



Report to inform Habitats Regulations Appraisal including Appropriate Assessment for the Draft Firth of Clyde Marine Spatial Plan

Introduction

The Firth of Clyde Marine Spatial Plan (the Plan)¹ has been developed under the auspices of the Scottish Government's Scottish Sustainable Marine Environment Initiative (SSMEI) Clyde Pilot project. The Plan is strategic in nature and establishes an overarching policy framework intended to provide direction and guidance to the sustainable development of marine activities within the Firth of Clyde.

The Plan has been in development since July 2006, under the guidance of a steering group made up of representatives of key stakeholders and regulators, and was launched on 31 March 2009. Following public consultation, which ended on 26 June 2009, a revised final Plan will be produced along with a report on lessons learned by May 2010. The outcomes of the Clyde Pilot will inform the debate on future marine management in Scotland, in particular possible approaches to (statutory) marine planning at the regional level.

Development of the Plan was informed by a Strategic Environmental Assessment (SEA). In their (statutory) response to the SEA Scoping report SNH stated:

"There are several Natura sites within the Plan area. Thus, the Conservation (Natural Habitats, &c.) Regulations 1994 as amended, (the "Habitats Regulations") apply. Where there are any potential significant effects on Natura sites, it should be noted that these would be required to be subject to an Appropriate Assessment".

This document considers the effects of the Plan on the integrity of Natura 2000 sites in the Firth of Clyde area. Section 1 lays out the screening process to determine whether any of the policies within the Plan are likely to have a significant effect on the qualifying interests and conservation objectives of Natura sites. Section 2 contains the Appropriate Assessment for any policies likely to have a significant effect and includes approaches to avoidance or mitigation of such impacts. Section 3 provides the overall conclusion that the Plan is not likely to adversely affect the integrity of any Natura site.

¹ The Plan can be viewed or downloaded from the project website at www.clydeforum.com/ssmei

Section 1 – Screening Process

Geographical Scope

The geographical scope of the Plan encompasses the marine and tidal extents of the Firth of Clyde including the River Clyde Estuary, the Inner Firth and associated sea lochs, and the Outer Firth. The Plan's outer boundary extends from the tip of Mull of Kintyre across to Finnarts Point, north of Loch Ryan (Figure 1).



Figure 1 Geographical scope of the Plan

Natura Sites

The Appropriate Assessment requires consideration of all European sites that have the potential to be impacted by the Plan, not just those sites within the boundaries of the Clyde Estuary. When undertaking the assessment, consideration has been given to whether there are further impact pathways that may result in impacts outside of the Plan boundaries. It was considered that this was unlikely, for the majority of polices within the Plan. The exception being FISH 3, where in view of the inclusion of a policy to maintain and upgrade the A82 and A83 roads, along with the Tarbert Woods SAC and proposed Glen Etive & Glen Fyne SPA indicated in Fig. 2, which lie adjacent to the A83, Loch Lomond Woods SAC has also been included in the screening process as it lies adjacent to the A82.



Figure 2 Marine and Coastal Natura 2000 sites in the Firth of Clyde area, (Natura sites outside the impact pathway of the Plan have not been included)

The qualifying interests and conservation objectives for all of these sites, under the Birds Directive (79/409/EEC) and Habitats Directive (92/43/EEC), are detailed in Table 1.

Table 1 Natura sites (Special Protection Areas and Special Areas of Conservation) within the Firth of Clyde area

Site name	General description	Qualifying interests	Conservation Objectives
Ailsa Craig SPA	<p>Ailsa Craig SPA is an island rising to 338 metres, situated in the outer part of the Firth of Clyde. Cliffs up to 100 metres encircle the island and provide nesting sites for a variety of seabirds, notably one of the largest Northern gannet colonies in the world.</p> <p>The boundary of Ailsa Craig SPA is coincident with Ailsa Craig SSSI. The seaward extension extends approximately 2 km into the marine environment to include the seabed, water column and surface.</p>	<p>Qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting populations of European importance of the migratory species; Northern gannet <i>Morus bassanus</i> (23,000 pairs 8.7% of the world biogeographic population) and Lesser black-backed gull <i>Larus fuscus</i> (1,800 pairs, 1.4% of the total <i>L.f. greallsi</i> biogeographic population).</p> <p>Also qualifies under Article 4.2 by regularly supporting in excess of 20,000 individual seabirds. It regularly supports 65,000 seabirds including nationally important populations of the following species: Common guillemot <i>Uria aalge</i> (3,350 pairs, 0.5% of the BG population), Black-legged kittiwake <i>Rissa tridactyla</i> (3,100 pairs, 0.6% of the GB population) and Herring gull <i>Larus argentatus</i> (2,250 pairs, 1.4% of the GB population).</p>	<p>To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained: and</p> <p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> • Population of the species as a viable component of the site • Distribution of the species within the site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting species • No significant disturbance of the species
Inner Clyde Estuary SPA	<p>The Inner Clyde is a long, narrow, heavily industrialised estuary on the west coast of Scotland. The SPA extends 20km westward from Newshot Island to Craigendoran Pier on the north shore and to Newark Castle on the south shore. It contains extensive intertidal flats which support large numbers of wintering waterfowl. The boundary is coincident with that of the Inner Clyde SSSI.</p>	<p>Qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting an internationally important wintering population of Redshank <i>Tringa tetanus</i> (1992/93-96/97 winter peak mean of 2,107, 1% of Eastern Atlantic Flyway, 2% of British). This is one of the highest density wintering populations of Redshank in Britain.</p>	<p>As above.</p>
Black Cart SPA	<p>3 km tidal stretch of the Black Cart Water and its associated floodplain, directly north of Glasgow Airport in Renfrewshire. This stretch of Black Cart Water supports abundant submerged aquatic vegetation, typical of brackish conditions. The floodplain is mostly semi-intensified pasture. The boundary of the SPA is coincident with that of the Black Cart SSSI.</p>	<p>Qualifies under Article 4.1 of the Directive (79/409/EEC) by regularly supporting a wintering populations of European importance of the Annex 1 species Whooper swan <i>Cygnus cygnus</i> (average winter peak mean of 207 individuals between 1993 and 1997, 4% of GB and 1% of total Icelandic population). The population forages over the entire Black Cart SPA, roosts on the open water and uses the area as a severe winter refuge.</p>	<p>As above.</p>
Glen App and Galloway	<p>A large upland area which extends north from Castle Kennedy in Dumfries & Galloway, to Ballantrae</p>	<p>Qualifies under Article 4.1 by regularly supporting a breeding population of European importance of the Annex 1 species Hen harrier <i>Circus cyaneus</i> (an average of 10</p>	<p>As above</p>

Site name	General description	Qualifying interests	Conservation Objectives
Moors SPA	in South Ayrshire. The area is mainly covered by heather moorland and rough grassland. The boundaries of the SPA are coincident with those of the Glen App and Galloway Moors SSSI.	breeding females annually between 1994 and 1998, 2% of GB).	
Arran Moors SPA	An extensive area of moorland covering the majority of the southern half of the Isle of Arran and extending along the northeast coast. Predominant habitats include extensive areas of wet and dry heath, wet and dry blanket bogs and unimproved acid grassland. There are small areas of broad-leaved woodland, typically associated with river valleys, and several small lochs on the site. The boundaries are coincident with those of the Arran Moors SSSI, Ard Bheinn SSSI and Benlister Glen SSSI and overlap those of Arran Northern Mountains SSSI and Gleann Dubh SSSI.	Qualifies under Article 4.1 by regularly supporting a breeding population of European importance of the Annex 1 species Hen harrier <i>Circus cyaneus</i> (an average of 21 breeding females between 1994 and 1998, 4% of GB).	As above
Glen Etive & Glen Fyne proposed SPA	A large predominantly upland site in the south west Highlands of Scotland. This site rises from sea level to over 1100m and encompasses a diverse range of habitats including heather moorland, rough grassland, blanket bog, native woodland, mountain heaths and exposed rock and scree. There are also numerous freshwater lochs and river systems.	Qualifies under Article 4.1 by regularly supporting a population of European importance of the Annex 1 species Golden eagle <i>Aquila chrysaetos</i> (19 active territories in 2003, more than 4.2% of the GB population).	As above
Loch Lomond Woods SAC		Otter – <i>Lutra lutra</i> (species). Western acidic oak woodland – old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles (habitat).	For qualifying species that the following are maintained in the long term: <ul style="list-style-type: none"> • Population of the species is a viable component of the site • Distribution of the species within site • Distribution and extent of habitats supporting the species • Structure, function and supporting processes of habitats supporting the species

Site name	General description	Qualifying interests	Conservation Objectives
			<ul style="list-style-type: none"> - No significant disturbance of the species for qualifying habitat: To avoid deterioration of the qualifying habitat thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and To ensure for the qualifying habitat that the following are maintained in the long term: <ul style="list-style-type: none"> • Extent of the habitat on site • Distribution of the habitat within site • Structure and function of the habitat • Processes supporting the habitat • Distribution of typical species of the habitat • Viability of typical species as components of the habitat • No significant disturbance of typical species of the habitat
Lendalfoot Hills Complex SAC		<p>Alkaline fens. Calaminarian grasslands of the <i>Violetalia calaminariae</i>. European dry heaths. Northern Atlantic wet heathland with cross-leaved heath <i>Erica tetralix</i>. Species-rich grassland with mat-grass <i>Nardus</i>, on siliceous substrates in mountain areas and submountain areas in continental Europe. Transition mires and quaking bogs. Western acidic oak woodland – old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles.</p>	As above for qualifying habitat
Tarbert Woods SAC			As above for qualifying habitat

Source:

Scottish Natural Heritage 2009, Citation for Special Protection Area Ailsa Craig (UK9003091) and Conservation Objectives
Scottish Natural Heritage 2000, Citation for Special Protection Area Inner Clyde (UK9003061) and Conservation Objectives
Scottish Natural Heritage 2000, Citation for Special Protection Area Black Cart Renfrewshire (UK9003221) and Conservation Objectives
Scottish Natural Heritage 2003, Citation for Special Protection Area Glen App and Galloway Moors (UK9003351) and Conservation Objectives
Scottish Natural Heritage 2009, Citation for proposed Special Protection Area Glen Etive and Glen Fyne (UK9020307) and Conservation Objectives
Scottish Natural Heritage 2005, Loch Lomond Woods Special Area of Conservation, Qualifying Interests and Conservation Objectives
Scottish Natural Heritage 2005, Lendalfoot Hills Complex Special Area of Conservation, Qualifying Interests and Conservation Objectives
Scottish Natural Heritage 2005, Tarbert Woods Special Area of Conservation, Qualifying Interests and Conservation Objectives
All above available at http://gateway.snh.gov.uk/portal/page?_pageid=53.910284.53_920284&_dad=portal&_schema=PORTAL
except for Glen Etive and Glen Fyne which is available at http://www.snh.org.uk/strategy/GE_consult05.asp

Screening of Policies

The Plan includes 41 policies within four cross-cutting themes and five sectoral plans. The policies are intended to be interpreted together and the policies within the cross-cutting themes, which include environment, underpin those developed for the five sectors. The Plan also includes a five-year Action Plan (Annex I) containing 28 action points based strictly on the policies. As such the screening process for the policies is considered to adequately cover the action points contained in the Action Plan.

Table 2 determines whether each of the 41 policies is likely to have a significant effect on each of the Natura sites identified above. The screening is informed by the SEA of the Plan² and aided by the use of SNH's "GeoView" GIS tool. Only those policies determined as having significant effects with respect to the notified interest(s) or conservation objectives of a given site are highlighted for inclusion in the Appropriate Assessment.

² Thompson, K., Ross, D. and Donnelly, J.E. (2009) Draft Firth of Clyde Marine Spatial Plan Strategic Environmental Assessment: Environment Report Consultative Draft: March 2009
http://www.clydeforum.com/ssmei/images/stories/SEA_Environmenteport_draft.pdf

Table 2: Screening of Policies with respect to the likelihood of significant effect on qualifying interests or conservation objectives of Natura sites in the Firth of Clyde area.

Theme/ Sector	Policy	Likely to have significant effect?									Comments
		Site 1 Alisa Craig	Site 2 Inner Clyde	Site 3 Black Cart	Site 4 Glen App	Site 5 Arran Moors	Site 6 Glen Etive	Site 7 Loch Lomond	Site 8 Lendal foot	Site 9 Tarbert Woods	
ENVIRONMENT	<p>ENV 1 Improving the knowledge base of the marine environment A strategic approach should be developed to gather and record data on the marine environment of the Firth of Clyde. This strategy should give priority to improving the knowledge of mobile and migratory species, developing a better understanding of seabed species and delivering accurate habitat maps.</p> <p>ENV 2 Identifying and mapping species, habitats and sensitivities The location of internationally, nationally and locally important species and habitats in the subtidal zone should be identified and mapped, with levels of sensitivity assessed to determine appropriate management and compatible uses.</p> <p>ENV 3 Mobile species Existing information on the occurrence of mobile and migratory species should be collated and analysed in order to determine whether there are important areas or times mobile and migratory species may be disturbed by activities.</p> <p>ENV 4 Pressure/sensitivity indicators A suite of Clyde specific pressure/sensitivity indicators for important species and habitats should be developed. These should be established from existing national indicators but, where no appropriate indicators currently exist, they should be developed to enable their adoption elsewhere in Scotland.</p> <p>ENV 5 Non-native invasive species A guiding framework for invasive non-native species mitigation within the Firth of Clyde should be developed.</p> <p>ENV 6 Appropriate location and scale Developments and activities should be in locations appropriate to their scale and impact upon the wider environment in order to minimise damage or disturbance.</p>	No	No	No	No	No	No	No	No	No	Desk-based strategy development will not undermine the conservation objectives of the sites.
	No	No	No	No	No	No	No	No	No	No	Desk-based and field research will not undermine the conservation objectives of the sites.
	No	No	No	No	No	No	No	No	No	No	Desk-based research will not undermine the conservation objectives of the sites.
	No	No	No	No	No	No	No	No	No	No	Desk-based and field research will not undermine the conservation objectives of the sites.
	No	No	No	No	No	No	No	No	No	No	Desk-based research will not undermine the conservation objectives of the sites.
	No	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.

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ENVIRONMENT	ENV 7 Natura sites Development likely to have a significant effect on Natura 2000 sites (including Special Protection Areas, Special Areas of Conservation, and Ramsar Sites) will be subject to an appropriate assessment. Where an assessment is unable to conclude that a development will not adversely affect the integrity of the site, development will only be permitted where there are no alternative solutions, and there are imperative reasons of overriding public interest, including those of a social or economic nature. These can be of a social or economic nature except where the site has been designated for a European priority habitat or species. Consent can only be issued in such cases where the reasons for overriding public interest relate to human health, public safety, beneficial consequences of primary importance for the environment or other reasons subject to the opinion of the European Commission (Via Scottish Ministers).	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.
	ENV 8 Sites of Special Scientific Interest Development affecting Sites of Special Scientific Interest (SSSIs) will not be permitted unless it can be demonstrated that the overall objectives of the designation and the overall integrity of the designated area would not be compromised, or any adverse effects are clearly outweighed by social or economic benefits of national importance.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.
	ENV 9 Voluntary approaches to protection Voluntary approaches to protect or enhance important areas of marine biodiversity should be encouraged and promoted in locations where activities have negative impacts upon important species and habitats.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.
	ENV 10 Seascape and landscape The seascape and landscape assets of the Firth of Clyde should be safeguarded and enhanced. A seascape/landscape analysis of the Firth of Clyde should be carried out and guidance for developers and Local Authorities developed.	No	No	No	No	No	No	No	No	No	Desk-based and field research will not undermine the conservation objectives of the sites.

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	ENV 11 Marine litter and debris A coordinated marine litter strategy for the Firth of Clyde should be developed. This should include establishing a systematic monitoring network in the Firth of Clyde to assess the extent of the problem, identify priority areas and the main sources of marine litter and debris. Existing initiatives should be supported in their efforts to combat the problem of marine litter.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.
	COM1 New developments Developments for marine-based activities should be located and designed to provide maximum economic and social benefits for local communities.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. Any development strategy for the Firth of Clyde and any individual projects would be subject to separate Habitats Regulations Appraisal. There is no linkage between the terrestrial sites and this policy objective. New developments as a result of this policy on the Inner Clyde and Ailsa Craig sites are considered to be improbable.
COMMUNITIES	COM 2 Re-engaging with the coastal environment and maritime heritage Communities should be encouraged to re-engage with their coastal environment and maritime heritage and to better recognise that the Firth of Clyde remains a living, working environment. One mechanism to achieve this re-engagement is through increased participation in marine leisure activities. The culture and heritage of coastal communities should be promoted and local authorities, among others, should consider ways of ensuring this rich maritime history is not lost.	Yes	Yes	No	No	No	No	No	No	No	Promotion of increased general access to coast and of increased opportunities for participation in marine leisure activities including wildlife tourism might exert additional disturbance pressures on the two highlighted marine Natura sites 1 & 2.
HERITAGE	HER 1 Protect and safeguard maritime heritage Significant maritime heritage should be safeguarded and protected. As the majority of maritime heritage below the MHWS has limited protection, a precautionary approach to development should be taken with consideration to the potential importance of currently unscheduled monuments. The impact of activities should also be considered on the integrity of maritime heritage and voluntary approaches should be encouraged such as the British Sub-Aqua Club's Code of Conduct.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.

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SAFETY	Policy SAFE 1 Marine safety Consideration should be given to the impacts of developments and related activities on marine safety. Voluntary approaches should be encouraged including the development of local codes of conduct. Mechanisms that increase awareness of issues and enable the dissemination of information to marine users such as the District Marine Safety Committee, the River Clyde Users Group and Glasgow City Council's Water Safety Working Group should be supported.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.
	R&T 1 Marine recreation and tourism The development of tourism and recreation related facilities and infrastructure should generally be supported, particularly those which extend the tourism season, spread economic benefits more widely and are accessible.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. Any development strategy for the Firth of Clyde and any individual projects would be subject to separate Habitats Regulations Appraisal. There is no linkage between the terrestrial sites and this policy objective. New developments as a result of this policy on the Inner Clyde and Ailsa Craig sites are considered to be improbable.
RECREATION AND TOURISM	R&T 2 Slipways and shoreside infrastructure The network of slipways and shoreside infrastructure across the Firth of Clyde should be maintained and enhanced to facilitate increased access to the water resource. To ensure that investment is targeted in the most appropriate locations an infrastructure audit and capacity analysis should be carried out.	No	Yes	No	No	No	No	No	No	No	Smaller scale developments, particularly the provision of slipways and associated parking facilities may exert impacts on habitats. Cumulative disturbance impacts may occur due to COM 2 also promoting increased use. Slipways and shoreside infrastructure developments in the inner Clyde are likely to have an impact on the Inner Clyde SPA. Developments elsewhere are unlikely to have an impact on other SPAs and SACs, as shoreline infrastructural development is unlikely on these sites.
	R&T 3 Sailing and Cruising Increased infrastructure capacity for the sailing and cruising industry should be encouraged within the Firth of Clyde. The development of facilities and infrastructure that enhance opportunities for tourism should be promoted, including increasing berthing capacity and developing a network of "sail to" facilities.	Yes	No	No	No	No	No	No	No	No	Increased leisure boating activity might exert impacts such as disturbance and litter around Ailsa Craig in the spring or summer months. Potential increase in marine non-native species will not undermine the conservation objectives of the sites.
	R&T 4 Water quality The potential for creating a recreational water quality standard and designation for areas of the Firth of Clyde where there is a high demand for marine recreation should be investigated. This standard should be at a level where no ill effects would be anticipated if recreational users ingest water.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. The focus of this policy is a desk based study to identify areas where no ill effects would be anticipated if recreational users ingest water.

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	R&T 5 Voluntary Codes of Conduct Promotion of existing codes should be encouraged. Where no suitable code is identified, Firth of Clyde specific voluntary codes of conduct should be developed in partnership with recreation, business and other stakeholders, to minimise damaging impacts and conflict with other marine and coastal users.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.
	R&T 6 Marketing the Firth of Clyde An integrated marketing strategy should be developed to promote the Firth of Clyde as a visitor destination for marine leisure pursuits and existing partnership, such as Sail Clyde and Sail Scotland, should be supported.	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. There is no connectivity between Marine leisure pursuits and the terrestrial sites, the mudflats of the Inner Clyde and isolated location and sheer cliffs of Ailsa Craig prevent leisure activity at these sites	
	R&T 7 Community engagement Initiatives that encourage participation in marine recreation should be supported. Local Authorities and schools should be encouraged to provide increased provision for marine-based recreation.	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. There is no connectivity between Marine leisure pursuits and the terrestrial sites, the mudflats of the Inner Clyde and isolated location and sheer cliffs of Ailsa Craig prevent leisure activity at these sites	
SHIPPING AND TRANSPORT	S&T 1 Ferries Existing ferry routes should be safeguarded from marine developments that might hinder current operations or future service expansion. Where demand or need exists, new or extended ferry services should be established, including any necessary harbour improvements.	No	Yes	No	No	No	No	No	No	Depends on routing, nature and infrastructure requirements of any proposed new ferry routes. Given urban population around the Inner Clyde, ferry services may increase in this area. However, this policy is unlikely to have a significant effect on any other Natura sites due to the locations being away from lifeline ferry routes and no connective pathway being identified.	
	S&T 2 Public transport integration Terrestrial public transport infrastructure should be integrated where possible with ferry services through the provision of appropriate infrastructure improvements and synchronisation of timetables.	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.	
	S&T 3 Freight handling infrastructure The development of new multimodal hubs, which would combine rail and shipping should be encouraged and promoted. Local Development Plans have identified three potential multimodal terminals at Hunterston, Greenock Ocean Terminal and Ayr harbour. These ports and harbours should be better integrated and incorporated into the wider transport system and supply chain. Connections to strategic corridors and Scottish networks should be improved; capacity constraints reduced; and additional routes able to carry standard European containers provided.	Yes	Yes	No	No	No	No	No	No	Increased levels of shipping activity could increase risk of oil or other chemical spillages. This would be likely to affect seabirds at SPAs which depend on the marine environment for food, but unlikely to affect coastal SACs or the other which has an alternative food source of freshwater fish, insects, and sometimes mammals. Whooper swans at Black Cart feed in fields in and adjacent to the SPA and use the tidal reaches of the river as one of a few roost sites, thus any significant effect highly unlikely.	

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	S&T 4 Fuel imports and exports The nationally important infrastructure of Finnart Ocean Terminal and Hunterston Deep Water Port should be protected. Marine developments that may have a negative effect upon navigation by large ocean-going vessels to these facilities should be discouraged.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. The focus of this policy is on interactions between marine users / marine development only.
	S&T 5 Hunterston deep water container port This Plan recognises the potential development of an international transshipment hub requiring deep water for sea freight movement at Hunterston. The area should be safeguarded and marine developments discouraged that may have a negative effect upon such a development.	Yes	Yes	No	No	No	No	No	No	No	Increased levels of shipping activity could increase risk of oil or other chemical spillages. This would be likely to affect seabirds at SPAs which depend on the marine environment for food, but unlikely to affect coastal SACs or the otter which has an alternative food source of freshwater fish, insects, and sometimes mammals. Whooper swans at Black Cart feed in fields in and adjacent to the SPA and use the tidal reaches of the river as one of a few roost sites, thus any significant effect highly unlikely.
	S&T 6 Terrestrial Developments Planning authorities should give consideration to the impacts of terrestrial development along the banks of the inner estuary, on the ability of vessels to navigate along the Clyde.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. The focus of this policy is on interactions between marine users / marine development only. This policy may in fact reduce development pressure.
	S&T 7 Ballast Water Expansion or development of port facilities to handle increased volumes of international freight within the Firth of Clyde should include infrastructure and procedures compatible with the Ballast Water Exchange and Ballast Water Performance Standards as set out in the Ballast Water Convention.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. The Ballast Water Convention of the IMO is designed to protect the integrity of local marine ecosystems by minimising the transfer of marine non-native species.
	S&T 8 Capital Dredging A precautionary approach should be adopted to capital dredging operations within the Firth of Clyde to identify, minimise and mitigate against potential environmental impacts.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. This policy highlights the need to protect the integrity of the marine environment.
MARCULTURE	MAR 1 Sustainable development of mariculture The development of mariculture should be encouraged within the Firth of Clyde and preferred locations for mariculture development should be identified.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. Mariculture areas have no connectivity with any Natura sites. Mariculture will not impact terrestrial sites and development of mariculture is impractical on the mudflats of the Inner Clyde or in the exposed estuary around Ailsa Craig.
	MAR 2 A Mariculture strategy for the Firth of Clyde An integrated and coordinated strategy for mariculture within the Firth of Clyde should be developed.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. Mariculture areas have no connectivity with any Natura sites. Mariculture will not impact terrestrial sites and development of mariculture is impractical on the mudflats of the Inner Clyde or in the exposed estuary around Ailsa Craig.

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	<p>MAR 3 Pre-application consultation Developers should be encouraged to carry out pre-application consultation with regulators, planning authorities, communities and other marine users.</p> <p>MAR 4 Protecting Wild Salmon All salmon producers within the Firth of Clyde should be encouraged to sign up to and operate within the relevant Area Management Agreement.</p>	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.
	<p>FISH 1 Competition for space Account should be taken of local fishing interests/fishing grounds when developing and determining development proposals. The fishing industry should be encouraged to develop guidance on the economic and stock management impacts associated with displacement of fishing activity and where possible identify areas where development could proceed with minimal or no impact on fishing. Preapplication consultation should be encouraged with fishing representatives for new developments.</p>	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. The focus of this policy is on interactions between marine users only.
FISHERIES	<p>FISH 2 Infrastructure To safeguard the local fishing industry a strategic plan should be developed to deliver and maintain appropriate infrastructure and facilities in light of the Clyde IFG Management Plan.</p>	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. Development of local fishing infrastructure unlikely to effect sites as Clyde fishing ports have no connectivity with Natura sites.
	<p>FISH 3 Roads Measures should be encouraged to improve the key road infrastructure to enable rapid transhipment to markets and processors, with priority given to works that maintain and upgrade the A82 and A83.</p>	No	No	No	No	No	Yes	Yes	No	Yes	Glen Etive and Tarbert Woods lie adjacent to the A83. Loch Lomond Woods lie adjacent to the A82. Any maintenance and development of these primary routes could significantly affect Natura sites 6, 7 & 9.
	<p>FISH 4 Protecting Habitats and Species The fishing industry should be encouraged to protect habitats and species that are sensitive to fishing activity.</p>	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.
	<p>FISH 5 Voluntary Approaches The fishing industry should be supported in developing and implementing collaborative and cooperative approaches to managing the Clyde fisheries, which include: voluntary measures to protect marine habitats and species; the fishing for litter scheme; and adoption of appropriate certification standards.</p>	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites.

Theme/ Sector	Policy	Likely to have significant effect?									Comments
		Site 1 Alisa Craig	Site 2 Inner Clyde	Site 3 Black Cart	Site 4 Glen App	Site 5 Arran Moors	Site 6 Glen Etive	Site 7 Loch Lomond	Site 8 Lendal foot	Site 9 Tarbert Woods	
ENERGY, SUB-SEA CABLES & PIPELINES	ESC&P 1 Renewable Energy Proposals for the generation and utilisation of renewable energy within the Firth of Clyde should be supported and encouraged in appropriate locations.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. Any marine renewable energy development strategy for the Firth of Clyde and any individual projects would be subject to separate Habitats Regulations Appraisal. There is no connectivity between the terrestrial sites and marine renewable energy within the Clyde Estuary. It is improbable with current or foreseeable technology that wind, tidal or wave power will be developed in locations which would affect Ailsa Craig or the Inner Clyde. Tidal barrages have been suggested as an option for the upper Clyde. Any proposal would only be considered to be in "appropriate location" if it were shown that the conservation objectives of the Inner Clyde were not undermined.
	ESC&P 2 Land based power stations Consideration should be given to the impact that new marine developments would have on the ability of power stations to abstract water from the Firth of Clyde for cooling purposes.	No	No	No	No	No	No	No	No	No	Policy will not undermine the conservation objectives of the sites. The focus of this policy is on interactions between marine users only.

All policies have been considered in combination and no further Natura sites were identified to have connections with the Plans policies.

This screening indicates that the Plan would not be anticipated to exert any significant effects on wintering whooper swans utilising the Black Cart SPA. The swans feed in fields within and adjacent to the SPA and use the tidal reaches of the Black Cart as a roost site. There are terrestrial development pressures on feeding areas and alternative roost sites lying outwith the SPA boundary.

The screening demonstrates that there would be no significant effects on Glen App & Galloway Moors SPA nor on Arran Moors SPA. The qualifying species of these SPAs is the Hen harrier which is essentially an open country species showing a close affinity to heather moorland and young forestry plantations with heather ground vegetation during the breeding season. Thus marine-based policies do not compromise their conservation objectives and coastal policies are not likely to impact these SPAs due to their geographical location reducing the connectivity.

Lendalfoot Hills Complex SAC is also not likely to be impacted by the Plan. The qualifying habitats include terrestrial grasslands, fens, heathland and quaking bogs. Due to the location of the SAC the connectivity between marine-based policies, even with terrestrial implications, and terrestrial habitats are reduced and extremely unlikely to have a significant effect on the conservation objectives for the qualifying habitats.

A number of policies, however, are identified as having the potential to affect the interests of Natura sites. These policies are considered in the appropriate assessment appraisal in the following section.

Section 2 - Appropriate Assessment Appraisal

Policies identified in Table 2 as likely to have significant effects upon the notified interests and conservation objectives of Natura sites are considered in more detail below. At this strategic level, it is not possible to predict or assess with any degree of certainty the impact on specific European sites. Individual projects would be subject to separate Habitats Regulations Appraisal.

Policy COM 2 Re-engaging with the coastal environment and maritime heritage **Policy Details**

Communities should be encouraged to re-engage with their coastal environment and maritime heritage and to better recognise that the Firth of Clyde remains a living, working environment. One mechanism to achieve this re-engagement is through increased participation in marine leisure activities. The culture and heritage of coastal communities should be promoted and local authorities, among others, should consider ways of ensuring this rich maritime history is not lost.

Implications for the sites

The promotion of increased general access to the coast and of increased opportunities for participation in marine leisure activities, including wildlife tourism, might exert additional disturbance or litter pressures on Ailsa Craig and the Inner Clyde Estuary. This could potentially compromise two conservation objectives:

- 1) No significant disturbance of the species
- 2) Distribution of the species within site

Disturbance of seabirds breeding on Ailsa Craig and their possible displacement from sensitive areas, such as localities used for feeding or loafing or by recently fledged (flightless) guillemots. Disturbance at the Inner Clyde Estuary SPA could ultimately reduce the site's overall carrying capacity for redshank and/or lead to some redistribution across the site

Mitigation or avoidance

A strategic approach to improve access to the shore or water will be implemented in a way that the Conservation Objectives of the Natura sites will not be adversely affected, i.e. access will not be promoted on or adjacent to the Inner Clyde or Ailsa Craig (no linkage to terrestrial sites). Possible mitigating actions will enable appropriate siting of routes and access points to avoid key feeding, roosting and moulting sites for the qualifying bird species of the SPAs. Only proposals where it can be ascertained that they will not adversely affect the integrity of Natura sites will be in accordance with the Plan (ENV 7). This strategic approach is proposed in Action 15 of the Plan (Annex I) and will be informed by policies ENV 2, ENV 3 and ENV 4 of the Plan (Table 2) which are intended to generate improved knowledge of how seabirds (and other mobile species) utilise marine areas. Such information would potentially enable future proactive management, if required, e.g. development of more prescriptive spatial policies within future revisions of the Plan, to avoid any significant disturbance impacts. Other policies within the Plan that support the Conservation Objectives of the Natura sites include:

Policy ENV 6 of the Plan promotes the appropriate location of developments and activities to minimise adverse impacts and to protect habitats and species (Table 2).

Development of voluntary codes of conduct such as the Scottish Marine Wildlife Watching Code and adoption by marine users, in particular those involved in wildlife tourism, is proposed in policy R&T 5 (Table 2).

Policy ENV 7 confirms that, in accordance with EC legislation³, any development project will be required to carry out an individual appraisal in relation to Habitats Regulations.

Conclusion

Given the mitigation measures indicated above, Policy COM 2 is unlikely to have a significant effect on the integrity of any Natura site.

Policy R&T 2 Slipways and shoreside infrastructure

Policy Details

The network of slipways and shoreside infrastructure across the Firth of Clyde should be maintained and enhanced to facilitate increased access to the water resource. To ensure that investment is targeted in the most appropriate locations, an infrastructure audit and capacity analysis should be carried out.

Implications for the sites

This would depend largely on the outcome of initial assessments of the provision of water access points in relation to recreational demand (Actions 13 and 14 of the Action Plan in Appendix I). The Inner Clyde Estuary SPA is the only site likely to be affected by future proposals to improve existing infrastructure. There are three conservation objectives likely to be compromised, these includes:

- 1.) No significant disturbance of the species
- 2.) Distribution of the species within site
- 3.) Distribution and extent of habitats supporting the species

This policy could result in more people using the Estuary due to the ease of access that might increase the disturbance of wintering waders within the Inner Clyde Estuary SPA. This could be compounded by increased use due to Policy COM 2 that encourages the community to re-engage with their coastal environment. Such disturbance could ultimately reduce the site's overall carrying capacity for Redshank and/or lead to some redistribution across the site; there is some existing circumstantial evidence of such impacts associated with coastal footpaths.⁴ Maintaining and enhancing slipways and shoreside infrastructure could include increasing the structural footprint and ultimately reducing the size/extent of the habitat.

³ Managing Natura 2000 Sites: The provisions of Article 6 of the Habitats Directive 92/43/CEE, Office for Official Publications of the European Communities, 2000, Luxembourg.

⁴ Harding, N. (2008a). Feeding Distribution of Wintering Waterfowl on the Inner Clyde SPA, Winter 2007-2008. Scottish Natural Heritage Commissioned Report No.XXX (ROAME No. R06LI10) (in press as at November 2008)

Mitigation or avoidance

This preliminary assessment indicates the need for careful management of projects which promote or create coastal footpaths or water access points within or adjacent to the SPA in order to avoid or mitigate potential disturbance and redistribution impacts on the qualifying species at the Inner Clyde Estuary. Policies that do not support the Conservation Objectives of the Natura sites will not be in accordance with the Plan (ENV 7).

Other policies within the Plan also support the Conservation Objectives of the Natura sites, these include:

Policy ENV 6 of the Plan promotes the appropriate location of developments and activities to minimise adverse impacts and to protect habitats and species (Table 2).

Policy ENV 7 confirms that, in accordance with EC legislation⁵, any development project will be required to carry out an individual appraisal in relation to Habitats Regulations.

Conclusion

Given the mitigation measures indicated above, Policy R&T 2 is unlikely to have a significant effect of any Natura site.

Policy R&T 3 Sailing and Cruising

Policy Details

Increased infrastructure capacity for the sailing and cruising industry should be encouraged within the Firth of Clyde. The development of facilities and infrastructure that enhance opportunities for tourism should be promoted, including increasing berthing capacity and developing a network of “sail to” facilities.

Implications for the Sites

Increased leisure boating activity might impact the marine sites Ailsa Craig and Inner Clyde through increased disturbance and litter particularly in the spring or summer months when seabirds are prevalent on the SPA for breeding, roosting, feeding and moulting. Conservation Objectives for this site that are most likely to be compromised are:

- a) No significant disturbance on the species
- b) Distribution of species within site

Increased traffic of leisure boating might cause disturbance to the SPA’s qualifying species for each of the two sites, at both sites direct access onto the site would not be possible therefore disturbance from passing boats might cause species at the fringes of the site to move away and re-distribute within the area of the SPA.

Mitigation or Avoidance

⁵ Managing Natura 2000 Sites: The provisions of Article 6 of the Habitats Directive 92/43/CEE, Office for Official Publications of the European Communities, 2000, Luxembourg.

There is no existing evidence that sailing and cruising within the Firth of Clyde are affecting seabirds. Major sailing facilities at marinas are located away from Natura sites. A strategic approach to the development of marine recreational activities is proposed in policy R&T 2 (Table 2) and Action 14 (Appendix I) by undertaking a capacity analysis highlighting the potential to increase use of the area. This analysis will be informed by policies ENV 2, ENV 3 and ENV 4 of the Plan (Table 2) which are intended to generate improved knowledge of how seabirds (and other mobile species) utilise marine areas. Such information would potentially enable future proactive management, if required, e.g. development of more prescriptive spatial policies within future revisions of the Plan, to avoid any significant disturbance impacts. Other policies within the Plan support the Conservation Objectives of the Natura sites and improve the natural environment within the Firth of Clyde Estuary, these include:

Policy ENV 11 proposes a marine litter strategy for the Firth of Clyde to assess the extent and sources of marine litter and debris and implement initiatives to combat the problem. The policy also suggests support of the Green Blue, an organisation which advises boating and water sports enthusiasts on how to act in an environmentally conscious way; part of their advice covers waste & sewage⁶.

Development of voluntary codes of conduct such as the Scottish Marine Wildlife Watching Code and adoption by marine users, in particular those involved in wildlife tourism, is proposed in policy R&T 5 (Table 2). This should minimise disturbance to qualifying species at the site.

Policy ENV 7 confirms that, in accordance with EC legislation⁷, any development project will be required to carry out an individual appraisal in relation to Habitats Regulations.

Conclusion

Given the mitigation measures indicated above, Policy R&T 3 is unlikely to have a significant effect on the integrity of any Natura site.

Policy S&T 1 Ferries

Policy Details

Existing ferry routes should be safeguarded from marine developments that might hinder current or future service expansion. Where demand or need exists, new or extended ferry services should be established, including any necessary harbour improvements.

Implications for the Sites

New or extended ferry services are most likely between urban conurbations and particularly in the Inner Clyde. Increased estuary traffic could potentially compromise three conservation objectives:

⁶ See <http://www.thegreenblue.org.uk/youandyourboat/wasteandsewage.asp> .

⁷ Managing Natura 2000 Sites: The provisions of Article 6 of the Habitats Directive 92/43/CEE, Office for Official Publications of the European Communities, 2000, Luxembourg.

- 1) no significant disturbance of the species
- 2) structure, function and supporting processes of habitats supporting the species.
- 3) distribution of the species within the site

Increased ferry traffic might cause disturbance through noise, air, and water pollution, and the physical presence of a ferry in the estuary. This could result in species moving away from the ferry routes and redistributing within the SPA area. Water quality might have an effect on the condition of the supporting habitat and the capacity to support the qualifying species.

Mitigation or Avoidance

Policy ENV 7 confirms that, in accordance with EC guidelines, each development project will be required to carry out an individual appraisal in relation to Habitats Regulations. If there were any proposal to develop novel ferry routes within or passing through the Inner Clyde Estuary SPA, these would require to be subject to Appropriate Assessment, with particular focus on potential disturbance and displacement effects arising from the operation of vessels in the winter months and the impacts on habitats arising from any proposed infrastructure developments. Only proposals where it can be ascertained that they will not adversely affect the integrity of Natura sites will be in accordance with the plan (ENV 7). Other policies within the Plan may support the Conservation Objectives of the Natura sites and improve the natural environment within the Firth of Clyde Estuary, these include:

Part 200 of the Plan on page 70 states that “The provision of such services and the associated infrastructure should take into account: the protection of the nationally and internationally important natural environment within the Clyde”.

Policy ENV 6 of the Plan promotes the appropriate location of developments and activities to minimise adverse impacts and to protect habitats and species (Table 2).

Conclusion

Given the mitigation measures indicated above, Policy S&T 1 is unlikely to have a significant effect on any Natura site.

Policy S&T 3 Freight handling infrastructure

Policy Details

The development of new multimodal hubs, which would combine rail and shipping should be encouraged and promoted. Local Development Plans have identified three potential multimodal terminals at Hunterston, Greenock Ocean Terminal and Ayr harbour. These ports and harbours should be better integrated and incorporated into the wider transport system and supply chain. Connections to strategic corridors and Scottish networks should be improved; capacity constraints reduced; and additional routes able to carry standard European containers provided.

Implications for the Sites

Increased shipping levels and vessel size might potentially lead to an increased risk of chemical, especially fuel oil, spills which could affect seabirds from Ailsa Craig or mudflat habitats, and associated invertebrates, utilised by Redshank within the Inner Clyde Estuary. These activities might conflict with three Conservation Objectives:

- 1) No significant disturbance of the species
- 2) Distribution of the species within site
- 3) Structure, function and supporting processes of habitats supporting the species

Increased shipping levels might cause disturbance through noise, air, and water pollution, and the physical presence of a ship in the estuary. This in turn could result in species moving away from the shipping routes and redistributing within the SPA area. Water quality might have an effect on the condition of the supporting habitat and the capacity to support the qualifying species.

Mitigation or Avoidance

Such impacts should be fully considered within the Habitat Regulations associated with major ports infrastructure developments. Potential mitigation measures would include comprehensive regular updates to oil spill contingency plans, which should reflect improved (spatial) knowledge of environmental features and their sensitivity to oil pollution arising from the implementation of environmental policies (specifically ENV1, 3 and 4) within the Plan. Only proposals where it can be ascertained that they will not adversely affect the integrity of Natura sites will be in accordance with the Plan (ENV 7).

Policy ENV 7 confirms that, in accordance with EC legislation⁸, any development project will be required to carry out an individual appraisal in relation to Habitats Regulations.

Conclusion

Given the mitigation measures indicated above, Policy S&T 3 is unlikely to have a significant effect on any Natura site.

Policy S&T 5 Hunterston deep water container port

Policy Details

This Plan recognises the potential development of an international transshipment hub requiring deep water for sea freight movement at Hunterston. The area should be safeguarded and marine developments discouraged that may have a negative effect upon such a development.

Implications for the Sites

Increased levels of shipping activity could cause disturbance and increase risk of oil or other chemical spillages. This would be likely to affect seabirds at SPAs which depend on the marine environment, namely at Ailsa Craig SPA where seabirds use adjacent waters for fledging and food, and the Inner Clyde Estuary SPA where

⁸ Managing Natura 2000 Sites: The provisions of Article 6 of the Habitats Directive 92/43/CEE, Office for Official Publications of the European Communities, 2000, Luxembourg.

Redshanks feed on mudflats exposed at low tide. The SPA Conservation Objectives that might be compromised are:

- a) No significant disturbance to the species
- b) Distribution of the species within site
- c) Structure, function and supporting processes of habitats supporting the species

Increased levels of shipping activity could cause disturbance through noise, air, and water pollution, and the physical presence of a ship in the estuary. This in turn could result in species moving away from the shipping routes and redistributing within the SPA area. Water quality might have an effect on the condition of the supporting habitat and the capacity to support the qualifying species.

Mitigation or Avoidance

Hunterston Deep Water Container Port is included in the National Planning Framework and the Ayrshire Structure Plan safeguards Hunterston for the development of an international transshipment hub. Policy ENV 7 confirms that, in accordance with EC guidelines⁹, any infrastructure development project would be required to carry out an individual appraisal in relation to Habitats Regulations. Potential mitigation measures would include comprehensive regular updates to oil spill contingency plans, which should reflect improved (spatial) knowledge of environmental features and their sensitivity to oil pollution arising from implementation of environmental policies (specifically ENV1, 3 and 4) within the Plan. Only proposals where it can be ascertained that they will not adversely affect the integrity of Natura sites will be in accordance with the Plan (ENV 7).

Conclusion

Given the mitigation measures indicated above, Policy S&T 3 is unlikely to have a significant effect on the integrity of any Natura site.

Policy FISH 3

Policy Details

Measures should be encouraged to improve the key road infrastructure to enable rapid transshipment to markets and processors, with priority given to works that maintain and upgrade the A82 and A83.

Implications for the Sites

For the Western acidic oak woodland of both Loch Lomond and Tarbert SACs construction work and/or increased traffic could impact the extent of habitat on site, processes supporting the habitat (eg through hydrological changes or pollution) and could disturb typical species of the habitat. For Loch Lomond SAC works increased through-traffic could also be a hazard for the Otter species (*Lutra lutra*) through disturbance, damage to supporting habitat or road kill. For Glen Etive & Glen Fyne SPA, works and increased traffic could impact the distribution and extent of habitats supporting the Golden eagle and change the structure, function and supporting

⁹ Managing Natura 2000 Sites: The provisions of Article 6 of the Habitats Directive 92/43/CEE, Office for Official Publications of the European Communities, 2000, Luxembourg.

processes of habitats supporting the species. The Conservation Objectives that might be compromised combined from both SAC and SPA sites are:

- a) No significant disturbance of the species
- b) No significant disturbance of typical species of the habitat
- c) Distribution and extent of habitats supporting the species
- d) Extent of the habitat on site
- e) Structure, function and supporting processes of habitats supporting the species
- f) Structure and function of the habitat
- g) Processes supporting the habitat
- h) Population of the species as a viable component of the site

Mitigation or Avoidance

Policy ENV 7 confirms that, in accordance with EC guidelines, any infrastructure development project would be required to carry out an individual appraisal in relation to Habitats Regulations. During any such appraisal of future maintenance or upgrading of the A82 and A83, various impacts on the SACs/SPAs need to be considered. The following is a guideline of issues, the potential impacts would have to be examined at a more detailed level:

Glen Etive & Glen Fyne SPA, qualifying interest Golden eagle

- habitat loss
- air pollution
- noise disturbance
- access

Loch Lomond Woods SAC, qualifying interest Western acidic oak woodland and Otter

- habitat loss
- hydrological impacts
- noise disturbance
- air pollution
- light pollution
- road kill
- access

Tarbert Woods SAC, qualifying interest Western acidic oak woodland

- habitat loss
- hydrological impacts
- air pollution
- disturbance
- access

Policy ENV 6 of the Plan promotes the appropriate location of developments and activities to minimise adverse impacts and to protect habitats and species (Table 2).

Conclusion

Given the requirement for any new construction project to undertake an individual appraisal in regards to Habitat Regulations, Policy FISH 3 is unlikely to have a significant effect on the integrity of any Natura site.

Section 3 - Conclusion

Strategic Vision & Guiding Principles of the Plan

The vision for 2029 is that “The Firth of Clyde will have a healthy marine and coastal environment, rich in biodiversity and natural resources. This will enhance the quality of life for local communities and contribute to a diverse and sustainable economy for the West of Scotland”. The Plan’s policies have been developed in accordance with six guiding principles, namely Sustainable Development, the Ecosystem Approach, Responsible Use, Quality of Life, Adding Value and Partnership Working.

Environmental Policies

Policy ENV 6 of the Plan explicitly state that “developments and activities should be in locations appropriate to their scale and impact upon the wider environment, in order to minimise damage or disturbance”.

Policy ENV 7 explicitly states that “development likely to have a significant effect on Natura 2000 sites will be subject to an appropriate assessment” and that if it can not be ascertained that the plan or project will not adversely affect the integrity of a Natura Site then it can not be consented (subject to no alternatives and imperative reasons of overriding public interest).

It must be stressed that approval of this higher level Plan does not exempt any further plans or any development project in the Firth of Clyde from appraisal in relation to Habitats Regulations and appropriate assessment where relevant.

Overall Conclusion

Given the strategic nature of providing overarching policies and guidelines for stakeholders in the Firth of Clyde area, the assessment in this appraisal is proportional to the level and detail of the Plan. This appraisal concludes that the Plan is unlikely to have a significant effect on the integrity of any Natura 2000 site and can therefore be approved by the relevant Competent Authority.

Annex I – Action Plan – 4 pages

Proposed Action Plan

287. It is critical to the Plan's success that its policy aspirations are translated into a clearly prioritised action plan that identifies the important areas of activity within the Firth of Clyde for planning authorities, regulators and stakeholders. A preliminary five-year action plan, covering the period 2009 to 2014, detailing what should be delivered by whom and when, is set out.

288. Consideration will have to be given to the resources required to deliver the policies within the Plan. **Inclusion in this preliminary action plan does not guarantee that policies will be delivered or that funding will be available.**

Proposal	Policy	Proposal	Details	Potential Partners	Target Delivery
1	ENV1	Develop a strategy for the coordinated gathering and recording of data in the Firth of Clyde	<ul style="list-style-type: none"> This should build upon work of the SSMEI Clyde Pilot in bringing together all existing data and information. It should prioritise areas where further survey work is required. 	FoCF SNH SEPA Marine Scotland	2011
2	ENV2	Identify and map locations of internationally, nationally and locally important species, habitats and sensitivities <ul style="list-style-type: none"> This should build upon 	<ul style="list-style-type: none"> work of the Review of Biodiversity and add data which could not be included due to time constraints in the original project. New locations should be included. 	SNH Marine Scotland	2011
3	ENV2	Map areas where particular activities could impact upon sensitive species and habitats	<ul style="list-style-type: none"> Through mapping known locations of species and habitats, with locations of activities and sensitivity/pressure information, potential conflicts can be identified. 	FoCF Marine Scotland SNH Marine Users	2012
4	ENV3	Identify important areas for mobile species	<ul style="list-style-type: none"> Data collated on mobile species should be analysed to identify areas which are important spatially and/or temporally for mobile species. 	FoCF SNH Marine Scotland	2012
5	ENV4	Develop a suite of pressure/sensitivity indicators	<ul style="list-style-type: none"> Some species and habitats are particularly sensitive to the effects of certain activities. 	SNH FRS SEPA	2011
6	ENV4	Map areas where marine based activities take place	<ul style="list-style-type: none"> Through mapping areas where activities take place these can be overlain with the location of known species and habitats to identify areas where conflicts may arise. 	FoCF	2011

Proposal	Policy	Proposal	Details	Potential Partners	Target Delivery
7	ENV5	Develop a guiding framework for non-native species mitigation	<ul style="list-style-type: none"> This will identify sensitive and vulnerable species and habitats to non-native invasive species and develop an action plan to protect and restore them. 	FoCF SNH	2012
8	ENV10	Carry out a seascape/landscape analysis of the Firth of Clyde	<ul style="list-style-type: none"> There is limited guidance available on the impacts of new developments on seascapes. The outcome of the analysis should be distributed to developers and planning authorities. 	SNH Planning Authorities	2011
9	ENV11	Establish a marine litter coordinator for the Firth of Clyde	<ul style="list-style-type: none"> A lead organisation or individual is required to enable a strategic approach to be developed. The marine litter coordinator, working in partnership with central and local government, relevant agencies and the voluntary sector, will enable a strategic approach to be developed within the Firth of Clyde. 	FoCF SNH SEPA Local Authorities Marine Scotland	2013
10	ENV11	Develop a coordinated marine litter strategy for the Firth of Clyde	<ul style="list-style-type: none"> It should encourage agencies and local authorities to work collaboratively to tackle marine litter This should also establish a monitoring network 	FoCF SNH SEPA Local Authorities Marine Scotland	2014
11	ENV11	Establish a monitoring network for marine litter and debris	<ul style="list-style-type: none"> This would enable the identification of priority areas and the main sources of marine litter and debris. 	FoCF SNH SEPA Local Authorities Marine Scotland	2013

Proposal	Policy	Proposal	Details	Potential Partners	Target Delivery
12	R&T1	Socioeconomic Review of marine recreation and tourism	<ul style="list-style-type: none"> Carry out a study to ascertain the total economic worth of the Firth of Clyde marine based recreation and tourism industry with an assessment of its potential worth. Details are required for micro-data such as visitor numbers, what they do and their spending patterns. This review will provide an evidence base for the development of the coordinated strategy on recreation and tourism. 	BMF Visit Scotland Enterprise Companies Local Authorities	2010
13	R&T2	Shoreside access and infrastructure audit	<ul style="list-style-type: none"> Identify and evaluate the condition of existing shoreside infrastructure and suitability of access points. 	FoCF Local Authorities Marine Recreation Users	2012
14	R&T2	Capacity analysis for marine recreation activities	<ul style="list-style-type: none"> This will highlight areas where current recreation activity takes place, the facilities currently available and the potential to increase the use of areas through wider promotion or improved infrastructure and facilities. It will also identify areas where recreational activity currently doesn't take place, but could be accommodated. 	FoCF Local Authorities Marine Recreation Users	2012
15	R&T2	Develop a coordinated strategy for shoreside infrastructure improvements and maintenance	<ul style="list-style-type: none"> The knowledge gained through proposals 14 and 15 would enable a targeted approach to providing marine infrastructure requirements as well as identify future development opportunities and maintenance requirements. 	FoCF Local Authorities	2013
16	R&T3	Implement the Clyde Sail Strategy	<ul style="list-style-type: none"> The infrastructure and facilities required to expand the sailing experience in the Firth of Clyde have been identified in the Clyde Sail Strategy. Through the delivery of these it is anticipated that the number of boats in the Clyde could double in 10 years. 	Clyde Sail Partnership Local Authorities Enterprise Companies	
17	R&T4	Investigate Recreational Water Quality Standard	<ul style="list-style-type: none"> The quality of water is an important resource for attracting marine recreation and tourism. This standard would identify areas where no ill effects would be anticipated if recreational users ingested water. 	SEPA Scottish Water	2012
18	R&T6	Develop voluntary codes of conduct for marine leisure activities	<ul style="list-style-type: none"> The codes of conduct should be developed to minimise damaging impacts and conflicts between other users. Priority should be given to developing codes of conduct for sailing and cruising. 	FoCF Harbour Masters RYA SBMIF	2012

Proposal	Policy	Proposal	Details	Potential Partners	Target Delivery
19	R&T7	Develop an integrated marketing strategy for the Firth of Clyde	<ul style="list-style-type: none"> The generic marketing of Scotland's marine resource and the Clyde in particular needs to be developed. 	Visit Scotland SportsScotland Event Scotland Local Authorities Scottish Enterprise Local Authorities Industry	2013
20	R&T8	Increase provision for marine based recreation in schools	<ul style="list-style-type: none"> The first opportunity many people have of various sports is as part of the physical education provision at school. The UK often succeeds in marine based sports. There is a continual need however, to find new participants. 	Local Authorities SportsScotland RYA	2013
21	MAR1	Carry out a landscape capacity study	<ul style="list-style-type: none"> There is limited guidance currently available on how mariculture developments interact with the seascape and landscape. 		2011
22	MAR1	Socioeconomic review	<ul style="list-style-type: none"> There is limited information available on the socio-economic benefit of mariculture in the Clyde. This study should ascertain the total economic worth of the mariculture sector within the Firth of Clyde as well as an assessment of its potential worth. 		2011
23	MAR2	Develop an integrated mariculture strategy	<ul style="list-style-type: none"> This would be resource led, identifying areas preferred and less preferred for development. It would also provide guidance to minimise the impact of terrestrial developments on existing and future mariculture developments. 	FoCF	2013
24	FISH1	Map fishing grounds which are sensitive to other marine activities	<ul style="list-style-type: none"> Identify areas where development or activities would have a detrimental impact on fishing grounds. 	Clyde IFG SNH FRS FoCF	2011
25	FISH2	Carry out an audit of existing infrastructure	<ul style="list-style-type: none"> Identify and evaluate the condition of existing infrastructure and facilities. 	Clyde IFG	2012
26	FISH2	Develop a strategic plan to deliver new and improve existing infrastructure	<ul style="list-style-type: none"> In light of the Clyde IFG Management Plan and the audit of infrastructure a strategic plan should deliver infrastructure requirements that will ensure the Clyde Fisheries is competitive. 	Clyde IFG Local Authorities Ports Transport Scotland	2013
27	FISH4	Map fishing activity and intensity in the Firth of Clyde	<ul style="list-style-type: none"> There is a need to map the location and intensity of fisheries activity in order to make the recommendations regarding the most appropriate methods of assessing the ecological effects of fishing activity. 	Clyde IFG FRS SNH	2011
28	FISH4	Carry out a study on the impacts of fishing to the marine environment	<ul style="list-style-type: none"> The effects of different fishing activities in the marine environment are not fully understood. 	SNH FRS SEPA Clyde IFG	2012