The Scottish Government
Riaghaltas na h-Alba

Marine Scotland

Clyde 2020 Summit: April 2014

Report of Summit

Clyde 2020 Summit, 23rd April 2014

Held at Grand Central Hotel, Glasgow

Report of Meeting

The Clyde 2020 Summit was called by Cabinet Secretary for Rural Affairs and the Environment, Mr Richard Lochhead, as part of the Scottish Governments commitment to a programme of measures that will identify, test and implement practical actions which may contribute to the renewal of the Clyde marine ecosystem.

The meeting was organised by the Firth of Clyde Forum which was tasked by Marine Scotland to do this work bearing in mind their role as an independent organisation focused on marine planning and integrated coastal zone management in the Firth of Clyde.

The following report of the meeting includes:

- An overview of the key note address by Mr Lochhead
- A summary of the presentations by Dr Bill Turrell, Marine Scotland Science and Anna Donald Head of Planning, Marine Scotland, together with an extract from the paper 'Clyde Ecosystems Review'
- Next steps – The Way Forward summary from Marine Scotland

Please note, these summaries do not replicate the presentations and should not, therefore, be taken as a complete picture of the organisational standpoint on any particular issue.

The second section of the report summarises the outputs from the workshops on vision, practical measures and research. The workshops aimed to agree the basics of what would make up a vision for Clyde 2020 and tried to set priorities against what practical measures might be appropriate and where the focus should lie with regards to research.

As noted at the meeting Clyde 2020 is an ongoing programme. If you feel your views have not been well represented at this stage there will be further opportunities to shape the programme going forward. However if you feel there are inaccuracies in the report or crucial omissions then please do get in touch.

A full transcription of the flip charts is included in the annexes A, B and C. The presentations by Dr Turrell and Anna Donald are in annexes D and E.

Sarah Brown, Project Manager, Firth of Clyde Forum

June 2014

Part 1 – Key Note Address and Presentations

Key Note Address – Mr R Lochhead, Cabinet Secretary for Rural Affairs and the Environment

Mr Lochhead's key note address included the following points:

- Everyone has an important role to play in helping to take forward the (Clyde 2020) programme and deliver our shared vision.
- In developing that vision … it's time for us to be imaginative, look forward, and work together.
- I am committed to working with stakeholders to improve the Clyde ecosystem through the Clyde 2020 programme. That will involve bringing together marine planning, environmental and fisheries and other key interests. I am pleased to see those interests are represented here today.
- On management of Marine Protected Area proposals in the Clyde, I see value in taking a wider ecosystem view to consider potential displacement effects and the Clyde 2020 programme is an excellent means of doing that.
- Clyde 2020 provides an umbrella to better co-ordinate existing work and take forward work on key gaps in knowledge or on the ground initiatives.
- The Community of Arran Seabed Trust have been trailblazers in articulating community aspirations at Lamlash Bay. The Sustainable Inshore Fisheries Trust has also recently been active in developing its own plans for the Clyde. I am very interested to hear the proposals for an application for a Regulating Order in the Clyde.
- The South West Inshore Fisheries Group also provides expertise and insight on how best to promote sustainable fishing opportunities.
- We need to ensure that fishing is sustainable and that there is access to fishing grounds and opportunities available. Of course we must also consider the competing demands of other marine users and how best to balance fishing with it.

Presentations

Please note – what follows is a brief summary aiming to provide an overview of the presentations. It should not be taken as a comprehensive picture of the planning context or representation of the full and final views of Marine Scotland.

The Clyde Ecosystem Review - Dr Bill Turrell, Marine Scotland Science Team Leader

Dr Turrell's presentation gave an overview of the Ecosystem Review and some detail of emerging research.

In 2010 Marine Scotland Science (MSS) commenced work to review the state of the Clyde Ecosystem in response to expressions of grave concern for its well-being, based on a study that relied heavily on landings data. Independently from the process underway within Marine Scotland, the University of Strathclyde also commenced work on the issue of the ecological status of the Clyde. The University study used research vessel survey data obtained from MSS.

What follows is an extract from the Executive Summary of the Clyde Ecosystems Review (McIntyre, F., Fernandes, P.G. and W. R. Turrell). Dr Turrell's full presentation at the event is available in Annex D.

As a result of a detailed and well-found analysis, in July 2011 Professor Heath published an analysis of the present state of the Clyde Sea demersal fish community in his paper, with Dr Doug Speirs, entitled "Changes in species diversity and size composition in the Firth of Clyde demersal fish community (1927-2009)" (Heath and Speirs, 2011).

The conclusions of Heath and Speirs (2011) point to a major ecological impact of fishing in the Clyde. However, the picture portrayed by Heath and Speirs is not one of an ecological desert, but of a severely altered ecosystem. Their principal conclusions were:

- Rather than commercial species being entirely removed from the Clyde, the biomass of the six main commercial species in the late 2000s was approximately double that prior to the onset of trawling in the 1960s.
- However, the size structures of these species were dramatically different, being markedly deficient in large commercially marketable individuals after the period of peak harvesting rates in the 1980s.
- Also the incidence of species with a maximum attainable length greater than 40 cm declined precipitously and did not recover during the period of low harvesting rates after the late 1990s possibly owing to internal predator–prey interactions.

This means that the Clyde Sea still functions as an ecosystem. Primary production still occurs, powered by the sun and supplied by water-borne nutrients, which sustains secondary zooplankton production, which in turn feeds an active food web. However, the Clyde ecosystem has been changed. The biomass of fish in the Clyde is the same, or for some species more, than when intensive fishing started. Additionally, a large and healthy population of shellfish (Nephrops) living on the seabed of the Clyde is present, but the community of fish is now made up mostly of small fish, and mostly small whiting.

The Clyde ecosystem is one that has been used by humans for centuries, and hence it is changed. But humans can also now influence the direction the ecosystem takes by managing human activities in the future.

The Planning Context – Anna Donald, Marine Scotland

(Main) Aims of Marine Planning

- Healthy marine and coastal habitats occur across their natural range and are able to support strong, diverse biological communities and the functioning of healthy, resilient and adaptable marine ecosystems.
- All those who have a stake in the marine environment have an input into associated decision-making.
- Our understanding of the marine environment continues to develop through new scientific and socio-economic research and data collection.
- Better understand interactions with other activities in marine and coastal areas and resolve key issues.

Principles Guiding Conflict Resolution

- Decisions must be SUSTAINABLE and not compromise the ecosystem so that it continues to provide goods and services for future generations
- Spatial approach
    - The right place
    - Priorities addressed
    - Direction set
    - Project level detail and existing requirements
- 'Take into account' - Framework of considerations
- ENGAGEMENT - Informed consultation, adaptive management

Regional Marine Planning

- Undertaken by Marine Planning Partnerships
- Similar process to National Marine Plan but locally owned
- Must adhere to UK Marine Policy Statement and National Marine Plan
- Directions from Ministers
- Shetland and Clyde early adopters
- Potential delivery vehicle for Clyde 2020

The full slides are available to see in Annex E.

Part 2 - Workshop Conclusions

Introduction

The following notes are taken from the summaries provided by the facilitators at the plenary session, from written submissions from the facilitators and from the flip chart notes taken during the workshops. They have been edited for ease of reading and aim to reflect the majority of discussions and agreements reached in the 18 workshops held at the Clyde 2020 summit on 23rd April 2014.

Delegates were split into groups of not more than 13 people and the workshops were repeated to ensure delegates had the opportunity to participate in all three themed workshops. Each workshop had a relevant, knowledgeable facilitator and scribe.

Vision Workshops' Summary

Delegates were asked what motivated them to attend the Clyde 2020 summit and what aspects they felt were important to include in the vision for the 2020 programme.

It was clear from the workshops that people wanted to see engagement by ALL stakeholders and meaningful research, which identified the impact of ALL activity.

Participants felt that the vision should:

- Reflect a sense of urgency.
- Be proactive, however the 2020 timescale is too short for realistic objectives to be set.
- Acknowledge that quality governance needs management to be at a local, regional and national level, be balanced and include real empowerment for local communities.
- Reflect that informed science is being used effectively to back up the strategy regarding social and ecological systems in the Clyde.
- Encourage science to be done in a relevant and applied fashion.
- The Clyde 2020 vision should be consistent with this overarching vision from the Scottish Government, and the Scottish Government's various legal commitments e.g. Marine Strategy Framework Directive, Water Framework Directive etc.

Delegates also identified that:

- They wanted to see people working together 'properly' – not just a veneer but real engagement and partnership.
- Government should be involved as a broker and facilitator, not necessarily a leader.
- The development of actions and a vision appear to be running concurrently. It is essential all actions are developed to meet the aims of the vision.
- People want to link with what is already happening and build on existing networks.
- There should be meaningful collaboration and education beyond a small group of stakeholders.
- The vision and measures should aim for improvement by 2020 but the benefits are likely to continue after that point and it may take longer for results to be achieved.

A successful vision, as related by the delegates, would include some of the following aspects:

- Sustainability
- Economically viability
- Fishing industry and science partnerships
- Pragmatism
- Healthy seas
- Understanding/evidence base
- Community benefits
- Increase in tourism and recreation
- Healthy ecosystems
- Climate change adaptation

On reflection stakeholders agreed with the vision laid out by Mr Lochhead, "My vision for the Clyde Basin is for a healthy and thriving marine ecosystem that supports sustainable fishing, tourism and leisure while offering protection to the most fragile natural habitats." Delegates also said they liked aspects of the SSMEI vision, "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."

An amalgamation of the two is offered below and will be used as a working vision for the Clyde 2020 project.

Clyde 2020 Vision

The Firth of Clyde is a healthy and thriving marine ecosystem that is capable of adapting to the challenges of climate change and supports sustainable fishing, tourism and leisure while offering protection to the most fragile species and habitats. This will enhance the quality of life for local communities and contribute to a diverse and sustainable economy for the West of Scotland.

Projects and Practical Measures Workshops Summary

Participants in the 'Projects and Practical Measures' workshops were asked to suggest their ideas for real world activities that would improve the Clyde ecosystem. Delegates recognised that the Clyde ecosystem is 'underperforming' and that we need to enhance the health of the whole marine environment, not just degraded fish stocks. Participants said measures should be introduced as soon as possible and should not be delayed until the research programme is completed.

Fisheries management measures were discussed in some detail and a combination of spatial management, gear change and effort management (strictly enforced) as may be appropriate were seen as practical ways forward.

Delegates were aware of proposals for a Regulating Order application and it was recognised that such an Order, if implemented, could allow some of the measures above to be introduced. Delegates stressed, however the need to ensure that an effective group was in place to manage any Regulating Order – the group would need broad local stakeholder input (linked into wider marine planning) and underpinned by sound science. Alongside these measures there would be a need a need to consider the impact on the fishing sector and to mitigate or incentivise Regulating Order management measures.

Delegates agreed on the following subject areas:

- The introduction of Vessel Monitoring System (VMS) on all fishing vessels would facilitate management and enforcement of fisheries measures.
- Production of a regular 'State of the Clyde' report would increase transparency and help communication with stakeholders and public.
- Consideration of the possibility of some selected Good Environmental Status (GES) targets at the scale of the Clyde (rather than the wider NE Atlantic scale required in MSFD) would be useful.
- There was a need to carry out fisheries stock assessment at a Clyde level.
- Habitat creation and enhancement projects could be considered e.g. local hatcheries, re-stocking / re-seeding, artificial wrecks; however there was a general feeling that we need to manage pressures and allow natural recovery before prioritising these measures.
- Public involvement and education projects e.g. the publics role in reducing marine litter and the benefits of eating local Clyde produce was hugely important.
- Funding for this work is important and European Maritime and Fisheries Fund (EMFF) was a possible source of such funds.

Research Workshops Summary

Delegates were asked before attending the research workshops to consider a list of research topics relevant to the Clyde ecosystem. Participants agreed broadly that long term data analysis is needed (historical, contemporary and future). They also agreed that the Clyde offered an important opportunity to test management scenarios in a relatively isolated and potentially responsive system. There is also a need to use research to identify geographical areas and sectors (e.g. leisure/ecotourism/angling) with potential for economic growth.

Specifically the majority of delegates agreed on the following areas:

- Research infrastructure – Delegates felt that there is a need to bring together and collate existing and future research. A symposium and 'book' or repository of some kind that brought together current knowledge would be a boost to the effectiveness of ecosystem and other research in the Firth of Clyde.
- Delegates were clear that a Clyde science-industry partnership and data clearing house would facilitate better standards and foster confidence in research outputs.
- Research into causes of mortality of fish (birds, mammals, predatory fish, fishing, toxicology) and changes in fish diets, role of by-catch, survival of discards, food web models etc. are all needed.
- Research is needed into what is driving changes in growth and maturation of fish and what this means for the future. Research subjects in this area include fisheries induced evolution, environmental changes in growth, food for fish (plankton, benthos, competition between groups), effects of warming (climate change) and food web models
- Research into governance scenarios (regional/local) was indicated as being desirable by delegates.
- A coherent, long term monitoring programme is needed to assess the impact of MPAs, this should be linked, if possible, to VMS data.
- Ecosystem services mapping and valuation (ecological, economic and social) is sought by delegates. This should include topic areas such as recreational fisheries, valuing biodiversity, value transfer, displacement mapping, aquaculture footprint, water quality and support systems for anadromous fish.
- Spatial connectivity including habitat for juveniles, litter dispersal, hydrodynamics and fish migrations where all identified as research topics of importance to delegates.

Next Steps – The Way forward

At the end of the summit Marine Scotland thanked participants for their contributions and outlined the next steps:

- Development of a workshop report for Ministers and attendees.
- Review of the workshop outputs and development of a draft Clyde 2020 action plan including a vision and measures and research to build on existing activity through a partnership approach.
- Consideration of governance arrangements for Clyde 2020 including further stakeholder engagement opportunities at appropriate stages.
- The action plan could include success factors (i.e. how we will recognise that we have achieved our aims) and these may include:
    - Vision delivered, or actions in place to deliver the vision;
    - Better balance in the size/range of fish species;
    - Broader based fishing opportunities;
    - Gaps in knowledge and other on the ground measures identified and action taken to address them;
    - Increased resilience from improvements in biodiversity and local socioeconomic benefits;
    - Communities place a higher value on the Clyde ecosystem.