



COAST response to MPA network consultation

General comments

The Scottish and UK Governments' vision for inshore and offshore waters is for 'clean, healthy, safe, productive, biologically diverse, marine and coastal environments, managed to meet the long term needs of nature and people'.

This is a vision which an ecologically coherent Marine Protected Area (MPA) network can play a part in realising. At present Scotland's Marine Atlas shows we have a lot to do to achieve this vision nationally and within many of the proposed marine regions. The Atlas highlights long-term declines and wide spread degradation of our marine life ranging from depleted fish stocks to damaged seabeds and declining numbers of seabirds, seals, sharks and rays.

In addition the Atlas and SEPA's River Basin Management Plan illustrate many inshore coastal and transitional waters are failing to meet Good Ecological Status under the Water Framework Directive and many are a long way from reaching Good Environmental Status as defined in the Marine Strategy Framework Directive Descriptors.

COAST's response to the MPA consultation is in 2 sections as follows:

1. Response to Marine Scotland's consultation questions on the proposed national MPA network.
2. South Arran and Clyde MPAs

National MPA Network

Proposed network sites and boundaries

COAST is strongly in favour of the designation of an ecologically coherent network of MPAs which can be tested and demonstrated to be functioning through scientific research and analysis. The network proposed will go some way to achieving this but would not be ecologically coherent in our view even with the addition of the outstanding 4 search locations. Species such as heart cockles, common skate, spiny lobsters and burrowing anemones are currently missing from the network. We support the national network of sites mapped by SNH and the sites below where options are given. COAST is also in favour of the creation of seabird MPAs to protect avian species reliant on a fully functioning marine environment.

Firth of Forth Banks

COAST supports the Firth of Forth Banks MPA proposal. This is in accord with JNCC advice and will best represent shelf banks and mounds, off-shore subtidal sands and gravels and ocean quahog in the southern North Sea. The other options are not ecologically equivalent. Seabirds and sand eels must also be protected features at Firth of Forth Banks.

Central Fladen MPA

COAST supports the 'Central Fladen MPA only' option to be included in the network. Core Central Fladen must be protected in accordance with scientific recommendations. This is the most ecologically coherent option and will allow the possibility of tall sea pen recovery outside the population in *core* Central Fladen.

Comments on the Sustainability Appraisal

The Sustainability Appraisal quantifies potential losses to the mobile fishing industry but fails to adequately quantify expected economic benefits to other sectors such as the static sector, sea anglers and tourism. Only a qualitative account of benefits to these sectors is given. This has the unfortunate result of emphasising the potential down side of MPA designations and is a serious flaw in the methodology used by Marine Scotland's consultants ABPmer (See COAST's previous response and comments on the analysis attached). COAST welcomes the inclusion of non-use values in the SA of up to £583m. However the socio-economic benefits estimates should include studies showing that recreational diving and angling in 20 of the proposed MPAs is valued at between £67 million to £117 million per year. Divers and anglers questioned were also prepared to make a one-off payment worth between £142 to £255 million if damaging activities were excluded from these areas. The SA must therefore be understood as presenting a worst case scenario on the one hand (likely displacement of fishing activity is not included for instance) and a weak financial benefits case on the other.

Government commitments

The Scottish Government has a duty under the OSPAR convention and the MSFD to create a functional well managed network of Marine Protected Areas by 2016. It is also committed to achieving GES under the Water Framework Directive by 2015. The creation of the MPA network must be fully integrated into the national marine plan if we are to achieve these objectives. MPAs must not be viewed as a set of discrete conservation measures for a narrow list of marine priority features.

South Arran and Clyde MPAs

Clyde Ecosystem Review

In 2012 Marine Scotland's Clyde Ecosystem Review described the Clyde as like 'used agricultural land'. The decline of commercially viable white fish stocks following the end of the trawler ban in

1962 and the removal of the three mile limit in 1984 is well documented. Although the Clyde ecosystem is assessed by Marine Scotland as still productive, white fish stocks have not been commercially viable for over a decade. The fishery in the Clyde is now almost entirely for scallops and Norway lobsters as is shown in the table below. Species evenness within the Clyde has declined. Trawl surveys show that whiting predominate and that 70% of these are under 1 year old. Top predators such as spur dog are missing and it is likely the Clyde's ecological regime has changed. This is a situation which appals older people who remember the Clyde as a highly productive fishing ground supporting many sea angling festivals as recently as the 70s and 80s.

Despite the acknowledged degradation of the Clyde, there are no permanent marine spatial measures in the Clyde designed to protect fish stocks or habitats apart from the SPA created on Ailsa Craig, which has a very small marine component, and the equally small No Take Zone in Lamlash Bay. In addition the seasonal cod closure fails to prohibit active bottom gear which damages cod nursery grounds.

COAST and the Lamlash Bay NTZ

The Community of Arran Seabed Trust's vision is for Healthy seas around Arran and the Clyde. Our purpose is to ensure shared responsibility for the protection and restoration of the marine environment around Arran and the Clyde and the diversity of life it supports. In 2008 after over a decade of campaigning by Arran residents led by COAST, Scotland's first No Take Zone was created in Lamlash Bay. The NTZ is only one of three in the UK and won the Observer Ecover Ethical Award in 2008. For over 10 years the work of COAST and more recently the NTZ have been the subject of many TV and radio programmes including, most recently, Radio Scotland's Out of Doors (media interest in COAST and the NTZ is worth tens of thousands of pounds to the Arran economy each year). The NTZ is a major feature of interest for visitors to Arran and a source of pride for residents. It is managed by the Lamlash Bay Implementation Group, which includes COAST, Marine Scotland, Scottish Natural Heritage and The Clyde Forum. Research survey work, instigated and hosted by COAST, and led by York University PhD student Leigh Howarth, comparing the NTZ to areas outside the zone has produced the following results ([Summary of NTZ research results](#)).

- Scallops - These are larger and more plentiful in the NTZ.
- Biodiversity - More individuals and a wider variety of species in all habitat types within the zone.
- Lobster - All lobsters over 110mm have been found inside the NTZ.
- Seafloor - Animals and plants that attach to the seafloor are twice as abundant in the NTZ.

The creation of the NTZ combined with effective community-led management and monitoring show that spatial marine conservation and restoration measures in the Clyde have the potential to gradually improve the marine environment. It also illustrates how spatial measures can bring benefits to fishermen (due to the spill over effect) and drive marine tourism.

South Arran MPA proposal

In 2011 following the success of the community led Lamlash Bay NTZ and the enactment of the Marine Scotland Act, COAST became a charity and hired a full time Marine Project Officer. In May 2012 COAST submitted a third party proposal for a Marine Protected Area around the South of Arran

which was subsequently included in the proposed Scottish MPA network put to parliament in December of that year. COAST proposed this area for 3 important reasons:

1. The area includes a diversity of habitats including fish spawning and nursery grounds and is important to the healthy functioning of the Clyde ecosystem.
2. Habitats within the area such as maerl beds and seagrass beds are important contributors to carbon sequestration and climate change mitigation.
3. Wide spread public support. People on Arran and around the Clyde want to see an end to dredgers and bottom trawlers trashing the marine environment. Excluding them from this area is an important first step towards recovering fragile habitats in the area.

COAST's application was assessed by Scottish Natural Heritage and an independent consultant who verified the data supporting the application and slightly increased the size of the MPA to include a maerl bed north of Blackwaterfoot. Eight marine priority features were considered eligible for inclusion in the South Arran proposal. As part of this process COAST attended a series of 5 stakeholder workshops and in 2013 we were a member of Marine Scotland's MPA Project Advisory Group (PAG).

Clyde designation areas

COAST agrees with the designation of all 3 MPAs as part of a coherent network of MPAs in the Clyde which will form part of a wider Scottish network. We note however that many residents on Arran, visitors to the island and respondents to the MPA consultation would prefer the MPA to extend all round the Isle of Arran. This is something that should be considered at the earliest opportunity. There is clearly a majority on Arran who would like this to be done and wide support from the general public.

Although black guillemot currently fail to meet SNH's strict criteria regarding population sizes, Arran's population of black guillemot is increasing. They should be included as a feature which needs protection. Dredging is a recognised pressure on their feeding grounds.

We consider the designation of the Clyde MPAs as important contributors towards achieving Good Ecological Status under the Water Framework Directive by 2015 and Good Environmental Status under the Marine Strategy Framework Directive by 2020. The Clyde MPAs will also assist in the delivery of Clyde 2020 objectives. These contributions should be made explicit in the final designation. Currently the focus on protecting nature conservation features as separate entities within the MPAs fails to recognise the functional importance of the areas as a whole to the health of the Clyde.

Management recommendations for Clyde MPAs

COAST's site specific responses to each of the management measures proposed by SNH in the Management Options papers are attached.

Conserve or restore?

The conservation objectives for all features in the Clyde MPAs should be to *restore* rather than just to *conserve*. There is little doubt that the condition, natural range and extent of marine priority

features, especially biogenic reefs, in the Clyde have been compromised and degraded (Hughes and Nickell, 2009). It is therefore not sufficient to simply conserve what little remains. This is 'relic' management. Horse mussel beds, flame shell beds, seagrass beds and native oyster beds have disappeared or declined at many locations around Arran and the Clyde. Further, to mitigate climate change and marine acidification it is not only critical that habitats such as seagrass beds and maerl are able to recover their full potential extents, but also that the resilience of the marine environment is enhanced. This can only be achieved by recovering biodiversity and productivity.

Anchorage and moorings

In the case of anchorages and moorings we believe the management options proposed will result in practical decisions based on consultations with yachtsmen and women. In Whiting Bay for instance there is the opportunity to replace old moorings with new ones outside the seagrass beds in consultation with the local community and yachting fraternity.

Aquaculture

Fin fish farms

COAST is not in favour of fin fish farming in Scottish waters until this industry is shown to be sustainable. We believe fish farms are incompatible with the objectives of the MPAs proposed in the Clyde and with the Arran MPA in particular. There should therefore be no expansion of existing fish farm operations within MPAs and fish farms already in operation should be required to complete environmental impact assessments if they have not already done so.

Shell fish farms

In principle mussel farms are far more sustainable than fin fish farms since they do not require the importation of feed. However they must be sited carefully so as to reduce their visual impact and equipment such as buoys managed to prevent them being washed up on beaches. It is important to site any mussel farms in MPAs well away from existing fin fish farms since localised eutrophication can lead to harmful algal blooms and can contaminate farmed and wild shell fish.

Dredging and trawling

Marine Scotland's VMS maps (Clyde Ecosystem Review, 2012) for boats over 15m in length in the Clyde illustrate dredging and trawling occurs across nearly the whole of the Clyde basin. Where dredging does not occur bottom trawling does and vice versa. In areas not covered by these boats it is likely that boats less than 15m are active. It is therefore not surprising that most of the Clyde is currently failing to meet GES under the Water Framework Directive due to the abrasive impact of fishing gear on benthic communities. An assessment of GES against the 11 Descriptors given in the Marine Strategy Framework Directive would also show that the Clyde is failing to achieve many of these descriptors. These activities must be properly regulated in inshore waters around Scotland as they are in countries like Sweden and Norway. Many complex and productive habitats such as biogenic reefs have been lost and are unlikely to recover if this activity continues.

It is essential that dredging and trawling is not allowed anywhere within the proposed Clyde MPAs. Many inshore pressures are localised in nature (e.g. anchorages) and can be managed as such.

However active bottom gear can damage and disturb vast area of the seabed and therefore must be managed on a larger spatial scale. The proposed MPAs in the Clyde present an opportunity to do this. SNH's recommendations to allow these activities within the Arran MPA are unacceptable for the following reasons:

1. Patch management within MPAs will undermine their internal ecological coherence and contribution to the coherence of the national network.
2. Dredging and trawling around feature boundaries will cause siltation over the feature preventing its conservation and recovery.
3. Dredging and trawling around features amounts to constraining that feature within existing boundaries and thereby not allowing it to recover to its full natural extent.
4. Community buy-in and enthusiasm for the MPAs will be undermined by weak management. (The Lamlash NTZ has demonstrated the importance and value of community support.)
5. Managing compliance will be extremely difficult and costly if boundary lines are not simple and easily monitored.
6. Environmental Impact Assessments have not been completed for mobile bottom active gear.

Static gear (creeling)

COAST agrees that creeling should be managed within MPAs to ensure creel numbers are sustainable and that local creelers are able to maintain sustainable creeling operations. It is important to ensure 'honey pots' are not created which undermine the area ecologically and commercially. We recommend Marine Scotland discusses management implications with Clyde creelers.

Scallop diving

COAST does not envisage that scallop diving will become a significant pressure on MPA features in the Clyde but recommends that this activity is kept under regular review.

Displacement of fishing effort

The Sustainability Appraisal and Strategic Environmental Assessment make assumptions about the economic and environmental impact of the possible displacement of fishing effort. We would like to make the following points:

1. The socio economic Sustainability Appraisal assumes that there will be no displacement of fishing effort and that there will be a net loss of income to fishermen. However the Strategic Environmental Assessment assumes that there will be displacement and this may have a detrimental impact on other areas. In assessing the merits of the MPA network it is not possible to assume both at the same time since they both represent contradictory worst case scenarios.
2. On the basis of SNH's recommended features-based management measures displacement pressure is more likely within MPAs. This will undermine the recovery and functional potential of the proposed area and undermines the purpose of MPAs.

3. 'Displacement' cannot be regarded as a knock-on effect of Marine Protected Areas. It is consequence of over fishing and damaging practices which have necessitated that an area is protected from these pressures. Displacement activity underscores the need to manage sea areas holistically.
4. Operators using damaging active mobile gear must be encouraged to switch to more sustainable methods such as creeling and hand diving.
5. Arguments promoting displacement as a negative consequence of spatial management measures fail to consider temporal improvements in the biodiversity and productivity of of MPAs and the likely spill over effect, which in the medium term can be expected to off-set any displacement activity by increasing the productivity of the area as a whole.

COAST, November 2013

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www.arrancoast.com



**Esmée
Fairbairn**
FOUNDATION THE UNDERWOOD TRUST

The Old Hay Barn, Park Terrace, Lamlash, Isle of Arran KA27 8NB
COAST winner of the 2008 Observer Ethical Conservation Project of the Year