

6. Overview of Development Opportunities

6.1 Introduction

This section summarises opportunities for future use and development that have been identified in the policy zone section and provides additional guidance and advice where appropriate, including relevant Argyll and Bute Development Plan (Structure and Local Plan) policies that need to be considered. Development opportunities identified are indicative, subject to obtaining the required consents, and do not preclude development applications and activities elsewhere.

6.2 Aquaculture Development

Figure 6.1 highlights existing sites which have the potential to be expanded and also policy zones where there is potential to support new developments.

Although the policy zone section provides guidance on the most appropriate locations for aquaculture development, individual development proposals will still require detailed, site-specific appraisal. These may sometimes require a formal environmental impact assessment (EIA) and consideration of carrying capacity issues by regulatory authorities.

All new and modifications to developments will require to be consistent with relevant Argyll and Bute and Development Plan Policies and obtain the required authorisations from other competent authorities to proceed.

6.2.1 Expansion of Existing Sites

There are a total of ten salmon farms in Loch Fyne, seven in lower Loch Fyne and three in upper Loch Fyne. The following finfish farms were identified as having potential for expansion.

Finfish Farm	Policy Zone	Existing scale ¹	Potential for expansion	Suggested scale of expansion (increase in surface area)
Meall Mhor	C	Medium	Yes	up to 20%
Strondoir Bay	D	Large	Yes	up to 20%
Furnace	I	Medium	Yes	Up to 25%
Ardgadden	O	Large	Yes	up to 20%
Gob á Bharra	O	Large	Yes	up to 20%
Rubha Stillaig	P	Large	Yes	up to 80%

Five of the six farms where potential for expansion was identified are located in the outer loch, where large-scale development can generally be more readily absorbed within the landscape.

The following shellfish farms were identified as having potential for expansion

Shellfish Farm	Policy Zone	Existing scale ¹	Potential for expansion	Suggested scale of expansion (increase in surface area)
Eilean an Dùnain (Scallop)	B	Medium	Yes	up to 20%
Port a' Ghuail (Scallop)	B	Medium	Yes	up to 20%

¹ Scale defined by Development Scenarios (Appendix VIII)

6.2.2 New Sites

The following opportunities for development of new aquaculture sites are listed below.

Policy Zone	Species	Suggested maximum scale of development *
F	Finfish/Mussel/Scallop	Medium
F	Oyster	Medium
H	Scallop	Medium
I	Non-salmonid Finfish/Mussel/Scallop	Medium
K	Mussel/Scallop	Small & Medium
L	Mussel/Scallop	Small
N	Finfish/Mussel/Scallop	Medium
O	Scallop	Small
P	Scallop	Medium

* Scale defined by Development Scenarios (Appendix VIII)

All opportunities for new aquaculture sites were limited to either small or medium-scale. This is largely due to the amount of existing development, which is sited in many of the most suitable locations. It is recognised that shellfish developments of a small-scale or even finfish developments of a medium-scale may not be viewed by the aquaculture industry as economically viable in their own right. However, it was felt that it was still important to identify these opportunities as it may be possible to operate a smaller site economically as a part of a group of sites.

There may be potential for sub-surface scallop line development in areas where there is currently a presumption against development in terms of landscape/seascape sensitivity. However, it is also recognised that some of the areas identified as suitable for shellfish farming, particularly in upper Loch Fyne may not be suitable for growing scallops as wild scallops are not present in any great numbers.

6.2.3 Relevant Argyll and Bute Development Plan (Structure & Local Plan) policies

Planning consent is required for the development of any species of finfish or shellfish farming. Aquaculture applications are assessed by Argyll and Bute Council against the Local Plan policy LP AQUA 1. Depending on the sensitivity of the location of the proposal, other Local Plan policies will also be relevant. The most relevant policies for marine and coastal development are summarised in Appendix I and more information on the planning application process for aquaculture can be found in Appendix VI.

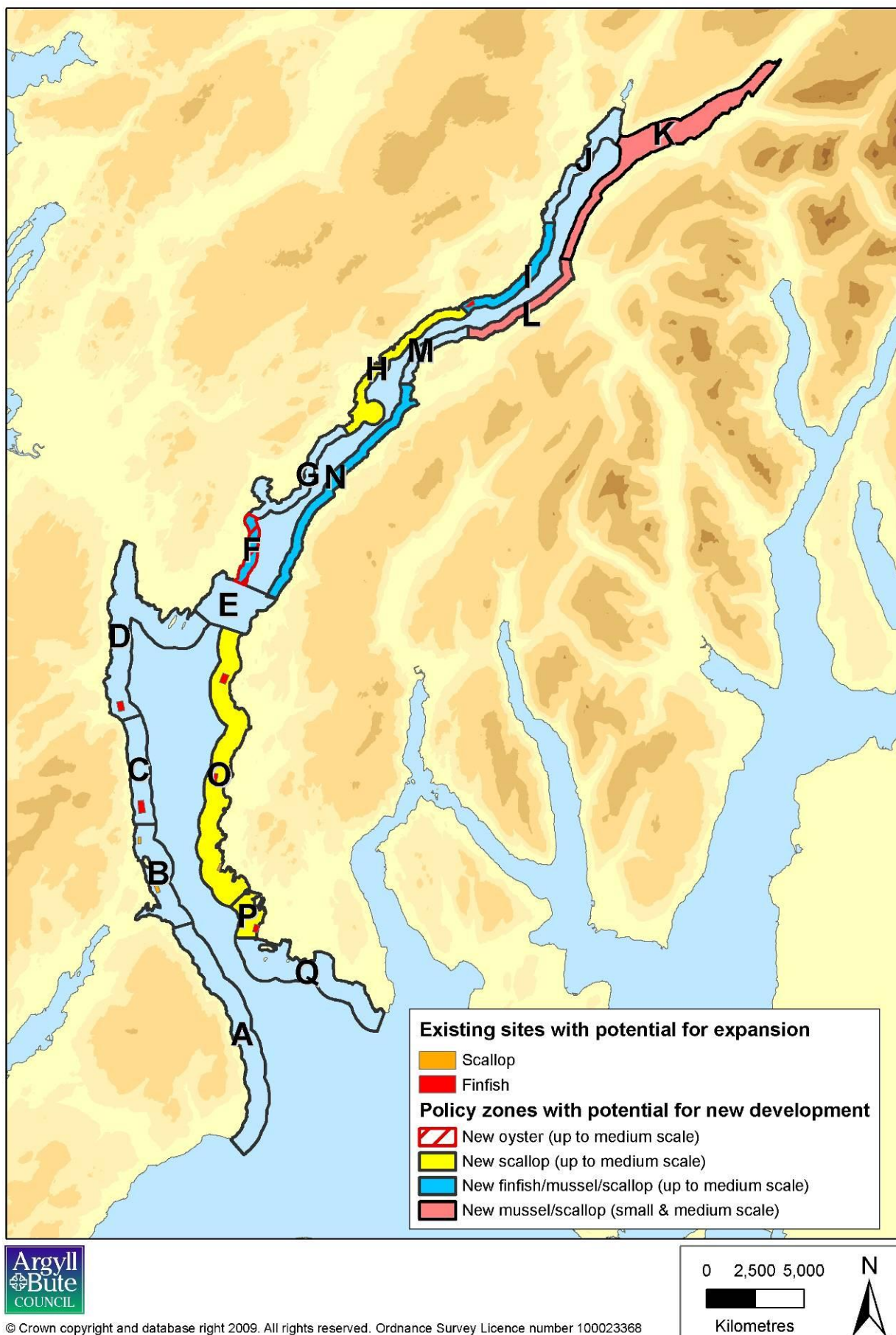


Figure 6.1 Development Potential for Aquaculture

6.3 Diversification of aquaculture

The potential environmental effects of the culture of new species i.e. disease and parasites, are less well understood than for existing farmed species. This means that any application to farm novel marine species may require more careful scrutiny to ensure that environmental impacts are minimised. The Scottish Aquaculture Research Forum (SARF) project on the Biodiversity Implications of farming novel aquaculture species in Scotland (Project Report SARF 022) provides useful guidance (<http://www.sarf.org.uk/Project%20Final%20Reports/SARF022%20-%20Final%20Report.pdf>)

6.3.1 Other finfish species

There is potential for diversification of finfish aquaculture into species other than salmonids, however it is recognised that there are many unresolved issues associated with this. Potential interactions with wild fish species will have to be taken into account if new species are to be farmed and it is noted that whole-loch synchronised fallowing may be problematic as a result of the differing growing cycles for marine species such as cod, haddock and halibut, when compared with salmonids.

The current AMA states that ‘In the event that the farming of non-salmonid marine fin-fish species should occur within the described area, then every effort will be made to incorporate such activities into this agreement under a separate annex’. It should be noted that the success of the current AMA has been brought about by the detailed and thorough considerations of all aspects of salmonid production. The same diligence would be a prerequisite of the new annex, which would take time to produce.

Cod and Halibut farming is discussed in Section 3.1.5.

6.3.2 Polyculture

Interest is increasing in the potential for polyculture. This might involve growing a species such as mussels, or certain marine algae on the same site as finfish. The main argument for this type of aquaculture is that one species may have the potential to utilise some of the waste nutrients produced by the other, leading to less dissolved organic matter entering the water column.

Seaweed farming

Other marine aquaculture opportunities such as seaweed growing, independently or in balanced systems with other species are not yet developed in Scotland, although the harvesting of live and washed-up seaweed has been a significant activity in the past.

Seaweed grown on long-line systems are likely to be no more visually intrusive than mussel lines or perhaps scallop lines and therefore this type of mariculture is likely to be appropriate where mussel or scallop development was identified as appropriate (see Section 6.2.2).

Seaweed is currently being used as food source; fertiliser and animal feed in many countries, but may also have the potential to become a major source of biofuel. Growing biofuel in the sea has advantages over growing on land, as seaweed does not require soil and is already supplied with all the water it needs. More research is needed to evaluate the practical benefits of seaweed as a biofuel on a large commercial scale. However, with energy generation diversifying, and local solutions becoming increasingly popular, seaweed biofuel is a real possibility for coastal communities. This may be particularly the case in the Scottish Highlands where a relatively cool climate and lack of arable land offers little prospect for growing ethanol or biodiesel producing land crops.

6.3.3 Shellfish ranching

The following opportunities for shellfish ranching were identified by stakeholders during the development of this plan:

- The reintroduction of the native oyster by extensive farming of loose laid individuals at the head of Loch Fyne, north of Dunderave Point;
- The potential for scallop ranching, whereby scallops are seeded in an enclosed area and left to grow before being harvested was identified at five locations (Policy Zones A, D, G, J and Q).

The ranching of native oysters or scallops would only be viable if the operator had a Several Order, which restricts the public right to fish in a defined area. A Several Order is granted by Scottish Ministers to restrict the public's right to fish an area of the seabed, to enable the establishment, improvement and protection of a shellfish fishery. Applications for Several Orders are assessed against existing fisheries within the area, potential for establishment, improving and maintaining a fishery, proposed source of farmed stock, impact on the environment and impact on navigation or marine operations.

6.3.4 Other opportunities

The potential for using waste from shellfish processing as bait for the creel fishing industry should be considered in light of the current Seafish project which is looking at cost effective ways to utilise shellfish waste. Trials have shown that the flesh from scallop, whelk, and crab waste can be used as commercial bait for the potting sector, and could turn disposal costs of £30 to £60 per tonne into a cost-neutral or profit making opportunity (Seafish Media Review 2009).

6.4 Coastal Development

All coastal development proposals require to be consistent with relevant Argyll and Bute, and Development Plan Policies, and must obtain the required authorisations from other competent authorities to proceed.

6.4.1 On-shore aquaculture development

Opportunities for on-shore aquaculture development (shore-bases or hatcheries) were identified in seven policy zones (B, D, G, H, J, K & P). These opportunities include:

- small-scale expansion of existing onshore developments;
- new developments as part of existing harbour developments, and
- appropriately designed new developments which could potentially merge with existing settlements or existing developed/industrial areas.

Opportunities for new development were normally where marine activity and lighting could be absorbed, adjacent to the more developed stretches of coastline, and where road access was not limiting. The majority of these locations are designated as 'Developed Coast', in the Argyll and Bute Development Plan (Structure & Local Plan) which is the preferred location for coastal development, particularly where it makes best use of existing infrastructure.

6.4.2 Coastal infrastructure

The policy zone section identifies a range of opportunities for new or improvements to existing coastal infrastructure, the majority of which have been identified by the Loch Fyne Stakeholder group.

Opportunities are identified in policy zones (B, C, D, E, G, H, I, J, K, L, N & P) and include:

- Improvements to existing harbour facilities for commercial and recreational use i.e. catch landing and transportation facilities at Tarbert Harbour, and facilities for sailors at Ardrishaig;
- Improvements to existing slipways and jetties to enhance marine access for commercial and recreational activities, and
- Provision of facilities to improve recreational access to Loch Fyne.

The biggest constraint to the development of marine and coastal recreation is the lack of facilities, including parking, toilets, access points and coastal infrastructure such as moorings, berthings, slipways, piers, etc. Improving or adding to existing physical infrastructure is vital to supporting and assisting the marine leisure industry and other commercial activities.

There is an opportunity to include provision for improved access to the water and facilities for recreational users as part of new development proposals, including: onshore aquaculture development; new business proposals such as cafes or restaurants; or development of new and improvements to existing coastal infrastructure.

Such proposals could explore the potential for allowing boaters/kayakers, divers and anglers to access any proposed infrastructure or to provide additional parking, dedicated launching points or toilet facilities. Such dedicated access points could take pressure off other less suitable locations currently used and could provide economic benefit to nearby services. It should be noted however, that the regular public use of fish farm access points may present issues in relation to public liability and disease control.

6.4.3 Relevant Argyll and Bute Development Plan (Structure & Local Plan) policies

Coastal development is guided by a range of Development Plan policies. The most relevant are the coastal development policies, listed below, which relate to the development control zones identified in the Argyll and Bute Development Plan.

Policy LP CST 1 - *Coastal Development on the Developed Coast (Settlements and Countryside around Settlements)*

Policy LP CST 2 – *Coastal Development on the Undeveloped Coast (Sensitive Countryside Zone)*

Policy LP CST 3 – *Coastal Development on the Isolated Coast (Very Sensitive Countryside Zone)*

Policy LP CST 4 – *Development impact on the Natural Foreshore*

Policy LP SERV 5 – *Waste Related Development and Waste Management in Developments*

Depending on the sensitivity of the location of the proposal, other Local Plan policies will also be relevant. The most relevant policies for marine and coastal development are summarised in Appendix I.

6.5 Funding Opportunities

There are several sources of funding that can assist with many of the development opportunities identified in this plan.

European Fisheries Fund

The European Fisheries Fund (EFF) Programme (2007-13) provides support for delivery of the Common Fisheries Policy (CFP). The EFF programme will be targeted to assist with capital investment in the aquaculture, fishing and fish processing industries. The programme can also support strategic trade initiatives, fisheries dependent communities, Scottish Government and European Community policy initiatives for the sustainable development of fisheries.

The fund is split into four priority axes: Axis 1: Measures for the adaptation of the Community Fishing Fleet; Axis 2: Aquaculture, inland fishing, processing and marketing of fishery and aquaculture products; Axis 3: Measures of common interest, and; Axis 4: Sustainable development of fisheries areas.

Eligible applicants include individuals, companies, trade and public bodies that have a direct interest in commercial fisheries. More information can be found at <http://openscotland.gov.uk/Topics/Fisheries/grants-subsidies>.

LEADER

The Argyll and the Islands LEADER Programme is a rural development initiative which is being delivered under the Scotland Rural Development Programme (SRDP). This programme will continue to make funds available to communities within Argyll and Bute for new and innovative projects which contribute to the themes 'Revitalising Communities' and 'Progressive Rural Economy' until 2013. Applicants will need to have matching funds, normally 50% or more of the total project cost.

More information can be found at <http://www.argyllandtheislandsleader.org.uk/index.html>

Water Framework Directive (Restoration funding)

Funding received from Scottish Government to restore the condition of Scotland's water environment will be used by SEPA to support partnership projects with third parties.

SEPA will consider funding partnership projects such as:

- re-engineering of rivers to restore their natural profile by recreating meanders;
- removal of man-made fish barriers or the provision of fish passage facilities at man-made barriers;
- restoration of flood plains, coastal intertidal zones and wetlands;
- treatment of effluent from abandoned non-coal mines.

Every project must deliver improvements to wetlands, rivers, lochs/ponds, estuaries and coasts; contribute towards achieving Water Framework Directive objectives; and where possible, deliver a wide range of environmental, social and economic benefits.

More information can be found at <http://www.sepa.org.uk/wfd/restoration/index.htm>.

The Crown Estate Marine Communities Fund

This fund provides support to initiatives and programmes which contribute to the development of best practice, and make a significant contribution to the good management and stewardship of the marine estate. The fund also supports projects raising awareness and involving coastal communities in the benefits of offshore renewable energy in the UK.

More information can be found at http://www.thecrownestate.co.uk/marine_communities_fund

Transport funds

Freight Facilities Grant (FFG)

The rail and water FFG schemes are capital grant schemes that aim to encourage the transfer of freight from roads to the more sustainable rail and water options by helping companies invest in the facilities needed to compete in financial terms with road.

Waterborne Freight Grant

This scheme assists companies with the operating costs, for up to three years, associated with running water-freight transport instead of road (where water is more expensive than road).

More information can be found at <http://www.scotland.gov.uk/Topics/Transport/FT/freightgrants1>

Sail West Project

Finance may be available, through this project, to support community groups or other developers for the provision of sailing stations, described as visitor moorings and landing pontoons in Upper Loch Fyne. This project is still being developed and further information can be provided by Argyll and Bute Council, and Highlands and Islands Enterprise.

7. Monitoring and Review

This plan needs to be flexible with an ability to adapt to changing pressures such as climate change, new technologies, new information and legislation.

The Scottish Government are currently consulting on a Scottish Marine Bill that proposes a new system of marine planning for Scotland, implemented by a marine agency (Marine Scotland). Marine planning at a local level may be undertaken by local authorities or local coastal partnerships and this plan will be integrated into any future planning system.

7.1 Implementation and Review

The Loch Fyne ICZM plan aims to provide guidance for Argyll and Bute Council planners, other regulators, and stakeholders on the future use and development of the marine waters and surrounding coast of Loch Fyne for the next five years (2010 – 2015).

Argyll and Bute Council's Marine and Coastal Development Unit will undertake the following throughout the plan period:

- Continue to coordinate the Loch Fyne ICZM group and organise and facilitate meetings where appropriate;
- Facilitate implementation of plan recommendations;
- Update and revise the plan where necessary;
- Encourage and assist in the development of research projects that will aid future management of Loch Fyne, and
- Continue to increase awareness and understanding of Loch Fyne and its management.

It is anticipated that by 2014, a National Plan for marine planning in Scotland will have been prepared, through the Scottish Marine Bill. At this stage the focus will turn to marine planning at the regional scale. The plan period of the Loch Fyne ICZM plan is (2010 – 2015), which provides the opportunity to review this plan when the delivery of marine planning at a regional scale is being discussed.

7.2 Monitoring

Argyll and Bute Council will monitor the implementation of this plan and its effectiveness on an ongoing basis. The monitoring will assess:

- Development applications for marine and coastal development in the coastal zone of Loch Fyne to determine whether they were consistent with plan policies;
- Feedback on the extent to which the plan has been used and referred to by developers and regulatory authorities, and
- Feedback from local stakeholders, communities, developers, and regulatory authorities on how useful and user-friendly the plan is.

It is anticipated that a short monitoring report will be produced by the Marine and Coastal Development Unit on an annual basis to assist frequent review of the plan.

8. Action Plan

The following actions have been identified from recommendations in Section 3.12 of the plan and the requirements for monitoring and review outlined in Section 7. This five year action plan will be reviewed annually and implemented by the Marine & Coastal Development Unit in partnership with relevant regulators, stakeholders and other Council departments. Inclusion of actions in this plan does not guarantee that funding will be available.

<i>Implementation and review of plan</i>					
	Action	Detail	Lead & (relevant partners)	Target delivery	Resources
1	Continue to coordinate the Loch Fyne ICZM group and organise and facilitate meetings where appropriate	Future meetings and liaison with this group will be necessary to monitor, implement and revise the plan	MCDU (Loch Fyne ICZM group)	Ongoing	Officer time (MCDU)
2	Produce an annual monitoring & implementation report	Development decisions, level of use and usability will be monitored where practical to allow the effectiveness of the plan to be measured	MCDU	Annually	Officer time (MCDU)
3	Update and revise the plan where necessary	The plan will be revised where necessary in light of the annual monitoring and implementation report, new information, research and changes in technology	MCDU (relevant regulators & stakeholders)	Annually	Officer time (MCDU)
4	Produce Data Management Plans to ensure spatial data used in the plan is updated at appropriate intervals	It is important that the spatial information on which the plans guidance and policies are based is kept up to date	MCDU & Development Services GIS team	Dec 2009	Officer time (MCDU & GIS)
5	Make the plan and its spatial information publically available through the development of a web-based interactive GIS system (Localview)	This will make the plan available in an interactive format, where the most up to date information and individual layers of spatial data can be viewed via an interactive GIS tool	MCDU & Development Services GIS team	Dec 2009	Officer time GIS project (MCDU & GIS)
6	Explore the potential for stakeholders to provide new information and report issues through Localview	The ability for stakeholders to input spatial data online could be a very useful information gathering tool	MCDU & Development Services GIS team	April 2010	Officer time (MCDU & GIS)
7	Undertake full review and update of the plan	This detailed 5 year review will involve all stakeholders and be subject to public consultation	MCDU (Loch Fyne ICZM group)	2015	Officer time (MCDU)
8	Encourage the use of the plan to ensure well-informed development applications and well-balanced decisions are made during the development application process	The plan will be distributed to relevant stakeholders and regulators, and made accessible on the Council website and through Localview	MCDU (relevant regulators & stakeholders)	Ongoing	Officer time (MCDU)
9	Explore the potential to use The Crown Estate marine spatial planning tool MaRS to inform future versions of the plan	This marine planning tool may be able to inform future plan reviews and the development of new coastal plans	MCDU & The Crown Estate	March 2010	Officer time (MCDU & TCE)

<i>Improving knowledge</i>					
	Action	Detail	Lead & relevant partners	Target delivery	Resources
10	Encourage and assist the development of research projects that will aid future management of Loch Fyne	Further research is required to inform and improve planning and management for coastal areas, in particular the research needs identified by the plan recommendations (Section 3.12)	MCDU (relevant agencies)	Ongoing	Officer time (MCDU)
11	Review the Sanitary Survey for Loch Fyne to help identify potential sources of pollution that could affect the growing and harvesting of shellfish	It may be possible to provide additional guidance to help protect existing shellfish farms being affected by new coastal development and prevent new shellfish farms being developed in at risk areas	MCDU (Food Standards Agency, SEPA)	Dec 2010	Officer time (MCDU)
12	Explore the potential to assist the objectives of the Argyll Biosecurity Plan in the collection of data on distribution and abundance of marine and coastal invasive non-native species in and around Loch Fyne	The ability to map the distribution and spread of INNS is essential in developing effective control and eradication programmes. Any proposals would need to meet the objectives of the Argyll Biosecurity Plan and Argyll Invasive Species Forum	MCDU, AFT, A&B Biodiversity	April 2010	Officer time (MCDU)
13	Seasearch surveys will be organised to confirm the presence, distribution and condition of recorded sensitive habitats of conservation interest	There is a need for further information on; <ul style="list-style-type: none"> maerl and flame shell beds around Otter Spit eel grass (<i>Z. marina</i>), in Loch Gilp 	MCDU, SNH & Seasearch	Dec 2010	Officer time (MCDU) SNH grant assistance
14	Support and assist the development of a research proposal to develop a sea lice dispersion model for Loch Fyne, to be put forward to the Scottish Aquaculture Research Forum (SARF)	There is wide support from members of the Clyde AMG for such a project which would improve knowledge and potentially provide additional guidance for this plan in relation to assessing the risk of the transfer of sea lice from farmed to wild salmonids	Clyde AMG, SARF, MCDU	April 2010	SARF project approval Officer time (MCDU)

<i>Sustainable use/development</i>					
	Action	Detail	Lead & relevant partners	Target delivery	Resources
15	Identify existing marine access points for different recreational activities, current access issues and opportunities for new access points and facilities, including parking and toilets	To enable improvement of access for recreational facilities and alleviate current access issues, it will be necessary to take a strategic approach and assess the suitability of existing access points and the future needs of recreational interests	MCDU, A&B Access (relevant stakeholders)	Dec 2010	Officer time (MCDU/ Access)

16	Investigate opportunities to provide interpretation on the final core path network that could promote activities and business, as well as natural and historical heritage	Most existing coastal interpretation focuses on natural heritage and historic interests and there is an opportunity to promote the existing activities and industries that are important in Loch Fyne	MCDU, A&B access (relevant stakeholders)	Dec 2010	Officer time (MCDU)
17	Explore the potential for a users committee, as a single point of contact for pre-application consultation for aquaculture development proposals	A users committee under the chairmanship of the Council may help to streamline the pre-application procedure and even act as an informal consultee in relation to other proposed activities within Loch Fyne. This should be considered in light of the proposed Marine Planning Partnerships for future regional marine planning	MCDU (relevant stakeholders)	April 2010	Officer time (MCDU)

Integration with other plans & planning processes

	Action	Detail	Lead & relevant partners	Target delivery	Resources
18	Ensure the integration of the Loch Fyne ICZM plan with other planning processes, including River Basin Planning and the work of the Clyde Inshore Fisheries Group (IFG)	Argyll and Bute Council are a member of the Argyll Area Advisory Group and the Clyde IFG Advisory Group and will ensure the policies and recommendations set out in this plan are considered where appropriate in the development and implementation of the SEPA area management plans and the Clyde IFG management plan	MCDU, SEPA, Clyde IFG	Ongoing	Officer time (MCDU)
19	Utilise data collected by Clyde SSMEI plan	Existing marine biodiversity information for the Firth of Clyde, collated by the Clyde SSMEI project into a single database, could be used where appropriate, to inform future decisions on development proposals and revisions of this plan	MCDU (Clyde SSMEI, SNH)	Ongoing	Officer time (MCDU)

Voluntary management

	Action	Detail	Lead & relevant partners	Target delivery	Resources
20	Explore the potential for an amendment to the existing voluntary agreement in Loch Shira, which will provide additional protection to populations of the fireworks anemone	Argyll and Bute Council will facilitate further discussion on the current agreement between the relevant parties, for consideration by Clyde Fishermen's Association	MCDU, SNH, AFT, CFA	March 2009	Officer time (MCDU)

Glossary

Algae: Marine plants that include the macro-algae, commonly known as seaweed, and the microscopic algae known as phytoplankton and phytobenthos.

Alluvial Fan: An alluvial fan is a fan-shaped deposit formed where a fast-flowing stream flattens, slows, and spreads typically onto a flatter plain.

Amnesic Shellfish Poisoning (ASP): A human illness caused by consumption of the marine biotoxin called domoic acid.

Aquaculture: The artificial rearing and husbandry of aquatic organisms; fish, shellfish and seaweed.

Area for action (AFA): Areas in the Argyll and Bute Development Plan (2009) which, subject to resource availability during the plan-period, will be the focus for partnership or community action.

Area of Panoramic Quality: these are areas of regional importance in terms of their landscape quality, identified in the Argyll and Bute Development Plan (2009).

Assemblage: a mixed grouping of animals and/or plants that are associated with a particular environment and can be used as an identifying characteristic of that environment.

Benthic: A description for animals, plants – the benthos and habitats associated with the seabed.

Bern Convention: The *Council of Europe Convention on the Protection of European Wildlife and Natural Habitats* (Bern 1979). The convention offers protection to plants, invertebrates and all vertebrates and is binding on all signatories, which includes the UK.

Biodiversity: The variability among living organisms from all sources including, among others, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species and ecosystems (CBD 1992).

Biodiversity Convention: The UN *Convention on Biodiversity* signed at the UNCED 'Earth Summit' in Rio de Janeiro 1992 to safeguard the total variety of animals, plants and all other living matter on Earth, i.e. the biodiversity, and their habitats.

Biomass: The total weight of living matter, either by species or all species combined, also referred to as the standing stock.

Biota: Any living organisms, both animals and plants.

Biotope: The physical habitat with its associated, distinctive biological communities. The smallest unit of a habitat that can be delineated conveniently and is characterised by the community of plants, and animals living there.

Birds Directive: The EU *Directive on the Conservation of Wild Birds* (79/409/ EEC) seeks to protect all wild birds and the habitats of listed species, in particular through the designation of special protection areas (SPA).

Cetacea: Marine mammals that give birth at sea, e.g. dolphins, porpoises and whales.

Coastal Framework Plans: A framework plan with a multi-agency remit extending beyond planning jurisdiction and which relates to specific seaward and landward areas of coast (e.g. a sea loch), and which may embrace area management agreements. A coastal framework plan can be proposed by local plans or may emerge through an allied partnership process.

Coastal Zone: The space in which land-based activities and terrestrial environments influence the marine environment and *vice versa*, but there is no universally recognised definition for the coastal zone. Pragmatically, the seaward boundary to the coastal zone is usually set by the limits of enabling legislation; e.g. the Territorial Sea (national legislation), or 6 miles – the area covered by national legislation and local byelaws, and the waters within which only UK registered vessels may fish.

Coliform Bacteria: Rod shaped bacteria, e.g. *Escherichia coli* (*E. coli*) and *Salmonella*, whose presence in coastal waters are indicative of faecal pollution.

Conservation Areas: Areas proposed by Local Plans or through a parallel process; they have a statutory basis (currently in the Planning (Listed Building and Conservation Areas) (Scotland) Act 1977) as areas of special architectural or historic interest and containing key features which it is desirable to conserve, sustain and enhance; a heightened value can be placed on a conservation area by Historic Scotland conferring 'outstanding' status;

Countryside Around Settlements: A development control zone which, under the Argyll and Bute Development Plan 2009, frames the area around settlements and settlement plans. Within this zone a co-ordinated and planned approach to development is appropriate, whilst allowing for small scale infill, rounding-off redevelopment and change of use of buildings to take place on an appropriate basis.

Creel: An alternative name for a crab or lobster pot.

Creeling: A method used for catching crabs, lobsters and Nephrops, whereby baited pots are laid on the seabed.

Demersal Trawling: Demersal trawls are used to catch fish or prawns that live on the bottom of the ocean. Trawlers targeting finfish often use one net (this is called a single-trawl) or two nets (twin-trawl), whereas prawn trawlers may use a twin-rig (towing two nets) or quad-rig (towing four nets). Both demersal and mid-water trawls use otter-boards to keep the mouth of the net open.

Depuration: The purification of bivalve molluscs by holding the live animals for a prescribed period in circulating seawater that is continuously sterilized, e.g. by an ultraviolet light source. During the process, the bivalves purge their guts of food and any coliform bacteria that may have collected there.

Development Control Zones: Argyll and Bute Development Plan designations which include:

- main towns
- small towns and villages
- minor settlements
- countryside around settlement
- greenbelt
- rural opportunity areas
- sensitive countryside
- very sensitive countryside

Dredging: A method for catching molluscs that live on or in the sea bed, e.g. clams, native oysters, scallops. Boats tow groups – 'gangs' – of dredges, each dredge rarely more than a metre in width. They are made of a robust steel frame, often with a toothed bar across the lower edge, and a heavily reinforced or chain link bag.

Diarrhetic Shellfish Poisoning (DSP): a temporary illness caused by eating bivalve molluscan shellfish that have accumulated toxins from dinoflagellates (*Dinophysis* spp.) in the phytoplankton.

Endemic: A natural or naturalized population that is normally found in a particular area.

Environmental Impact Assessment (EIA): an assessment which is required by formal Environmental Assessment Regulations or by the planning authority to inform the determination of a planning application and which describes the impact of development on natural and built heritage resources and on land use along with any other environmental impact.

Epifauna: Animals that live on the surface of the seabed or other substratum.

Furunculosis: Caused by *Aeromonas salmonicida*; characterized by bacteremia, septicemia and sometimes accompanied by deep necrotic lesions on the sides and backs of fish.

Good Status (Water Framework Directive): the level of quality that each river, loch, estuary, coast or ground water aims to achieve. It is a combined measure of the plants and animals present, the quantity of water available to sustain species, the physical structure of the water which provides habitat for animals and plants and the chemical quality. The emphasis is not just on water quality, but also on the *ecological* quality of the water environment.

Gross Value Added (GVA): GVA measures the contribution to the economy of each individual producer, industry or sector in the United Kingdom.

Habitat: The place where an organism lives, as characterised by the physical features. For example, rocky reefs, sandbanks and mud holes all provide particular habitats that are occupied by animals adapted to live in or on one of them but probably cannot thrive, or even survive in the others.

Habitats (and Species) Directive: *Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna* requires EU member states to protect scheduled species and to designate and manage special areas of conservation (SAC) for the protection of specific habitats and species identified in Annex I and II of the Directive.

ICZM: Integrated Coastal Zone Management, the co-ordination of all activities, regulatory and management functions to safeguard all natural resources and processes found in and affecting the coastal zone.

Intertidal: The foreshore or area of seabed between high water mark and low water mark which is exposed each day as the tide rises and falls, also known as the littoral zone.

Keystone Species: A species that forms an essential part of a community or assemblage of species without which the rest of the community cannot exist. For example, reef building species such as the colonial worm *Sabellaria* spp or the horse mussel *Modiolus modiolus* are keystone species that provide specific habitats within which many other species live.

Listed Buildings: buildings which are statutorily protected (currently under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997) as buildings of special architectural or historic interest and in relation to which it is a criminal offence to affect the appearance and characteristics without first having obtained the necessary listed building consent; these buildings are currently categorised as A, B and C in descending value and have descriptive lists and other information associated with them.

Littoral: The edge of the sea, but particularly the intertidal zone.

Local Biodiversity Action Plan: a multiagency action plan, which is currently being led by Argyll and Bute Council with the core objective of informing, influencing and engaging with agencies, organisations, businesses, communities and individuals to support and sustain biodiversity in Argyll and Bute.

Local Plan: a statutory plan, which has a detailed area and subject basis and which sits under a strategic Structure Plan.

Maerl: Twig-like, calcified red algae that act as keystone species and form a particular habitat. Maerl is marketed as 'calcified seaweed' for horticultural use.

Marine Stewardship Council (MSC): A non-governmental organisation that encourages consumers to purchase fish taken only from environmentally responsible and sustainable fisheries. All fish products that MSC judge to be from such sustainable fisheries, will be permitted to carry an 'eco-friendly' seal of approval.

Marine Consultation Area (MCA): a non-statutory nature conservation designation for Scotland. It identifies areas of nature conservation interest for which widespread consultation is desirable before any development takes place.

Material Considerations: Considerations or factors relating to the use and development of land, which are relevant and valid to consider in relation to the taking of a decision on an application for planning permission.

National Scenic Area: A conservation designation specifically for Scotland, administered by Scottish Natural Heritage. NSAs are defined as having outstanding scenic interest or unsurpassed attractiveness. They are the Scottish equivalent of AONBs (Area of Outstanding Natural Beauty in England, Wales and Northern Ireland).

Natura 2000: The EU-wide network of Special Protection Areas (SPAs) established under the Birds Directive and Special Areas of Conservation (SACs) established under the Habitats Directive.

OSPAR: A combination (1992) of two earlier conventions (Oslo and Paris) to create the *Convention for the Protection of the Marine Environment of the Northeast Atlantic*. Annexes to the convention address specific issues:

1. **Annex I** prevention and elimination of pollution from land based sources;
2. **Annex II** prevention and elimination of pollution by dumping or incineration;
3. **Annex III** prevention and elimination of pollution from offshore sources;
4. **Annex IV** assessment of the quality of the marine environment;
5. **Annex V** protection and conservation of ecosystems and biological diversity.

Paralytic Shellfish Poisoning (PSP): Paralytic Shellfish Poisoning is a natural algal poison, which filter feeding shellfish can concentrate.

Polyculture: Polyculture is the practice of culturing more than one species of aquatic organism.

Plankton: The animals and plants that float in mid water and drift with the tides.

Ramsar Convention: The international Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar, Iran 1971).

Recreational Fisheries: Any fishery that is undertaken for pleasure rather than income; most frequently it is represented by beach and boat angling. Recreational sea fishing is not licensed, but it is subject to minimum landing size (MLS) regulations and its activities can be curtailed by quota restrictions.

Regulating Order: A variation in the public right to fish for molluscs otherwise guaranteed by *Magna Carta* (1215). The Order is usually granted to a public body, e.g. Sea Fisheries Committee (SFC), to manage a wild stock mollusc fishery. The species covered by each order are named. Licenses are then issued to individuals granting them the right to fish the named species within the area covered by the order. The order does not affect the public right to fish within the regulated area for species not named in the order.

Special Area of Conservation (SAC): areas designated by Government to accord with the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora and to safeguard rare and threatened species and habitats listed in the Directive; terrestrial SACs are normally, but not exclusively, SSSIs which together with SPAs form the Natura 2000 network.

Salmonid: Belonging to, or characteristic of the family Salmonidae, which includes the salmon, trout, and whitefish.

Saltmarsh: A maritime habitat found in temperate regions, but typically associated with tropical and subtropical mangrove swamps, in which excess sodium chloride is the predominant environmental feature.

Scheduled Ancient Monuments: Monuments protected by statute where within the scheduled area, development requiring planning permission is subordinated to scheduled monument consent legislation.

Settlement: Main towns, small towns and villages, and minor settlements (six adjoining houses and above represent a settlement).

Species Action Plans (SAP): Species Action Plans form part of the UK Biodiversity Action Plan (UKBAP) to protect UK priority species and habitats. Marine priority species for which plans have been published (UKBG 1999) include: baleen whales, harbour (common) porpoise, small dolphins, toothed whales, marine turtles, basking sharks, common skate, selected commercial fish species, 'selected deep-water fishes', native oyster, 12 non-commercial invertebrate species and two seaweeds.

Severall Order: An order removing the public right to fish for named shellfish normally guaranteed by *Magna Carta* (1215). The Order assigns exclusive rights to an individual or organisation to improve and manage an area of seabed and ownership of named species of shellfish living on it. The chosen method of management is usually through cultivation (mariculture), but it includes stock enhancement. The order does not affect the public right to fish within the area for species not named in the order.

Shellfish Growing Water: An area where coastal water quality is monitored/maintained by the Scottish Environment Protection Agency (SEPA) at an appropriate standard for shellfish growing.

Smolts: Juvenile salmon (known as parr) spend most of their freshwater life in shallow riffles, mostly at the southern end of their range, until they reach 12–15 cm in length, when they transform themselves into smolts and are ready for migration in spring the first year after hatching.

Site of Special Scientific Interest (SSSI): for the purposes of this plan these are sites which are designated by Scottish Natural Heritage (SNH) under the provisions of the Wildlife and Countryside Act 1981 and in accordance with specific guidelines to protect the special interest of the site from change or deterioration; these areas are special because of their marine conservation and wildlife importance and the nature conservation value of the plants, animals or habitats as well as any rock formations and can include rivers, freshwater and intertidal areas as far as the low water mark; SSSI status does not change the use of the land but the Council, owners and occupiers must consult with SNH on any developments or activities which may affect the site.

Statutory Instrument: A document bringing into force, usually as a result of an Order in Council, a variation to existing legislation without the need for Parliament to amend the primary legislation.

Structure Plan: the strategic tier of the development plan, which establishes the framework for the local plan (s) -the current Structure Plan for the whole of the Argyll and Bute territory is the Argyll and Bute Structure Plan approved November 2002.

Sublittoral: Depths greater than the intertidal zone.

Supplementary Planning Guidance: Planning guidance that is adopted in connection with a strategic development plan, or in connection with a local development plan, and which therefore forms part of the development plan.

Sustainable Development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED 1987 – *The Brundtland Report*).

Thermocline: Depth at which the rate of decrease of temperature with increase of depth is the largest. In general, the sea water temperature decreases from the surface to the deepest levels, except in high latitudes where the configuration can be more complex.

Tidal currents: A tidal current is a steady, permanent, horizontal movement of water, like a broad river running through the open ocean.

Tidal Stream: A tidal stream is a horizontal movement of water, but its speed and direction vary frequently and regularly according to the state of the tide.

Trawl: A large, funnel-shaped net that is towed through the water by single or paired boats. The mouth of the net is held open by a beam (beam trawl) or floats along the headline, weights along the ground rope and is pulled open laterally either by the doors attached to the towing wires (warps) or two boats pulling one warp each.

UKBAP – The UK Biodiversity Action Plan, the Government's programme aimed at meeting some of its obligations under the UN *Convention on Biodiversity* (1992). A wide range of habitat action plans (HAP) and species action plans (SAP) are being implemented to help safeguard and improve the conservation status of priority habitats and priority species.

Vibriosis: Vibriosis is a disease caused by an infection with bacteria of the *Vibrio* genus, most commonly *Vibrio parahaemolyticus* or *Vibrio vulnificus*. *Vibrio* bacteria cause diarrhea, skin infections, and/or blood infections.

Water Bodies (River Basin Management Planning): SEPA have divided the larger rivers, lochs, estuaries, coasts and ground waters into smaller parts called water bodies. A water body may be a single burn or loch, or it could be a stretch of a river or an area of ground water.

Wellboat: Used for a range of functions including transferring of fish for harvest.

References

- Anderson, J. and Myers, M., 2005. Seafish – The Argyll and the Islands Enterprise Fisheries Review. Seafish Economics.
- Argyll and Bute Council, 2002. Argyll and Bute Structure Plan - Developing Our Future. pp 54.
- Argyll and Bute Council, 2009. Argyll and Bute Local Plan. pp 153.
- Argyll Fisheries Trust, 2005. Loch Fyne Atlantic Salmon Restoration Plan – 2005-2010. Cherry Park, Inveraray, Argyll. PA32 8XE.
- Argyll Fisheries Trust 2008. Available from: <http://www.argyllfisheriestrust.co.uk/fishresources.html> [Accessed 10 Feb 2009].
- Baxter, J. M., Boyd, I. L., Cox, M., Cunningham, L., Holmes, P., Moffat, C.F., (Editors), 2008. Scotland's Seas: Towards Understanding their State. Fisheries Research Services, Aberdeen. pp. 174.
- Clyde Fishermen's Association, 2005. Clyde Fishermen's Association Agreement to Manage Trawling in Loch Shira.
- Cole, R., 2007. The Sail Clyde Project Sailing in the Clyde Estuary. Available from: <http://www.clydeforum.org/conference> [Accessed December 2008].
- Combes, J., Lart, W., 2007. Clyde Environment and Fisheries Review. Available from: <http://www.gla.ac.uk/centres/marinestation/CFDP/index.htm> [Accessed January 2007].
- Craik, J. C. A., 1999. NBN Gateway – Seabird 1999 dataset.
- Craik, J. C. A., 2000. NBN Gateway – Seabird 2000 dataset.
- Davies, L. M., 1989. Area: Loch Fyne. Available from: <http://www.clydeforum.org/reports/Marine%20N%20Heritage%20A%20&%20B.PDF> [Accessed 28th August 2006].
- Davies, L. M., 1989(b). Marine Nature Conservation Review. Surveys of Scottish sea lochs: Loch Fyne. (Contractor: University Marine Biology Station, Millport). *Nature Conservancy Council, CSD Report*, No. 984.
- DEFRA, 2006. Available from: <http://www.defra.gov.uk/environment/water/marine/uk/iczm/index.htm> [Accessed 28th August 2006].
- DEFRA, 2008. Available from: <http://www.defra.gov.uk/environment/water/quality/shellfish/index.htm> [Accessed 2nd July 2008].
- Dipper, F.A., Beaver, R., 1999. Marine Nature Conservation Review Sector 12. *Sea lochs in the Clyde Sea: area summaries*. Peterborough: Joint Nature Conservation Committee. [Coasts and Seas of the United Kingdom. MNCR Series].
- DTZ Pida Consulting, 2005. Economic Impact of the Leveraged Employee Buyout at Loch Fyne Oysters. Edinburgh.
- Edwards, A., Sharples, F., 1985. Scottish sea lochs: a catalogue. SMBA Internal Report 134, 110.
- Food Standards Agency, 2006. Classification of Shellfish Harvesting Areas Document 2006. Available from: <http://www.foodstandards.gov.uk/multimedia/pdfs/classshellscot0806.pdf> [Accessed 27th November 2006].
- EKOS, 2008. Firth of Clyde Socio Economic Review. A report prepared for the Scottish Sustainable Marine Environment Initiative (SSMEI). pp 298.
- Grant, A., 2000. Marine Aquaculture and the Landscape: The siting and design of marine aquaculture in the landscape. Scottish Natural Heritage Management Series, cited in: Guidance on Landscape/Seascape Capacity for Aquaculture 2008.
- Grant, A., 2007. Landscape/Seascape Capacity for Aquaculture: Loch Fyne. Final Report.

- Historic Scotland, 2008. Available from: Historic Scotland
<http://www.historic-scotland.gov.uk/index/heritage/gardens/gardens-selection.htm> [Accessed 7th March 2008].
- Houston, A., 2004. Clyde Cruising Club – Firth of Clyde. Including North Channel, Solway Firth & Isle of Man. Sailing Directions. Glasgow: Clyde Cruising Club Publications Ltd.
- Howson, C.M., Davies, L.M., 1988. Sublittoral diving surveys - Marine Nature Conservation Review (MNCR).
- Kettle-White, A. 2006. *Argyll & the Islands Fisheries Biosecurity Management Plan*. Report commissioned by the Argyll Fisheries Trust, Cherry Park, Inveraray, Argyll, PA32 8XE.
- MacKay Consultants, 2001. Lighthouse's fish farming operations in Argyll: Socio-economic impact study. Unpublished
- MacKenzie Wilson Partnership, 2006. Sailing in the Clyde Estuary – The Potential for Future Development. A Market Assessment, Economic Impact Study and Action Plan.
- Marine Climate Change Impacts Partnership, 2007-8. Available from:
<http://www.mccip.org.uk/arc/2007/marine.htm> [Accessed 31st July 2008].
- MarLIN 2008. Available from: http://www.marlin.ac.uk/marine_alien/marine_alien.htm [Accessed 14th January 2009].
- McLuskey, D.S., 1986. The intertidal ecology of three west of Scotland estuaries (Loch Crinan, Loch Gilp, West Loch Tarbert). *Estuarine and Brackish Water Sciences Association, Bull.* 43: pp.15-25.
- Paisley College of Technology, Department of Biology, 1979. *A biological survey of seashores in the Clyde Sea Area – 1978-9*. Unpublished, Nature Conservancy Council, Scotland, South-west Region. (Internal report, No. NC211 J.).
- Paisley, O. 2005 *Pachycerianthus* Survey Loch Shira Sept/Oct 2005 Summary Report www.seasearch.org.uk
- Paisley, O. 2006 Loch Shira Second Survey April 2006 Summary Report www.seasearch.org.uk
- Paisley, O. 2008 Upper Loch Fyne Survey April 2008 Summary Report www.seasearch.org.uk
- Ports and Harbours of the UK, 2008. Available from: <http://www.ports.org.uk/port.asp?id=384> [Accessed 3 April 2008].
- Radford A. F., Riddington G.L 2004. *The Economic Impact of Game and Coarse Fishing in Scotland*. A report prepared for SEERAD - <http://www.scotland.gov.uk/Publications/2004/06/19506/38879>
- Radford, A. F., Riddington, G. L., Gibson, H., 2009. *Executive Summary: Economic Impact of Recreational Sea Angling in Scotland*. A report prepared by Cogent Research International Ltd. for the Scottish Government. 13pp. (Report No. B61549 7/09).
- Ridley, G., 1986. *The DIVER Guide to Scotland-Volume 1 – Dive West Scotland*. Underwater World Publications, London.
- Ritchie, W. 1975. *Beaches of Cowal, Bute and Arran*. Report commissioned by the Countryside Commission for Scotland. University of Aberdeen. 130pp.
- RSPB, 2004. Available from: <http://www.rspb.org.uk/wildlife/birdguide/name/a/index.asp> [Accessed 11th December 2007].
- Sail West Project, 2007. A Strategic Programme for the Development of Marine Leisure Activities and Infrastructure in the Republic of Ireland Border Region, Northern Ireland and the West of Scotland.
- Scottish Government, 1999. Policy Guidance Note – Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters. Available from: <http://www.scotland.gov.uk/library2/doc06/mff-23.htm> [Accessed 11th June 2008].
- Scottish Natural Heritage, 1996. Landscape Assessment of Argyll and the Firth of Clyde – Environmental Resources Management. No.78. 65.

Scottish Natural Heritage, 2008. Sitelink Available from:
http://gateway.snh.gov.uk/portal/page?_pageid=53,910284,53_920284&_dad=portal&_schema=PORTAL&UNIT_ID=2071&DESIGNATION_ID=18&CONTAINS=&LA_ID=4 [Accessed 11th June 2008].

Seafish Media Review, 2009. Available from: www.seafish.org;
<http://www.thefishsite.com/fishnews/8840/recycling-shellfish-waste-for-commercial-bait> [Accessed 14th January 2009].

Selkie Associates, 2001. The Marine Natural Heritage of Argyll and Bute – Volume 1: Loch Fyne to Loch Craignish.

Stewart Miller Associates, 2004. *Overview of the Marine Tourism Sector in Argyll and the Islands of Scotland*. 60pp.

The Crown Estate, 2006. Available from:
http://www.thecrownestate.co.uk/15_ourportfolio/39_marine/53_fish_farming.htm [Accessed 18th September 2006].

The Marine Life Information Network for Britain and Ireland (*MarLIN*), 2008. Marine Aliens - *Caprella mutica* Available from: http://www.marlin.ac.uk/marine_alien/species.asp?SpID=20#Life [Accessed 13th January 2009].

Wilson, A., 2008. *SPICOSA - Science and Policy Integration for Coastal System Assessment*. The Socio-economics of Loch Fyne. A Report for the SPICOSA Economics Workshop, July 2008, up-dated November 2008.

Bibliography

- Anderson, J., Myers, M. 2005. Seafish – The Argyll and the Islands Enterprise Fisheries Review. Seafish Economics.
- Argyll and Bute Modified Finalised Draft Plan – Written Statement. June 2006.
- Argyll and Bute Local Transport Strategy 2007-2010 – Moving Forward.
- Argyll and Bute Structure Plan 2002 – Developing Our Future. November 2002.
- Argyll Fisheries Trust. 2004. Loch Fyne Salmon Restoration Project. Glen Aray Hatchery Development - Draft 1, October 2004. Cherry Park, Inveraray, Argyll. PA32 8XE.
- Argyll Fisheries Trust. 2005. Loch Fyne Atlantic Salmon Restoration Plan – 2005-2010. Cherry Park, Inveraray, Argyll. PA32 8XE.
- Argyll Fisheries Trust. 2007. Upper Loch Fyne Fisheries Restoration Programme – Progress Report, December 2007. AFT Report to Loch Fyne River Improvement Association & Tripartite Working Group. Cherry Park, Inveraray, Argyll. PA32 8XE.
- Arthur, G., 1999. The Atlantic Halibut: a potential species for fish farming in Shetland, North Atlantic Fisheries College Fisheries Information Note 2. Available from: <http://www.nafc.ac.uk/fdn/fin2halibut.pdf> [Accessed 20th November 2006].
- Atkinson, J. & Tuck, I. (2004) Nephrops TV surveys and effort mapping. *In*: Proceedings of the Clyde Fisheries Workshop (eds R. Ormond & W. Lart). University Marine Biological Station Millport, 6–7 February 2004. University Marine Biological Station Millport. pp. 20–21.
- Cromey, C., Treasurer, J., Nickell, T., Black, K. and Duncan, J., 2006. *Cod Farming in the Marine Environment – Minimisation of environmental impact and sustainable cultivation of Atlantic cod (Gadus morhua)*. Available from: <http://www.sams.ac.uk/research/coastal%20impacts/codfarm.htm>, Accessed 20th November 2006.
- Davies, L. M. 1989. Area: Loch Fyne. Available from: <http://www.clydeforum.org/reports/Marine%20N%20Heritage%20A%20&%20B.PDF> [Accessed 28th August 2006].
- Delap, J., 2007. Loch Fyne District River Improvement Association – Annual Report.
- DELTIX/IBI Group. 2006. Business opportunities for the marine transport of timber in Scotland – Final Report. Report commissioned by the Scottish Enterprise.
- Dipper, F.A., Beaver, R. 1999. Marine Nature Conservation Review Sector 12. *Sea lochs in the Clyde Sea: area summaries*. Peterborough: Joint Nature Conservation Committee. [Coasts and Seas of the United Kingdom. MNCR Series].
- Firth of Clyde Area Management Agreement. 2007. Tripartite Working Group.
- Forestry Commission Scotland, 2008. The Scottish Forestry Strategy 2008-2011 Implementation Plan and 2007-2008 Progress Report. Available from: <http://www.forestry.gov.uk> [Accessed 11th June 2008].
- Grant, A. 2007. Landscape/Seascape Capacity for Aquaculture: Loch Fyne. Final Report.
- Gubbins, M. J., Bricknell, I., 2007-8. MCCIP Annual Report Card 2007-2008 Scientific Review – Aquaculture. Report commissioned by Fisheries Research Services, Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB. Available from: <http://www.mccip.org.uk/arc/2007/PDF/Aquaculture.pdf> [Accessed 31st July 2008].
- Historic Scotland. 2003. Historic Land-Use Assessment of the Extension to the Loch Lomond and the Trossachs National Park (Cowal) - A Report prepared by the Royal Commission on the Ancient and Historical Monuments of Scotland and Historic Scotland.

- Howson, C.M., Davies, L.M. 1991. A report to the Nature Conservancy Council from the University Marine Biological Station, Millport, Isle of Cumbrae, Scotland, KA28 0EG. Marine Nature Conservation Review – Surveys of Scottish Sealochs. A Towed Video Survey of Loch Fyne. Report No. 1189.
- MacKenzie Wilson Partnership, 2006. Sailing in the Clyde Estuary – The Potential for Future Development. A Market Assessment, Economic Impact Study and Action Plan.
- Marter, H.J., 2003. Halibut farming arrives. The Shetland News, 11th September 2003. Available from: http://www.shetland-news.co.uk/archives/pages/news%20stories/2003/September%202003/halibut_farming_arrives_%E2%80%93_11th_september.htm [Accessed 20th November 2006].
- North Atlantic Salmon Conservation Organization (NASCC). 2005. Report of a one-day workshop organised by the NASCO/North Atlantic salmon farming industry Liaison Group. *Wild and Farmed Salmon - Working Together*. In co-operation with the European Aquaculture Society (EAS). 11 Rutland Square Edinburgh EH1 2AS Scotland UK.
- PESCA, 2001. Marine Coastal Management – A new approach for Argyll & Bute. Prepared for Campbeltown and Kintyre Enterprise Trust, Trench Point, Askomil Walk, Campbeltown, Argyll, PA28 6EP.
- PIEDA Ltd. The Scottish Marine Biological Association, 1988. *Clyde Sea Angling Study – Final Report*.
- SAIL WEST PROJECT. 2007. A Strategic Programme for the Development of Marine Leisure Activities and Infrastructure in The Republic of Ireland Border Region, Northern Ireland and the West of Scotland.
- Scottish Environment Protection Agency (SEPA). 2004. Shellfish Growing Waters and SEPA Monitoring Sites - Area 9: Loch Fyne Coastal Strip. Available from: <http://www.sepa.org.uk/pdf/data/shellfish/9.pdf> [Accessed on 22nd May 2005].
- Scottish Executive. 2007. Scottish Planning Series, Planning Circular 1 2007 – Planning Controls for Marine Fish Farming.
- Scottish Executive. 2007. Scottish Planning Policy, SPP22 – Planning for Fish Farming.
- Scottish Natural Heritage. 1996. Landscape Assessment of Argyll and the Firth of Clyde –Environmental Resources Management. No. 78.
- Scottish Natural Heritage. 2002. Vision of Sustainable Marine Aquaculture in Scotland.
- Seasearch 2005. *Pachycerianthus* Survey – Loch Shira Sept/Oct 2005 Summary Report.
- Seasearch 2006. Fireworks anemone distribution in Loch Shira, Argyll 1988-Oct 2006.
- Seasearch 2008. Upper Loch Fyne Survey April 2008 Summary Report.
- Swanwick, C. 2002. Landscape Character Assessment – Guidance for England and Scotland. Prepared on behalf of The Countryside Agency and Scottish Natural Heritage.
- Trew, J., 2004. Flat's just the way we like it. The Herald, 28th February 2004. Available from: http://www.bmfa.uk.com/news/flats_the_way_we_like_it.htm [Accessed 20th November 2006].
- Wieczorek, S.K., Campagnuolo, S., Moore, P., Froggia, C., Atkinson, R.J., Gramitto, E., Bailey, N., 1999. *The composition and fate of discards from Nephrops trawlers in Scottish and Italian waters*. Final Report (96/092) to the EC, Study Project in support of the CFP (XIV/96/C75).

Appendix I: Summary of Argyll and Bute Development Plan policies that are particularly relevant to the Loch Fyne ICZM Plan

This appendix summarises the most relevant Development Plan policies for marine and coastal development. The Argyll and Bute Development Plan, comprises the Structure Plan and Local Plan and these documents should be referred for the full details of the policies listed below and details of other policies which may be relevant to a particular development proposal.

Aquaculture Development

Local Plan

Policy LP AQUA 1 - Shell Fish and Fin Fish Farming

For the purposes of this policy, marine fish farming corresponds to shellfish and fin-fish farming located in coastal waters and the foreshore below Mean High Water Springs. Policy LP AQUA 1 addresses both the consultation and formal planning application contexts.

Coastal development

Structure Plan

STRAT CP 1 – Coastal Transshipment Development

Coastal transshipment on well chosen sites will be supported unless it is incompatible with:

- A) A particular settlement or edge of settlement location because of conflict with the settlement plan or with the capacity of that settlement to accommodate the development.
- B) A particular coastal location because of the sensitivities of the coastscape or coastal ecology or significant conflict with other coastal use or natural heritage interest.

STRAT DC 7 – NATURE CONSERVATION AND DEVELOPMENT CONTROL

- D. *Enhancement to nature conservation interests will also be encouraged in association with development and land use proposals.*

STRAT DC 8 – LANDSCAPE AND DEVELOPMENT CONTROL

- B) *Protection, conservation and enhancement to landscape will also be encouraged in association with development and land use proposals.*

Local Plan

Coastal Development

Policy LP CST 1 - Coastal Development on the Developed Coast (Settlements and Countryside around Settlements)

In Argyll and Bute the Structure Plan identifies developed coast as coastal sectors of existing settlements and countryside around settlements. This is the preferred area for coastal development in Argyll and Bute particularly where it makes best use of existing infrastructure or Brownfield land.

Policy LP CST 2 – Coastal Development on the Undeveloped Coast (Sensitive Countryside Zone)

In Argyll and Bute the Structure Plan identifies undeveloped coast as coastal sectors of the Sensitive Countryside Zone. It is important that the character of Argyll and Bute coast is protected from inappropriate development and that development which requires a coastal location is directed in the first instance to areas where development has taken place. Applications for development on the undeveloped coast will not generally be supported unless: site reinstatement proposals that enhance biodiversity are submitted with the application.

Policy LP CST 3 – Coastal Development on the Isolated Coast (Very Sensitive Countryside Zone)

The purpose of this policy is to protect the character of the isolated coast from inappropriate development and to help direct development requiring a coastal location to areas with existing development, or sites where the character of the coastal zone could accommodate such development.

Environment

There are a range of Environment policies in the Local Plan, which aim to safeguard key environmental assets and guide new development to locations that minimise environmental impacts.

The policies most relevant to the Loch Fyne ICZM plan are:

- **Policy LP ENV 1** - *Development Impact on the General Environment*
- **Policy LP ENV 2** - *Development Impact on Biodiversity (i.e. biological diversity)*
- **Policy LP ENV 3** - *Development Impact on European and Ramsar Sites*
- **Policy LP ENV 4** – *Management of Sites*
- **Policy LP ENV 5** – *Development Impact on Sites of Special Scientific Interest (SSSIs)*
- **Policy LP ENV 6** – *Development Impact on Habitats and Species*
- **Policy LP ENV 10** - *Development Impact on Areas of Panoramic Quality*
- **Policy LP ENV 11** - *Development Impact on Historic Gardens and Designed Landscapes*
- **Policy LP ENV 12** – *Water Quality and Environment*
- **Policy LP ENV 13 (a)** – *Development Impact on Listed Buildings*
- **Policy LP ENV 16** - *Development Impact on Scheduled Ancient Monuments*
- **Policy LP ENV 17** - *Development Impact on Sites of Archaeological Importance*

Servicing

Policy LP SERV 1 – *Private Sewage Treatment Plans and Wastewater (i.e. drainage) Systems.*

The aim of this policy is to ensure that septic tanks and other private foul drainage arrangements where permitted, are properly sited and have no adverse effects on the surrounding area, and in areas served by wastewater schemes, new development is connected to the system where capacity allows.

Policy LP SERV 2 – *Incorporation of Natural Features/Sustainable Drainage Systems (SuDS)*

Where major new developments are planned, this policy seeks to encourage the retention of existing watercourses and the creation of buffer zones on development sites, to reduce the risk of flooding which can occur through the forcing of water through alternative/man-made routes. The retention of watercourses also helps to protect and enhance biodiversity.

Policy LP SERV 3 – *Drainage Impact Assessment (DIA)*

This policy requires developers to submit a DIA along with SuDS as part of all significant new development proposals and for all proposals where there are contamination or flood risk issues. A DIA takes into consideration the impact of the proposed development on its catchment areas essentially with regard to flood risk and pollution.

Policy LP SERV 5 – *Waste Related Development and Waste Management in Developments*

This policy requires the waste management of any new developments to conform to the National Waste Strategy, National Waste Plan and the Area Waste Plan for Argyll & Bute, and states that developments shall make effective land use and layout provision for the storage, separation, recycling, composting and collection of waste. Policy LP SERV 5 also supports waste related development, particularly opportunities to capitalise on the economic opportunities associated with sustainable waste management projects.

Recreation

Policy LP REC 1 – *Sport, Leisure and Recreation*

The aim of this policy is to promote sport and recreation wherever appropriate and prevent the loss of any such facilities that are important to the local communities. Proposals should be located, wherever possible, where they can be easily accessed by public and other modes of transport at all times of the day, and close to where people live in order to cut down on travel time and costs.

Policy LP REC 2 - *Safeguarding of Recreational Land and Important Open Spaces*

The aim of this policy is to safeguard areas of valued open space, sports pitches and playing fields from being redeveloped. Protected areas shall not be built on except where the retention or enhancement of the facilities can best be achieved by the redevelopment of part of the site which will not compromise its sporting potential and its amenity value.

Aquaculture and coastal development

Policy LP CST 4 – *Development impact on the Natural Foreshore*

The foreshore is the sensitive interface between land and the sea. The natural foreshore corresponds to that area between mean high-water and low-water springs, which has been largely unaltered by human activity. Within the natural foreshore there are environmental sensitivities and planning issues, which impose severe limits on the acceptability of development. These sensitivities and planning issues include: the ecological health of the foreshore; the importance of the foreshore in terms of outlook; the important economic functions of the

foreshore e.g. for shellfish farming; for access to the sea and for urban harbour and waterfront infrastructure; and the need to safeguard public access down to and along the foreshore.

Policy LP PG 1 – Planning Gain

The Council shall seek appropriate elements of planning gain in association with development proposals emerging from partnership activity, from the development plan process and from planning applications. This shall be in liaison with participating partners and developers and be proportionate to the scale, nature, impact and planning purposes associated with the development.

Coastal planning

Structure Plan

REC CP 1 – Coastal Framework Plans

- A) It is recommended that Argyll and Bute Council, with support from Scottish Environment Protection Agency, Scottish Natural Heritage, the local enterprise companies, neighbouring authorities, other partner and community organisations and interest groups, commence and seek to complete within five years the following priority coastal framework plans.
1. Firth of Lorn/Lynn of Lorn/ Loch Linnhe/South of Mull waters
 2. Islay, Jura and Colonsay coastal waters
 3. Firth of Clyde
 4. Loch Etive
 5. Loch Creran
 6. Sound of Mull
 7. Loch Fyne

Fishing

Structure Plan

REC CP 2 – Sea-fishing Interests

- A) It is recommended that Argyll and Bute Council, along with partner agencies and organisations, take into account local commercial fishing interests when Argyll and Bute Plans or partnership processes propose harbour and waterfront-related development and projects.
- B) Local commercial fishing interests be given appropriate support to achieve a local fishing – and local community-based approach to sustainable sea-fishing having regard to:
1. International and national competition for depleted fish stocks.
 2. Consequential adversities in the communities and settlements which support and depend on local commercial fishing fleets.
 3. Pursuance of more control of in-shore waters by local communities and the pursuance of ‘conservation order’ approaches.
 4. Establishing recovery regimes and management of over-fished sea-lochs.

Tourism

Structure Plan

REC TOUR 1 – Water Related Tourism Opportunities

Transport

Local Plan

Transport

Policy LP TRAN 8 – Piers and Harbours

The purpose of this policy is to assist in maintaining viable, thriving and stable harbour areas. To ensure working harbours are not constrained by neighbouring development, land must be allocated for development adjacent to the harbour to help increase trade and competitiveness, and to support the needs of fishing and other harbour based industries. It is also important to safeguard land for existing ferry operators to allow their continued operation and/or enhancement.

Appendix II: Plans and policies taken into account in the development of this plan

International

- 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)
- Convention on Biological Diversity (Rio de Janeiro, 1992)
- 1991 Agreement on the Conservation of Small Cetaceans in the Baltic and North Sea (ASCOBANS), made under the 1979 Convention on Migratory Species (Bonn Convention)
- World Summit for Sustainable Development (2002)

European

- Water Framework Directive (2000/60/EC)
- Integrated Coastal Zone Management Recommendation
- Common Fisheries Policy (CFP) 1970
- Habitats Directive (Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora)
- Natura 2000 (The EU-wide network of protected sites established under the Birds Directive (SPA) and the Habitats Directive (SAC))
- Wild Birds Directive (Council Directive 79/409/EEC on the conservation of wild birds)
- Ramsar Convention (The international Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar, Iran 1971)).
- Strategic Environmental Assessment and Environmental Impact Assessment Directives
- The Lisbon Agenda (2000)
- Wildlife and Countryside Act 1981
- The Convention on the Conservation of European Wildlife and Natural Habitats 1979 (The Bern Convention)

UK/National

- Water Framework Directive (2000/60/EC)
- Defra (2002) Safeguarding our Seas – a Strategy for the Conservation and Sustainable development of our Marine Environment
- Shellfish Waters Directive (79/923/EEC)
- Scottish Executive (2007) Recommendations of the Advisory Group on Marine and Coastal Strategy: A follow up to Seas the Opportunity: A Strategy for the Long Term Sustainability of Scotland's Coasts and Seas
- Scottish Executive (2005) A Strategic Framework for Inshore Fisheries in Scotland
- Scottish Government (2009) A Renewed Strategic Framework for Scottish Aquaculture
- Scottish Executive Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters
- Fish Farming and Shellfish Farming Businesses Order 1985
- Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003
- Wildlife and Countryside Act 1981 (as amended)

- The Conservation (Natural Heritage & c.) Regulations 1994
- The Conservation (Natural Heritage & c.) Amendment (Scotland) Regulations 2004
- Nature Conservation (Scotland) Act 2004
- UK Biodiversity Action Plan (1994)
- Scotland's Biodiversity: It's in your Hands – A Strategy for the conservation and enhancement of biodiversity in Scotland (2004)
- Scotland's Biodiversity: It's in your Hands – Strategy Implementation Plans 2005 – 2008
- Water Environment and Water Services (Scotland) Act 2003 (WEWS)
- CAR (Water Environment (Controlled Activities) Regulations 2005)
- Ancient Monuments and Archaeological Areas Act 1979
- Protection of Wrecks Act 1973
- Scottish Executive National Planning Policy Guideline No. 5 – Archaeology and Planning
- Securing a Renewable Future: Scotland's Renewable Energy (2003)
- Scottish Executive (2004) Framework for Economic Development in Scotland
- Coast protection Act 1949
- Sites of Special Scientific Interest – Notified under the Wildlife and Countryside Act 1981
- Special Areas of Conservation – Designated under the European Directive (92/43/EEC)
- Seas of Change and the Government's Response to Seas of Change
- National Planning Policy Guideline No. 6 – Renewable Energy
- National Planning Policy Guideline No. 7: Planning and Flooding
- Scottish Executive (1997) National Planning Policy Guideline No. 13 – Coastal Planning
- Scottish Executive (2002) National Planning Policy Guideline No. 14 – Natural Heritage
- Scottish Executive (1999) National Planning Policy Guideline No. 18 – Planning and the Historic Environment
- Planning Policy Guidance Note 25: Development and Flood Risk
- National Planning Framework for Scotland 2004
- National Planning Policy Guidelines
- SEPA Policy on Regulation and Expansion of Caged Fish of Salmon in Scotland (2000)
- Environmental Impact Assessment (Scotland) Regulations 1999 (SSI 1999/1)

Regional/Local

- Argyll and Bute Council Development Plan
- Argyll and Bute Local Transport Plan
- Firth of Clyde Marine Spatial Plan
- Argyll and Bute Biodiversity Action Plan
- Council Directives (85/337/EEC and 97/11/EC)

Appendix III: Details of wildlife recording schemes

A number of biological public recording schemes have been set up through a various conservation agencies. These are listed below together with their contact details.

Basking sharks

Information on identifying basking sharks and how to report a sighting can be found at the Marine Conservation Society (MCS) website: <http://www.mcsuk.org/mcsaction/wildlife-protection/basking+shark>.

Marine and coastal species

Information on identifying and recording marine species/habitats can be found on the Seasearch website: <http://www.seasearch.co.uk/>

Whales & dolphins

Information on cetacean sightings can be found through the Hebridean Whale and Dolphin Trust (HWDT) and the Whale and Dolphin Conservation Society (WDCS) websites respectively:

<http://www.whaledolphintrust.co.uk/research/sightings-summary-2000-2003.asp>;
<http://www.wdcs.org.uk/>

Non-native species

Information on identifying invasive marine non-native species and how to report a sighting can be found on the Scottish Natural Heritage (SNH) website www.snh.org.uk/wireweed and on the Marlin website: http://www.marlin.ac.uk/marine_alien/marine_alien.htm

Appendix IV: Summary of roles and responsibilities of regulators in the marine & coastal environment

Competent/ Relevant Authority	COMPETENT AND RELEVANT AUTHORITY RESPONSIBILITIES								
	Fishing	Gathering/ Harvesting from Foreshore	Aquaculture	Marine Recreation	Effluent Discharges & Marine Dumping	Shipping/ Boating	Coastal/Marine Development	Land Use: Forestry and Agriculture	Scientific Research
Argyll & Bute Council	Responsible for food safety aspects of shellfish fisheries. Shellfish toxin sample collection.	Responsible for food safety aspects of shellfish collection. Collect samples to monitor for toxins and water classification. Issue shellfish movement documents and locally enforce Temporary Prohibition Notice system.	Responsible for granting development consent. Responsible for food safety aspects of shellfish aqua-culture industry. Collect samples to monitor for toxins and water classification. Issue shellfish movement documents and locally enforce Temporary Prohibition Notice system.	Responsible for public health and safety in relation to leisure activities in marine environment. Licence businesses eg charter boats or boat rental with capacity for 12 passengers or less.	Responsible for planning permission on developments down to MLWS. Consulted on Water Environment Controlled Activities Regulations (CAR) 2005 authorisations. Statutory duty for littering/dumping on public ground. Removal of fly-tipping waste and prosecution of those responsible.	Harbour and Port Authority in certain locations. Preparation of Oil Spill Contingency Plan. Responsibility for the removal and disposal of beached oil, chemical pollution & spilled deck.	Responsible for planning permissions on developments down to MLWS. Responsibility to undertake coast protection works/flood defence. Statutory consultee for Coast Protection Act 1949 Section 34 Consents.	Statutory consultee for forestry developments.	
Argyll Fisheries Trust	Wild salmon & sea trout fisheries management.		Non-statutory consultee on marine aquaculture planning applications and EIA. Mainly concerned with disease, parasite transfer and escapes. Partner to the Area Management Agreement (AMA) process.						
District Salmon Fisheries Board	Wild salmon & sea trout fisheries management	Consultee for commercial seaweed harvesting plans.	Statutory consultee on marine aqua-culture planning applications and EIA. Member of working group developing Area Management Agreement.	Monitor catch returns for recreational fishing for migratory salmon and trout.			Consultee on coastal development and extraction of material from foreshore and seabed.	Consultee on land drainage and forestry.	
Food Standards Agency	Responsible for decisions relating to closures of scallop grounds when shellfish toxin levels exceed statutory limits.		Issue shellfish licences with Argyll and Bute Council. Determine shellfish harvesting and classification.						

Competent/ Relevant Authority	COMPETENT AND RELEVANT AUTHORITY RESPONSIBILITIES								
	Fishing	Gathering/ Harvesting from Foreshore	Aquaculture	Marine Recreation	Effluent Discharges and Marine Dumping	Shipping/ Boating	Coastal/Marine Development	Land Use: Forestry and Agriculture	Scientific Research
Forestry Commission Scotland								Responsible for regulating forestry industry. Issue consents for afforestation proposals of ≥2 ha and deforestation of ≥ 0.5 ha. Work to Forests and Water Guidelines when developing forestry projects.	
Maritime and Coastguard Agency	Responsibilities for ensuring vessels are compliant with sea safety regulations.		Responsibility for preventing hazards to navigation and ensuring sea safety compliance for aquaculture floating facilities and vessels.	Responsibility to prevent hazards to navigation, ensure sea safety compliance and coordinate emergency rescues.	Management of pollution at sea. Responsibility for controls over disposal of vessel bilge water and sewage outside harbour order area.	Responsible for National Contingency Plan to manage pollution at sea.	Consultee on extraction of material from seabed.		
Maritime and Coastguard Agency			Consultee on Coast Protection Act 1949 Section 34 consents.	All boats must comply with the MCA Code of Practice. Licence businesses eg charter boats or boat rental with capacity for 12 passengers or less. Consultee on Coast Protection Act 1949 Section 34 consents for moorings.		Responsible for management and coordination of large-scale incidents. Responsibility for preventing hazards to navigation and ensuring sea safety compliance.			
Northern Lighthouse Board			Responsibility for preventing hazards to navigation. Consultee for marine aquaculture planning applications.	Consultee on mooring applications.		Prevent hazards to navigation by wreck marking, buoy laying and lighthouse maintenance.	Consultee where development could affect navigation.		

Competent/ Relevant Authority Fishing	COMPETENT AND RELEVANT AUTHORITY RESPONSIBILITIES								
	Fishing	Gathering/ Harvesting from Foreshore	Aquaculture	Marine Recreation	Effluent Discharges and Marine Dumping	Shipping/ Boating	Coastal/Marine Development	Land Use: Forestry and Agriculture	Scientific Research
Scottish Environment Protection Agency			Regulate discharges through the Water Environment CAR Regulations 2005. Statutory consultee on marine aquaculture planning applications.		Regulate discharges through the Water Environment CAR Regulations 2005.	Provide technical advice and monitoring assistance for pollution incidents. Regulate trade effluent discharges from boat maintenance through the Water Environment CAR Regulations 2005.	Statutory consultee on planning applications, Food and Environment Protection Act 1985 licences and extraction of material from foreshore and seabed. Regulate activities involving the -use or deposit of waste materials used for construction work eg. sea defences.	Statutory consultee for land drainage, agriculture and forestry developments. Undertake firm inspections (both ad hoc and routine) supported by incident response where required. Respond to pollution incidents as required.	
The Scottish Government (Marine Scotland)	Responsible for inshore fisheries management, policy and regulation Monitors and advises on fish stocks and undertakes research in support of policy development. Enforcement of UK and EU fisheries legislation	Responsible for inshore fisheries management, policy and regulation Consultee on commercial seaweed harvesting plans. Enforcement of UK and EU fisheries legislation	Statutory Consultee on marine aquaculture planning applications. Issue Food and Environment Protection Act 1985 licence for fish farm developments such as jetties, piers, slipways and outfalls. Consulted on Water Environment CAR authorisations. Responsibilities under Fish Diseases Acts and EC Fish Health Legislation.		Issue Food and Environment Protection Act 1985 licence for outfalls extending below MHWS. Consulted on Water Environment CAR authorisations. Statutory duty under the Food and Environment Protection Act 1985 to control the disposal of dredged material.	Provide full emergency cover to respond to marine incidents involving oil and chemical spills. Provide advice on spills. Participate in the Environment Group in event of large-scale incident.	Issue Food and Environment Protection Act 1985 licences for coastal developments, including defences, piers, and slipways extending below MHWS. Consultee on extraction of material from seabed.		Responsible for licensing deposits in the sea below MHWS.
The Scottish Government, Transport and Lifelong Learning Department – Transport Division			Responsibility for preventing hazards to navigation. Issue Coast Protection Act, 1949 Section 34 Consent.	Responsibility for preventing hazards to navigation. Issue Coast Protection Act, 1949 Section 34 consents for moorings which could cause hazards to navigation.	Responsibility for preventing hazards to navigation. Issue Coast Protection Act, 1949 Section 34 consents for pipelines which could cause hazards to navigation.		Issue Coast Protection Act, 1949 Section 34 consents for coastal construction projects and marine dredging. Administer Harbour Orders for marine construction under Harbours Act 1964		Issue Coast Protection Act, 1949 Section 34 consents for scientific research that may cause a hazard to navigation.

Competent/ Relevant Authority	COMPETENT AND RELEVANT AUTHORITY RESPONSIBILITIES								
	Fishing	Gathering and Harvesting from Foreshore	Aquaculture	Marine Recreation	Effluent Discharges and Marine Dumping	Shipping/ Boating	Coastal/Marine Development	Land Use: Forestry and Agriculture	Scientific Research
Scottish Natural Heritage	Provide conservation advice to Scottish Government on fisheries activities.	Provide conservation advice to Scottish Government on intertidal activities.	Statutory consultee on marine aquaculture planning applications, Coast Protection Act 1949 Consent and CAR authorisations.	Statutory consultee for seabed lease and Coast Protection Act 1949 consent for moorings. Requirement to publish Scottish Marine Wildlife watching Code under Nature Conservation Scotland Act 2004.	Statutory consultee on Food and Environment Protection Act 1985 licences and CAR authorisations.	Provide advice concerning nature conservation interest of marine and coastal area.	Statutory consultee on the development of local plans, planning applications, Food and Environment Protection Act 1985 licences.	Statutory consultee on the development of local plans and forestry developments.	Issue licence if research activities involve a species protected under the Wildlife and Countryside Act 1981 or European Protect Species under the Habitats Directive.
Scottish Water					Issue consents for treatment of industrial effluent via waste-water treatment works. Responsible for operation of public sewers and for treatment and discharge of domestic sewage discharged to sewers. Consulted on Water Environment CAR authorisations.				
The Crown Estate		Issue licence for seaweed harvesting/ collection if on Crown Estate owned foreshore or seabed.	Issue seabed lease.	Issue seabed lease for moorings and monitor leased moorings.	Issue lease for discharge pipeline if over Crown Estate foreshore and/or seabed. Consultee where discharge is direct to sea. Required to ensure that lease-holders adhere to the conditions of their leases and remove all equipment when the lease is relinquished.	Issue seabed lease for moorings and monitor leased moorings.	Issue foreshore or seabed lease if development is on Crown Estate land. Issue seabed lease for commercial extraction of material from seabed.	Responsibilities for land drainage. Consultee on forestry developments.	

Appendix V: Summary of legislation, national policy and guidance relevant to Aquaculture in Scotland

1 National Policy/Guidance

Strategic Framework for Aquaculture

The Strategic Framework for Scottish Aquaculture (SFSA) was published in March 2003 and based on four guiding principles; economic; environmental; social and stewardship. It is the main policy instrument to deliver a diverse, competitive but sustainable aquaculture industry in Scotland and provides a set of parameters within which industry can balance socio-economic benefits against environmental impact.

The Scottish Government are currently reviewing this framework and a full public consultation on a renewed Strategic Framework for Scottish Aquaculture will be launched in summer 2008, with a renewed framework expected to be in place by December 2008.

The formation of the Scottish Aquaculture Research Forum (SARF) was one of 33 priorities for action contained within the framework and was created to promote, encourage and support research and development in aquaculture. SARF is an independent company whose main aim is to support research into aquaculture and related areas.

Scottish Planning Policy 22 – Planning for Fish Farms (April 2007)

Following the extension of planning controls to marine fish farming, the Scottish Planning Policy (SPP) sets out the Scottish Government's national planning policy for marine and freshwater fish farming. It provides guidance on how planning authorities should plan for fish farming development and respond to development proposals for fish farming. It seeks to ensure that they take a strategic long term approach to planning for fish farming and explains how developers, planners and other interests should work towards achieving this. This document and all other existing Scottish Planning Policies (SPPs) and National Planning Policy Guidelines (NPPGs) are in the process of being consolidated into a single SPP document, which will become a single statement of national planning policy.

Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters (not relevant to shellfish aquaculture)

Loch Fyne is listed under the Scottish Executive's Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters as a category 3 area. Areas are designated based on predictive modelling of nutrient enhancement and benthic impact conducted by the Fisheries Research Services. Category 3 areas are the least sensitive and show the lowest potential for environmental impact. Therefore, they offer the best prospects for obtaining permission for aquaculture development although each case is still considered carefully and modelling is run for each application.

Code of Good Practice for Scottish Finfish Aquaculture (not relevant to shellfish aquaculture)

Lighthouse Caledonia adhere to the Code of Good Practice for Scottish Finfish Aquaculture, which was established to ensure all farmers adhere to relevant legislation; manage their sites in an economically, socially and environmentally sustainable way; meet specified standards, e.g. in stock health and welfare; provide assurance to other interest groups on fish farming practices; and provide an alternative to further regulation of the industry.

Tripartite Working Group (not relevant to shellfish aquaculture)

The Tripartite Working Group (TWG) was established in 1999 and is composed of representatives from the Scottish Government Marine Directorate, Fisheries Research Services, the salmon farming industry and wild fisheries interest groups. The aim of the TWG was to address problems and to seek solutions between the industry, and wild fish interest groups that will help maintain wild salmonid stocks and promote a sustainable aquaculture industry.

At a local level, Area Management Groups were established, composed of representatives from local fish farming companies, local wild salmonid interests (District Salmon Fishery Boards/Fishery Trusts), with a goal to promote and maintain the good health of wild and farmed salmonids through an Area Management Agreement (AMA).

2 Relevant regulations

Environmental Impact Assessment (EIA) Regulations (not relevant to shellfish aquaculture)

The Environmental Impact Assessment (Scotland) Regulations 1999 (SSI 1999/1) as amended, implement the Council Directives (85/337/EEC and 97/11/EC) on the assessment of the effects of certain public and private

projects on the environment. Under the 1999 Regulations as amended, an EIA; an assessment of the impact of the project on the environment, must be undertaken where any proposed finfish development is to be carried out in a sensitive area, designed to hold a biomass of 100 tonnes or greater or will extend to 0.1 hectare, or more of the surface area of the marine waters, including any proposed structures or excavations.

EIA Guidance and Templates

A series of Practical Guidelines have been developed, which are designed to assist developers, planners, environmental practitioners and regulators in their approach to marine fish farm Environmental Impact Assessments (EIA). The Guidelines are accompanied by a series of templates for use by applicants, and are the result of a collaborative process directed and assisted by a steering group, and input from a number of key individuals from industry, government and regulators. All relevant documents can be downloaded from the SARF web-pages: <http://www.sarf.org.uk/index.html>.

Registration of Fish Farms

Under the Registration of Fish Farming and Shellfish Farming Businesses Order 1985, all fish farming and shellfish farming businesses are required to register with Fisheries Research Services, on behalf of the Scottish Government Marine Directorate, for fish health purposes to help maintain and improve the fish health status of Scottish Waters.

Appendix VI - Procedure for applying for planning permission for marine aquaculture development

Developers are encouraged to use the plan as guidance when developing proposals and should follow the planning application procedure outlined below.

New and modifications to existing aquaculture developments in Loch Fyne require planning consent from Argyll and Bute Council under the provisions of the Town and Country Planning Marine Fish Farming (Scotland) Order 2007. It applies to the placement of equipment in the sea, on the seabed or on the foreshore below Mean High Water Springs out to 12 nautical miles.

There are three types of application that can be made:

- New site – this will involve a proposal for a new previously undeveloped site or if it is proposed to change from Shellfish to Finfish or vice versa.
- Change of use – should be made when the proposals involve a change in the species that will be farmed on site, i.e. Salmon to Cod.
- Alterations to an existing approved site – this may involve a change to the overall size of the site and/or the equipment used on an existing site.

The stages of applying for planning permission are as follows:

- 1) Pre-application discussion with local planning office**
- 2) Pre-application preparation**
 - Scoping for EIA*
 - Screening for EIA*
 - Prepare EIA*
- 3) Prepare planning application – application form & guidance**
- 4) Submit planning application – consultation by development management**
 - Submit EIA*
- 5) Determination of planning application**

** Not relevant to shellfish development*

1. Pre-application discussion

Prospective developers are advised to discuss their proposals with their local planning office as early as possible in the process of preparing a planning application. For finfish development, planning officers will be able to identify whether the proposal can proceed directly to formal planning application, or whether the developer should proceed to non-statutory but structured EIA pre-application consultation.

Pre-application consultation, if utilised, is an opportunity for the developer to identify the main constraints and potential issues associated with a development. Key stakeholders should be involved in this process, however the extent of discussions will vary depending on the proposals. Contact with the statutory consultees at this stage in the project is recommended as a starting point.

Pre-application discussion between the developer and the local authority, and other key stakeholders allows the following opportunities to:

- Appraise the compatibility of proposals with existing development plans (Argyll and Bute Development Plan & Loch Fyne ICZM Plan);
- Develop a network of contacts and relationships with key organisations;
- Gain an appreciation of any significant environmental issues that would result in any objections to the development;
- Secure advice on whether any environmental survey work is required; and
- Gain early agreement on methodologies and presentation.

2. Pre-application preparation

The following documents, reports and plans should be consulted at this stage in considering site selection and design:

- Argyll and Bute Development Plan (Structure & Local Plan) – these documents can be found at <http://www.argyll-bute.gov.uk/content/planning/developmentpolicy/>;
- Loch Fyne Integrated Coastal Zone Management Plan;
- Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters (<http://www.frs-scotland.gov.uk/Delivery/standalone.aspx?contentid=806>);
- SPP 22: Planning for Fish Farming (<http://www.scotland.gov.uk/Resource/Doc/173613/0048434.pdf>);
- The SNH guidance – *Marine Aquaculture and the Landscape: The siting and design of marine aquaculture developments in the landscape* (Grant 2000).
- SNH digital records of natural heritage designations (<http://www.snh.org.uk/snhi/>).

Developers should refer to the Local Plan policy LP AQUA 1 and any other relevant Development Plan policies. LP AQUA 1 sets out the criteria against which Argyll and Bute Council will assess any marine aquaculture applications.

Policy LP AQUA 1

Shell Fish and Fin Fish Farming

There is general support for shellfish and finfish farming subject to there being no significant adverse effect, directly, indirectly or cumulatively on:

1. Communities, settlements and their settings;
2. Landscape character, scenic quality, and visual amenity;
3. Loch Lomond and the Trossachs National Park;
4. National Scenic Areas and Areas of Panoramic Quality;
5. Statutorily protected nature conservation sites, habitats or species, including priority species and important seabird colonies along with wild fish populations;
6. Navigational interests;
7. Areas of Isolated Coast (coastal area of very sensitive countryside);
8. Sites of historic or archaeological interest and their settings;
9. Recreational interests;
10. Areas of Search for Wild Land;
11. Existing Aquaculture sites;
12. Water quality.

In the case of marine fish farming, this support is further conditional on the proposals being consistent with other policies of the Structure and Local Plan, and the Scottish Executive Strategic Framework Guidelines. If a coastal framework plan is in place it should be considered as a significant material consideration in assessing any proposal, along with advice from all relevant statutory consultees. In the case of non-marine (i.e. development above Mean High Water Springs) fish farming, this support is further conditional on the proposals being consistent with other policies of the Local and Structure Plan, and the Scottish Executive Strategic Framework Guidelines. In addition, a direct operational need tied to a specific location will need to be demonstrated where proposals are within the sensitive or very sensitive countryside development control zones.

Developers should then refer to the Loch Fyne ICZM plan, as outlined in section 5.3 of this plan.

EIA Screening and Scoping

If the local planning office has recommended that the developer progress to formal Screening/Scoping, as part of the EIA process for finfish development, the developer should refer to the new Scottish Government EIA guidance and templates (see Appendix V for more details).

The purpose of the screening and scoping process is to:

- Allow the planning authority to determine the need for an EIA i.e. the potential for significant effects; and
- To allow the planning authority to determine the scope, content and focus of the EIA.

3. Prepare planning application

Applications forms and guidance

Argyll and Bute Council's application form and guidance note for marine aquaculture application can be found at: <http://www.argyll-bute.gov.uk/content/planning/developmentmanagement/devcontappforms/94marinefishfarmapplication/>

The 'Marine Aquaculture' application form should be used for finfish, mussel or scallop development only. Applications for new or modified oyster farms should be made using the terrestrial development forms (<http://www.argyll-bute.gov.uk/content/planning/developmentmanagement/devcontappforms/>).

4. Submit planning application

Applications should be submitted to the relevant local planning office. Section 5 of the Loch Fyne ICZM plan identifies the relevant planning office and Appendix XI provides the contact details.

5. Determination of planning application

Consultation process

On receipt of an application for a finfish farm, the Council will consult the following statutory consultees for their opinion:

- Scottish Environment Protection Agency (SEPA)
- Scottish Government Marine Directorate
- Scottish Natural Heritage (SNH)
- Bidwell's (Agents for The Crown Estate)
- Argyll District Salmon Fisheries Board
- Historic Scotland

In addition the following the application will also be sent to the following non-statutory consultees for comments and the planning application will be publically advertised in the local newspapers:

- Community Council(s) (within which the application lies)
- Royal Yachting Association (RYA)
- Northern Lighthouse Board (NLB)
- Fishing Associations
- Royal Society for the Protection of Birds (RSPB)

In the case of applications for Loch Fyne, the Council will also consult those non-statutory consultees identified in the relevant policy zone in section 5 of the Loch Fyne ICZM Plan.

Decision making

Permission is granted or declined by the Council's planning department who make a judgement based on the application in relation to:

- The Town and Country Planning Marine Fish Farming (Scotland) Order 2007;
- Argyll and Bute Development Plan (Structure and Local Plan) policies;
- Any aquaculture framework plans in existence (in the case of applications in Loch Fyne, the Loch Fyne ICZM plan);
- Environmental Impact Assessment if appropriate, and
- Representation from statutory consultees and other parties.

If a site is approved, then there will be a presumption that the planning consent will be granted without time limit. However, there is still potential for sites to be given a temporary consent.

Other consents

Where the seabed is owned by the Crown, the right to occupy the site will be by means of a lease from The Crown Estate. An application for a fish farming lease can be made at any time, a valid planning consent is not a prerequisite.

As there is no fee for processing Coast Protection Act applications, developers are encouraged to apply for this consent before submitting applications for the other relevant permissions. This will help to prevent situations where a developer has spent considerable time and money applying for planning consent only to find that they cannot get Coast Protection Act consent on the grounds of navigation concerns.

Appendix VII: Codes of conduct and environmental programmes

Scottish Outdoor Access Code

The Scottish Outdoor Access Code (SOAC) provides detailed guidance on the public's responsibilities when exercising access rights and management of land and water. The complete version is available at: <http://www.outdooraccess-scotland.com/upload/ApprovedCodeindex06Sept04.pdf>

Scottish Marine Wildlife Watching Code

The Scottish Marine Wildlife Watching Code (SMWWC) is intended to be a concise code of conduct that comprises a set of broad principles, followed by three user codes: *On the coast*, *On the sea*, and *In the sea*. Detailed information is available at: <http://www.marinecode.org/documents/Scottish-Marine-Code-web.pdf>

BSAC 'Respect Our Wrecks Code'

The British Sub Aqua Club (BSAC) has developed a *Respect Our Wrecks* code of practice for wreck divers. Detailed information is available at: <http://www.bsac.org/page/627/wreck-divers-code.htm>.

ScotSAC – Land Access Guidance for Divers

ScotSAC have developed an access guidance code and is available through either website address: www.scotsac.com; <http://www.scotsac.com/PDF-downloads/board/land%20access%20guidance.pdf>

Scottish Canoe Association – Paddlers Access Code

The Scottish Canoe Association (SCA) is the recognised governing body of canoe sport and recreation in Scotland. The SCA Paddlers Access Code is available from: <http://www.canoescotland.com/downloads/access/Access%20Code%20Leaflet.pdf>. Related information and Guidance Notes are additionally available from: <http://www.canoescotland.com/Default.aspx?tabid=534>

Green Blue Environmental Initiative

The Green Blue is an environmental awareness initiative by the British Marine Federation and the Royal Yachting Association. The Green Blue aims to educate and inform the recreational boating community about our environmental impacts, emphasising how these can be minimised. Guidance notes are available from: <http://www.thegreenblue.org.uk/>

Appendix VIII: Conclusions from Landscape/Seascape Capacity Assessment for Aquaculture

- The assessment identified that much of the existing development is well-located in relation to the landscape character and most developments were well-related in terms of location, shape and scale to coastal character.
- Overall, this assessment identified limited opportunities for new development, often of only up to a medium-scale in size. However, some opportunities to expand existing developments were identified.
- Close liaison between the operators, the local planning authority and Scottish Natural Heritage, and the use of professional landscape design expertise can help make the most of the opportunities which exist.
- The preferred sites for development were stretches of coastline which were regular with few indentations, bays or promontories. The best locations for larger development tended to be those where a backdrop of an expansive stretch of sea could absorb the scale of development.
- The small-scale of the more indented coastlines had limited capacity for offshore development, and this was often further reinforced by the scenic quality of these rugged, intricately scaled coastlines, which were often accompanied by islands.
- Large-scale development could generally be more readily absorbed in the lower and outer reaches of the loch, where the widening of the channel, accompanied by expansive seascape views, created a vastness which could more readily absorb the scale of large developments. In some of these areas however, development would conflict with fine quality panoramic views, for example to Arran, where they might add unnecessary clutter and divert focus from the view.
- The inner reaches of the loch were more limited in the size of development, which could be accommodated, and all guidance in these areas referred to accommodating medium scale development only where applicable.
- Finally, areas where there were a number of limiting factors tended to be seascapes with a concentration of high aesthetic qualities, including: dramatic views to more distant mountains; landscapes where solitude and naturalness could be appreciated; areas where the small scale indented coastlines and islands contrasted in scale with the more expansive stretches of water; and coasts of rich visual diversity, and where lagoons, long tidal reaches or shifting sand and shingle banks reflect the dynamism of ever changing maritime conditions.

Appendix IX - Sites, Habitats and Species of Significance

	European or wider significance		National significance		Regional/Local significance	
	European Protected Species or Site ²	OSPAR Species/Habitat	National Designated Site	UK BAP Priority Species/Habitat	Argyll and Bute LBAP	Other sensitive area, habitat or species
Designated Sites						
Tarbert Woods SAC	✓					
Glas Eileanan SPA	✓					
Tarbert to Skipness Coast SSSI			✓			
Artilligan and Abhain Strathain Burns SSSI			✓			
Strone Point SSSI			✓			
Ardchylne Woods SSSI			✓			
Loch Fyne Marine Consultation Area			✓			
Biodiversity Action Plan habitats						
Mud habitats in deep water		✓		✓	✓	
Intertidal mudflats		✓		✓	✓	
Coastal saltmarsh				✓	✓	
Horse mussel beds (<i>Modiolus modiolus</i>)		✓		✓	✓	
File Shell Beds (<i>Limaria hians</i>)				✓		
Eelgrass/Sea grass beds (<i>Zostera sp.</i>)		✓		✓	✓	
Biodiversity Action Plan species						
Basking shark (<i>Cetorhinus maximus</i>)		✓		✓	✓	
Bottlenose dolphin (<i>Tursiops truncatus</i>)	✓			✓	✓	
Harbour porpoise (<i>Phocoena phocoena</i>)	✓	✓		✓	✓	
Fireworks anemone (<i>Pachycerianthus multiplicatus</i>)				✓		
Maerl (<i>L. corallioides</i> & <i>P. calcareum</i>)		✓		✓		
Atlantic salmon (<i>Salmo salar</i>)		✓		✓	✓	
Sea trout (<i>Salmo trutta</i>)				✓	✓	
Important sensitive areas						
Wildfish rivers		✓ Salmon only		✓	✓	✓
Haul out areas for Common Seal (<i>Phoca vitulina</i>)						✓
Important seabird breeding sites						✓

² Protected under Habitats Directive (92/43/EEC) or Birds Directive (79/409/EEC)

Appendix X: Development scenarios for aquaculture development

Guidance on the scale of aquaculture development, presented in the Policy Zone section is based on the following development scenarios which were used to focus thinking on the potential effects of development on the seascape, as part of the Landscape/seascape capacity assessment for aquaculture development in Loch Fyne.

These Development Scenarios are indicative, and are intended to be used as a guide for discussion between the developer and local planning authority. They represent the general size, range of components and layout of developments. They cannot however, aim to cover all variables in the design, size and layout of aquaculture structures.

Three broad scenarios were used, differentiated by size:

Small scale

- Up to six circular cages (80 m circumference) or equivalent cage surface area of square cages or other sizes of circular cages. As a guide, this equates to a maximum cage surface area of around 3000 m², which is roughly equivalent to up to six square cages (23 x 23 m), up to eight (70 m circumference) cages or up to four (100 m circumference cages).
- Up to four mussel lines or rafts occupying up to one third of the length of a bay, with no additional infrastructure. Generally, the lines are likely to be about 100 m – 200 m in length, but it is the proportion to the length of bay, or defined coastline which is the overriding consideration.
- Oyster trestles which occupy up to one tenth of the length of a bay (or defined area), when the intertidal is revealed at low tide.
- Scallop lines which require up to fifty buoys to be visible.

Medium scale

- Up to twelve circular cages (80 m circumference) or equivalent cage surface area of square cages or other sizes of circular cages. As a guide this equates to a maximum cage surface area of around 6000 m², which is roughly equivalent to up to twelve square cages (23 x 23 m), up to sixteen (70 m circumference) cages or up to eight (100 m circumference cages).
- Up to six mussel lines or rafts, occupying up to two thirds of the length of a bay, with associated offshore infrastructure. Generally, the lines are likely to be about 200 m – 440 m in length, but it is the proportion to the length of bay or defined coastline which is the overriding consideration.
- Oyster trestles which occupy up to one quarter of the length of a bay (or defined area), when the intertidal is revealed at low tide.
- Scallop lines which require between fifty and two hundred buoys to be visible.

Large scale

- More than twelve circular cages (80 m circumference) or equivalent cage surface area of square cages or other sizes of circular cages. As a guide, this equates to a cage surface area of more than 6000 m², which is roughly equivalent to more than twelve square cages (23 x 23 m), sixteen (70 m circumference) cages or eight (100 m circumference cages).
- More than six mussel lines or rafts, occupying more than two thirds of the length of a bay, with associated offshore infrastructure. Generally the lines are likely to be about 440 m in length or even longer, but it is the proportion to the length of bay or defined coastline, which is the overriding consideration.
- Oyster trestles which occupy more than one quarter of the length of a bay (or defined area), when the intertidal is revealed at low tide.
- Scallop lines which require more than two hundred buoys to be visible.

Appendix XI: Contact details for non-statutory consultees for aquaculture development planning applications

Loch Fyne Organisations & Consultees	Contact Details
Ardrishaig Community Council	http://www.argyll-bute.gov.uk/content/democracyandyourcouncil/politicians/communitycouncils/
Argyll and Bute Council Planning	<p>West side of Loch Fyne (Policy Zones A – K) Richard Kerr, Development Services, Ardrishaig planning.maki@argyll-bute.gov.uk</p> <p>East side of Loch Fyne (Policy Zones K – Q) David Eaglesham, Development Services, Dunoon planning.bandc@argyll-bute.gov.uk</p>
Argyll and District Salmon Fisheries Board	The Clerk, Argyll District Salmon Fishery Board, North-west Tower, Cherry Park, Inveraray, PA32 8XE
Argyll Fisheries Trust	Alan Kettlewhite, Cherry Park, Inveraray, PA32 8XE ak@argyllfisheriestrust.co.uk
British Telecom	Richard Hill, BT Subsea, 18-20 Millbrook Road East, Southampton, Hampshire, SO15 1HY richard.4.hill@bt.com
Cairndow Community Council	http://www.argyll-bute.gov.uk/content/democracyandyourcouncil/politicians/communitycouncils/
Caledonian MacBrayne	Fay Harris fay.harris@calmac.co.uk
Clyde AMG Group	Penny Hawden ph@argyllfisheriestrust.co.uk
Clyde Fishermen's Association	Archie McFarlane, 4 Maol Bhuie Cottages, Ardbeg, Isle of Islay, PA42 7ED amf@clydefish.org
Clyde Inshore Fisheries Group	Alex. Watson Crook, Clyde IFG, PO Box 8509, Prestwick, KA9 9AE A.WatsonCrook@scotlandifg.co.uk
Forestry Commission Scotland	Perth & Argyll Conservancy, Algo Business Centre, Glenearn Road, Perth, PH2 0NJ panda.cons@forestry.gsi.gov.uk
Furnace Community Council	http://www.argyll-bute.gov.uk/content/democracyandyourcouncil/politicians/communitycouncils/
Historic Scotland	Development Assessment Team, Room 7, Longmore House, Salisbury Place, Edinburgh, EH9 1SH HS.DAT@scotland.gsi.gov.uk
Inveraray Community Council	http://www.argyll-bute.gov.uk/content/democracyandyourcouncil/politicians/communitycouncils/
Kilfinan Community Council	http://www.argyll-bute.gov.uk/content/democracyandyourcouncil/politicians/communitycouncils/
Lakeland Marine	Mr Colin Blair, Lakeland Marine Farms, Units 2&3 TighMhicleoid, 3 Lochnell Street, Lochgilphead, Argyll, PA31 8JL
Lighthouse Caledonia Scotland Ltd	Rebecca Dean, Mid Strome, Lochcarron, Ross-shire, IV54 8YH Rebecca.Dean@lighthousecaledonia.com
Loch Fyne Oysters	David Attwood, Clachan, Cairndow, PA26 8BL davida@lochfyne.com
Loch Fyne Seafarms	Gordon Goldsworthy, Tarbert Trading Estate, Tarbert, PA29 6SX lochfyneseafarms@aol.com
Lochgilphead Community Council	http://www.argyll-bute.gov.uk/content/democracyandyourcouncil/politicians/communitycouncils/
Marine Scotland	Paul Stainer, Environment Protection Group, Marine Scotland – Science, Scottish Government, Marine Laboratory, 375 Victoria Road, Aberdeen AB11 9DB
National Trust for Scotland	Abbie Patterson - Biodiversity Partnership

	apatterson@nts.org.uk)
Northern Lighthouse Board	Northern Lighthouse Board, Coastal Inspector, Steven Driver, 84 George Street, Edinburgh, EH2 3DA navigation@nlb.org.uk
Portavadie Marina	Marina Manager-Robert Kitchin, Portavadie Marina, Portavadie, Loch Fyne, Argyll, PA212DA Tel. 01700 811075; Fax 01700 811074; info@portavadiemarina.com
Royal Society for the Protection of Birds	Andy Robinson, South West Scotland Office, 10 Park Quadrant, Glasgow, G3 6BS andy.robinson@rspb.org.uk
Royal Yachting Association Scotland	Pauline McCrow admin@ryascotland.org.uk
Scottish Creelers and Divers Association	Alistair Sinclair, 5 Queen Elizabeth Cottages, Furnace, PA32 8XX ats1@btopenworld.com
Scottish Environment Protection Agency	SEPA Planning Service, 142 Sinclair Road, Torry, Aberdeen, AB11 9PR planningaberdeen@sepa.org.uk Local Environment Protection & Improvement Team, 2 Smithy Lane, Lochgilphead, PA31 8TA Tel. 01546 602876
Scottish Federation of Sea Anglers	John Crowther, Clyde & West Region, 49 Nelson Road, Gourrock, Inverclyde, PA19 1XJ john_crowther_5@hotmail.com
Scottish Natural Heritage	West side of Loch Fyne (Policy Zones A – K) SNH Mid Argyll and Kintyre Mid Argyll Area Officer, Scottish Natural Heritage, 1 Kilmory Industrial Estate, Lochgilphead, Argyll PA31 8RR East side of Loch Fyne (Policy Zones K – Q) SNH Bute And Cowal: Elizabeth Pryor, Area Officer, Ballochyle, 81 Sandbank, Dunoon, Argyll PA23 8PN Elizabeth.Pryor@snh.gov.uk
Scottish & Southern Energy	Head Office , Scottish and Southern Energy, Inveralmond House, 200 Dunkeld Road, Perth PH1 3AQ, Tel. 01738 456 000
Scottish Water	Head Office , Castle House, 6 Castle drive, Carnegie Campus, Dunfermline, KY11 8GG
Strachur Community Council	http://www.argyll-bute.gov.uk/content/democracyandyourcouncil/politicians/communitycouncils/
Tarbert & Skipness Community Council	http://www.argyll-bute.gov.uk/content/democracyandyourcouncil/politicians/communitycouncils/
The Crown Estate	Alex Adrian, The Crown Estate, 6 Bell's Brae, Edinburgh EH4 3BJ alex.adrian@thecrownestate.co.uk
The Lochgair Association	Ian M Smith, The Lochgair Association, 6 Gallanach, Lochgair, Argyll, PA31 8SD Tel. 01546 886328
The Scottish Sub Aqua Club	The Scottish Sub Aqua Club, The Cockburn Centre, 40 Bogmoor Place, Glasgow, G51 4TQ. Tel. 0141 425 1021 hq@scotsac.com
West Lochfyne Community Council	http://www.argyll-bute.gov.uk/content/democracyandyourcouncil/politicians/communitycouncils/

Appendix XII: Loch Fyne ICZM Group – Stakeholders involved in the development of the plan

Please note that this list includes all those who responded to the consultation and the draft plan.

Ardrishaig Community Council
 Argyll & Bute Council
 Argyll District Salmon Fisheries Board
 Argyll Estates
 Argyll Fisheries Trust
 Argyll Holiday Park
 Argyll Timber Transport Group
 Argyll Walking Holidays
 ASW Fishing Charters
 British Telecom
 British Waterways
 Cairndow Community Council
 Caledonian MacBrayne
 Clyde Fishermen's Association
 Clyde SSMEI Project
 Crown Estate
 Dalriada Diving
 Dunstaffnage Marine Laboratory
 Firth of Clyde Forum
 Forestry Commission Scotland
 Fyne Ales
 GRAB Trust
 Here We Are
 Historic Scotland
 Inveraray Community Council
 Jig Ltd
 Kilfinan Community Council
 Local Walking Holidays
 Loch Fyne Dive Charters
 Loch Fyne Oysters
 Loch Fyne River Improvement Association
 Loch Fyne Seafarms
 Loch Lomond & Trossachs National Park
 Lochgilphead Community Council
 MNWFA
 MOD
 Newton Boat Club
 Northern Lighthouse Board
 Otter Ferry Shellfish
 Portavadie Marina
 Qinetiq
 RSPB
 RYA Scotland

SCAD
 Scottish Canoe Association
 Scottish Environment Protection Agency
 Scottish Natural Heritage
 Scottish Water
 Seacliffe
 Seasearch
 Seatrek Training Ltd
 Sorcha Boat Charters
 South Knapdale Community Council
 SSACN
 Strachur Community Council
 Strachur Community Futures
 Stuckreoch Caravan Park Ltd
 Strachur Bay Moorings Association
 Tarbert & Skipness Community Council
 Tarbert Harbour
 Tarbert Loch Fyne Yacht Club
 The Crown Estate
 West Loch Fyne Community Council
 WHAM

And 53 individual stakeholders

Place	Number
Cairndow	3
Furnace	3
Glasgow	3
Glasgow (local caravan)	1
Inveraray	1
Isle of Kerrera	1
Kilmarnock (local diving interest)	1
Largs	1
Lochgair	3
Lochgilphead	1
Minard	3
Otter Ferry	3
Portavadie	2
Skipness	1
St Catherine's	3
Strachur	10
Strathlachlan	4
Tarbert	5
E-mail address only	4