LOCH INCHARD



AQUACULTURE FRAMEWORK PLAN

MARCH 2001



PRODUCED BY THE PLANNING AND DEVELOPMENT SERVICE, THE HIGHLAND COUNCIL

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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 Inchard replaces the version prepared in 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 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 document. 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, marine nature conservation interest, and aspects of carrying capacity. 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 consultation with a wide range of interests, a list of which can be found in 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 terrestial area contained in the current Highland Structure Plan and the Local Plan for the area. Collectively these form the policy background against which the Council will assess all fish farm proposals in Loch Inchard.

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.

Francis Keith Depute Chairman Planning, Development, Europe and Tourism Committee The Highland Council

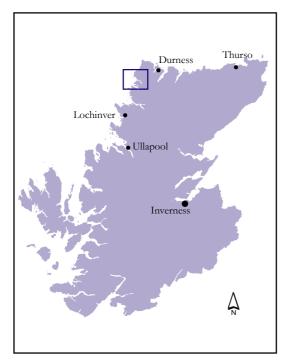
John Rennilson Director of Planning & Development The Highland Council

INTRODUCTION

Location

1. Lying just south of Cape Wrath, Loch Inchard is the most northerly sea loch of significant size on the west coast of Scotland. From its head at Rhiconich the loch curves north and west for 7 kms through rugged countryside characterised by small crofting settlements and low rocky hills before opening into the Atlantic. The location of Loch Inchard is shown in Figure 1 below.





2. The loch is best known for its fishing port of Kinlochbervie which serves both local inshore fishermen and the Scottish and international whitefish fleets. Co-existing with the fishing port is a small salmon farming operation based around the adjacent inlet of Loch Clash. However, in the last decade Loch Inchard has seen a steady expansion of shellfish farming and this now represents the main aquaculture presence.

Planning Policy Background

3. The national planning guidance for marine fish farms produced in 1999 classified Loch Inchard as one of the less constrained sea lochs in terms of potential for future development (Category 3). The Scottish Executive however pointed out that there are areas classified as Category 3 which might be considered sensitive but which are not designated as Category 1 or 2 because they currently lack significant aquaculture development. Loch Inchard could be considered such an area because it is one of the few west coast sea lochs without a fin fish farm in its inner reaches. It is, however, extensively developed for shellfish farming.

4. By contrast the national planning guidance lists Loch Clash as a category 2 loch. This means that any proposals for new finfish farm sites here or significant modifications at existing sites will require an environmental impact assessment. In this context 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.

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 plan for Loch Inchard in July 1988 at a time when there was modest development pressure for finfish farm sites in the inner loch. In the subsequent twelve-year period, changes in the technology and the economics of finfish farming have meant that such developments are now limited to the outer reaches of Loch Clash and Loch Inchard. Shellfish farm developments, on the other hand, have increased in both number and extent in recent years and are at present centered on the more sheltered inner loch.

6. The present aquaculture installations are therefore somewhat different from those described or envisaged at the time the last framework plan was produced. In addition concerns have increasingly been expressed in recent times that aquaculture development within the loch has reached or is close to, its maximum sustainable level. Expansion proposals in the late 90's tended to be contentious as a result. 7. For the present framework plan, the boundaries have been increased slightly to include outer Loch Clash to the north and Loch Ceann na Saile and Loch an Ròin to the south. This change in boundary has been primarily to encompass existing finfish sites at the west end of the plan area which were not in place when the last plan was produced. It also gives the opportunity to provide strategic guidance in relation to the two small lochs mentioned above. The boundary of the framework plan area is shown in Figure 2 below.

OBJECTIVES

8. The objectives of the framework plan for Loch Inchard are:

- to identify opportunities for aquaculture development compatible with other interests.
- to raise public awareness of the multi-faceted resources of Loch Inchard and its environs.
- 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

Loch Inchard is one of the smaller and narrower 9. sea lochs in Highland, bounded by terrain which is more rugged towards its mouth and on its south side. The outer half of the loch trends east-west and is exposed to westerly wind and associated swells. Wave action is concentrated on the headlands and islands at the mouth of the loch and swells can be particularly strong in north-westerly winds since the Isle of Lewis offers little protection from the fetch of the Atlantic.

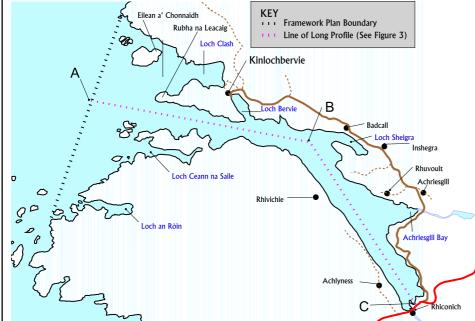
10. The loch has a dog-leg to the south east approximately half way along its length which makes the inner loch much more sheltered than the mouth. The north side of the loch has three subsidiary inlets. The westernmost, Loch Bervie, contains Kinlochbervie harbour and has had its mouth artificially deepened in recent years. Loch Sheigra is on the bend of the dog-leg and is overlooked by the small settlement of Badcall. To the south east is the recognised anchorage of Achriesgill Bay.

Hydrography *

11. Loch Inchard is a fjordic loch 6.6km long having steep sides and a deep basin with a maximum depth of 64m at the lowest astronomical tide (LAT). The loch has one quite pronounced sill with a mean depth of 24m which is situated just to the west of the

entrance to Loch Bervie. The sill has a small rocky pinnacle, Bodha Ceann na Saile, which comes within 3m of the surface at LAT. The main basin of Loch Inchard rises steeply to the sill and to the two sides of the loch but more gradually into Loch Sheigra, Achreisgill Bay and the head of the loch. The sheltered nature of the inner loch means that the basin and the side lochs contain the soft muddy benthos characteristic of a reduced energy environment.

Figure 2: Boundary of Framework Plan Area



12. The flushing time of the loch has been calculated as being approximately four days which is about average in a Scottish context. The steady, moderate, water movement combined with the sheltered nature of the inner loch makes Loch Inchard highly suitable as a site for the longline culture of shellfish. However, lack of water movement and available space are limiting factors for large scale fin-fish farming. The bathymetry of the loch is shown in figure 3 below.

Access

13. Although this area of Sutherland is remote it is relatively well served by roads. The A838 skirts the head of the loch and provides the main link to the markets for fisheries products on both the East Coast of Scotland, in the Central belt and further afield. South of Laxford Bridge the route to Lairg along Loch Shin is mainly single track but the alternative route south via Kylesku and Ullapool is of a good twin-track standard throughout.

14. The east and north side of the loch is served by the B801 which leaves the A838 at Rhichonich. This is a busy road in local terms, providing access to and from Kinlochbervie Harbour. Road access to the south of the loch is limited to a single-track road which runs through the crofting settlement of Achlyness before turning into a gravel track one kilometre from the croft at Rhivichie.

SCALE OF AQUACULTURE DEVELOPMENT AND POTENTIAL

Historical Development

15. Prior to preparation of the last framework plan for Loch Inchard there was significant pressure for finfish cage sites within the inner loch. Applicants for these sites included large multinational salmon companies, a consortium including a Finnish parent company and smaller scale proposals by local crofters. However, finfish farming never really established itself within the inner loch and the early 1990's saw undeveloped leases being released for shellfish longline culture. The mussel industry within the loch has grown steadily with shellfish farm expansions being approved up to 1999. In addition there were leases approved for shellfish farming in Loch an Ròin and Loch Ceann na Saile although these have not been developed.

Present level of development

Finfish Farming

16. At the time of writing, fin fish farming is confined to outer and inner Loch Clash and the south side of outer Loch Inchard. The cages are used for salmon on-growing though the company holding the lease for these sites was considering the possibility of farming new species. In June 2000 the salmon farming operation in Loch Clash supported five local jobs. The farm sites in Loch Clash are serviced from Loch Clash pier and there is a storage unit in Kinlochbervie itself. Where possible supplies and services for the fish farms are sourced locally. The position of the leased areas is shown in the accompanying policy map (p10) and the gear permitted is summarised in Appendix 1.

17. Finfish culture is carried out using circular plastic cages with a total consented biomass of 690 tonnes at the time of writing. By Scottish standards this is a small fish farm but it is the policy of the leaseholder to develop sites well within the limits of the expected biological carrying capacity of the loch.

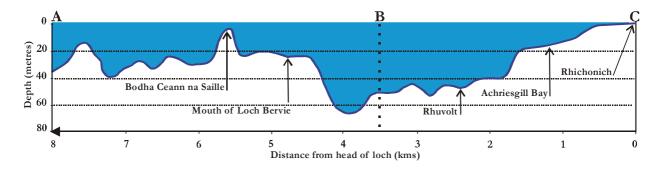


Figure 3 - Long Profile of Loch Inchard from mouth to head

Shellfish Farming

18. In June 2000 there were a total of six leases for mussel culture within inner Loch Inchard: five longline sites and one raft site (see figure 4). These leases were held by five mussel farmers who work together by subcontracting the work to one Kinlochbervie based company, which undertakes all of the site management, harvesting, depuration and marketing. Many of the mussel farmers are crofters with land adjacent to the loch and shellfish farming provides valuable additional income.

19. With the exception of two rafts, all of the mussel culture is carried out employing double-headed longlines supported by rows of plastic barrels. Mussel spat is collected by allowing natural settlement onto pegged dropper ropes and on reaching market size the mussels are harvested and cleaned on the loch before being transported to the shorebase for depuration.

Future Prospects for Aquaculture Development

20. The salmon farming industry is increasingly looking towards diversification into new species and there has been much interest in the potential for cultivation of halibut and cod in recent years. As mentioned above, the company holding the salmon farming leases in the framework plan area at the time of writing was considering using these leases to ongrow other species, particularly cod. Whilst it may be possible to on-grow cod in reasonably exposed sites, including those currently used for salmon, 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 close to the floor of the cages which makes them prone to abrasion if conditions are too rough.

21. 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 if the risk of escapes can be minimised.

22. Relative to its size, Loch Inchard is now one of the most heavily developed sea lochs in terms of shellfish farming, and the scope for further expansion is very limited. The

Crown Estate (CE), which acts as landlord in relation to seabed leases has 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 'Locational Guidance for the Authorisation of Marine Fish Farms in Scottish Waters' published in 1999. The guidance recommends a minimum distance between finfish farms of 8km. Between a finfish farm and a shellfish farm the recommended seperation 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. However, none of these conditions can be said to exist in Loch Inchard.

23. At the time of writing none of the existing shellfish leases was more than 0.5 km from its closest neighbour and the finfish farm at the mouth of Loch Inchard was just 0.6 km from the nearest shellfish lease. This would suggest that there should be no further significant expansion of shellfish farming in the inner loch and consideration should be given to reducing the extent of the existing installations.

24. In addition, shellfish farmers operating within the loch have commented that in recent years mussel growth rates have been decreasing. This is perceived as being a result of the large scale of development within the loch and the biological carrying capacity being exceeded. Although there is at present no empirical evidence to support this view it would be wise to adopt the precautionary principle with regard to future additional shellfish developments within the inner loch.

Figure 4: Mussel Longlines in Loch Inchard



LOCH INCHARD AQUACULTURE FRAMEWORK PLAN

25. In recent years Loch Inchard has been one of the sites used to determine the feasibility of ongrowing sea urchins as an aquaculture species. A continental and far eastern market exists for the mature roe of some species. Work carried out by Dunstaffnage Marine Laboratory has produced encouraging results for the green sea urchin *Psammechinus miliaris*. This species has the potential to be cultivated in trays or lantern nets suspended on subsurface longlines and may prove to be a viable aquaculture species in the future. The use of subsurface longlines would also result in reduced surface gear and therefore less visual impact. In the future Several Fisheries Orders may offer potential for scallop ongrowing in shallow, less exposed areas of the loch

PLANNING ISSUES / GENERAL DEVELOPMENT PROSPECTS

Navigation: Harbour Area

26. Kinlochbervie is one of the key fishing ports in Highland. In 1998 landings of fish and shellfish there represented almost 4% of the Scottish total by weight and had a value of \pm 15.3 million (5% of the Scottish total). In the same year it was ranked 7th in terms of weight of landings and 8th in terms of value of landings within the United Kingdom. Accordingly, Loch Inchard was designated as a Harbour Area in 1987. The boundary of the harbour area is shown in Figure 5. landings it is important to maintain freedom of navigational access to the harbour. In addition there are many designated anchorages within the loch which are used by both commercial fishing vessels and recreational craft. These anchorages are shown on the policy map (p.10). It is vital that all aquaculture installations are located to ensure freedom of navigational access to these anchorages at all times of day and night. Navigational lights on all aquaculture installations must be maintained in order to mark their position at night

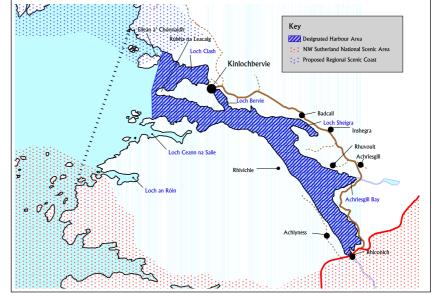
Economic Development

29. North-west Sutherland is one of Scotland's most remote, sparsely populated and economically fragile areas. However, the fishing industry presence in Loch Inchard means that local opportunities for employment are somewhat better than for the rest of the area. This said, surprisingly few local boats operate from Kinlochbervie, the majority of the fleet being made up of large vessels mainly from east coast fishing ports which use the harbour as a base for fishing the northern Minch and further afield. These visiting vessels are however important to the local economy, with the fish selling company and associated transport services being a significant local employer. Along with the harbour and its related industries, which employ around 30 people locally, crofting, aquaculture and tourism are also key sectors of the local economy.



27. The entrance channel to the harbour itself was deepened in 1997 and at the same time the leading lights were replaced with a single sector light. The result is that the harbour is now accessible to deepdraughted fishing vessels at most states of the tide. Prior to this, these vessels would have had to wait either at anchor in the loch or within the harbour until there was sufficient depth of water to pass through the entrance channel.

28. Given the recent capital expenditure and the importance of Kinlochbervie in terms of fish



30. Planning policy needs to nurture economic activities such as these which can capitalise on the area's natural resources. However it must do this within a framework which ensures that development is sustainable and is in harmony with other interests in the area

✤ Water Quality

31. Live bivalve shellfish put on the market must by law meet strict criteria in terms of hygiene. Shellfish production areas are therefore classified according to the presence of certain bacteria in water and shellfish samples. At the time of writing, Loch Inchard had a seasonal classification of Category 'A' from October to August inclusive and Category 'B' for September 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 to ensure that mussels reach end product standards. During the season of the 'B' classification, mussels must be either depurated, heat treated or relayed to an alternative location with Category 'A' status in order to meet legal requirements. All shellfish must also meet the legal end product srandard prior to being offered for sale for human consumption.

32. In addition to statutory requirements, larger customers of farmed shellfish are also in a position to require additional criteria to be met by their supplier (ie the shellfish farmers). For example, many large customers are now requesting that all mussels are depurated, year round to ensure that a high quality product reaches the market place. Customers may also stipulate that mussels are not supplied during periods in which fish medicines are being used on nearby finfish farm 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 separation between farms.

33. Other activities within the loch can also have an adverse effect on water quality. Fishing vessels resupplying at Kinlochbervie Harbour are allowed to refuel on a self-service basis from the fuel berth on the ice factory pier. Unfortunately spillages of oil into the harbour can occur despite SEPA's best efforts to ensure that these are minimised. The self-service delivery system relies at all times on the vigilance of the vessel

crew and this has, in the past, been the source of a number of spillage incidents where vessels have been left unattended whilst refueling.

33. In addition to oil spillages, there has been a build up of fishing-related litter on a number of beaches in the area despite the provision of waste receptacles at the harbour. This waste includes empty oil containers, discarded plastic fish boxes, old net panels, ropes, and pallets. Much of this waste could prove dangerous to other water users and marine life in addition to being unsightly. Discarded net panels in particular are a major risk to wild fish. These issues need to be addressed by raising the level of awareness of harbour users and by tighter ongoing site management. Despite the high concentration of shellfish farms within the loch it lacks designation as a shellfish growing water through EC regulations 79/ 923 EC. If the loch had this status the water quality would be afforded additional statutory protection in that polluters would be liable to pay compensation to shellfish farmers adversely affected.

✤ Infrastructure

Road Access

34. Road access along Loch Inchard is mainly confined to the north side of the loch where the main road runs to Kinlochbervie harbour and the pier at Loch Clash. This road does not come close to water level at any point and the slopes down to the loch side are generally quite steep. Additional shore access could only be developed with difficulty. Any future aquaculture development would have to be serviced from the Kinlochbervie or Loch Clash area.

Landing Facilities

35. Landings from aquaculture activities take place at two sites within the framework plan area. The salmon farm sites are serviced from the pier in inner Loch Clash, where activities include the loading of fish feed, replacement of cage nets and landing of harvested fish. The pier is in reasonably good condition having undergone recent repairs to its upper surface and apparently is rarely used other than by the salmon farming company. Occasionally, large fishing boats which are unable to enter Kinlochbervie due to constraints of draught off-load their catch at Loch Clash.

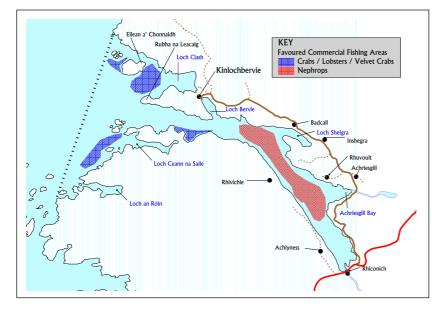


Figure 6: Favoured inshore Fishing Areas

36. Mussel landings are to the slipway in Kinlochbervie harbour which by comparison to the pier in Loch Clash is in a poor state of repair. Although the top surface of the slip is reasonable the slipway is too short to permit use at all states of the tide. In addition, on neep tides the end of the slipway is only covered for a short period at high water. There have been a number of complaints locally regarding the state of the supporting gabions which are collapsing and make access alongside the pier difficult. Although it is primarily utilised for mussel landings it is also the launching point for any recreational boat users that might tow their boats to the area, for example sea anglers, divers etc. This is a facility that requires improvement - both to assist the local shellfish farmers and to encourage more recreational water users to the area. The Council is aware of the concerns expressed regarding the slipway and intends to carry out repairs in the future when resources permit.

Inshore Fishing

37. Inshore fishing activities are not particularly extensive when compared to other west coast sea lochs. Around three to five small boats operate out of Kinlochbervie which target crustaceans in the loch and nearby using creels. Fishing is for brown crabs, velvet swimming crabs and lobsters in rocky areas and for Nephrops in the muddy basins. These activities are seasonal, depending largely on weather conditions and market demand and they currently operate in harmony with shellfish farming interests. Inshore fishing areas are shown in Figure 6.

Landscape and visual amenity

38. Loch Inchard is a compact sea loch with a rugged but intimate character and a well-preserved crofting landscape in its upper reaches. The loch is relatively narrow and overlooked for much of its length by houses and roads. It therefore requires careful management if the geometric patterns of aquaculture installations are not to impose themselves too strongly.

Beyond the mouths of Loch Inchard and Loch Clash, difficult access and exposure to the full force of Atlantic storms mean that pressures for aquaculture development are negligible. These areas, particularly south of the mouth of Loch Inchard have a wilderness character (and value) which is essentially self-preserving.

39. Although Loch Inchard itself is not included in the North West Sutherland National Scenic Area (NSA), its scenic value as a foreground to views of the peaks of Foinaven and Arkle is often recognised in calendars and postcards. The southernmost stretch of coastline within the plan area is included in the NSA. In addition, the north-western end of the plan area, beyond Kinlochbervie, is identified as Regional Scenic Coast in the Council's 1999 Structure Plan. These landscape designations are shown in Figure 5 (See page 5).

40. Most people who pass through this area view the loch from its head at least, where the A838 passes through Rhiconich. The loch is also overviewed by visitors and residents travelling to and from Kinlochbervie through the crofting townships of Achriesgill, Rhuvoult, Inshegra, and Badcall.

41. The key landscape issue is the need to manage the visual impact of shellfish farms in the inner loch. At the time of writing, the longlines at some of the mussel farm sites, particularly at Rhuvoult and opposite Achlyness, dominated views down the loch. In places lines of 400m length are used and groups of lines sometimes appear to extend across over a third of the loch's width.

42. The presence of the longlines is emphasised in some locations by the fact that they run at right angles to the strong parallel lines of the field strips and drystone dykes of the hillside crofts adjacent. The visual impact of the longline buoys is also sometimes heightened by their bright colours. Colour effects can, however, be mitigated and in most cases it is a condition of the Crown Estate lease that longline buoys are matt grey in colouration.

43. In the relatively confined location of the inner loch it is important that the visual impact of longline and raft systems is controlled by careful attention to their location, numbers, length and orientation, and to the buoyancy systems used.

44. Finfish farming in the plan area, because it is quite limited in extent and mainly located in the outer reaches of Loch Clash, has raised no significant landscape issues to date. However, the industry in general is moving towards larger scale operations which can take advantage of automated feeding systems and perhaps use more exposed sites. Such developments will have to be monitored carefully in view of the impact they could have on remote and sensitive landscapes in the outer sea loch areas.

Nature Conservation

45. There are no statutory nature conservation designations affecting Loch Inchard at the present time, although it is reported to support the greatest range of sublittoral biotopes in northwest Scotland. Surveys of the loch carried out by the Joint Nature Conservation Committee noted the presence of a number of marine habitats, which are important to the United Kingdom Biodiversity Action Plan. These habitats include the moderately deep mud basins throughout Loch Inchard, which contain populations of the phosphorescent sea pen Pennatula phosphorea and the sea pen Virgularia mirabilis. The loch is also noted for the presence of its steep bedrock walls which are covered by the anemone Protanthea simplex and the brachiopod Neocrania anomala. In addition the presence of maerl is reported in and around Loch Clash.

46. The small lochs, Loch an Ròin and Loch Ceann na Saile are cited as being lagoon environments with tidal rapids present in both. In addition, Scottish Natural Heritage reports that there are occasional sightings of harbour porpoise, white-beaked dolphins and minke whales in Loch Inchard. SNH also notes that cod, whiting and herring are reported to spawn in the loch.

47. A number of important bird species frequent the area, including 6-8 pairs of red throated divers, which feed in the loch between late March and early September. This species is afforded special protection as it is on Annex 1 of the EC directive on the Conservation of Wild Birds.

48. Of greater significance to the shellfish farming industry is the presence of a large visiting population of eider ducks on the loch. Mussels are one of the main foods of the eider and the presence of mussel farms leads to a superabundance of food and more eiders being attracted to the area. Non-lethal methods of controlling predation by eider ducks exist and mussel farmers are encouraged to use these. The catchments of the Achriesgill Burn and the Rhiconich River support locally important populations of Atlantic salmon and sea trout, and these make a significant contribution to the biodiversity of these rivers.

49. The relatively unexploited status of the Achriesgill salmonid population makes it particularly important from this perspective. It is therefore important that any aquaculture developments in Loch Inchard do not compromise the health of these wild species, given their inter-relationships with populations of freshwater pearl mussels.

Recreation

50. Tourism in this remote corner of Highland is primarily based on touring and enjoying the scenery. In the main this takes the form of car tourism although there is a significant number of motorcycle tourists, particularly from the continent. The fine beaches at Oldshoremore and Sandwood Bay, arguably the best in the Highland region, are the main draw to the area. Visitors must pass along the loch to Kinlochbervie in order to reach these beaches.

51. The mussel farmers in Loch Inchard say that many visitors to the area are interested in finding out more about mussel farming activities. There is obviously an opportunity to encourage this interest via interpretive signs at major viewpoints.

52. Game fishing in the Achriesgill and Rhiconich river catchments is the main specialist activity pursued

by visitors to the area but Loch Inchard itself is used to a small extent for recreational activities. The loch sees occasional use by sailing vessels and has recognised anchorages at Camus Blair, Achriesgill Bay, Rhiconich and Loch Clash which are listed in the Clyde Cruising Club's Sailing Directions. In addition, a number of local residents have motor boats which they use on the loch for their own recreation. At least one local skipper offers boat trips to view the seal and bird populations near the mouth of the loch and further south to near Handa Island.

53. Kinlochbervie is visited from time to time by groups of recreational divers. However, these tend to head out of the loch towards Cape Wrath and local coastal islands rather than into the loch itself which has a reputation for being quite dark and foreboding. Within the plan area there are popular dives at Minister's Point (Rubha na Leacaig) and at the skerries in the vicinity of Loch an Ròin.

54. The hills of Foinaven and Arkle, inland from the head of the loch, are popular with walkers visiting the area and there is a mountain rescue post situated at Rhiconich. Kinlochbervie also sees a number of visiting walkers who use the village as an overnight halt or supply stop en route to and from Sandwood Bay and Cape Wrath.

55. The main aim of the framework plan in relation to recreation is to ensure that the area's scenic value is not compromised by unsympathetic development. There is also a need to safeguard key anchorage's and wildlife resources and to encourage reasonable separation of salmonid farms from the mouths of game fishing rivers. The main areas of constraint are indicated on the policy map. Recognised dive sites are also shown on the map for information. These tend however to be in locations which are too exposed for aquaculture development with existing technology.

56. Further development of recreation in this area will require new facilities. However, the relatively small flow of visitors and the short tourist season here in the far north tends to militate against major investment of this kind.

Game fisheries

57. The Rhiconich and Achriesgill river systems which flow into Loch Inchard, while short in overall length, both have significant networks of hill lochs. Salmon and sea trout are present throughout both catchments and sport angling is an important source of business for the two local hotels. Game fishing also supports at least three part-time jobs for ghillies in the area. It is therefore important that any fish farming which takes place in Loch Inchard does not compromise this resource.

58. Throughout its length Loch Inchard is frequently less than 500m wide so any migratory fish entering or leaving the Rhiconich and Achriesgill rivers would have to pass very close to any finfish farm sited in the loch. This situation could increase the risk of disease and parasite transfer between farmed and wild salmonid fish (and vice versa).

59. The Tripartite Working Group of Scottish Executive Rural Affairs Department, Scottish Quality Salmon and wild fisheries interests have recommended that Area Management Agreements (AMA) are adopted between salmon farmers and local freshwatre fisheries interests. The group recommends that the aim of the AMA should be to ensure that there are zero egg-bearing sea lice on farmed fish, particularly during periods of in which wild smolt are running to the sea. Salmon farm operators in Loch Inchard are encouraged to produce an AMA in conjunction with the West Sutherland Fisheries Trust.

STRATEGY AND AREA POLICIES

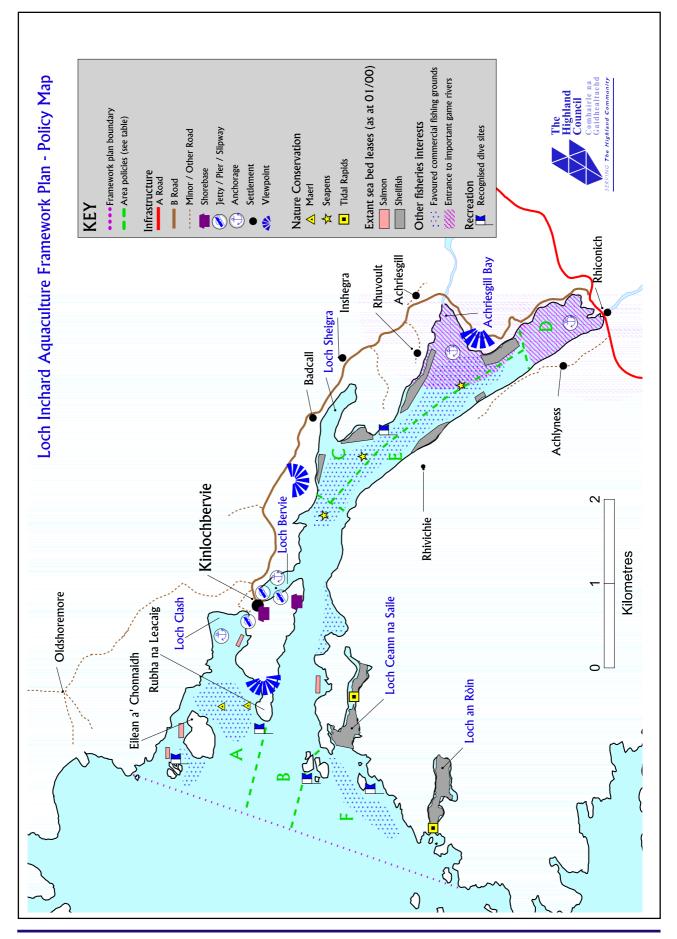
60. In light of the considerations above, the framework plan strategy for Loch Inchard:

- Identifies opportunities for aquaculture development compatible with other interests.
- Supports continued finfish and shellfish farming activity in the areas currently used for this purpose with the proviso that the holders of larger scale shellfish leases in the inner loch seek to minimise the real extent and visual impact of their operations
- Reserves the inner loch for shellfish farming, whilst recognising that some potential for non-salmonid finfish farming may exist in the long term, but seeks to limit the overall scale of aquaculture here to its current level
- Supports finfish farming in outer Loch Clash which is compatible with other interests
- Discourages further aquaculture development in the approaches to Kinlochbervie harbour, in inner Loch Clash, in the exposed and remote area south of the mouth of Loch Inchard, and at the head of the loch

61. For policy purposes the loch has been divided into a series of zones labeled 'A' to 'F' which are indicated on the accompanying map Policy Map(p10). These broadly follow the coastline round from the north of Loch Clash, into Loch Inchard and then south to beyond Loch an Ròin. The policy guidelines for each zone, along with a brief description of its key characteristics and constraints, are given in the accompanying table.

62. 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 fish farming proposals.

63. 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, and other relevant authorities. A list of relevant guidance documents at the time of writing is given in Appendix 2.



AREA POLICIES

Zone	Characteristics/ Issues	Area Policy
А	Loch Clash and associated islands	
	This area is mainly characterised by its rugged low- lying hills and undeveloped character though the head of the loch contains Kinlochbervie's old north pier and some associated buildings. The local vantage point of Cnoc na h-Eannaiche overviews the whole of this area and the inner loch is overlooked at closer range by the Kinlochbervie Hotel. The coastline is largely unroaded however. In the outer loch, Eilean a' Chonnaidh and the nearby skerry of Na Cluasnadh offer a degree of shelter from west and south westerly winds. The south side of the inner loch offers a restricted area of better shelter but the pier requires clear access. Finfish leases have been granted in both these areas. There is some redevelopment potential on the land at the head of Loch Clash but the presence of buildings and the potential for outfalls here tends to preclude shellfish farming in the inner loch on water quality grounds. Development within this policy zone generally is constrained by its scenic quality and exposure to swell.	There is scope for aquaculture on a limited scale in the more sheltered parts of this area provided that existing interests and the scenic value of the area are taken into account. There would however be a presumption against significant expansion of finfish farming beyond currently consented levels in inner Loch Clash. Any proposed expansion would be likely to require an Environmental Assessment since the loch is classified as Category 2 in the current national planning guidance. Small to medium scale finfish farms in the vicinity of Eilean a' Chonnaidh may be acceptable should new gear technology allow more exposed sites to be used for fish farming.
В	Outer Loch Inchard and the western approaches to Kinlochbervie This area contains the main entrance channel to the loch and the manoeuvring area for vessels entering and leaving Kinlochbervie harbour. As such, any development in this area is constrained by the need to maintain safe passage to the harbour. The largest of the three bays on the south side of the loch has been leased for a small finfish farm.	Presumption against any additional aquaculture developments in this area or expansion of existing leases due to navigational requirements of the harbour area.

Zone	Characteristics/ Issues	Area Policy
C	Characteristics/ Issues Inner Loch Inchard: north side This is the most developed area of the loch having four sites leased for shellfish farming in close proximity to each other. The presence of the longline systems is obvious in this area with all being visible from the main road at one point or another. Key roadside viewpoints at Cnoc na Caillich and at the bend in the road on the lower slopes of Creag an Fhithich also overlook these sites. This area is considered by many to be either at capacity or overdeveloped – at least in terms of cumulative visual impact, but possibly also in terms of shellfish production capability. Development of finfish farming here is precluded by the concentration of shellfish farming activity and further expansion of shellfish farming is unlikely to be tenable without detriment to other interests. Because of the narrowness of the loch and the close proximity of other shellfish farms it is important that gear configuration and orientation conforms closely to the conditions set down in leases. Achriesgill Bay is a recognised anchorage and access to it should be safeguarded.	Area PolicySupport for shellfish farming in principle on existing leased sites but presumption against further expansion in this area. Encourage operators on the larger scale leases to consolidate their production within more compact sites and work towards reducing the area of the loch covered by longline gear (eg by use of subsurface longlines or reducing the number/length of longlines and extending droppers) and improving separation distances between sites.General presumption in favour of modifications to sites which will reduce the visual impact of the development. On landscape and navigational grounds, aquaculture installations should not extend outwards from the shore more than one quarter of the loch's width.General presumption against marine finfish farms due to the proximity of existing shellfish leases and presumption against salmonid farms specifically due to the proximity of the locally important game fisheries in the Achriesgill river system. There may however be some potential for non-salmonid finfish farms in the long term if the shellfish sites were to be relinquished.
D	The head of Loch Inchard The head of the loch is surrounded on three sides by roads and overviewed by the houses in Achlyness and the hotel at Rhiconich. Development here is constrained by amenity considerations, the presence of the recognised anchorage and the proximity to the mouth of the river Rhiconich (game fishing interests). Shallow water depth and reduced salinity would tend to preclude the development of any additional shellfish sites in this area.	General presumption against aquaculture development at the head of the loch. Lack of water depth, limited water exchange, and the need to maintain reasonable seperation between finfish and shellfish farms weighs against the development of finfish farms. Proximity to the Rhiconich river and the risk of the spread of disease and sea lice both to and from wild fish militates against the location of salmonid cages specifically. Presumption against additional longline or raft systems for shellfish because of limited water depth, the extent of shellfish farms nearby and the cumulative impact on views from the main road.

Zone	Characteristics/ Issues	Area Policy
E	Characteristics/ Issues Inner Loch Inchard: south side This section of coast is uninhabited but for the croft at Rhivichie. The coastline has no significant bays or inlets but there are leases here for both shellfish longlines and rafts. The steeply sloping hillside provides a dark backdrop which helps to absorb the visual impact of these developments when viewed from the opposite shore. However, further expansion is constrained by the proximity of other leases to the south east and creel fishing grounds to the north west. The landscape in this area is better able to accommodate surface longlines than some other areas of the loch but care needs to be taken to avoid coalescence of installations. Because of the narrowness of the loch and the close proximity of other shellfish farms it is important that gear configuration and orientation conforms with the conditions set down in leases. The narrowness of the loch here means that migratory fish travelling up the loch would be likely to come within close proximity of cages sited in this area. This would pose obvious disease transfer risks for both wild and farmed salmonid stocks. It is important that the game fishing resources in the area are maintained.	Area Policy Support for shellfish farming in principle on existing leased sites but presumption against further expansion in this area to limit the cumulative impacts on navigation and the landscape. Presumption in favour of gear modifications which will reduce the visual and navigational impact of aquaculture installations. General presumption against finfish farms within this area given the close proximity that any site would have to existing shellfish leases. There may however be some potential for non-salmonid fish farming in the long term if the shellfish sites were to be relinquished.
F	Western seaboard south of Loch Inchard, Loch Ceann na Saile and Loch an Ròin Similar in character to policy area 'A' this is a rugged and exposed stretch of coast which is accessible only by boat or by walking cross- country from Rhivichie. Although not formally designated, it is of high landscape value both in terms of its scenic character and wilderness quality. Loch an Ròin enjoys a degree of local shelter but its entrance is very narrow and the sill at its mouth is too shallow to allow access by boat at any time other than high water of spring tides.	Because of the natural heritage value of this area and the technical difficulties associated with developing aquaculture here, this is not a favoured location for the development of finfish or shellfish aquaculture. In the longer term, finfish farming or shellfish farming may become technically feasible in this area with advances in gear technology. However on landscape grounds development would be unlikely to be favoured south of Loch Ceann na Saile.

Zone	Characteristics/ Issues	Area Policy
F	Characteristics/ Issues Continued. Aquaculture development on this coast is unlikely to be feasible with the current technology. The existing shellfish lease in Loch Ceann na Saile is too exposed for easy access and the lease holder has intimated that the lease is retained to store equipment and to use as a relaying site if necessary. These small lochs are also important in nature conservation terms being shallow, lagoon environments and there are tidal rapids at the sill of Loch an Ròin.	Area Policy

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 JULY 2000

CEC lease reference	Location and species	Permitted gear	Lease Expiry Date
SU-9-17	Rhivichie Mussels	4x400m + 2x200m Longlines	30/6/2009
SU-9-23	Portlaidh Mhurchaidh <i>Mussels</i>	4x300m longlines	30/9/2008
SU-9-25	Moll a'Bhuailt <i>Mussels</i>	4x200m longlines	31/12/2008
SU-9-27	Badcall Mussels	3x100m longlines	31/12/2001
SU-9-28	Inner Loch Clash Salmon	4 cages	30/4/2010
	Outer Loch Clash, Eilean Salmon	8 cages between 2 sites	30/4/2010
	Loch Inchard Salmon	2 cages (All 70m Circumference Plastic Cages)	30/4/2010
SU-9-30	Rhuvolt <i>Mussels</i>	6x300m longlines	31/12/2009
	Rhivichie Mussels	3 10mx10m Rafts	31/12/2009

APPENDIX 2- BIBLIOGRAPHY

Clyde Cruising Club(1997): Sailing Directions and Anchorages: Part 3 Ardnamurchan to Cape Wrath

Holt R. (1991): <u>Surveys of Scottish Sea Lochs - Loch Laxford, Inchard Broom and Little Loch Broom</u>. *Marine Nature Conservation Review*

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): Caithness and Sutherland Landscape Character Assessment

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

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

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

Crown Estate (1998): Environmental Assessment Guidance for Marine Salmon Farmers (Revised 2000

SERAD (2000): Wild and Farmed Salmonids - Ensuring a better future-Tripartite Working Group Concordat and Report

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 - ORGANISATIONS CONSULTED DURING PLAN PREPARATION

Aquascot Ltd Association of District Fishery Boards Association of Salmon Fishery Boards Association of Scottish Shellfish Growers Association of West Coast Fisheries Trusts Association for Protection of Rural Scotland Atlantic Salmon Trust Caithness and Sutherland Enterprise Crofters Commission Crown Estate Commissioners D. Ross Dunstaffnage Marine Laboratory Federation of Highlands & Islands Fisherman Highlands and Islands Enterprise Highlands of Scotland Tourist Board Historic Scotland HM Naval Base Clyde Kinlochbervie Community Council Loch Duart Ltd Mallaig & North West Fishermans Association Maritime and Coastguard Agency N. Ross North and West Salmon Fishery District Board North Minch Shellfish Ltd North of Scotland Water Authority Northern Lighthouse Commissioners Royal Society for the Protection of Birds Royal Yachting Association (Scotland) Scottish Crofters Union Scottish Environmental Protection Agency Scottish Executive Scottish Landowners Federation Scottish Natural Heritage Scottish Quality Salmon Scottish Wildlife Trust Sea Fish Industry Authority Sport Scotland West Highland Anchorage's & Mooring Association West Sutherland Fisheries Trust