

LOCH HOURN



AQUACULTURE FRAMEWORK PLAN

SEPTEMBER 2001

FOREWORD

Fish Farming Framework Plans were introduced by Highland 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 Hourn replaces the version prepared in July 1989 and is one of a second generation of plans designed for the current decade. Like its predecessor, the plan's status is 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, it may come within the scope of the legislation within the lifetime of the plan.

Various improvements on the framework plan format have been introduced with this second series. The visual presentation has been upgraded to include a coloured policy map, more 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 also 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 consultation with a wide range of interests (see Appendix 3). A full report on the consultation exercise was also prepared, copies of which can be obtained from the Planning and Development Service. The Framework Plan now supplements the statutory guidance for the terrestrial area contained in the Highland Structure Plan and the Skye and Lochalsh Local Plan. Collectively these form the policy background against which the Council will assess all aquaculture proposals in Loch Hourn.

To help ensure that The Framework Plan remains responsive to changing circumstances the Council will monitor the Plan's progress and update it as necessary.

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INTRODUCTION

❖ Location

1. Loch Hourn is one of the largest sea lochs on the mainland west coast and is located in one of Scotland's most important wild landscape areas. It is one of the few remaining sea lochs which is unroaded for the majority of its length and it is widely regarded as the best example of a fjord on the UK coast.
2. Both finfish and shellfish farming take place in the outer loch and aquaculture represents a significant source of employment and income for the small resident community here. The number of sites which are available for aquaculture development are limited however, either by physical factors or by the range of other interests which have to be taken into account. A framework of planning policies is necessary to guide developers whilst safeguarding the unique character of the loch and its surrounding area.
3. In addition, Loch Hourn spans two of Highland Council's administrative areas - the former Districts of Skye & Lochalsh and Lochaber - so is represented in two Local Plans. The Aquaculture Framework Plan provides additional information in relation to aquaculture development within the context of these Local Plans.

❖ Planning Policy Background

4. The 1999 national planning guidance for the location of marine fish farms lists Loch Hourn as a Category 2 loch. This means that any proposals for new fish farm sites here, or significant modifications at existing sites, will require an environmental impact assessment. At the time of writing a 'significant modification' is taken to mean any single or cumulative increase of 25% or more in biomass or equipment which would result in a development holding a biomass of 250 tonnes or more, or a cage area of more than 2000 square metres. The guidance also indicates that the prospects for further development in Category 2 areas are likely to be limited. There may, however, be the potential for modification of existing operations or limited expansion of existing sites if this will result in an overall reduction in environmental effect and enhance the quality of the area and its hydrological conditions. A summary of the provisions of the national planning guidance is contained in appendix 3.
5. The national planning guidance also recommends that local authorities produce framework plans for coastal waters within their areas. Highland Regional Council first published a Fish Farming Framework Plan for Loch Hourn in July 1989 at a time when several leases for finfish and shellfish farm sites had been granted in the inner loch. In the subsequent eleven year period, changes in the technology and economics of finfish farming, together with fish health problems experienced in the inner loch, have meant that such developments are now limited to the wider, more open and better-flushed outer loch. Shellfish farms, although present in the outer loch, are technically better suited to the more sheltered nature of the middle and inner reaches of the loch.

Figure 1: Location of Framework Plan Area

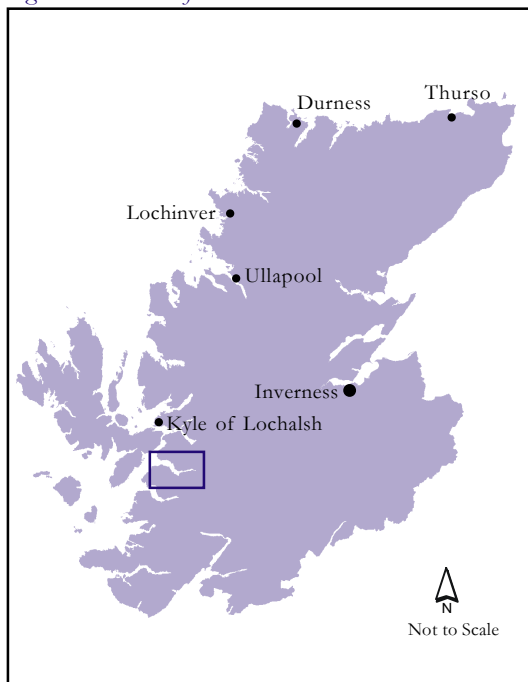
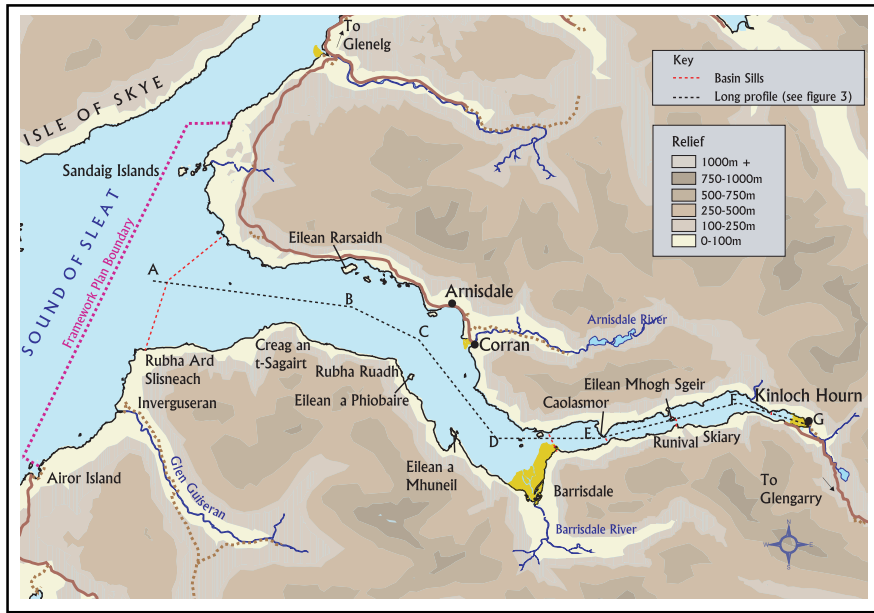


Figure 2: Boundary of Framework Plan area showing line of hydrographic profile used in Fig.3



6. The northern boundary of this plan is the same as that used in the 1989 document. The southern boundary has been extended slightly to encompass the northernmost tip of Airor island (See Fig 2). This change has been made to provide strategic guidance for this extended, sensitive stretch of coastline and to allow for contiguous coverage with the Loch Nevis framework plan.

OBJECTIVES

7. The objectives of the framework plan for Loch Hourn are:

- to identify opportunities for aquaculture development compatible with other interests.
- to raise public awareness of the multi-faceted resources of Loch Hourn and its environs.
- to safeguard the landscape and natural heritage interests of the loch.
- to identify investment priorities for infrastructure to support the development of aquaculture and to maximise the general economic and recreational value of the loch.

FEATURES

❖ Topographic Setting

8. Forming the northern boundary of the remote Knoydart peninsula, Loch Hourn represents one of the deepest natural incisions in the mainland coast of Scotland. However its mouth has a degree of shelter from the landmass of the Isle of Skye. The setting of the loch is characterised by high, steep and rugged slopes which drop to sea level with, for the most part, only a minimal coastal fringe. Throughout the area there is considerable evidence of past glaciation which has shaped the metamorphic bedrock into the landforms seen today.

9. Like Loch Nevis on the south side of the Knoydart peninsula, Loch Hourn has two distinct dog-legs which tend to separate it into three main zones – an outer, middle, and inner section. The outer loch is open to the west and somewhat exposed, the middle section is still quite broad but relatively sheltered, while the innermost section is sheltered but relatively narrow.

10. The dramatic scenery and sense of remoteness in the unroaded, middle and inner sections of the loch attracts many visitors to the area on foot. However, on close inspection there is considerable evidence of past habitation, through the presence along the length of the inner loch of ruined cottages, drystone dykes and numerous hillside lazy beds. The handful of small

estate cottages scattered along the shores of the inner loch, now only used as holiday accommodation, are more obvious remnants of the past habitation of the area.

❖ Settlements

11. The main settlement in the vicinity of the framework plan area is Glenelg, with smaller settlements at Arnisdale, Corran and Kinloch Hourn. In addition there are croft houses situated along the road from Glenelg to Arnisdale and on the north of the Knoydart Peninsular at Croulin, Inverguseran and Airor. The total population in the vicinity of the plan area is around 200 people.

❖ Hydrography

12. Loch Hourn is one of the largest and deepest lochs on the west coast of Scotland having an estimated low water volume of 2005 million cubic metres. Only Loch Torridon and Loch Fyne are larger in terms of volume and only Loch Fyne is comparable in depth. The maximum depth of 185m is found in the outermost of five basins in the loch. The outer boundary of this basin and the outer boundary of the loch is a sill 88m deep which forms a shelf into the open sea.

13. The outer basin runs from the mouth of the loch to Barrisdale Bay. Here the second sill, at a depth of only 9m, marks the entrance to the narrow inner loch and is represented on the surface by the presence of Eilean a' Garb-Lain at its northern end. The next three basins are progressively shallower and shorter with

decreasing clearance over the sills as one approaches Kinloch Hourn. The bathymetry of the loch is shown in long profile in figure 3 below.

14. The presence of deep basins within Loch Hourn and the shallow nature of the four inner sills means that water movement is restricted, resulting in an extremely long flushing time of 11 days. Water exchange is, therefore somewhat limited and there is the very real risk of nutrient enrichment within the inner loch basins.

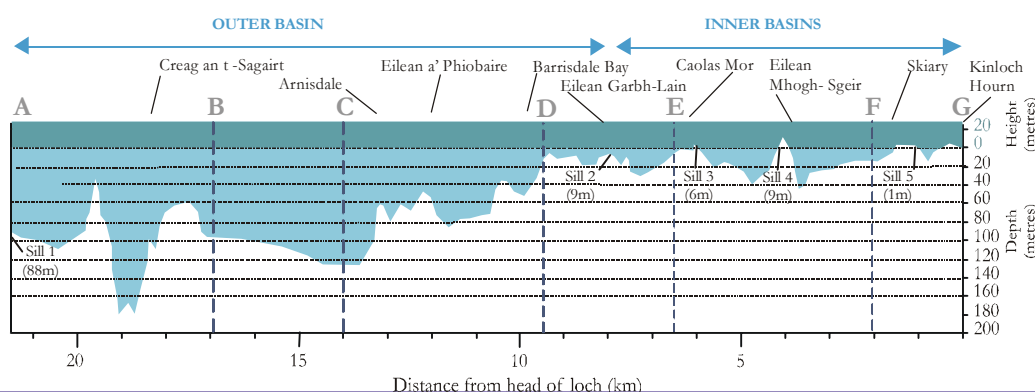
SCALE OF AQUACULTURE DEVELOPMENT AND POTENTIAL

❖ Historical Development

15. During the 1980's a number of leases were granted by the Crown Estate for finfish farming sites for salmon and sea trout in the inner loch basins. Over a period of years these sites experienced fish health problems and high mortality rates and as a result were never considered to be particularly successful. There was also concern in some quarters that fish farming was incompatible with the wild land character of the inner loch. These leases changed hands in the late 1990's and were subsequently relinquished in favour of consolidation of gear at outer loch sites.

16. Leases for shellfish farming were also more widespread when the last framework plan was prepared though not all of them were developed in practice because of exposure problems.

Figure 3: Hydrographic long profile of Loch Hourn from west (mouth of Loch) to east (head of loch)



❖ Present level of development

Salmon Farming

17. Salmon farming in Loch Hourn is currently focussed on one large site at Creag an t-Sagairt on the south side close to the mouth of the outer loch. At the time of writing, this site was one of the largest salmon farms in Highland in terms of the biomass of fish stocked. In addition, a small area at the west end of Arnisdale Bay is leased for temporary harvesting purposes only. The salmon farm is mainly supplied by sea from Kyle of Lochalsh. However, the shorebase in Arnisdale is used for the small scale day-to-day servicing of the site and equipment storage. The position of the leased areas is shown in the Area Policy Map and the permitted gear is summarised in Appendix 1.

Shellfish Farming

18. Three of the shellfish leases which were extant when the previous framework plan was produced remain in operation at the time of writing. The two main sites, which are used for on-growing, are on the south side of the loch opposite Corran - to the north of Eilean a Phiobaire and to the south at Camas Domhain. Harvesting of mussels here was hampered by an algal bloom which effected the mussels in the loch for an extended period during the summer of 2000. A further two sites, in the inner loch, are used for mussel spat collection. The gear permitted at these sites is also summarised in Appendix I.

19. Shellfish sites in the outer loch can suffer problems as a result of their exposure. Although the existing sites are tucked close into the shore on the south side, there can be considerable wave action here in certain sea conditions. This can cause mussels to be lost from the dropper ropes, reducing the quantity available for harvesting but it can also cause stress to those remaining on the lines and reduce growth rates and meat yields. On occasions sea states in the outer loch

can be such that harvesting mussels from a small boat can be hazardous.

❖ Future Prospects for Aquaculture Development

20. Loch Hourn lies within the Knoydart National Scenic Area, recognising its national status as a landscape asset and a wilderness resource. Installations therefore have to be carefully located, moderate in scale, and of a design that minimises their impact on their scenic surroundings. Surface buoyancy for shellfish farms, for example, needs to be low in profile and of suitable colouration. Within these constraints there is however scope for aquaculture to be pursued in Loch Hourn and some possibilities for expansion. Close liaison between aquaculture interests, the local planning authority, and Scottish Natural Heritage, and the use of professional landscape design expertise, where appropriate, can help to make the most of the opportunities which exist. Further information can also be obtained from the National SNH documents 'Skye and Lochalsh Landscape Character Assessment' and 'Marine Aquaculture and the landscape'.

21. The salmon farming industry is increasingly looking to diversify into new species and there has been much interest in the potential for cultivation of

Figure 4: Inner loch from Kinloch Hourn



halibut and cod in recent years. Whilst it may be possible to on-grow cod in reasonably exposed sites, including those currently used for salmon in Loch Hourn, 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. Halibut farms are likely to be economically viable at much lower stocking biomasses than salmon and there may be a perceived potential to redevelop the inner loch for species such as halibut which require more sheltered sites. However this should be resisted because of the poorly flushed nature of the inner loch basin.

22. Within the aquaculture industry there is some interest in two or more salmon sites being used in rotation with each other and fallowed for extended periods between farming cycles. In Loch Hourn this would require the provision of an additional site for rotational salmon farming, or would require the existing site to be utilised in rotation with sites in other sea lochs. The possibility might also exist for salmon to be farmed on a single site in rotation with other marine finfish species. Such rotational strategies either between sites or between species might have benefits for the control of sea lice infestations and other disease problems.

23. In the future, given improving technology, it may become possible to moor fish farm cages in more exposed sites than are currently viable. This could open up the prospect of new sites for development. It is essential, however, that navigational access is maintained, that there is sufficient separation distance between adjacent sites and that any future developments are located away from the entrance to important game fishing rivers. The Crown Estate, who act as landlords in relation to seabed leases have produced indicative guidance as to the minimum separation distances that should exist between fish and shellfish farm sites. This guidance was developed in the late 1980's and was included in the Scottish Executive's national planning guidance for Marine Fish Farms in published in 1999. The guidance provides for an indicative separation distance between finfish farms of 8 km. Between a finfish farm and a shellfish farm the indicative separation distance is 3km and between two shellfish farms 1.5km. The guidance advises that closer siting may be possible between small scale farms and in large loch systems or open water.

24. With regard to shellfish developments there are only a limited number of sites within the inner loch that may be suitable for the longline culture of mussels. These locations are identified in the attached policy map.

25. The fact that water movement in the inner loch is slow enough to allow for a good settlement regime is also likely to mean that supplies of nutrients in this area are limited, particularly when the long flushing time of the loch is also considered. Sites in the innermost basins are therefore likely to offer poor shellfish growth rates when compared with more dynamic, better-flushed sites such as those in the outer basins.

26. To date no empirical research has been carried out in Loch Hourn to establish its biological carrying capacity (eg for shellfish and finfish production) and the Council normally does not have the resources to carry out this type of modelling work. In the absence of such information a cautious approach should be taken in relation to developing new sites to ensure that as far as possible the carrying capacity of the loch is not exceeded and growth rates are maintained.

DEVELOPMENT ISSUES AND PLANNING CONSTRAINTS

❖ Economic Development

27. Because of its remoteness and very small population, the prospects for employment in the vicinity of Loch Hourn are very limited. A number of local residents are employed in aquaculture, farming, forestry, estate work including game fishing and small amounts of inshore creel fishing. Seasonal tourism provides a few opportunities for others.

28. Planning policy needs to nurture economic activities such as aquaculture which can capitalise on the area's natural resources and provide local employment opportunities. However it also has to do this within a framework which ensures development is sustainable and in harmony with other interests in the area.

29. At the time of writing there were 7 full-time equivalent staff employed at the salmon site during periods of routine operation. The core staff is

assisted during periods of harvesting, by a team based in Kyle of Lochalsh, who also serve the company's other farms in the area.

30. Most of Scotland's salmon farms tend to be controlled by interests based outwith the immediate area and in 2000 Loch Hourn was no exception. Shellfish farming on the other hand generates fewer local jobs but the farms tend to be owned and operated by local inhabitants and it can offer additional local employment at times of peak harvest. Here the majority of the income from the site will remain locally and it represents a valuable form of supplementary income for crofting communities.

31. Tourism is a significant seasonal employment sector in Skye & Lochalsh, however tourist facilities in the Arnisdale, Corran and Kinloch Hourn areas are restricted to bed & breakfast facilities and self-catering holiday lets. The proximity of the Kyle Rhea ferry route to Skye and the designation of the Arnisdale road as a tourist route does, however, bring passing trade.

❖ Navigation

32. The mouth of Loch Hourn opens onto the Sound of Sleat. This is a navigable channel allowing large vessels, such as coastal tankers, freighters, and even on occasions submarines passage south of the Isle of Skye via Kyle Rhea and into Loch Alsh. It is important that any future developments within the plan area but outside the mouth of the loch itself do not impinge on this commercial traffic or present a navigational hazard to smaller coastal vessels. Any installations must be adequately lit with appropriate navigation lights so that they remain visible at night. It should be noted that under Section 34 of the Coast Protection Act 1949 there is a requirement for all works within Scottish tidal waters below Mean High Water Spring Tides 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.

❖ Water Quality

33. Live shellfish put on the market must by law meet strict criteria in terms of hygiene. For this purpose shellfish production areas are classified according to the presence in the water and shellfish samples of certain types of bacteria. At the time of writing Loch Hourn had a provisional seasonal classification of Category 'A' from August to May inclusive and Category 'B' for June and July only. Shellfish landed during the months when the 'A' classification is in force can go direct to market for human consumption. There is no legal requirement for any processing other than washing. During the season of the 'B' classification, mussels must be either depurated, heat treated, or re-laid in an area having an 'A' classification in order to meet Category 'A' requirements and the end product standards. These classifications are subject to ongoing monitoring carried out by the Food Standards Agency and are published annually.

34. In siting shellfish farms in particular it is important that developments are not close to any significant sewerage discharges, including the discharge from septic tanks. Any application in relation to the siting of marine aquaculture developments is referred to NOSWA for their expert advice in this regard.

35. In addition to the statutory requirements, volume buyers of farmed shellfish also require certain criteria to be met. For example, they may request that mussels are depurated, year-round to ensure a high quality product reaches the market place. They may also stipulate that mussels should not be supplied during periods in which fish medicines have been used on nearby finfish sites. It is not therefore in the interests of the shellfish farming industry to be in close proximity to fin fish farms and this serves to illustrate the importance of water quality and effective separation distances.

36. 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 are not uncommon in Loch Hourn and other west coast sea lochs during summer months.

37. All aquaculture activities rely on high water quality and a certain amount of water movement. In the case of shellfish longline culture, water movement is necessary to supply planktonic feed to the culture site. For finfish farming, water movement is necessary to ensure adequate flushing. On this criterion the loch's outer basin is the most suitable for aquaculture development.

❖ Infrastructure

Roads

38. Road access to Loch Hourn is limited to two single-track roads, both of which access separate parts of the loch and have only distant connections to the main road network. One serves Arnisdale and Corran from Glen Shiel via the Ratagan pass and the village of Glenelg. The other serves Kinloch Hourn from Glen Garry. Both roads are of a winding, undulating nature and upgrading of these roads to twin-track status is unlikely, at least within the lifetime of the plan, because of the difficult topography and very sparse population. Any future upgrade could impact on the wild qualities of the area. Bulk servicing of a large fin fish farm such as the one at the mouth of the loch, should be by sea from Glenelg or Kyle. Lighter loads and labour can travel on the local roads but local observations have indicated that large lorries have in the past, caused significant damage to road verges.

39. The road serving the north side of the outer loch from Glenelg is a designated tourist route, with fine views at various points from Màm an Staing

eastwards, but while there are many passing places, there are few locations where cars can be parked. Localised congestion due to cars blocking passing places in the tourist season is not uncommon.

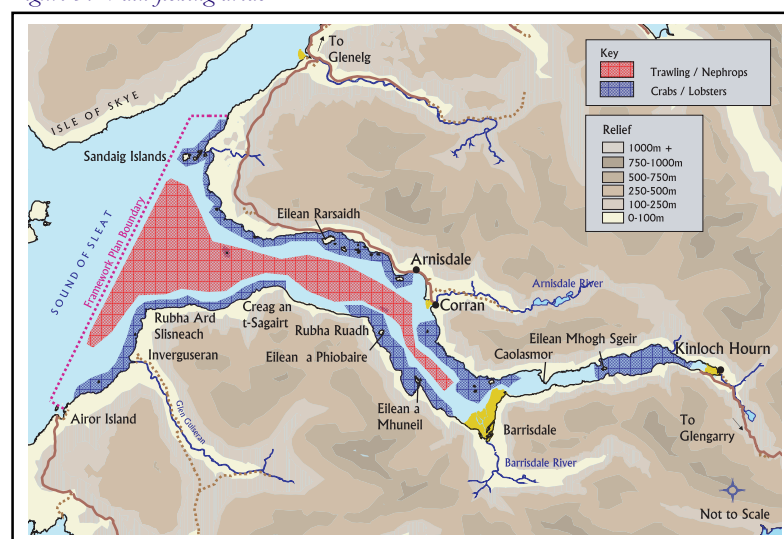
40. The road runs fairly close to the shore from Eilean Ràrsaidh as far as the car park at Corran but its winding, undulating nature, means that its scope for servicing aquaculture developments is limited.

41. The head of the loch is accessible via a longer, even more remote single-track road which travels 33 miles from the junction with the trunk road at Loch Garry to Kinloch Hourn. There is a 7.5 tonne weight restriction on the bridge of Quoich and the last mile of this route down to the head of Loch Hourn is very steep with numerous sharp bends and limited passing spaces. As well as serving the isolated community of Kinloch Hourn, this route provides access for cross-country walkers travelling to and from Inverie on the south side of the Knoydart peninsula.

42. Facilities for landing within the plan area are limited, the main access being at Arnisdale. Day-to-day servicing of the salmon farm at Creag an t-Sagairt is carried out from here, mostly using plastic workboats to ferry equipment and personnel to the cage sites. When larger items of equipment and supplies are required a landing craft type workboat is loaded from the beach here using a telescopic forklift. Beach access is gained by a concrete ramp in front of the shore base.

43. The ramp also provides access for small boats to be launched and recovered from the beach. However, due to the loose pebble nature of the beach, this is

Figure 5: Main fishing areas



only really feasible using a four-wheel drive vehicle other than at the top of a large spring tide.

44. Arnisdale Bay also has a small but prominent concrete jetty situated in front of the estate house. The jetty belongs to Arnisdale Estate but is in poor condition and inaccessible at low spring tides. Local boats occasionally use the jetty but general use is discouraged due to safety concerns.

45. The Skye and Lochalsh Local Plan identifies an area of land at the western end of Arnisdale Bay as having the potential for the development of a new shorebase with slipways, car parking and a public jetty.

46. Kinloch Hourn also has a slipway situated at the south side of the loch. However the tortuous nature of the road into this area means that this slipway is used more for the recovery of boats from moorings than for actually launching boats trailed in by road. There are a number of old boathouses situated towards the head of the loch but these are no longer used and are in various states of disrepair.

❖ Inshore fishing

47. Inshore fishing in Loch Hourn takes the form of creeling and some seasonal trawling. However, as with other large sea lochs on the West Coast, the native fish stocks in Loch Hourn appear not to be as rich as in the past. This is usually attributed to over-fishing. In the past the loch was regarded as a good place for the capture of sprat and herring and many boats targeted this fishery up until recent times. However the season

during which these fish were found in the loch now coincides with the closed season for mobile gear. Up until the late 1950's runs of wild salmon and sea trout supported commercial netting stations as well as the sporting estates in the area.

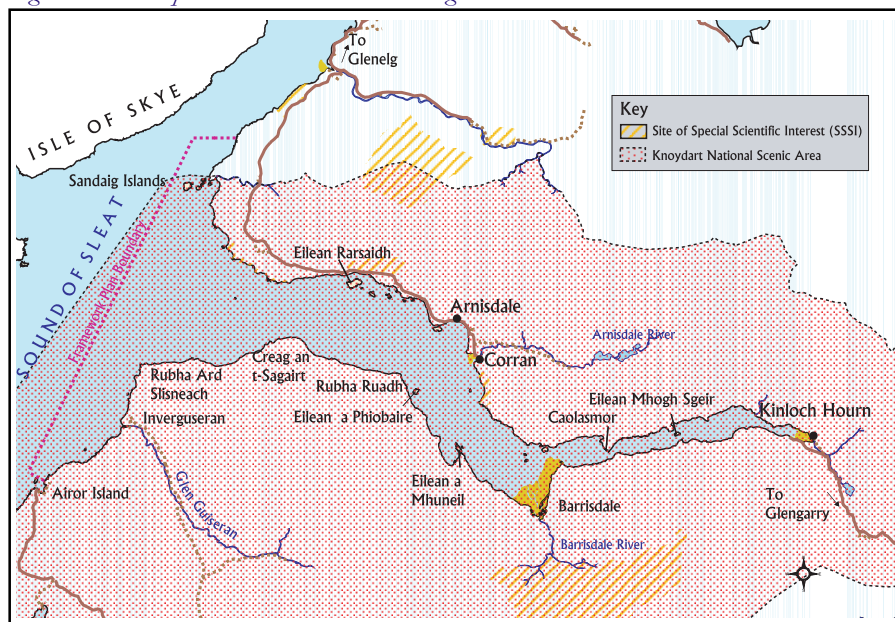
48. Trawling is at present only permitted in the loch from April to September when the loch is fished by the Mallaig and Kyle fleets and provides them with a valuable fishing opportunity during bad weather. Nephrops are the main species targeted during this time. There is, a local strength of feeling against trawling in the loch and reports of vessels fishing at night during the closed season are not uncommon. The main commercial fishing grounds in Loch Hourn are shown below in figure 5 and on the policy map.

49. Fishing in the inner loch is nowadays limited primarily to creeling for crustacean shellfish such as lobsters and crabs which is undertaken by local boats. There is also some creeling in the deeper outer loch basins for Nephrops.

❖ Landscape and visual amenity

50. Loch Hourn forms an important part of the Knoydart National Scenic Area (see figure 6 below). The NSA designation identifies remoteness, ruggedness, and fine coastline as key features of the area and formally acknowledges Knoydart's status as "one of the wildest and most beautiful parts of mainland Scotland". The need to conserve the scenic quality and landscape character of the loch inevitably constrains the development options for aquaculture

Figure 6: Landscape and nature conservation designations



installations and shorebase facilities, particularly in the sensitive inner area. However, the designation does not constitute a blanket presumption against development and designs which relate to the specific characteristics and qualities of the landscape and exploit natural screening will always be easier to accommodate.

51. The landscape character of the outer, westernmost, part of the loch is fairly open but the presence of high, steep hill slopes on both sides adds a sense of enclosure to the area. This is heightened by the close proximity of the Isle of Skye across the Sound of Sleat. The north side of the outer loch tends to be viewed from close quarters more often than the south because the road and most of the settlement is here. On balance this tends to make it somewhat more sensitive in landscape terms. The south side is sensitive in its own right, but it is usually viewed from a distance across the loch, and its rugged character tends to camouflage and draw the eye away from installations at sea level near the shore – at least when viewed across the loch at low level. However, having the right scale, orientation, and colouration of surface gear is important. Care particularly needs to be taken with the cumulative build up of gear on large sites, eg the addition of ancillary equipment such as work rafts and feeding barges, which may make an operation more prominent. Attention may also be drawn to aquaculture installations by the activities associated with them. This could include boat movements and the use of generators and other machinery during the day-to-day operation of the site. All activities of this nature could impact on the landscape perception.

52. The middle reaches of the loch, between Corran and Barrisdale Bay, are somewhat more enclosed and intimate, in part because of the lack of road access. So the considerations above apply along with the general proviso that increasing restraint is needed as one moves further up the loch. The inner loch east of Barrisdale Bay is particularly sensitive to the visual impact of aquaculture developments given its narrow nature, the sense of wild land and the fact that it is overviewed from the south side for most of its length by the Kinloch Hourn to Barrisdale footpath. However, there may be some potential for the siting of a small number of shellfish longlines in the outer basin of the inner loch, close to the north shore.

❖ Nature Conservation

53. Loch Hourn contains a wide variety of marine habitats characteristic of a fjordic sea loch. Of particular note are the deep muddy basins and sublittoral rock habitats found throughout the loch, which are relevant to UK Biodiversity Action Plans and the EC Habitats Directive.

54. Underwater biological survey data is somewhat limited here compared to other sea lochs although SNH and the Joint Nature Conservation Committee (JNCC) have carried out some video surveys of the deep basins of the outer loch using a Remote Operated Vehicle (ROV). The video surveys have provided good examples of the wildlife communities of these deep, muddy, reduced-energy basins, including the fireworks anemone and the giant or slender sea pen as well as burrows in the soft mud containing the commercially important Norway Lobster (*Nephrops*). A species of deep water brittlestar (*Asteromyx loveni*) has been found living on large sea pens from 100m downwards in the outer basin of the loch. This species is normally only found in depths of several hundred metres.

55. Rock and boulder reefs are found throughout the loch and support the normal range of biotopes expected within a sea loch. The steep bedrock walls of the outer loch are of particular note, being inhabited by a number of sponge species as well as the brittlestar *Leptometra celtica* which is only found in Scotland. Walls and reefs in the more sheltered inner loch are characterised by the presence of large numbers of the anemone *Protanthea simplex*.

56. Above water the inner loch is noted for the presence of golden eagles, particularly near its head. In the inner loch the island of Eilean Mhogh-sgeir is an important local heronry where up to 15 pairs of herons have been known to nest. It is also a nesting site for terns. Other fish-eating birds such as black guillemots and shags are regularly observed within the loch.

57. The islands of the outer loch are important haul-out sites for the local population of common seals, and otters are often seen in the inner loch. These two types of mammal probably represent the greatest attraction for wildlife boat trips on the loch.

58. Parts of the terrestrial area adjacent to the loch are also of importance in nature conservation terms as well as being of high scenic value. Both the coastline

of the loch itself and the surrounding hillsides contain a number of geological and biological features which have been designated as Sites of Special Scientific Interest. These areas are shown in figure 6. There are a number of areas of coastal native woodland, particularly on the north shores of the inner loch. Some of these are believed to be unique populations isolated since the end of the last ice age. Within the rivers feeding the loch salmon are an Annex 2 listed species and freshwater pearl mussels may be present. These would need to be considered if their presence was confirmed. Salmon and sea trout, whilst important species in their own right, are essential for the survival of freshwater pearl mussels since they form the intermediate host for the larvae.

59. Given this variety of wildlife interest, the location of any new aquaculture developments needs to be carefully considered to conserve the distinctive natural history of the area.

❖ Recreation

60. The Loch Hourn area is best known for the opportunities it offers for walking and climbing in remote and rugged terrain. However it also attracts yachtsmen and divers. The main aim of the framework plan in relation to recreation is to ensure that the area's scenic character and features which draw visitors in are not compromised by unsympathetic development. There is also a need to safeguard key anchorages and wildlife resources and to encourage reasonable separation of fin fish farms from the mouths of game fishing rivers. The main areas of constraint in this regard are indicated on the policy map.

61. The most popular recreational activity is long-distance walking into and across the Knoydart peninsula using Arnisdale, Kinloch Hourn, or Inverie as points of access. People also visit the area to climb some of the hills overlooking the loch, eg Ladharr Bheinn and Beinn Sgritheall, from where fish farm cages in the loch can be visible. A long-distance footpath runs along the south side of the inner loch from Kinloch Hourn to Barrisdale where there is a camping area and bothy. The path then continues over Màm Barrisdale to Inverie on Loch Nevis where there is a passenger ferry connection to Mallaig. These routes represent some of the most popular long-distance walking routes in the Highlands and the presence of large numbers of visitors in season can

exert considerable pressure on limited resources. A small passenger ferry also operates from Arnisdale and can carry walkers direct to or from Barrisdale or Kinloch Hourn. In addition a footpath follows the coastline for a few miles on the north side of the loch from Corran to the small islets of Corr Eileanan. The road from Glenelg to Arnisdale is popular with cyclists during the summer months and mountain bikes are sometimes used on the coastal footpaths though they are generally not well suited to this.

62. Sailing vessels are often seen in the outer loch and they occasionally anchor, or use moorings in Camas Bàn (Arnisdale Bay) for overnight stops. A number of local residents also have small sailing and powerboats that are kept on the shore and launched when required, or are left on moorings at Camas Bàn. There are a number of other anchorages within the framework plan area which are noted in the Clyde Cruising Club's sailing directions. These are shown on the policy map and may also contain permanent moorings. Although the loch sills are very shallow in places, particularly at the two sets of narrows, the loch is navigable right up to its head.

63. Sea kayaking is also popular on the loch with launching possible at Arnisdale, Corran, and Kinloch Hourn. The impressive scenery and sense of enclosure and wilderness in the narrow inner loch is the main draw for participants in this activity.

64. Loch Hourn has a number of noted diving sites throughout its length and is visited several times a year by groups of recreational divers. Dive boats can be launched at the ferry slipway at Glenelg to access sites in the outer loch but more commonly they are launched off the pebble beach at Arnisdale using four-wheel drive vehicles, to reach sites in the inner loch. Shore diving is also possible close to Arnisdale and at Kinloch Hourn. Divers are attracted by the scenery like other groups but also by the impressive underwater topography which has resulted from the loch's glacial past. Underwater pinnacles, walls and boulder fields all provide varied habitats for marine life. The main dive sites of note and launching points are shown on the policy map.

65. The road into Glenelg and Loch Hourn from Loch Duich crosses such a high, steep pass that it adds a sense of exploration to the journey. There is obvious potential to attract additional visitors to the area to carry out some of the specialist activities mentioned above. This will, however, require some investment

and new facilities as identified in the Skye and Lochalsh Local Plan (eg a bunkhouse, visitor interpretation and public toilets) probably in the vicinity of Arnisdale or Corran but it could provide additional sustainable income to the area.

❖ **Archaeology**

66. Although the inner reaches of Loch Hourn today attract many visitors seeking a wilderness experience, people once lived in this area in much greater numbers than at present. This is clear from the presence of archaeological features such as old lazy beds, drystone dykes, and the ruins of small settlements; also the long-distance footpath which is built into the side of the loch at several points along its length.

❖ **Game fisheries**

67. In the past the Arnisdale River, the Barrisdale River and the River Ghuiserein all had good runs of salmon and sea trout, providing valuable sporting income for the local estates. The loch also had a number of commercial netting stations for these species which provided significant local income and employment and helped to support small remote crofting communities. In recent years however, the catches in the rivers have diminished and salmon and sea trout are recognised as being locally endangered.

68. The decline in numbers of wild migratory salmonids has been noted on many West Coast rivers and while there may be several reasons for this, one factor may be the high densities of sea lice which are associated with salmon farms affecting migratory fish passing nearby. Until such time as this is conclusively proved or disproved as a significant cause of the decline it is prudent for the framework plan to adopt a cautious approach. Salmon farming companies now recognise that they must work to reduce lice numbers on the farmed fish particularly at times when wild fish are running past the cages.

69. The Tripartite Working Group (TWG) made up of the Scottish Executive Rural Affairs Department, Scottish Quality Salmon and wild fisheries interests has recommended that area management agreements (AMA) be drawn up between all fish farm operators in a given loch system and the freshwater fisheries interest in the area. The aims of the AMA should be to mitigate or eliminate threats to wild salmonids through:

- i) a target of zero egg-bearing sea lice on farms
- ii) improved fallowing strategies
- iii) effective single-bay management
- iv) robust contingency plans for escapes
- v) free exchange of relevant information

70. The TWG and the Joint Government Industry Working Group on ISA have recommended that the Loch Hourn system should be considered as a single area. In addition, the Scottish Salmon Growers Association have suggested that Loch Hourn should be included in the same management area as the Loch Duich, Long and Alsh system. It is therefore recommended that one AMA should be prepared and maintained for this larger area. In common with recommended practise elsewhere this management agreement should include:

- a) synchronised stocking of smolts throughout all sites in the area at the same time
- b) strategic and co-ordinated sea lice treatments
- c) the development of integrated pest management strategies
- d) synchronised fallowing across all sites for at least six weeks at the end of the growing cycle

71. As far as possible a robust AMA should be in place prior to any modification of the existing fin fish farm sites in Loch Hourn.

STRATEGY AND AREA POLICIES

72. In light of the considerations above, the framework plan strategy for Loch Hourn:

- Supports continued finfish and shellfish farming activity in the areas currently used for this purpose provided they give due regard to the environmental sensitivity of the loch and its surroundings.
- Reserves the inner loch for shellfish farming activities but seeks to limit the overall scale of this activity to a level which is in keeping with the nationally recognised landscape character and wilderness quality of the area.
- Seeks to contain finfish farming broadly at its current level but allows for the possibility of some relocation of cages within the outer loch for the purpose of extending the fallowing period of existing sites.

73. For policy purposes the loch has been divided into a series of zones labeled 'A' to 'L' which are indicated on the accompanying policy map. These broadly follow the coastline round from the north of the Sandaig Islands, into Loch Hourn along its north side then back out along its south side as far as the northernmost tip of the Airor Islands. The policy guidelines for each zone, along with a brief description of its key characteristics and constraints, are given in the accompanying table.

74. 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.

75. 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 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>Sandaig (Rubha na h-Airde Beithe to Rubha a' Chaisteil)</p> <p>This is an exposed but low-lying rocky shore with shingly beaches. The land adjacent was heavily afforested down to the edge of the sea in the past but is now being opened up as the conifer crop reaches felling stage and is being replaced by a more attractive forest design.</p> <p>The attractive group of small, low-lying islands here marks the entrance to the mouth of Loch Hourn from the north and lies close to the former site of the author Gavin Maxwell's house 'Camusfearna'. The islands are noted for their wildlife and landscape qualities and there is an anchorage in the small bay to the southeast.</p> <p>There is an automatic light beacon on the largest of the islands because of their proximity to the important navigational route through the Sound of Sleat.</p> <p>Much of this area is overviewed by the popular viewpoint at Màm an Staing where the road from Glenelg turns east towards to Arnisdale.</p>	<p>The exposure of this coastline to the prevailing southwest winds militates against aquaculture. However, there may be some potential for seabed cultivation of scallops in the lee of the islands although this would require any potential developer to apply for a Several Order.</p> <p>The scenic quality of the islands and the secluded bay adjacent attracts many visitors because of its literary associations. Visitor interest is likely to be sustained as a result of the forest restructuring here and the opening of the Bright Water Visitor Centre at Kyleakin.</p> <p>The bay and setting of the islands should not be developed for aquaculture, though the area immediately to the north may have scope for small scale shellfish farming which is kept close in to the shore.</p>
B	<p>Mouth of Loch Hourn (north side) (Rubha a' Chaisteil to the south ridge of Beinn Mhialairigh)</p> <p>A secluded section of coast without road access and hidden from roadside view by convex slopes and forest cover. The steepness of the banks precludes access from the forest roads. The coastline is exposed to a long southwest fetch so gear siting could be problematic.</p> <p>The coastline is designated as an SSSI for its geological interest and extends from Eilean Chlamail to Camas Nan Ceann and down to mean low water of spring tides.</p>	<p>The exposed nature of this coast is likely to preclude development of aquaculture. However on policy grounds finfish or shellfish farming would be acceptable here providing navigational access to the loch is maintained and consideration is given to the needs of creel fishermen. Any future installations should be sited close to the land edge.</p>

Zone	Characteristics/ Constraints	Area Policy
C	<p>North side of outer basin (South ridge of Beinn Mhialairigh to Sgeir nan Gealag)</p> <p>Scenically important, island-studded stretch of south-facing coastline, closely overviewed by the public road into Arnisdale. The bays, woodland, and rugged, wooded islands make this one of the most sensitive landscapes in which the geometric forms of fish farm cages would be out of keeping.</p> <p>Shellfish longline systems could also detract from the scale and character of the island unless they were small in size, carefully positioned, and used muted colours for any surface equipment.</p> <p>The area is generally more sheltered than the mouth of the loch because of the slight narrowing which occurs to the west. Fishing boat moorings are located between some of the islands and approaches to these must be maintained.</p>	<p>There is some potential for small-scale shellfish farming here but it would need to be of very small scale with low-profile gear comprising only a few short lines and would need to sensitively relate to the pattern of islands. The best opportunities for shellfish farming would be at the eastern or western ends of this policy zone – in each case, close in to the shore.</p> <p>Presumption against finfish farming on landscape grounds other than west of Eilean Ràrsaidh where the siting of a small number of cages would be acceptable in order to permit rotational fallowing of the site on the south side of the Loch. In order to prevent cumulative build up of gear in the loch the short term location of cages at this site would be instead of the site at Creag an t-Sagairt and given the more constrained nature of this zone less cages would be acceptable. Any cages sited in this area must be located close to the shore.</p>
D	<p>Arnisdale and Corran (Eilean Tioram to Rubha Camas na Cailinn)</p> <p>Arnisdale has one of the most remote and attractive settings of any village on the west coast. It stands on a compact, semi-circular, south-facing bay (Camas Ban) which is backed by high, rugged hills and looks directly across to the Knoydart peninsula. The bay is used as a mooring by boats servicing the finfish farm near the mouth of the loch, by local fishermen, and by leisure craft.</p> <p>Development in this area is constrained by the proximity of the settlements and the coastal path, both of which would overview any installations at close quarters.</p> <p>The open outlook from the village is worth conserving and aquaculture installations in the bay would intrude on this other than for short term harvesting use at the western end. Salmon farming is further constrained by the close proximity to the mouth of the Arnisdale River and moorings in the bay.</p> <p>A key constraint on the use and development of any shorebase here is the low standard of the road into Arnisdale which is narrow and has only a limited weight capacity.</p>	<p>General presumption against aquaculture installations in the bay which forms the main outlook from Arnisdale and Corran (other than for short term harvesting use at the western end).</p> <p>There is some potential for small scale shellfish longlines to the east of Sgeir Leathan although access to the creel fishing grounds in this area will need to be maintained and any installations should not impinge upon the distinct promontary of Rubha Camas na Cailinn.</p> <p>It is important that the sensitive setting of the village is safeguarded. Any new fish farm shorebase should therefore be of an appropriate scale and design and contained within the narrow coastal strip immediately west of the bay.</p> <p>In view of the low specification of the access road here supply of feed and harvesting of fish should be done by sea. Any future developments should not infringe on the coastal SSSI south of Corran.</p>

Zone	Characteristics/ Constraints	Area Policy
E	<p>North side of Barrisdale Bay: (Rubha Camas na Cailinn to Ealean a' Gharb-làin)</p> <p>Southeast of Rubha Camas na Cailinn the settlements of Arnisdale and Corran are out of sight and the view is dominated by the impressive ridges, corries and cliffs of Ladhar Bheinn opposite. A coastal footpath follows the shoreline closely here giving relatively easy access on foot for people who wish to sample the secluded atmosphere of the inner loch. This stretch of coastline is favoured as creeling ground.</p> <p>The rocky islands which mark the second main sill in the loch are important visual features and their isolated setting should be kept free from development. There are also several good dive sites nearby.</p>	<p>Presumption against aquaculture installations to safeguard fishing grounds, views across the loch, and amenity of relatively accessible sanctuary area</p>
F	<p>Inner loch: western basin (Ealean a' Gharb-làin and Fraoch Eilean to Caolas Mór)</p> <p>There is a sill across the loch at Ealean a' Gharb-làin which has a maximum depth of less than 9m at chart datum. This divides the loch's main outer basin from the smaller inner ones and it coincides with a visible change in landscape character above water. It coincides with one of the main doglegs in the loch, a marked narrowing of its width as one moves eastwards and an increased native woodland presence on the north side. These factors combine to give the inner loch greater intimacy than the middle and outer sections.</p> <p>The south side of the loch is overviewed at close quarters by the Kinloch Houran to Barrisdale long distance footpath.</p> <p>The narrow nature of the loch, particularly close to the 6m sill at Caolas Mór makes navigation to the moorings at the head of the loch somewhat difficult in strong ebb and flood tides.</p>	<p>There is potential for a single, small scale longline installation on the north side of the loch, provided it is close to the shore and the design of its surface gear has minimum impact on the landscape character of its surroundings. Siting must ensure that navigational access to the upper loch is maintained.</p> <p>Presumption against finfish farm developments in this area.</p> <p>The anchorage near the Caolas Mór narrows should be safeguarded.</p>

Zone	Characteristics/ Constraints	Area Policy
G	<p>Inner loch: middle and eastern basins (Caolas Mór to Loch Beag)</p> <p>This is the most enclosed part of the loch with the poorest water circulation. It is also the most remote and difficult to service, though Kinloch Hourn is accessible by a single track road from Glen Garry. The whole width of the loch is overlooked by the coastal footpath between Kinloch Hourn and Barrisdale, in some places from high vantage points. This area of the loch, particularly west of Skiary gives the strongest sense of ‘wild land’. There is a strong sense of tranquility, enclosure and grandeur due to the surrounding steep slopes, trees and still waters.</p> <p>Previous finfish farm developments in this area have proved unsuccessful largely as a result of the poor water exchange in these confined inner basins. In addition, the presence of a game fishing river at the head of the loch precludes the siting of salmon farms.</p> <p>Mussel settlement is good in this area but the growth rate for adult stock is poor. There is a small spat collection site in the fourth basin which is not intrusive.</p> <p>There are numerous small boat moorings associated with the isolated cottages in the inner loch. Access to these moorings and recognised anchorages must be maintained. The innermost part of the loch is a favoured creeling ground. There are also several good recreational dive sites in this area, particularly around Eilean Mhogh-sgeir.</p> <p>The small islands and steep bounding hill slopes of the loch’s inner reaches are important habitats for birds such as peregrine falcons and golden eagles.</p>	<p>Presumption against finfish farming developments in this area.</p> <p>There is limited potential for expansion of the existing spat collection site on the north side of the loch. There may also be potential for small scale, subsurface longline developments for mussel spat collection or for on-growing of species such as sea urchins on the south side of the loch opposite. There would be a presumption against shellfish farming involving surface gear in the area between the existing leases and Caolas Mór.</p>

Zone	Characteristics/ Constraints	Area Policy
H	<p>Barrisdale Bay (Eilean a’ Mhuineil to Fraoch Eilean)</p> <p>Development in this area is largely constrained by the shallow, intertidal nature of Barrisdale Bay, and the navigational constraints imposed by the narrow entrance to the inner loch itself.</p> <p>Proximity to the mouth of the Barrisdale river would militate against the siting of finfish farm developments in this area.</p> <p>The shallow east and southern shores of the bay are visited by many cross-country walkers in transit between Loch Hourn and Loch Nevis. However, the steeply rising ground above Inbhir Dhorcaill in the north-western part of the policy zone screens the nearshore area from the main ridges on Ladhar Bheinn and the going is too difficult on the lower slopes near the shore to attract walkers. Discreet development here would be inconspicuous when viewed from the coastal footpath on the opposite (north) side of the loch.</p>	<p>Some potential for small scale trestle farming of oysters in the lower intertidal of Barrisdale Bay. However access and servicing would have to be by boat from the Arnisdale Area.</p> <p>Presumption in favour of small scale shellfish farming north-west of Inbhir Dhorrcail subject to adequate separation from existing developments and careful design of surface gear to fit in with the landscape. Any development would have to be sited close to the shore. Development proposals should also take into account local fishing interests.</p> <p>Presumption against finfish farming developments.</p>
I	<p>Middle loch, south west side: area around Li (Rubha Ruadh to Eilean a’ Mhuineil)</p> <p>This section of coast has been extensively developed for shellfish farming with longlines. Leases for growing mussels cover a large proportion of the coastline and there is little remaining space available for creel fishing interests.</p> <p>There is an anchorage and seal haul-out site at Poll a’ Mhuineil.</p>	<p>Presumption in favour of shellfish farming at the current scale of operation in this area, subject to careful design of surface gear and due consideration to other interests. Some mitigation of the visual impacts of the lease would be welcomed. When longline buoys are being replaced, buoys of dark, matt colouration should be used.</p>
J	<p>South side of outer basin (Creag an t-Sagairt to Rubha Ruadh)</p> <p>This unroaded and uninhabited stretch of coast has a very steep hill backdrop and reasonable shelter from south-west winds, especially just to the east of Creag an t-Sagairt where the main finfish farm site in the loch is situated.</p> <p><i>(continued on next page)</i></p>	<p>Presumption in favour of finfish or shellfish farming compatible with the generally high scenic quality of Loch Hourn and other interests. Presumption against further expansion of finfish farming. Stocking and harvesting of this site should be synchronised with those in Loch Duich, Long and Alsh.</p> <p><i>(continued on next page)</i></p>

Zone	Characteristics/ Constraints	Area Policy
J	<p>South Side of outer basin (<i>continued</i>) (Creag an t-Sagairt to Rubha Ruadh)</p> <p>This very large installation dominates the shoreline when viewed from some high vantage points on the road on the opposite side of the loch. It is also highly visible from the surrounding hills and represents maximum acceptable development of the site. However, the steep north-facing hill backdrop and the shadows which are cast by it make the farm relatively inconspicuous from lower levels on the north side. There is favoured creeling ground and a popular recreational dive site at the eastern end of this zone.</p>	<p>Future development of finfish culture in this zone should take account particularly of the need for adequate separation from other leases and landscape impacts at this gateway into the National Scenic Area.</p>
K	<p>Mouth of Loch Hourn (south side) (Rubha Ard Slisneach to Creag an t- Sagairt)</p> <p>This stretch of coast is generally exposed to westerly and north-westerly winds though there is a degree of shelter just to the east of Rubha Camas an t-Salainn. There are favoured fishing grounds all along this section of coast. The shore around Croulin and the house one mile to the west has relatively good in-bye grazing land.</p>	<p>Exposure tends to preclude aquaculture development here though there may be some limited scope for small scale shellfish farming to the east of Rubha Camas an t-Salainn.</p>
L	<p>South-western approaches to Loch Hourn (Airor Island to Rubh Ard Slisneach)</p> <p>Although there are several houses scattered along this section of coast it is both remote and very exposed and noted for its wild land value, particularly around the low-lying point of Rubha Ard Slisneach.</p> <p>This zone also includes the mouth of the River Ghuiserein which was previously an important game river.</p>	<p>Owing to the exposed nature of the coastline there is very limited scope for aquaculture and proximity to the mouth of the River Ghuiserein further militates against salmon farming.</p> <p>Presumption against any aquaculture developments in this area to safeguard wild land value and in the case of salmonid aquaculture to safeguard game fishing interests.</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 LEASES AS AT NOVEMBER 2000

CEC lease reference &	Location and species	Permitted gear approval date	Lease Expiry Date
IN9-23-3	Torr a' Choit	12 x 100m Longlines	Dec. 2008
	<i>Mussels</i>	(between 2 sites) to be used for spat collection only and removed when not in use	
	Skiary <i>Mussels</i>	See Above	Dec. 2008
	Eilean a' Phiobaire (North) <i>Mussels</i>	7x 200m Longlines and 1x 8m x8m Raft (Between 2 Sites)	Dec. 2008
	Eilean a' Phiobaire (South) <i>Mussels</i>	See Above	Dec. 2008
IN9-25-1	Arnisdale Bay <i>Salmon</i>	10 cages each 15m x 15m	Dec. 2013
	Creag an t-Sagairt <i>Salmon</i>	40 cages each 60m in Circumference	Dec. 2013

APPENDIX 2- BIBLIOGRAPHY

Clyde Cruising Club(1984): Sailing Directions and Anchorages: Part 3 Ardnamurchan to Cape Wrath

Edwards, A. and Sharples, F. (1986): Scottish Sea Lochs: a Catalogue

Ridley. G (1995): Dive Northwest Scotland

Scottish Executive Rural Affairs Department (1999): Locational Guidelines for the authorisation of Marine Fish Farms in Scottish Waters: Policy Guidance Note

Scottish Natural Heritage (1997): Skye and Lochalsh Landscape Character Assessment

Scottish Natural Heritage (2000): Marine Aquaculture and the Landscape: The siting and design of marine aquaculture developments in the landscape

In addition the following Guidance will be taken into account when determining applications for marine fish farms in Highland:

Countryside Commission for Scotland (1978): Scotland's Scenic Heritage

Scottish Executive (2000): Final Report of the Joint Government / Industry Working Group on Infectious Salmon Anaemia (ISA)

SERAD, ASFB, BTA, FRS, SQS, (2000) Report of the Working Group on Farmed Fish Escapes.

SERAD (2000): Wild and farmed salmonids-Ensuring a better future-Tripartite Working Group Concordat and Report.

Scottish Salmon Growers Association (1998): A National Treatment Strategy for the Control of Sea Lice on Scottish Salmon Farms - A Code of Practice

The Crown Estate, Scottish Salmon Growers Association, Shetland Salmon Farmers Association (1998): "Environmental Assessment Guidance Manual for Marine Salmon Farmers"

NB:this list is not intended to be exhaustive and the Council accept that additional recommendations are likely to be made in relation to the siting of Marine Fish Farms during the lifetime of this plan.

APPENDIX 3 - NATIONAL PLANNING GUIDANCE FOR AQUACULTURE

The following information is extracted from the Scottish Executive's 1999 "Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters" national planning guidance and the paragraph numbers indicated here relate to those of the full document. This puts Loch Hourn's category status, in its national context, indicates the thresholds for environmental assessment and sets out the process by which applications for marine fish farms are assessed. It is important to note that this guidance is under review as indicated in paragraph 21 below and could conceivably change within the anticipated lifetime of this framework plan. The information below is reproduced with the permission of SEERAD and a full copy of the guidance can be found on the Scottish Executive website.

Definition of area policy Categories

Category 1- where the development of new or the expansion of existing marine fish farms will only be acceptable in exceptional circumstances. These are only likely to arise where it can be demonstrated conclusively, by the applicant, that the development will not have a significant adverse effect on the environmental qualities of the area. See Annex A.

Category 2- where the prospects for further substantial developments are likely to be limited although there may be potential for modifications of existing operations or limited expansion of existing sites particularly where proposals will result in an overall reduction in environmental effect, so enhancing the qualities of the area and hydrological conditions. See Annex B.

Category 3- where there appear to be better prospects of satisfying environmental requirements, although the detailed circumstances will always need to be examined carefully.

Criteria for categorisation

9. A combination of factors were taken into account in deriving the categories including natural heritage interests, physical attributes, hydrographical characteristics as well as existing levels of development. As a result there will be areas within category 3 which are or could be sensitive to aquaculture development but have not been specifically highlighted as they do not contain significant aquaculture development at the moment. This approach underlines the importance of the review mechanism (see paragraph 21). More detail on the criteria applied can be found in Annex C while the principal constraints within each Category 1 and 2 area are identified in Annex D.

Environmental assessment

12. Marine fish farming falls within the types of projects listed in Annex II to the EC Directive on Environmental Assessment (851337/EC) as amended by Directive 97/11/EC. The Environmental Impact Assessment (Fish Farming in Marine Waters) Regulations 1999 bring the amended Directive into force and supersede the Environmental Assessment (Salmon Farming in Marine Waters) Regulations 1988 with effect from 14 March 1999. Such developments must therefore, be subject to EIA whenever they are likely to have significant effects on the environment. This includes changes or extensions to existing developments that may have significant adverse effects on the environment even where the original development was not subject to EIA. The Regulations also apply to renewal of existing leases.

13. The Regulations apply to applications received on or after 14 March 1999 and where:

(a) any part of the proposed development is to be carried out in a sensitive area, or

- (b) the proposed development is designed to hold a biomass of 100 tonnes or greater, or
- (c) the proposed development will extend to 0.1 hectare or more of the surface area of the marine waters, including any proposed structures or excavations.

14. Applications which trigger any of these thresholds must be subject to a formal determination (referred to as a screening opinion in the Regulations) by the relevant competent authority as to whether EIA is required or not. Until such time as the proposed legislation is in place transferring responsibility for the authorisation of marine fish farming to Scottish local authorities, the “competent authority” for the purposes of the EIA Regulations remains the Crown Estate Commissioners.... For the interim period, the Crown Estate will have regard to the views of the Local Authorities and other statutory consultees on the need for EIA in specific cases..... for the purposes of this Policy Guidance Note, the indicative criteria which will determine the need for EIA, using the categorisation set out in paragraph 8, is set out below

Category 1 areas

- all proposals for new sites or modifications to existing marine fish farm sites or equipment

Category 2 areas

- all proposals for new fish farm sites or significant modifications at existing sites. For the purposes of the indicative criteria, a “significant modification” is any single or cumulative increase of more than 25% in biomass or equipment which would result in development designed to hold a biomass of 250 tonnes or more, or a cage area of more than 2,000m².

Category 3 areas

This will include sea lochs and other enclosed inshore areas along with open sea areas within 2 Km of the coast which are not within Category 1 or 2.

- all proposals will be subject to the normal screening procedures provided for in the EIA Regulations.

If in any doubt as to the need for EIA, applicants are encouraged to seek a screening opinion from the appropriate competent authority at a very early stage in developing proposals for new sites or expansions to existing sites.

Assessment of applications

18. In seeking to reconcile marine fish farming, with its prospects for local employment and other economic benefits, with other interests as well as environmental and conservation considerations, the following factors are particularly relevant and will be a material consideration, along with national and local policy, when assessing individual proposals. They should be addressed, where appropriate, in the environmental assessment and conditions attached to leases:

- landscape and visual impact,
- effect on recreation and tourism,
- effect on fishing and navigation,
- aspects of pollution, disease and carrying capacity,
- nature conservation interests, including wild fish populations,
- access and infrastructure requirements, and
- methods of operation (e.g. lighting impacts, associated noise etc).

Decisions will require a balanced judgement on each application taking into account development plan policies, the applicant's case for the proposed development, the environmental implications of carrying it out and other material considerations.

19. Where there are sound objections to a particular proposal, the applicant will be required to demonstrate that these can either be overcome or how any significant detrimental environmental effects can be adequately mitigated before a lease can be granted. Material arguments which might outweigh objections to the proposed development could include matters such as environmental benefits arising from the restructuring of existing operations.

Review of guidance

21. This guidance has been prepared on the basis of the best information currently available. It will be kept under review in the light of work currently underway by the Joint Industry/Government Working Group on ISA and the Tripartite Industry/Wild Fish Interest/Government Working Group on west coast stocks and more generally in the light of advances in scientific understanding of the coastal environment and changes in technology, husbandry practice and the pattern of site demand. It will also be reviewed in the light of the proposed legislative changes when approved by the Scottish Parliament.

APPENDIX 4- ORGANISATIONS CONSULTED DURING PLAN PREPARATION

Arnisdale Estate Incorporated
The Association for Protection of Rural Scotland
Association of District Fishery Boards
Association of Salmon Fisheries Boards
Association of Scottish Shellfish Growers
Association of West Coast Fisheries Trusts
Atlantic Salmon Trust
Barrisdale Estate
Crown Estate
Crofters Commission
Dunstaffnage Marine Laboratory
Eileanreach Estate
Federation of Highlands & Islands Fisherman
Glenelg & Arnisdale Community Council
Highlands & Islands Fishermans Association (SG)
Highlands and Islands Enterprise
Highlands of Scotland Tourist Board
John Muir Trust
Kinloch Hourn Estate
Knoydart Foundation
Lochaber & District Fisheries Trust
Lochaber and District Salmon Fishery Board
Lochaber Limited
Mallaig & North West Fishermans Association
Marine Harvest (Scotland)
Maritime and Coastguard Agency
North of Scotland Water Authority
Northern Lighthouse Board
Royal Society for the Protection of Birds
Royal Yachting Association (Scotland)
Scottish Crofters Union
Scottish Environment Protection Agency
Scottish Executive
 -Rural Affairs
 -Development Department
Scottish Fisheries Protection Agency
Scottish Landowners Federation
Scottish Natural Heritage
Scottish Quality Salmon
Scottish Wildlife Trust
Sea Fish Industry Authority
Skye & Lochalsh Enterprise
Spean Bridge & Glengarry Community Council
SportScotland
The Highland Council (Skye and Lochalsh Area, Lochaber Area and Headquarters)
 -Roads and Transport Services
 -Planning and Development Service
 -Councillor George Bruce
 -Councillor Isabelle Campbell
West Highland Anchorages & Mooring Association