sunart Area are indicated in Figure 7.

Figure 6: Fishing Grounds

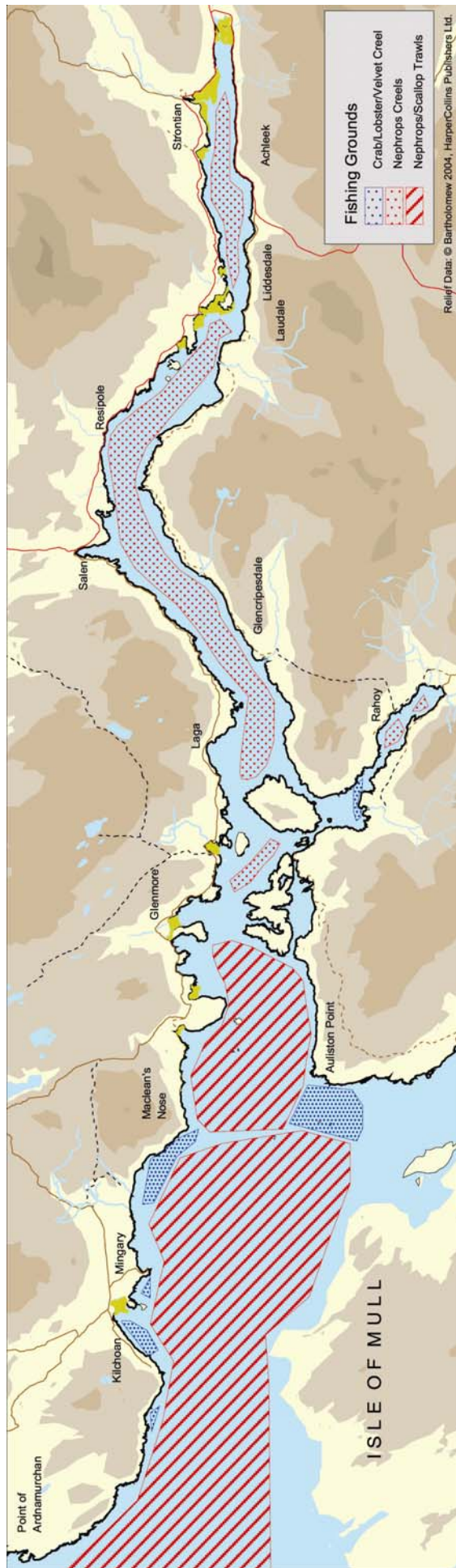
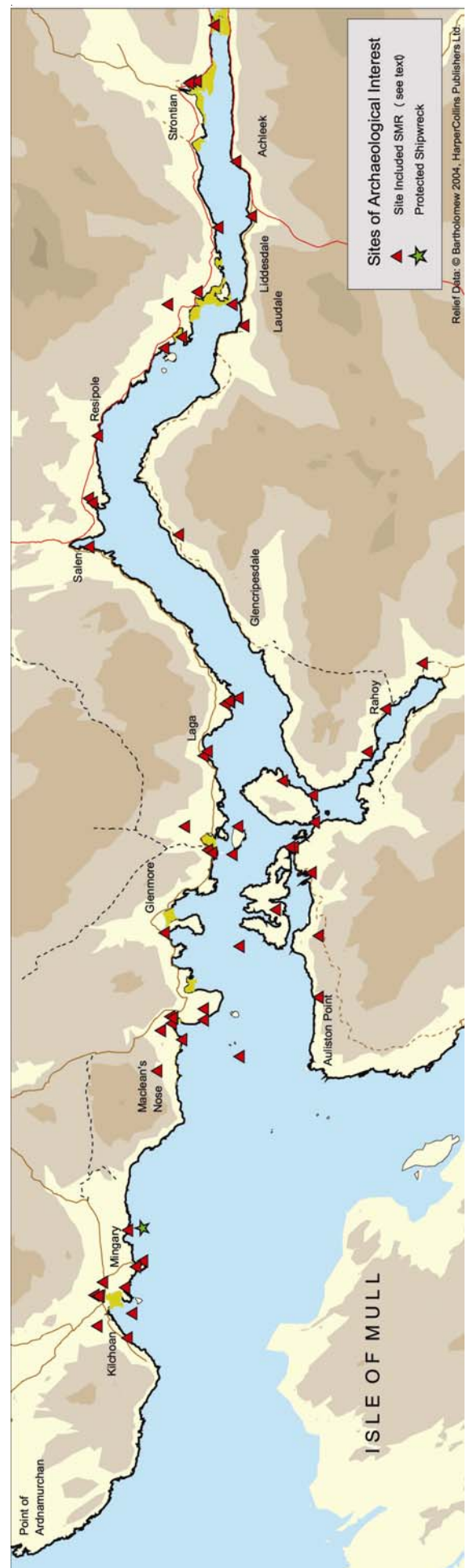


Figure 7: Sites of Archaeological Interest



OVERALL STRATEGY AND AREA POLICIES

90. In light of the considerations above, the framework plan strategy for Loch Sunart:

- ◆ supports continued finfish and shellfish farming activity in the areas currently used for this purpose provided operators give due regard to the environmental sensitivity of the loch and its surroundings;

Upper Loch Sunart near Achleek



- ◆ identifies limited potential for the development or expansion of shellfish farming in the section of the loch between Resipole and Glencripesdale on sites which do not encroach on key viewpoints or roadside picnic areas;
- ◆ seeks to ensure that aquaculture development is compatible with safeguard of the designated features of nature conservation interest in the Sunart cSAC;
- ◆ seeks to contain finfish farming broadly at its current level in terms of equipment, although where environmental considerations permit there may be the potential for modest increases in biomass;
- ◆ encourages the establishment of an Area Management Agreement, including contingency plans for fish escapes, prior to any modifications to salmonid farms in the plan area;
- ◆ supports the diversification of aquaculture activities into alternative species, subject to good environmental practice and with regard to fish health, disease control and parasite management;

- ◆ encourages the use of existing undeveloped shellfish leases, or failing this, their surrender to improve the separation between finfish and shellfish farms or to stimulate new development;
- ◆ identifies safeguard zones around the mouths of the main rivers in the area where there will be a presumption against the location of salmonid finfish farms.

91. For policy purposes the loch has been divided into a series of zones labelled A-M which are indicated on the fold-out map at the rear of the document. These broadly follow the coastline round from the Point of Ardnamurchan into Loch Sunart along its north side then back out along its south side to Auliston Point. The policy guidelines for each zone, along with a brief description of its key characteristics and constraints, are given in the table which follows. The policy map also includes a range of relevant background information on infrastructure and other interests in and around the loch which will be taken into account in assessing aquaculture proposals.

92. When consulted on seabed lease applications the Council will consider each application in its own right within the context of the policies set out below. In addition, the Council will take into account policy and technical guidance issued by the Scottish Executive, Crown Estate, and other relevant authorities. A list of relevant guidance documents at the time of writing is given in Appendix 2.

AREA POLICIES

Zone	Characteristics/Constraints	Area Policy
A	<p>Point of Ardnamurchan to Sròn Beag</p> <p>Exposed area of coast requiring maximum freedom for navigation. The inaccessibility of the coastline in this area means the wild life is generally undisturbed.</p> <p>The Point of Ardnamurchan is the most westerly headland of mainland Great Britain and is valued for its sweeping views across the southern end of the Minch to the Small Isles, Coll and Skye. The road to the lighthouse is a designated tourist route, with many visitors each year.</p>	<p>The exposure of this coastline militates against aquaculture on technical grounds. Presumption against aquaculture development in this area due to the danger to navigation and the need to safeguard the seaward views from the Point of Ardnamurchan.</p>
B	<p>Sròn Beag to Maclean's Nose</p> <p>This open, south-facing section of coastline faces Mull and is linked to it by a ferry which uses Mingary pier. Apart from the small anchorage at the pier itself, the most sheltered part of this coastline is Kilchoan Bay which is closely overlooked by the village. To the east of the pier, the coastline is exposed and virtually uninhabited - rocky but low-lying around Mingary Castle, rugged and steep where the slopes of Ben Hiant (a key coastal feature) drop down to the loch.</p> <p>Tourism is a significant source of income to this remote area, with the ferry traffic, moorings for pleasure craft, coastal walks, and hillwalking on Ben Hiant all contributing to this. Mingary Castle is a Scheduled Ancient Monument and important local landmark. The whole of the compact massif of Ben Hiant is designated as a Site of Special Scientific Interest for its geological features and vegetation. The shoreline below its western slopes is accessible by foot as far as Camas nan Clacha' Mora.</p> <p>Development in the vicinity of Mingary would be constrained by the need to maintain navigational access to the ferry slipway and to safeguard the landscape setting of the castle. The presence of a protected wreck in the bay below Mingary Castle precludes aquaculture development within the immediate vicinity.</p> <p><i>(Continues overleaf)</i></p>	<p>Presumption against shellfish and finfish farms in the immediate vicinity of Kilchoan, Mingary pier, and Mingary Castle - to safeguard amenity and navigational access.</p> <p>Exposure to westerly conditions militates against the siting of shellfish farm installations in the area between Rubh' a Mhile and Maclean's Nose. The Ben Hiant area is also sensitive due to its high landscape and nature conservation value.</p> <p>Finfish farm development may be acceptable at the eastern end of this area (SE of Rubha Ruadh) provided it is limited in scale, designed for low visual impact, and is suitably robust. The design and orientation of any cages would require careful consideration given the exposed situation. Landscape design advice should also be obtained from SNH and the Council prior to introduction of any ancillary equipment (eg feed barges) in this area. Careful consideration needs to be given to the natural heritage interests at this location and the importance of MacLean's Nose as a landscape feature.</p> <p>Any future proposals for finfish farm development in this zone will need to be carefully considered and the proximity of other fish farm sites in The Sound of Mull should be</p> <p><i>(Continues overleaf)</i></p>

Zone	Characteristics/Constraints	Area Policy
	<p>East of Rubh' a Mhile, exposure and scenic quality tend to militate against development unless it is small in scale and sympathetically designed and located.</p>	<p>taken into account. Presumption against additional fin-fish developments in this area unless Loch Sunart and the Sound of Mull are operated with single-year-class stocking and synchronised fallowing.</p>
C	<p>Maclean's Nose to Rubha Aird Shlignich</p> <p>The coast between Maclean's Nose and the attractive bay of Camas nan Geall lies beneath the steep and rugged eastern slopes of Ben Hiant. This is scenically one of the most impressive parts of Loch Sunart and is part of the proposed Area of Great Landscape Value (AGLV) which covers the lower reaches of the loch. It is well seen from the panoramic roadside viewpoint and car park above the head of the bay.</p> <p>There are Scheduled Ancient Monuments beside Camas nan Geall and sea grass beds (a Biodiversity Action Plan priority habitat) in the waters of the bay itself. There is a locally important dive site on the north side of Sligneach Mór and a seal haul-out at Rubha Aird Shlignich.</p> <p>The area is exposed to the south-west and west with the longest fetch affecting the seaward side of Aird Shlignich. This tends to militate against aquaculture development on technical grounds apart from any visual impact considerations</p>	<p>This area is generally too exposed for most forms of aquaculture but a policy presumption against development is necessary to safeguard the area's outstanding views, its nature conservation interests and its recreational value.</p>
D	<p>Rubha Aird Shlignich - Dun Ghallain</p> <p>The intricate coastline, varied topography, and native woodland cover in the lower reaches of the loch combine to create an attractive, varied landscape which is proposed for designation as an AGLV. The combination of sheltered inlets and reasonably good water exchange has also resulted in this area of the loch being extensively developed for aquaculture. Leases in this area were mostly granted prior to the introduction of indicative separation distances with the result that there are many in close proximity to each other.</p> <p>There are leases for salmon scallops and mussels in the various bays on the north side. The aquaculture leases are supported by two shore bases and slipways/jetties in Laga Bay and Glenmore Bay.</p>	<p>Presumption in favour of finfish or shellfish aquaculture which is broadly compatible with other interests but presumption against further expansion beyond that currently permitted. Favour an overall reduction in the scale of equipment permitted in this zone.</p>

Zone	Characteristics/Constraints	Area Policy
	<p>Aquaculture installations have a significant presence here, visible from various points on the tourist route, in particular at Laga bay which has an almost industrial character due to the close proximity of the fish farm and the large shorebase.</p>	
E	<p>Dun Ghallain - Salen</p> <p>One of the narrower stretches of the loch and overviewed for most of its length by the main road which runs close to the shore. The area is well-wooded and largely uninhabited apart from a few houses at Camasinas. Commercial forestry dominates the upper slopes but there are attractive stands of native pinewood close to the sea which enhance views of the loch and are part of Loch Sunart's essential charm. One of the most impressive stands is on the promontory at Dun Ghallain and a car park, interpretation, and trail have been constructed nearby.</p> <p>Two shellfish leases at opposite ends of this area are serviced from Laga Bay and Salen.</p>	<p>There is potential for limited expansion of existing shellfish leases in this area provided the installations are small scale and do not encroach on navigational access to Salen or Camasinas, or compromise reef habitats. Shellfish farms should be tucked in close to the shore and incorporate only short lines to minimise landscape and visual impacts.</p> <p>Presumption against development of new aquaculture installations in the vicinity of coastal viewpoints and formal picnicking areas to safeguard their setting.</p>
F	<p>Salen Bay</p> <p>Most of Salen Bay is closely overlooked by the village and is a natural anchorage so tends to be a focus of human activity. A shellfish merchant has facilities for landing and depurating farmed shellfish at the west side of the mouth of the bay and there is a jetty, offering public launching and berthing facilities, in the bay itself. The bay also contains visitors' moorings.</p>	<p>Presumption against aquaculture installations in the marine area of the bay to safeguard the village's visual amenity, the anchorage and associated recreational activities.</p> <p>Full and multiple use of the jetty at Salen should be encouraged.</p>
G	<p>Sàilean nan Cuileag - Eilean Mór</p> <p>The section of coast between Resipole and the narrows near Eilean Mór has an intimate character with a number of shallow bays, small islands, and wooded headlands backed by extensive native woodland cover. Both here and in the section west of Resipole, the Forest Enterprise has been active in opening up viewpoints and woodland trails near the loch (eg at Garbh Eilean and Sàilean nan Cuileag).</p> <p><i>(Continues overleaf)</i></p>	<p>The sensitive character of much of this zone, coupled with the proximity of a large finfish farm and shellfish lease on the opposite side of the loch, militates against any increase in the number or size of aquaculture installations. However, there may be potential for a small-scale shellfish farm just east of Rubh Aird Beithe.</p> <p><i>(Continues overleaf)</i></p>

Zone	Characteristics/Constraints	Area Policy
	<p>The road runs closest to the loch at Resipole where there is a campsite with chalets and launching facilities overlooking an open bay. This open outlook and access for recreational craft should be maintained. Bunalteachan Bay similarly has an attractive outlook and is one of the few open areas along this wooded coastline.</p> <p>There are two small existing shellfish leases in this zone but generally there is a lack of water depth for cage or longline systems close inshore. Interactions with the designated nature conservation interests in this area (native woodland habitats and otters) would have to be considered.</p>	<p>In the event of existing leases being relinquished or coming up for renewal, continuation of small-scale shellfish farming would be acceptable in principle. However, careful consideration should be given to the design of any installations involved and they should be sited so that the main road or picnic areas do not overview them at close quarters and any sites should not impinge on the central waters of the loch from key views.</p>
H	<p>Upper Loch : Eilean Mor - Rubh' an Dunain</p> <p>The innermost basin of Loch Sunart is fairly open with generally low-lying, rocky or shingly shores. However steeper hill slopes lie close to the water at the head of the loch on the south side. There is a substantial, long-established finfish farm with shorebase in the bay west of Achleek, attractive oakwoods on the north side opposite, and two sizeable rivers (the Strontian and the Carnoch) enter the loch near its head. The area is closely overviewed by public roads apart from its SW end at Laudale.</p> <p>The finfish farm at Achleek is the most prominent on Loch Sunart being visible at close quarters from the Lochaline road and also from the north side. Its presence effectively precludes shellfish farming on the opposite side of the loch. Finfish farm development towards the head of the loch would not be advisable because of poor water circulation and (in the case of salmonid farming) proximity to the mouth of the two game fishing rivers. West of the Achleek fish farm, the narrowness of the loch, limited water depth, and the scenic and wildlife value of the oakwoods on the northern shore militate against further aquaculture development.</p> <p>There are large intertidal and shallow subtidal areas at the head of the loch and near Strontian which provide important foraging habitat for otters. There are also important, tidal reef habitats at the Laudale narrows, including dense and extensive biogenic reef habitat containing the flame shell <i>Limaria lians</i>.</p>	<p>Presumption in favour of continued use of Achleek Bay for finfish farming but against further expansion of finfish farming in this zone. Reduction of the cage area or stocked biomass would help to reduce the visual impact and environmental effects considering its close proximity to the mouth of the game fishing rivers.</p> <p>Subject to a favourable EIA, presumption in favour of the diversification of this site to marine finfish - for a trial period in the first instance or for rotation with salmonids.</p> <p>At present the scale of the existing finfish lease and the narrowness of the loch militate against the development of shellfish farming in this area. However, in the event that the finfish lease is relinquished, consideration could be given to the siting of a small-scale shellfish longline system, close in to the shore near Liddesdale.</p>

Zone	Characteristics/Constraints	Area Policy
I	<p>Rubh' an Dunain (Laudale) - Rubha Aird Earnaich</p> <p>A large finfish farm is located in this zone at Invasion Bay. It is mostly serviced by sea but there is a shore base and storage facilities at the head of a pontoon jetty with access for staff via the Laudale Estate Road.</p> <p>Shellfish leases both in this zone and on the opposite side of the loch are in very close proximity to the salmon lease.</p> <p>This zone is a remote area which is important for nature conservation interests. There are also recreational interests here with the track to Glencripesdale passing nearby and a recognised anchorage at the eastern end which sees occasional use by visiting yachts. Forklift truck and vessel movements in connection with the fish farm can detract from the tranquil nature of the area.</p> <p>Aquaculture installations here are not however readily visible from the opposite side of the loch due to their close proximity to the shore and the small islands in the foreground of views from the north side.</p>	<p>Presumption in favour of small to medium scale finfish or shellfish farming at the south east corner of the policy area (continued use of existing lease), provided this does not block access to the recognised anchorage and is of an appropriate scale.</p> <p>It is important that any new development should not compromise the landmark qualities of the promontories and islands in this section of the loch and on the opposite side. Development should be located close to the shore to appear in the shadow of neighbouring hills from key views.</p>

Zone	Characteristics/Constraints	Area Policy
J	<p>Rubha Aird Earnaich - Carna</p> <p>This section of coast is uninhabited apart from a few isolated houses at Camas Salach and Glencripesdale. The steep, wooded hill slopes help to reduce the visual impact of aquaculture installations here as seen from the opposite, more populated side of the loch which carries the main road.</p> <p>There are two large leases for shellfish farms at opposite ends of the area and a finfish farm at Camas Glas.</p> <p>Road access is limited to unsurfaced private estate roads, which are used by walkers and mountain bikers and are valued for the sense of remoteness and tranquillity, which they offer. The most sensitive areas in terms of amenity are likely to be those near to the houses at Camas Salach and Glencripesdale. The existence of migratory fish in the Glencripesdale Burn also needs to be taken into account.</p> <p>A large part of the shoreline adjacent to the loch forms part of the Glencripesdale wood SSSI.</p>	<p>Favour continued use of the existing aquaculture leases but presume against expansion beyond their existing level. Safeguard the outlook from houses at Camas Salach and avoid finfish farm development near the mouth of the Glencripesdale Burn.</p> <p>Presumption in favour of conversion of salmon leases into marine finfish leases, subject to a favourable EIA. Care must be taken to minimise the visual impact of finfish and shellfish farm installations. Any further developments should be small in scale and avoid compromising the sense of remoteness. Viewed from the opposite side of the loch they are seen against a dark backdrop so they should be coloured accordingly.</p>
K	<p>Loch Teacuis</p> <p>Access to much of the shoreline of Loch Teacuis is difficult because it is heavily afforested and there are no public roads and few tracks. All the jetties in the loch are privately owned.</p> <p>There are several leases for shellfish farms within the loch as well as a recent large lease for Halibut which is serviced from Laga Bay.</p> <p>The area is popular with walkers and mountain bikers because of its sense of remoteness and wildlife interests. The surroundings of the loch are undeveloped other than for a small number of estate houses</p> <p>Two small rivers, the Kinloch and the Barr, run into the loch. These both have a game fishing interest.</p>	<p>Support for marine finfish farming in the outer loch at its existing level (medium scale). Operations should however be sympathetic to the tranquillity and wildlife interest of this remote area, particularly in relation to noise and boat movements.</p> <p>Presumption against finfish farming in the inner basin of the loch because of shallow bounding sill/ restricted water circulation.</p> <p>Support for shellfish farming at its existing (small scale) level. Expansion of lease areas should be avoided.</p> <p>Presumption against a full-time return to salmon farming in outer Loch Teacuis other than as part of a rotational strategy with marine finfish.</p>

Zone	Characteristics/Constraints	Area Policy
L	<p>Carna, Oronsay and Loch na Droma Buidhe</p> <p>This area encompasses the two largest islands in Loch Sunart, both of which lie close to the southern shore, and is part of a proposed Area of Great Landscape Value in the Highland Structure Plan. The steep and rugged island of Carna is an important landscape feature of the loch. Access to the mainland part of the coast in the south of this zone is difficult by land: the only vehicular route is a rough track which runs across the hills from Drimnin to Doirlinn. There are biogenic flame shell reefs north of Carna.</p> <p>There are two leases for salmon farming and one for halibut at Oronsay and these are close to the shellfish and finfish leases on the north side of the main loch. The separation distances between installations in this area are therefore limited.</p> <p>To the south of Oronsay, Loch Na Droma Buidhe is an important natural anchorage with a narrow entrance and access to this must be maintained. This also applies to recognised anchorages either side of Carna and the narrow entrance channels into Loch Teacuis.</p> <p>The islands, and in particular the west side of Oronsay, provide important creel fishing areas.</p> <p>The varied scenic character, intricate coastline, remoteness, and intimacy of much of this area make it valuable for wildlife tourism and recreation. There is also considerable diving interest in this area at various points around the islands and at sites in the main channel.</p>	<p>Support for marine finfish farming at its existing level in this area (medium scale).</p> <p>Support for salmonid farming at its existing level but presumption against the further expansion in size of installation of existing salmon farms surrounding Oronsay. If Environmental Impact Assessments are favourable, presumption in favour of the diversification of existing salmon sites to marine finfish for a trial period in the first instance or for rotation with salmon provided that there is no overall expansion in cage area.</p> <p>Development of shellfish farming will only be acceptable in this area as an alternative to existing finfish farming leases because of navigational and environmental constraints.</p> <p>Presumption against development in the vicinity of the channels east and west of Carna which provide anchorages and entry to Loch Teacuis.</p> <p>Due to exposure to westerly swells and the presence of creel fishing grounds presumption against development to the west of Carna.</p> <p>Any future proposals for finfish farm development in this zone will need to be carefully considered and the proximity of other fish farm sites in the Sound of Mull should be taken into account. Presumption against additional fin fish developments in this area unless Loch Sunart and the Sound of Mull are operated with single-year-class stocking and synchronised fallowing.</p>

Zone	Characteristics/Constraints	Area Policy
M	<p>Torr nan Con to Auliston Point</p> <p>This zone is part of the proposed Area of Great Landscape Value identified in the Highland Structure Plan. The area is remote and unroaded with the remains of an abandoned township and fort on the coast near its western end. There is also a recognised dive site just to the east of Auliston Point, near Carraig.</p> <p>Other than the Point of Ardnamurchan this zone represents the most exposed in the plan area. Though less dramatic in scenic terms than the coastline on the north side, it is valued for its archaeological heritage and views across the loch.</p>	<p>The exposed nature of this coastline is likely to discourage aquaculture and the western part merits protection on amenity grounds. The eastern part may however have some scope for development with robust gear as an alternative to development on the seaward side of MacLeans's Nose.</p> <p>Specific presumption against aquaculture developments around the approaches to Loch na Droma Buidhe (to safeguard navigation into this natural anchorage) and in the vicinity of Auliston Point and Carraig to safeguard the landscape setting of the archaeological site and diving interest.</p> <p>Any future proposals for finfish farm development in this zone will need to be carefully considered and the proximity of other fish farm sites in The Sound of Mull should be taken into account. Presumption against additional fin-fish developments in this area unless Loch Sunart and the Sound of Mull are operated with single-year-class stocking and synchronised fallowing.</p>

NB: "Small" and "medium" scale are relative terms. However as a guide for the purpose of this plan, a finfish farm of up to about 2000 sq.m. cage area would be regarded as "small" and one of up to 4000 sq.m. would be regarded as "medium". A "small" shellfish farm using the longline system would employ lines of up to 200m length to a maximum of 4 lines. A "medium" shellfish farm would employ up to 8 lines of 200m length each, up to 5 lines 300m each, or up to 4 lines 400m each. All other things being equal, the longer lengths of lines are harder to accommodate successfully in the landscape. A "small" shellfish farm using rafts would employ up to 4 rafts each 10m square, and a "medium" one would have up to 4 rafts each 20m square.

APPENDIX 1- EXTANT SEA BED LEASES - AUGUST 2004

CEC lease reference	Location and species	Permitted gear	Lease expiry date
AR1-15-2	MacLean's Nose, Sound of Mull <i>Salmon</i>	16 cages 70m circumference or 12 cages 80m circumference but not a combination of cage sizes	Mar. 2018
AR1-16-2	Between Glenborrodale Bay and Rubha Aird Drumnich <i>Mussels</i>	1 x 600m Longline	Jul. 2006
AR1-16-4	Between Glenborrodale Bay and Rubha Aird Drumnich <i>Salmon</i>	6 Cages each 15m x 15m	Apr. 2008
AR1-16-8	Eilean an Fheidh <i>Mussels</i>	4x 200m Longlines	Dec. 2005
AR1-17-4	Mouth of Glenmore Bay <i>Scallops</i>	13 x 250m Longlines	Dec. 2005
AR1-17-6	Port Nan Gall <i>Scallops</i>	6 x 200m Longlines	May 2007
AR1-20-5	Bunalteachan <i>Mussels</i>	3 x 180m Longlines	May 2006
AR1-21-2	Rubha Bhualte <i>Mussels</i>	1 x 100m and 1 x 200m Longlines	Mar. 2010
	East of Rubha na Aighean <i>Mussels</i>	1 x 200m and 1 x 800m Longlines	
	East of Rubha Aird Earnach <i>Mussels</i>	1 x 200m and 1 x 600m Longlines	
	Sailean Cuileag <i>Mussels</i>	No Gear - Intertidal area used for shellfish conditioning	
AR1-21-5	Invasion Bay (Camas na h-Airbhe) inner cage group <i>Salmon</i>	20 Cages each 20m x 20m between both sites	May 2008
	Invasion Bay (Camas na h-Airbhe) outer cage group <i>Salmon</i>		
AR1-22-5	Achleek / Liddesdale outer cage group <i>Salmon</i>	20 Cages each 16m x 16m	Jun. 2007
	Achleek / Liddesdale inner cage group <i>Salmon</i>	24 Cages each 16m x 16m	

CEC lease reference	Location and species	Permitted gear	Lease expiry date
AR1-24-3	Rahoy - Loch Teacuis <i>Mussels</i> Loch Teacuis - south side <i>Mussels</i> Loch Teacuis - south side <i>Mussels</i> Carnliath - Loch Teacuis <i>Mussels</i>	7 x 200m Longlines Hardening off area Hardening off area Hardening off area	May 2006
AR1-24-5	Camas Glas <i>Salmon</i>	8 Cages each 24m x 24m	Jan. 2014
AR1-24-8	Loch Teacuis <i>Halibut</i>	36 Cages each 12m x 12m	Sept. 2014
AR1-26-2	Glenmore Bay <i>Salmon</i> Rubha an Aisig - Oronsay <i>Salmon</i> Port Phadruig - Oronsay <i>Salmon</i> Laga Bay <i>Salmon</i>	26 Cages each 15m x 15m 10 Cages each 12m x 12m 20 Cages each 16m x 16m 72 Cages each 15m x 15m	Dec. 2003 (renewal in progress)
AR1-26-3	Loch na Droma Buidhe - Oronsay <i>Halibut</i>	44 Cages each 15m x 15m	Dec. 2003 (pending renewal)

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APPENDIX 3: SLIPWAYS AND JETTIES WITHIN THE PLAN AREA

Place Name	O/S Grid Reference	Type	Ownership / Access	Condition	Main Use
Kilchoan	NM 481636	Concrete Slipway/ Jetty	Public	Very good condition but narrow	Inshore fishing and some pleasure craft
Mingary	NM 495627	Concrete Slipway	Private with Public Access	Very good condition, in constant use	Mull ferry
Glenmore Bay	NM 591 618	Slipway / Floating Pontoon	Private	Good - constant use	Fish farm jetty
Glenborrodale	NM 670 670	Concrete Slipway/ Jetty	Private	Unknown	Estate use
Glenborrodale	NM 608 609	Slipway	Private	Unknown	Estate use
Laga Bay	NM 632 608	Slipway / Floating Pontoon	Private but some public access	Good - constant use	Fish farm / boat charter / launching
Rubha Bhuilt	NM 685 635	Slipway	Private	Very good	Shellfish farming operations
Salen	NM 688 641	Slipway / Stone Jetty	Private with public access (launching fee)	Short ramp onto soft gravel beach alongside stone/ wooden pier. Launching possible with four-wheel drive vehicle. Upgrading of slipway facilities planned.	Inshore creeling, pleasure boat launching
Resipole	NM 674 638	Slipway	Private with public access (launching fee)	Good quality concrete slip with shallow angle but tight at top - drop off end on to beach at low water.	Pleasure boat launching - free to Resipole Farm residents
East of Strontian	NM 823 607	Stone Jetty	Unknown	Concrete capping loose in places	Unknown; presumably pleasure craft
East of Liddesdale	NM 786 597	Slipway / Floating Pontoon	Private	Good - constant use	Fish farm jetty
Approach to Laudale	NM 758 598	Slipway	Public	Shallow concrete slipway, some large cracks in capping, considerable weed fouling.	Pleasure craft launching
Laudale Estate Slipway	NM 707 604	Slipway	Private	Relatively new concrete slipway	Estate use
Camas na h'-Airbhe (Invasion Bay)	NM 731 608	Slipway / Floating Pontoon	Private	Good - constant use	Fish farm jetty

Place Name	O/S Grid Reference	Type	Ownership / Access	Condition	Main Use
Glencripesdale (derelict barge)	NM 663 597	Grounded Barge	Private	Beached steel barge capped with hardcore and faced on north side with rock armour.	Built to facilitate timber extraction by sea
Glencripesdale (derelict jetty)	NM 657 593	Concrete Jetty	Private	Derelict	Disused Victorian jetty
Loch Teacuis	NM 640 562	Gabion Jetty	Private	Good but basic	Shellfish growers and private vessels operating from Loch Teacuis

APPENDIX 4: UK BIODIVERSITY ACTION PLAN HABITATS AND SPECIES RELEVANT TO THE LOCH SUNART AREA

UK BAP Habitats

Wave exposure within the Loch Sunart system ranges from very exposed to very sheltered, and this, combined with the presence of various types of substrata, has resulted in an extensive range of habitats. A number of these are designated as priority habitats in the United Kingdom Biodiversity Action Plan (UK BAP), and are characterised as follows:

- ◆ **Mud habitats in deep water** - These habitats are well represented within the loch with each of the basins being largely dominated by this habitat. All three UK species of sea pen *Funiculina quadrangularis*, *Virgularia mirabilis* and *Pennatula phosphorea* are found at high densities. Also indicative of this type of habitat is the Norway Lobster, *Nephrops norvegicus* which is fished extensively by creeling within the basins if the inner loch.
- ◆ **Sea grass beds** - sea grass beds are found at a number of locations within the loch such as in Salen Bay and on the south side close to the Laudale Narrows.
- ◆ **Coastal Saltmarsh** - is found at the head of Loch Sunart and at sheltered locations throughout the larger bays within the plan area.
- ◆ ***Modiolus modiolus* beds** - the main types of biogenic reef found within the plan area are horse mussel beds which provide habitat for numerous other species.
- ◆ **Tidal Rapids** - this includes tide-swept habitats such as the narrows at Laudale and at the entrances to Loch Teacuis. These high-energy environments are characterised by clearer water and reduced fine sedimentation.

UK BAP Species

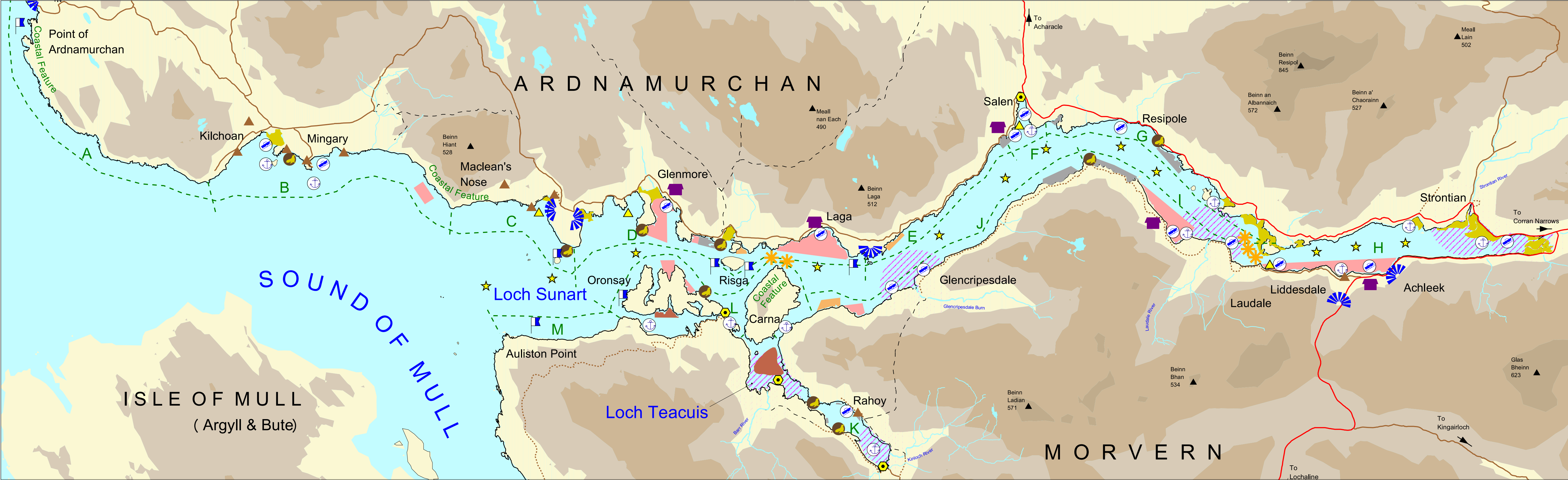
The United Kingdom Biodiversity Action Plan also lists a number of nationally important 'priority' species. These include a number of species of whales, dolphins and fish; mammals such as otters, and some seabirds. Whilst the majority of these are either mobile or are protected under UK legislation there are a number of outstanding species not protected by law which occur in Loch Sunart.

- ◆ ***Funiculina quadrangularis* - tall sea pen** - this species is the tallest of the UK sea pen species and is found at several locations throughout the loch, particularly in the low energy environment of the deep muddy basins. This is a deep water species, normally found offshore.
- ◆ ***Ascophyllum nodosum* *ecad. mackaii*** - this species is restricted to very wave-sheltered locations and in the UK is only found in a small number of sea lochs. Five locations have been recorded for Loch Sunart and Loch Teacuis.
- ◆ ***Thyasira gouldi* - Northern Hatchet Shell**, is a small bivalve mollusc which has been recorded in the inner basins of the loch and which has only been found at a few sites in the UK. These populations are considered to be a relic from the last ice age.
- ◆ ***Ostrea edulis* - Native Oyster** - the native oyster is found at several locations within the loch.

The presence of UKBAP habitats and species must be taken into account when developing aquaculture sites.

In addition to the UKBAP species and habitats, local authorities throughout the UK have embarked on a process of identifying important species and habitats specific to their areas. A Local Biodiversity Action Plan for Lochaber has recently been published.

Loch Sunart Aquaculture Framework Plan: Policy Map



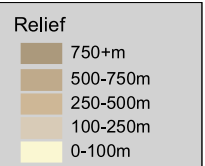
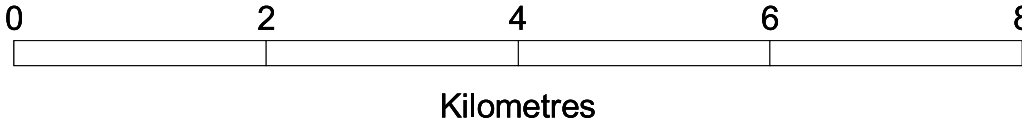
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Notes:

The above map is intended to be indicative rather than definitive, the marked presence of a road or track does not indicate a right of way.

Sea Bed Lease areas are reproduced from data provided by the Crown Estate, the presence of the site on the map indicates that the lease was extant in August 2004 it does not mean that the lease was active at that time.

Scale: 1:60000



KEY

Extant sea bed leases (as at 06/02)	General	Infrastructure	Nature Conservation	Recreation and Archaeology
Salmon	Area policies (see table)	A Road	File Shell Bed	Viewpoint
Halibut	Intertidal area	B Road	Seals	Recognised dive sites
Mussels		Other Road	Sea grass	Entrance to game fishing rivers
Scallops		Footpath	Ecod mackaill	Scheduled Ancient Monument
		Shorebase	Seapens	
		Jetty / Pier / Slipway		
		Anchorage		