Building on the vision for the North Devon Marine Pioneer programme WORKSHOP REPORT



6th February 2018 at Alverdiscott Community Hall, Bideford

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Devon Marine Pioneer Steering Group

















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Introduction

On the 6th February 2018 at Alverdiscott Village Hall, Bideford, over 40 people gathered for the 2nd Marine Pioneer stakeholder workshop. The North Devon Biosphere's Marine Working Group gathered to hear progress with the North Devon Marine Pioneer, to find out how it links to the Government's newly launched 25 Year Environment Plan and to help with the progress of the North Devon Marine Pioneer's demonstration projects.

The aim of the day

The aim of the workshop was to build on the work that has already taken place, either as part of the North Devon Marine Pioneer or through past projects and activities in North Devon. The Marine Working Group members were asked to provide their knowledge and expertise to help develop ideas for demonstration projects for the North Devon Marine Pioneer and to inform those projects that are already underway.

Presentations

Before the workshops began, Chrissie Ingle, North Devon Marine Pioneer Coordinator, welcomed the Marine Working Group to the meeting. Members of the North Devon Marine Pioneer Steering Group then updated the Marine Working Group about the work that is being done through the Marine Pioneer, how it links to the Government's 25 Year Environment Plan and how they could help with that work, as well as providing feedback from past events.

The following presentations can be found on the North Devon Marine Pioneer webpage www.northdevonbiosphere.org.uk/marinepioneer.html

The Marine Pioneer and the 25 Year Environment Plan - Aisling Lannin

Aisling Lannin, from the Marine Management Organisation, is the Marine Pioneer lead for both the North Devon and Suffolk Marine Pioneers. Aisling discussed the Government's 25 Year Environment Plan and its overarching aim of leaving the environment in a better condition for the next generation. One of the plan's policies is to have 'clean, productive and biologically diverse seas' with several goals, such as, 'thriving plants and wildlife' and 'using resources sustainably' clearly linked to the marine environment.

The government, via the Department of the Environment, Food and Rural affairs (Defra) is looking at how this realistically can be achieved using pilot areas – and these are the Pioneers. There are four geographical Pioneer areas: Urban in Greater Manchester; Catchment in Cumbria; Landscape in North Devon and Marine over two places, North Devon and Suffolk.

The aim of the Pioneers is to: work closely with a large range of stakeholders to build on the good work that has already happened; to test and scrutinise new and innovative approaches to planning and delivery that includes our natural environment; to develop resilient and integrated management and governance frameworks and, most importantly, share the lessons learned along the way.

The 25 Year Environment Plan can be found here: www.gov.uk/government/publications/25-year-environment-plan

Previous North Devon Marine Pioneer workshops - Tara Hooper

Tara Hooper is a Principle Investigator for the South West Partnership for Environment and Economic Prosperity (SWEEP) programme, based at Plymouth Marine Laboratory (PML). Tara gave feedback on two Marine Pioneer workshops from 2017 - the 1st Stakeholder Workshop in March and the Natural Capital and Local Decision Making workshop in November.

The 1st stakeholder workshop developed the long term vision for the Marine Pioneer and the North Devon Biosphere Reserve, considering the assets, challenges and opportunities for North Devon's marine area and its core values. From this workshop, nine goals were proposed for consideration in the Marine Pioneer.

The second workshop, involved local and regional planning and licencing authorities and looked at how natural capital could be incorporated into local decision making. The participants had two contexts to discuss - individual developments (marine planning and licensing consents) and strategic planning for marine areas. Several key outcomes were identified, such as, using the North Devon and Torridge Local Plan as the policy framework for incorporating the natural environment, and natural capital character assessments and risk registers to help identify where there are thresholds and sensitive areas.

Both reports can be found on the North Devon Marine Pioneer webpage: http://www.northdevonbiosphere.org.uk/marinepioneer.html

To find out more about SWEEP's role in the North Devon Marine Pioneer please visit: www.sweep.ac.uk/portfolios/north-devon-marine-pioneer/

Introducing the UK SEAS project - Jenny Oates

Jenny Oates, the UK SEAS Programme Manager presented the project to the Marine Working Group. This new project, led by WWF-UK, will focus on Marine Protected Areas (MPAs) and how these can be better and more sustainably managed.

There are two case study areas: one in the Outer Hebrides and one that sits within the North Devon Marine Pioneer area. The UK SEAS project will look at how better management of MPAs can be achieved and how those lessons can be shared, how engagement with local people can be enhanced (not only those that already have an interest in the marine environment but also those that don't) and finally how the management of MPAs can be sustainably financed.

To find out more about the UK SEAS project please visit www.wwf.org.uk/what-we-do/projects/uk-seas-project

The role of the Marine Working Group - Chrissie Ingle

The aim of this presentation was to help the Marine Working Group understand their role within the Marine Pioneer. Chrissie talked about the governance structure of the North Devon Marine Pioneer and how the Biosphere's Marine Working Group will be the stakeholder group for the Pioneer, guiding and providing the local expertise needed to make the Pioneer the best it can be, with communication being key between the Marine Pioneer partners and the stakeholders that form the Marine Working Group. To achieve this Chrissie asked the Marine Working Group members to participate in a survey which would help the North Devon Marine Pioneer partners to understand what they are interested in, how they communicate with their groups and others, and how they would like any information presented. The survey has now been completed with 51 responses and will assist with the development of any Marine Pioneer activities where the Marine Working Group will be needed.

Governance in the marine environment

To introduce the first workshop, Jan Maclennan a Senior Environmental Specialist (marine) at Natural England, spoke about Natural England's role in the North Devon Marine Pioneer and the UK SEAS project.

Jan defined marine management as the elements of governance that you can readily see: management plans, management groups, patrols etc. Governance is what you cannot readily see: negotiations amongst people, agreements, norms, market influences etc. Through the North Devon Marine Pioneer and its demonstration projects there is a real opportunity to look at innovative and integrated governance of the marine environment, building on North Devon's current groups and structures.

As part of the UK SEAS project there has been development of a governance toolkit for MPAs, which was developed in partnership with Natural England and is available here: https://www.wwf.org.uk/what-we-do/projects/uk-seas-project

¹ The World Forum on Natural Capital describes natural capital as: the world's stocks of natural assets which include geology, soil, air, water and all living things.

Workshop: Understanding marine governance - a stakeholder's perspective

Sarah Young, Stakeholder Engagement Officer for WWF, introduced this workshop - where participants were split into three groups and asked how prominent they thought their organisations were in the governance of the marine environment of North Devon. They did this by placing their organisations on a 'circle of influence', where the most influential were at the centre.

Participants were then asked 4 things:

- How influential do you think your organisation is when making decisions about marine management?
- What other organisations do you talk to and how influential do you think they are?
- Who is missing that needs to be included? Specifically, who are those small but influential organisations in North Devon?
- Are you aware of any connecting organisations or forums (e.g. Taw Torridge Estuary Forum)?

Interesting points came out of the discussion during this exercise and as debates were had, changes were made to how influential different participants deemed their organisations to be.

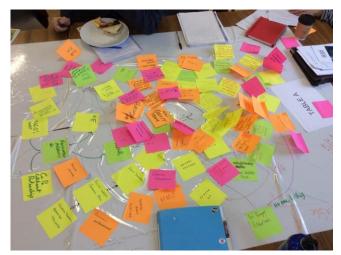


Figure 1 Circle of influence completed by one of the groups

Summary

Over the course of the activity, 143 organisations and groups were identified as playing a role in marine governance in North Devon, which is a considerable number (see Annex A). This diversity brings both opportunities, in the form of lots of interested and motivated people, but also challenges for coordination and communication. Forty organisations were put in the centre of the circles by participants, meaning they were perceived as being powerful or influential. Again, this is a lot of organisations that are thought to be influencing / making decisions at the same time. These included both government agencies with responsibility for management, such as Defra, but also local authorities, fishing organisations and funding agencies. The majority perceived as powerful in North Devon were national organisations rather than North Devon-based and surprisingly there

were only two organisations, the MMO and Devon and Severn IFCA that appeared on all three tables. This indicates a striking lack of consensus or confusion about who is in charge.

Discussions were had about whether it was right that national organisations have more influence than regional and local stakeholders, when talking about local issues. There was also some discussion about whether local organisations have an opportunity to guide national decisions with North Devon Council and North Devon Biosphere given as examples.

Discussion was held about the influence of NGOs such as Blue and WWF, with some feeling that they had little influence but others saying that, although they do not have statutory power, they are 'influencers' rather than 'regulators' and as the Pioneer progresses there should be more contribution from them.

Devon and Severn IFCA, the Marine Management Organisation, Natural England, and Minsters were seen as most influential.

There was some discussion about how large organisations have varying levels of influence depending on which department you are talking about, and also how challenging it can be to know who to talk to about particular issues. In a similar vein, it is important to separate out sub-groups who might have very different opinions, contributions and connections, e.g. fishermen and shell fishermen.

Missing organisations

39 organisations were identified as 'missing' as the maps developed, including organisations like the Crown Estate and some recreational user groups. This is useful information for the North Devon Marine Pioneer because it helps us know with whom we need to make extra effort to engage.

Challenges:

Industry involvement: It was felt that marine users are not involved in the decision making process. Those that work in the environment know it well, and maritime industry, such as fishing, drives other industries.

Responsibility: Many stakeholders were confused about who to go to for marine matters, nationally and locally, and who they needed to talk to when asking about specific marine issues.

A lot of active organisations: there is currently a plethora of local organisations involved with marine governance in North Devon. This may result in weak stakeholder engagement as there is no clear line of communication between central government and people on the ground. "It's hard for statutory agencies to talk to us" "There are a huge number of organisations involved".

Limited influence: local communities have no authority or statutory teeth to implement and execute their own regulations. This may lead to delayed action and appropriate management measures are needed to safeguard important ecosystem services e.g. declining fish stocks or damaging commercial and recreational activities. "The Councils own assets, control landings but don't have much authority. Except planning in the intertidal. It's really on the IFCA."

Lack of resource: Those that have influence are generally those with statutory powers as they have to produce management plans - but they have no resource to implement them.

Stakeholder engagement: There is no defined structure within a local community and therefore, reaching out to individuals is difficult and results in varied participation during stakeholder engagement.

Understanding marine management: even in national organisations, there is little understanding of how marine management works. There is also a real feeling of the marine area being distant, isolated and remote from its communities. "Am I in an MPA? Never heard of them until 10 minutes ago."

Impact of tourism: people visit North Devon because of its unspoiled landscapes and beautiful coastline and beaches, there is a risk that what draws people here may become damaged because of tourism activity.

Opportunities:

Create a local marine management forum (like the Lundy Management Forum) that is able to influence policy and provide political pressure for new regulations but need to ensure that all sectors are represented.

Undertake a review of current marine management and assess effectiveness, so we know what needs improving.

Engage local people with their marine environment – do more in schools, educate local people, encourage work experience in maritime industry and marine conservation, and create connections between communities and their sea.

Integration – use the opportunities that the Marine Pioneer affords to encourage transparent communication between the different organisations. Arrange sector specific meetings.

Use local knowledge – actively engage with local communities to ensure their local expertise and knowledge is embedded within management. "Local communities provide crucial insight and knowledge into the history and layout of the area, as well as regular reports on changing environmental conditions, which can be used to inform adaptive management plans." "No one listens to us!".

Identify a representative to act as point of contact for higher level authorities.

Develop a tourism strategy that incorporates the natural environment. Engage the tourism industry and promote stewardship

A political window for change – with the development of the Government's 25 Year Environment Plan, Brexit and the Pioneers, there is a real opportunity for change.

"There is a real challenge in marine - a feeling that no one listens. Collectively we have influence but separately we don't get heard. There is a real opportunity to analyse what comes out of this workshop and feed it back"

Small group discussions

In the afternoon the participants were asked to contribute to three small discussion groups. These groups were thematic and included: i) the issues that affect the Taw Torridge estuary; ii) understanding commercial fishing in North Devon; and iii) sustainable finance for MPAs. The Marine Working Group was encouraged to participate in each group discussion, although the fisheries workshop was targeted at the local fishing sector and as there was good representation from this industry on the day, they were encouraged to remain at that table. Some excellent ideas came out of the workshops that will be used to inform the Marine Pioneer as it progresses and develops and delivers demonstration projects.

Small group discussion 1 - How can we manage the multiple uses, impacts and ecosystem services in the Taw Torridge Estuary?

This workshop (developed by Tara Hooper, Plymouth Marine Laboratory, and led by Sian Rees, University of Plymouth and Chrissie Ingle, Biosphere Reserve), looked at the management of multiple uses, impacts and ecosystem services within the Taw Torridge Estuary.

The first activity involved looking at a map of the Taw Torridge Estuary and identifying key points on the map related to activities within the estuary such as, angling access points, bait digging, wildlife watching areas, etc.

For the second activity, participants were asked to identify an ecosystem-based issue for the estuary, and then identify the pressures that cause the issue, the impact, any management measures, and any mitigation and benefits to improving the condition of the ecosystem. The two threatened ecosystems that were discussed were bird populations and water quality. The bowtie analysis for these two issues can be found at Annex B

Additions to the map:

- **Identifying landowners** of the foreshore would be useful not only Crown Estate but also who manages/is responsible as well.
- Bait digging is currently unregulated. Although bait digging is a private matter and people tend to
 keep locations to themselves, there are some obvious places where it is undertaken. On the Taw at
 Broadsands, opposite the old Yelland Power station and alongside Barnstaple Old Bridge. On the
 Torridge bait digging tends to be focused around Appledore on the foreshore in front of Richmond
 and Newquay Docks but also near Zeta Berth, near Westleigh. These areas are important for bait
 digging because of muddy substrate and easier access. There are also crab traps along Appledore
 Quay front.
- **Cockle raking** used to happen in the estuary mouth but when water became contaminated they stopped, there is now no commercial cockling.
- Mussel beds are found along Yelland Quay, Crow Point and Appledore areas.
- No seaweed collection was identified by the participants.
- Wildlife watching access points are found around Isley Marsh and Home Farm Marsh (where there
 is a bird watching camera installed). The Pill at Velator, Braunton is becoming more important for bird
 watching because the road runs alongside, which affords easier access. The riverside path alongside
 Anchorbank in Barnstaple has good access for birdwatching. Skern in the Torridge is becoming more
 popular too. There is significant bird and other wildlife watching that happens all along the Tarka Trail
 on both sides of the estuary (so this needs to be added to the map) and also other footpaths such as
 South West Coast Path.
- Recreational angling happens at Instow beach, Fremington Quay, Crow Point, and along the
 estuary from Bideford and Barnstaple bridges. There is some bass fishing along the beaches at
 Westward Ho! and Saunton Sands and some crabbing from the quayside at Appledore. During a
 North Devon Museum led project called 'Fishing for History' the project officer identified angling spots
 for North Devon and Torridge
- Reason for designation of SSSI would be useful to add to the map.

- Northam Burrows Centre should be added and any other similar field centres.
- Westward Ho! golf course needs to be celebrated, as it is low impact.

Participants felt that a separate map devoted to access (footpaths and access to the foreshore) would be useful.

Opportunities:

The participants felt that well managed tourism could benefit the estuary. People visit the harbour to see the ships and the wildlife. The worst thing that could be done would be to close the harbour. Participants felt that the access around the estuary is great but not enough is made of it, for example, a bird hide at Skern. There is also a real literacy pull to the rivers and estuary, with Williamson's Tarka the Otter and Kingsley's the Water Babies.

More could be done in the estuary and wider North Devon area about Blue Flag beaches - there is only one at present. Beaches around North Devon are losing Blue Flag status, not because of water quality but because of beachside facilities.

Good water quality and habitat improvement around the estuary is helping to improve the status of wildlife, such as otters and osprey.

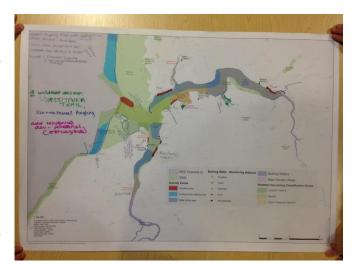


Figure 2 A map of the estuary annotated with different activities.

There is a real opportunity to build on people's changing views; to enhance the natural environment but also educate people about the estuary and its wildlife. It's a challenge but an opportunity to inform - "from 'dismal swamp' to 'precious wetland'". There is also an opportunity to offer sense of place training for locals, to give them ownership of their natural environment.

There is a need for a focal point in the estuary - an estuary officer - with an up to date and comprehensive estuary strategy/management plan with actions. This would help to manage the activities but also resolve the fragmented information about the estuary, but there is the issue of resource to be able to do that.

Session 1 Bird populations

Challenges:

Participants identified several pressures and impacts that would contribute to a declining bird population, expressing several issues that they felt were of particular concern.

Participants were concerned about **increased residential development** close to the estuary. Not just because of the visual impact, but because of increased waste. They were also concerned about the reduction of sites that can be used for commercial activity.

Water quality at Instow: concerns were expressed that if is not a 'bathing beach' there will be little incentive to improve water quality in the estuary, especially on EU exit – what will replace the Water Framework Directive?

Too many Canada Geese at Instow was identified as an issue, as they prey on the young of the mallards. This is also the same for **invasive species** – how will they impact native populations?

Tourism could be an issue – there is a need to consider the carrying capacity of the region, especially with limited infrastructure for tourism development. The environment must be considered in tourism strategies/development, as that is what people come to Devon for; particularly in North Devon, which is relatively un-spoilt. Cornwall Council have a 'maritime strategy', which is linked to Cornwall's Environmental Growth Strategy but there is a need to consider impacts and indicators to measure effectiveness of any strategies.

Pollution – There were concerns about the potential pollution spill from the old 1970s landfill site on Northam Burrows, with potentially toxic substances that could have been washed out to the sea already. Northam Council and Torridge District Council need to take action now.

Management and enforcement - The Harbour Authority at Bideford has limited powers that reach roughly to Torridge Bridge², there is no recognised authority to manage the other areas and the participants felt that this should be addressed. There is a real issue with wrecks and live-aboards, which is being managed on Torridge to an extent but not the Taw. Private landowners have a role to play in the management of their sites as well.

Other concerns and impacts were: overfishing and neonicotinoids, which affect prey; and increased human pressure through recreation, which increases noise and disturbance.

Management measures:

Participants identified several management measures that benefit bird populations, such as:

- plans and strategies district and local plans, Shoreline Management Plan, tourism strategy
- incentives agri-environment schemes, upstream thinking
- voluntary and community based efforts beach cleans, Estuary Code of Conduct, Plastic Free North Devon.

Benefits of improving bird populations:

Participants identified a wide range of benefits that would occur through improving healthy bird populations, including: improving the beauty of the landscape; using the range of different species to indicate the health of the estuary; and the opportunities for education and engagement. There would also be the benefits to human health (something to walk to see) and international recognition - if rare species are identified. All of which would be of benefit to locals and also increase the tourism draw of the estuary.

Session 2 Water quality

Challenges:

Participants identified several pressures and impacts that contribute to poor water quality some of which were also cited in the first session about bird populations. Consideration was given to: climate change and the threat of coastal erosion, again citing the landfill site as an issue; increased pressure from development and holiday population expansion with associated waste issues. Unclear line of sight of who owns and manages the foreshore and so who is responsible for managing impacts that may affect water quality was also discussed. Participants were concerned that there was no representation from the Crown Estate on the Marine Working Group, as the main landowners of the foreshore.

Particular reference was made about pressure from development at Yelland but also potential development at Chivenor, with the foreshore around Chivenor seen as an area that is currently protected by the location of a Ministry of Defence site nearby (restricting access).

Another challenge identified was the potential for a future tidal barrage across the estuary, although it looks like this will not happen in the near future, it is still a threat and could have a significant impact on water quality in the estuary.

Concerns about pollution from different sources were discussed, including discarded fishing gear, beach based and ocean-based litter, farming run off - exacerbated by poor soil and water management and increased maize growing and increased storminess and associated movement of sediment, which can carry pollutants.

Motor boats and jet skis were also seen as an issue, they used to be licenced through Torridge District Council but are not any longer. There is a code of conduct for estuary use but it is voluntary and believed to be largely ignored by visitors.

² The full statutory Bideford Harbour Authority area of jurisdiction can be found in the Torridge Estuary Strategy, August 2014 - Table 3 http://www.torridge.gov.uk/CHttpHandler.ashx?id=13968&p=0

Management measures:

Local management measures, specific to water quality in the estuary were discussed, including: Estuary Code of Conduct, although the effectiveness of this was questioned. Local beach cleans by North Devon Coast AONB, Surfers against Sewage and the Marine Conservation Society as well as local community groups, and Tarka trail litter picks by the Biosphere Reserve team. Local 'fishing for litter' type efforts and Seafish's Responsible Fishing Scheme all help to reduce litter in the sea, which ends up in the estuary.

Projects undertaken by the Biosphere, Devon Wildlife Trust, and Environment Agency, such as Nature Improvement Area, tackle farming and land management problems, and projects aiming to reduce and/or identify pollution events. Participants also mentioned Westcountry Rivers Trust which has a mussel scheme that includes monitoring water quality.

Benefits to improved water quality

The main benefits to improved water quality were benefits to wildlife and estuary health. Improved water quality would improve nursery habitats for fish and rare species like fresh water pearl mussels, and encourage wildlife.

Improved water quality would also encourage more people to take to the water for exercise, rowing, sailing, kayaking, etc., so would improve human health.

In turn this would increase the tourism draw encouraging recreation, wildlife watching, visiting beaches and eating local seafood.

How will the information from this discussion be used?

The South West Partnership for Environmental and Economic Prosperity (SWEEP) team will use the outputs from this workshop to update and inform the North Devon Geodatabase. This Geodatabase is being developed by the SWEEP team as part of their contribution to the North Devon Marine Pioneer. The Geodatabase will map current data, such as, habitats, species, human activities and values. This will feed into the work by SWEEP to develop a natural capital decision support tool that will help decision makers to incorporate the natural environment into their decisions

Small Group discussion 2 - How do we deliver economically viable, sustainable fisheries management in North Devon and Marine Pioneer area?

This discussion was led by Libby West, Senior Environment Officer for Devon and Severn Inshore Fisheries and Conservation Authority(IFCA) and supported by IFCA and Blue Marine Foundation.

North Devon's commercial fisheries were defined by the participants as being very weather and tide dependant, a mixed fishery that is traditionally diverse and seasonal, targeted by mobile gear (i.e. skate, ray, squid and fin fish), pots (i.e. whelks, crabs, lobster), nets and rod and line (i.e. bass, herring) - as well as aquaculture for oysters and harvested wild mussels.

The aim of the small group discussion was to capture the views of the local fishing industry. There were a range of stakeholders represented including: North Devon fishermen; North Devon and Somerset aquaculture businesses; local and regional authorities; fisheries managers and partnership organisations. The views below largely reflect the views of the local fishermen.

The participants were asked three questions:

- What are the challenges for viable long-term fisheries in North Devon and the Pioneer Area?
- What is regional management and what would it look like in the Bristol Channel/ Pioneer Area?
- What would help North Devon fishermen to sustain their livelihoods?

Exercise 1: What are the challenges for viable long-term fisheries in North Devon and the Pioneer Area?

The participants were split into four groups to discuss challenges to long term fisheries with each group giving their top five issues (Annex C). The numbers in parentheses indicates the number of groups where this issue was mentioned in the top 5. The points covered included:

Quota management (4)

Current quota management was raised by all four groups as a barrier to long-term fisheries. Participants stated that it was difficult for North Devon vessels to gain access to quota and they expressed a desire to see local stock assessments undertaken to support re-allocation. Fishermen expressed frustration at the MMO for holding back quota when it's needed and refusing to refund fishermen when there is quota left over at the end of the year. Possible solutions could involve managing quota on a refundable basis or closing the fishery when all quota is used. It is difficult to set quota for "aggregate" species such as skates and rays where all species are currently grouped together. Fishermen believe that quota needs to be more flexible as, once the quota has been fulfilled, fishermen must change gears to fish for different species. Fisheries management needs to be reactive in a positive as well as a negative way. When stocks improve, so should quota. Discussion was had over whether the newly created Coastal Producer Organisation could work with the Marine Pioneer to encourage the government to make positive moves towards equitability of quota post EU exit. The fishermen agreed that Brexit is an opportunity for a reshuffle of quota allocation.

Bass regulations/ IFCA netting bylaw (3)

Bass fishermen feel there is a disconnection between the research and stock observed on the ground. Management has hindered the ability of fishermen to target mixed fisheries due to the risk of choke species. Weather and tidal range are both more severe than on the south coast and this shapes the traditional fishing patterns. Fishermen can no longer fish in the Taw Torridge Estuary, which used to be their "safety net" during bad weather. Fishermen want to change this to a six month ban as they claim their nets never catch salmon in the winter months. It was seen that management of the bass fishery could also contribute to management of salmon stocks, with possible suggestions including: shortening nets; introducing a voluntary code; and more fisheries enforcement officers on the ground. However, there is a lack of enforcement capacity. There is currently a perceived conflict between commercial fishermen and anglers who are seen to earn money from selling salmon caught further upstream but are classed as a "leisure activity", not commercial, and therefore not managed by the IFCA. However, this is managed by the Environment Agency, and salmon cannot be sold by people fishing under recreational permits.

Whelk stocks (2)

There were concerns over a proposed change to the Minimum Landing Size (MLS) for Whelk, by D&S IFCA. This is a live consultation and is being discussed with fishermen already using larger grids. The whelk fishery is an established fishery and fishing effort is high and likely to increase; because of this there is a need to undertake research to underpin and support management of the whelk fishery. Many in North Devon are reliant on whelks if other stocks are poor or when prices for lobster are suppressed. Heavy potting from other vessels and larger vessels in the area is also causing displacement.

Ray ban (2)

The ray ban was seen as having a significant socio-economic impact on the region with the resulting reduction of the towed-gear fishing industry in North Devon. It was felt that there needed to be consideration of whether local stocks of ray can be sustainable with assessments on a local scale, to make the case for quota allocation. The ray ban led to an increase in fuel costs, when the trawlers left llfracombe it resulted in other boat owners paying more for fuel.

Stock assessments (2)

The participants felt that there is a need to replace "precautionary approaches" with appropriate management measures, underpinned by robust science. The fishermen want to move towards a fully documented fishery and record discards and observational data, as well as landings. This should also include local knowledge and historic landings data. The fishermen felt that the current stock assessment isn't local enough. A number of more locally-focused stock assessments were suggested to determine health of fish stocks and support management, or evidence to gain more quota. This would also provide more certainty and understanding into how changes in populations can impact fishing diversity. They understood that they need to be open to what the stock assessment may say, though. They were concerned that without certain fisheries (due to quota restrictions) that there will be no one left to help understand what is there.

Spurdog management (1)

There was discussion around the prevalence of predatory fish (spurdog, porbeagle, tuna) and any ecosystem effects plus their role as choke species, and the need for more and better science for management. Spurdog can't be landed and therefore the fishermen have noticed increased levels of spurdog on the ground, which as a predator are seen to be the reason for the decline in the squid fishery. Fishermen want to see a longline fishery for spurdog – approx. 500 hooks with monitoring to determine stock status, to help support diversification of the fishing fleet. D&S IFCA informed workshop of the avoidance programme being developed by Cefas, which could be an opportunity for North Devon.

Water quality issues for shellfisheries (1)

There was concern from shellfishery businesses over the ability to shut down a fishery following three poor readings for water quality. It was thought that this is likely to be a consequence of boat owner's sewage but there is a lack of funding to deal with this issue. One group also suggested working with landowners in the Biosphere catchment to reduce diffuse pollution (from agriculture).

Increased potting on all shellfish (1)

There has been a huge increase in static gear effort and increased pressure on the seabed, due to EU overcapacity building and funded new potting gear. There is an increase in number of pots per vessel that has happened due to no trade or replacement scheme put in place. Currently fishermen have limited diversification opportunities, because of restrictions, and this has increased pressure on shellfish and increased competition between boats. This has led many fishermen to leave North Devon to fish other grounds.

Discard ban and landing obligation (1)

There was concern over the large volumes of bass thrown overboard as dead discards. Fishermen want to record discards in logbooks to document every fish caught to move towards a fully documented fishery to make the case for increased quota for species like bass. The fishermen stated that they'd be willing for someone to come on their boat and look at level of discards and bycatch.

Shoreside facilities (1)

This was identified at this stage as an issue in adding value/new markets. In some locations, chillers/ freezers would increase opportunities to store wet fish, Ilfracombe was particularly identified.

Other challenges that were highlighted by participants included:

- Fishermen believe fisheries management needs addressing with perceived limited resource for enforcement. Also a need to identify new funding sources for fisheries management.
- Participants would like to see a more pragmatic approach to obtaining vessel licenses, as well as new policies in place to allow **new entrants** into the fishing industry.
- Fishermen in North Devon did not see Marine Protected Areas as a threat to their livelihoods in particular, as the fishermen were involved in the MPA designation process. **Dynamic seas**

management was seen as a useful way forward rather than focussing on MPAs, with an opportunity to use useful technology – such as cameras on boats - but only if it is useful for fisheries scientists.

- Marine renewable energy was raised both positively (tidal stream has potential and it's the right environment) and negatively (loss of fishing grounds and impact on fish stock due to infrastructure).
- There were some concerns over **Brexit** and 'bargaining chips' to seek trade agreements that may impact the fishing industry.



Figure 3 The small group discussion on fisheries management

Exercise 2: What is regional management and what would it look like in the Bristol Channel/Pioneer Area?

Regional management would look like **community-led local fisheries management with fishermen in partnership with fisheries managers.**

Regional management would include:

Improved access to traditional seasonal fisheries to increase diversification, allowing access to different species throughout the year. Current restrictions on specific species, such as ray, spurdog and bass limit the ability of fishermen to prosecute the mixed fishery.

Community-led inshore policy overseen by a committee of multi-stakeholders - recreational and commercial fishermen - working in tandem with local authorities — and marine/fisheries managers (in equal number) to lead on inshore policy and re-balance equity. Employment of one representative from each local district to report to the MMO and prevent distant authorities dictating management in North Devon. Although Lyme bay was given as an example of a community led fishery, there were concerns that it had no regulatory 'teeth' — no statutory power.

The participants discussed **the role of Producer Organisations** (PO) specifically the newly created Coastal PO for small scale fishermen (such as at Thanet, the Helford and Hastings) this would enable funding to be sought for quayside infrastructure and conservation projects through the European and Maritime Fisheries Fund (EMFF). Although the participants were apprehensive over how successful these POs have been. There was recognition that the Marine Pioneer would have to work with the nearest PO – Cornwall PO - but should also consider collaboration with the Coastal PO given its aims.

The need for robust science to underpin management and ensure real-time data and sustainability of fish stocks was identified. Stock assessment needs to be relevant to the area where management is enforced. There needs to be a strong link between the scientists and the fishermen, with a clear understanding of what the science is and the potential impacts.

Management of quota and licences was seen as a barrier, with new ways to manage it discussed, such as sub-quota and non-transferable quota. There is also the opportunity to redress the balance between inshore and offshore fisheries to allow stocks to be fished sustainably and to support artisanal fishermen. Participants identified that there needed to be a more pragmatic approach to vessel licensing. It is currently difficult to get a new licence and because of this it limits new entrants – currently licences are held onto because it's too difficult to get new licences to start fishing.

Exercise 3: What would help North Devon fishermen to sustain their livelihoods?

Education and apprenticeships

The issues identified above, relating to access to quota, hinders the fishery from growing and does not present an attractive opportunity for the next generation. The key reason given for this is the inability of fishermen to fish a mix of species and also the bans in place on high value species.

The participants felt that there were real barriers to fishing related to education and training, with limited training facilities in North Devon. Apprenticeship schemes or work experience on boats would help (although there is the issue of sea survival certification) by raising the profile of fishing as a vocation to aspiring entrants. There needs to be greater integration of fishing into North Devon communities and schools.

There was also a need to look at other types of support for the fishing industry, such as small business guidance and education. The fishermen suggested looking to Scotland as an example of how this is done well.

New routes to markets

The participants felt that there was a real opportunity to look at new routes to markets as well as a network of contacts, expanding on what is being done by the local buyer (T&T Shellfish) but were aware that to have a 'brand' sustainability criteria would need to be fulfilled. They also discussed whether a cooperative would be useful.

Communications

The participants felt that it would be useful to build on examples of what has gone before, such as boat stories, to promote fishing as a vocation. This would help people to celebrate and understand the benefits of having an active fishing community and how that integrates with other industries. Communication with Local Authorities was also identified, to highlight the importance of the local fishing industry and the need for good infrastructure to allow its development. This could be expanded on, to show how fisheries benefit tourism and make the two more integrated. Participants mentioned the English Riviera project - seafood coast http://www.englishrivierabid.co.uk/seafoodcoast/.

Management at several levels

Not just 'the only answer is quota' but looking at how more fish can be made available for a sustainable fishery. Make sure that there is more joined up management both inside and outside 6nm and between commercial and recreational fishing, supported by more enforcement.

How will the information from this discussion be used?

The ideas that came out of the workshop and during previous discussions with North Devon fishermen and Marine Pioneer aquaculture businesses, will be used to guide the demonstration projects for the Marine Pioneer including: research and management strategies; fisheries, managers and scientist partnerships; and any resulting projects/initiatives that can be tested through the Marine Pioneer. This should encourage and support continued partnership working during and beyond the Marine Pioneer.

Small Group discussion 3 - How can we move towards a long-term solution for financing Marine Protected Areas (MPAs)?

This discussion was led by the WWF team, Jenny Oates, Sarah Young and Toby Roxburgh, and investigated how we can move towards a long-term, sustainable solution for financing Marine Protected Areas (MPAs), with participants asked to consider three questions:

- Who do you think funds MPA management and governance?
- Who allocates money or makes decisions about how MPA money is spent?
- Money is one form of resource for MPAs what other kinds of contribution do people make towards MPA management?

Participants were also asked where they thought the potential was for additional funding and/or resources.

The first workshop group discussed the current sources of financing of MPAs as well as some of the issues; they also identified some potential funding opportunities. The breakdown of the discussion can be found at annex D

Types of funding currently available in North Devon

It was felt that there was no one specific source of funding but that funding was sourced from both public and private sector sources, as well as grants for specific projects, and in kind time (officer time towards projects and volunteer/citizen science) although not all this funding was MPA specific. The numbers of organisations involved make it difficult to calculate current costs of management, and without these figures approaching people for funding would be a hard sell as you need to know what it is you are looking to fund. There was a concern that by 'charging for designations' you will displace funds from elsewhere.

As Lundy is in North Devon, this was used as an example by participants of a 'mixed economy' where tourism and transport to the island, along with the statutory authorities input, contribute to the cost of management of the marine nature reserve (and MPA) through employing wardens, with the Lundy Field Society contributing through research projects.

What needs to be financed?

Participants asked what needed to be financed and whether only mandatory activities/enforcement needed to be considered or additional and voluntary actions also. In the discussion the participants considered the cost of management and also research over the short and long term as well as seeing value in support for voluntary measures and volunteers, who help manage the marine environment.

They felt these should all be considered in a business plan or structured so that spend is coordinated across all the different organisations involved in MPA/marine management.

Challenges:

Communication and engagement

The participants noted that when sourcing funding you need to be very clear what it is for, mentioning examples such as water bill breakdown and National Parks that make running costs publically available. The participants felt that the Biosphere was an opportunity that is poorly communicated at the moment, as the team were "experts in ecology and not communicators and influencers".

At the moment the sea is held in people's minds as a free resource - there needs to be a hook that helps people value it. Participants felt that there was an opportunity to take advantage of the designations, what they mean and why they're important, to sell the idea to funders investing in them. How can you help people understand the different values of MPAs (including intrinsic) so spending is not begrudged? It was felt there was an opportunity to build on what has already been done nationally, through public media and engagement activities such as Blue Planet 2, the Natural History Museum, and Countryfile.

Political climate

The participants had concerns that there are other issues that have priority at the moment such as Brexit, the NHS, and employment and that there are very few 'votes' on the coastal fringes. To bring about change you need to identify those people and groups that need to be influenced and lobby them (such as using local MPs) and this needs to be coordinated to be effective.

Who allocates money?

Although participants felt that designation is like a building with no maintenance costs factored in, it was also felt that the designation itself drives money towards areas – 'enabling funding but no maintenance'.

Public sources:

It was felt by participants that most funding mechanisms are top down. Nationally, there are financial incentives that could have an unintended negative impact on the environment, such as subsidies for farming, fishing, infrastructure, ferry terminals and the Ministry of Defence.

It was thought, by participants, that generally capital costs come from Defra but revenue costs are sourced from council tax (and possibly tourism tax) and these need to be more joined-up. National public funding for marine is very scarce. It would be good to bring funds together across the scarcity to try to get more for a bigger pot of money but also to increase the knowledge that goes into decisions on where funds are spent i.e. to include local and national decision makers so that funds are invested wisely.

Private sector:

Developers contribute to 'greater good' efforts through article 106/Community Investment Levy money but was thought to be currently focussed towards community halls rather than the environment. The national planning policy framework has net gain incorporated into it but no guidance on how this can be achieved.

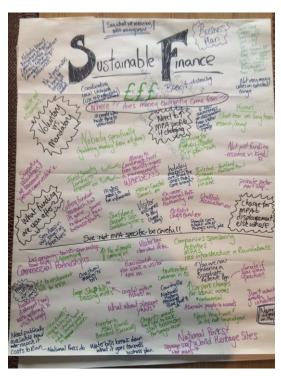


Figure 4 Notes from the 'who allocates money' discussion

The issue of who funds pollution reduction efforts was raised; there is a real push for funding to be directed toward plastic reduction, following media publicity of the issue and this has been effective in drawing money down. NGOs are supporting this through advocacy and plastic campaigns and projects. There is also the opportunity with the introduction of OFWATs Price Review (PR 19) for water companies to do more towards reducing pollution.

Grant funding

There are also grant based funders, such as Esmee Fairbairn and Heritage Lottery that fund short term projects but these are based around the funder's priorities. Citizen science projects (such as Seasearch) are reliant on grants so suffer for being time limited. Protection of coastal heritage is dictated by English Heritage, who state which materials can be used for any improvements, which defines the cost.

Potential future sources of funding

It was identified that because there is more public benefit derived from the sea (no specific owner) and more private benefit derived from the land (private/public ownership), there is a need to identify terrestrial areas where there is a high public and private spend and then link them to the sea. For example, when money is spent on flood defences there is a case to be made for natural flood barriers (reduced cost) and to look at what natural defences are currently protecting and make that link for funders.

Tourism tax - Tourism tax, which is common in the EU, was discussed - but how this would work was not clearly understood. It was noted that there needs to be a balance between the deterrent to visit (the tax) and

encouragement to visit and enjoy the area. There is the issue that it has been determined, from visitor surveys, that there is little understanding of what a 'designation' is and what it entails. Another source of tourism tax type of funding that was discussed was an increase in carpark fees, although this was seen as controversial.

Visitor willing to pay - Participants cited Lyme Bay as an example for visitors willing to pay, with donations such as 'adding a £ to a bill' (restaurants/hotels) discussed, but, again, there had to be clarity about what the money was being spent on — "what do we mean by 'MPA management". Selling the idea to visitors was important when looking to encourage donation for positive change, for example 'you are now entering a Biosphere Reserve', 'this is a Marine Protected Area' and what that means.

User pays - Participants discussed maritime industry contributions looking at whether large ships incurring tolls for crossing MPAs (although there was some concern that this may impact fishing) as well as looking at aggregates industries and permitting fees for fishing, angling and diving. Charter boats could be encouraged to donate, as those that use the sites for commercial benefit, but it was thought that they may pass this cost on to divers and passengers. Other industry specific sources of funding were considered, such as EU fish and chips fund (Seafish?), Shellfish Association of Great Britain and producer organisations. Another option was to look at fines for bad practice that could be used to fund good practice, although this would involve a higher degree of enforcement than is currently undertaken and would have to be clearly allocated for specific activities.

Corporate responsibility was considered by the participants who looked at marine specific industries such as surf companies and pleasure yacht companies, but also other businesses such as transport companies (that benefit from visitors), tolls on roads and ferries, and commercial sponsorship (similar to 'sponsor a roundabout') and costs drawn from advertising. It was stated that there needed to be encouragement of businesses to include natural capital implications into their business plans, with a potential opportunity to 'reward' in-kind work through tax rebates.

Grants/short term funding - It was felt that projects for environmental activities had to link strongly to the Government's 25 Year Environment Plan, to have any chance of funding success. There were several specific funds identified, such as Coastal Communities and other lottery funds. Crowdfunding was seen as 'democratic' with a specific pot of money requested for a specific use. With all short term grants and funds though, there needs to be a long term plan - use the grants to kick start the process for longer-term, sustainable financing.

Non-monetary resources

Participants felt that **in kind contributions**, such as support from volunteers, shouldn't be overlooked. There is an opportunity to identify those that have time to volunteer and how they can be used. They also felt that the Pioneer was a resource in itself but that visibility needed to be improved. It was noted that to be productive, there needed to be a balance between time and energy given against the potential outcomes, i.e. school visits (low energy/time and local outcomes) versus Blue Planet 2 (high energy/time and international outcomes).

Potential to **tap into unused skills** such as retirees, who can help with things like business plans and communication, providing the knowledge that may be outside the expertise of those already working in the field.

Publicity and education – in kind support from volunteers for outreach projects, as well as legacies and donations. There is an opportunity to make teachers more marine aware (rather than visitors) and "make people more 'ocean literate'" by building it into 'life' education.

Changing behaviour - helping people to invest in the future so that costs are reduced, such as recycling, and encouraging participation in current activities such as beach cleans.

In kind **Project Officer time** from organisations as well as the **use of equipment**, such as boats and submersibles, was seen as a valuable asset.

Personal connections with others working on the same challenges and having shared experiences were seen as valuable.

How will the information from this discussion be used?

The information will be used to help guide the UK SEAS team as they develop the next stage in the financing work stream for the project. An expert workshop held in Bristol will be used to determine which methods of funding will be tested as part of the UK SEAS project within the Marine Pioneer. This work will also be used to understand different funding options between the two case study areas in North Devon and the Outer Hebrides.

Next steps

The information and expertise provided by the Marine Working Group attendees (Annex E) is being used to progress and determine what demonstration projects will be developed to test new and innovative ways of working. The Marine Working Group have already been contacted and asked to complete a survey to help the Steering Group better understand not only how they would like to be contacted but also how they engage with other people and what is the best way of working together. Through this, smaller focus groups will be developed to help inform and guide the demonstration projects further, to make them the best and most useful that they can be.

There will be a Marine Pioneer conference in June, at the WWF's Living Planet Centre, to help promote and deliver the two Marine Pioneers. In North Devon, the demonstration projects will be promoted, and this report containing the Marine Working Group's views, will be widely shared. As demonstration projects are developed they will be publicised through the Marine Pioneer webpage, the Biosphere newsletter and Biosphere news webpage.

Annex A - List of organisations and groups involved in Marine Governance in North Devon

Academic Journal Boards

AONB

Appledore Fish Store Appledore Fishing and sustainable education Appledore Sub Aqua Club

ASERA

Barnstaple Chamber of

Commerce

BCSEG (Bristol Channel Standing Environment Group) Beach litter cleaning partnerships

Bideford Town Council Biosphere Reserve

BLUE

Business Forum South West CABA Catchment Partnership Campaign for the Protection of

Rural England CEFAS

Climate change panel Coastal Advisory Group Coastal Community Teams

CoastNet

Coastwise North Devon
Coombe Shellfish
Cornish Tourism
Cornwall Council
Cornwall seafish
Councillors
Crown Estate

Data /information providers e.g. Marine Biological Association

DEFRA

Department for Transport

Developers

Devon and Cornwall Business

Council

Devon and Severn IFCA Devon County Council Devon District Council

Devon Environment Business

initiative

Devon Maritime Forum Devon Wildlife Trust

Dive Clubs

Dutchy of Cornwall

eNGOs

Environment Agency

Environmental Record Centres Estuaries and Coastal Fora European Funders e.g. EMFF,

INTEREG

Exmoor National Park Authority Fish merchants and buyers Fish producer organisations & Fisherman's associations

Fisherman's ass

Fishermen

Government Brexit team Harbour Authorities Harbour Masters Her Majesty's Coast Guard Holiday parks / coastal land

owners ICES

Ilfracombe Harbour Board Joint Nature Conservation

Committee Land owners Local authority

Local community/residents Local funding authorities*

Local MPs

Local Nature Partnerships

Local volunteers

Lundy diving Shrllyon Shellfish

(sp?)

Lundy Management Forum

Lundy Manager

Lundy Marine Advisory Group

Lynton Agency

Marine Conservation Society

Media

MEPs as needed MMO Aisling Lannin MMO Marine Planning Ministry Of Defence

National Association for AONBs National Association of IFCAs

National EU funders National MPs National Trust

NATO Telecom Hydrographer

Natural England

Natural Resources Wales North Devon Fishermen's Association (NDFA) North Devon and Somerset Coastal Advisory Group North Devon Biosphere

Foundation

Devon County Council North Devon District Council North Devon Natural England

Team (terrestrial)

North Devon Nature Improvement

Area

North Devon seaside towns North Devon Tourism Board

Parish Councils Petroc College Planners

Plymouth Marine Lab Porlock Bay Oysters

Porlock Vale coastal community

team Public

Ramblers Association Recreational Fishers

Royal National Lifeboat Institute Royal Navy/Ministry of Defence Royal Yachting Association Saville's Estates School Children

Seabed Users Development

Group Seafish

Secretary of State

Severn Estuary Partnership Shellfish association of Great

Britain

Shellfish/Aquaculture Somerset County Council Somerset Wildlife Trust South West Coast Path Unit South West Protected Landscapes Forum

South West regional flood and

coastal committee

South West tourism audience

Sport England Suffolk Pioneer Supermarkets

Surfers Against Sewage

SW Local Enterprise Partnership

SWEEP

Taw Torridge Estuary Forum Torridge District Council Torridge Estuary Forum Torridge Oysters and Mussels

business

Treasury Department

Trinity House

University of Plymouth

Visit Britain Visit Devon

Water sports clubs and

businesses Welsh Assembly Welsh Government

West Somerset Environmental Health Officer - Food Standards

Authority

Westcountry Rivers Trust Wildlife Trusts National

WWF Yacht Club

Annex B - Bowtie analysis for two top events that would impact a healthy estuary environment for the Taw Torridge Estuary in North Devon.

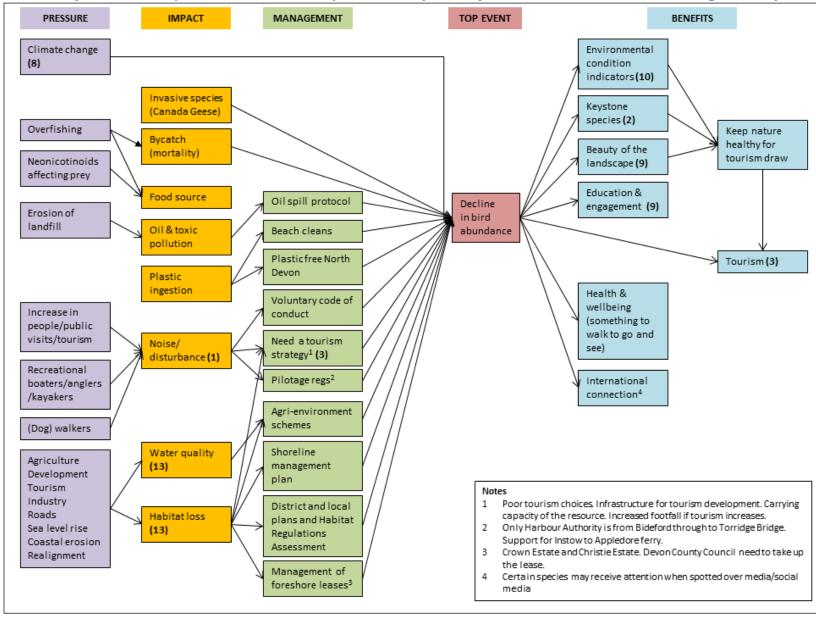


Diagram showing the risks, management, and benefits to bird populations in the Taw Torridge Estuary (numbers in parentheses indicate number of times the subject has been mentioned by participants).

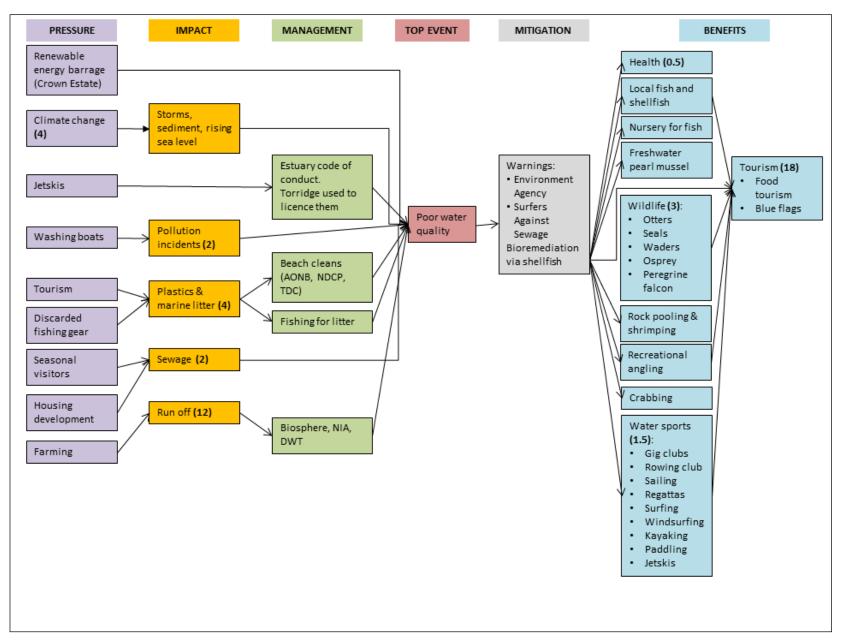


Diagram showing the risks, management, mitigation and benefits of water quality in the Taw Torridge Estuary (numbers in parentheses indicate number of times the subject has been mentioned by participants).

Annex C - Top 5 challenges for viable long-term fisheries in North Devon and the Marine Pioneer Area

Group A - Top 5	Group B - Top 5	Group C - Top 5	Afternoon – Top 5
Whelk stocks and fishing effort	Stock levels, landings and displacement	Overcapacity and overfishing (whelk, crab, lobster)	Weather – tidal range and fishing patterns combined with netting byelaw and bass ban
Ray ban (& effect on new entrants)	Ray ban and unforeseen circumstances (e.g. fuel costs increase)	IFCA netting byelaw – removes options for diversification	Spurdog management, Porbeagle. Increase in predatory fish = decreased squid fishery. Want longline fishery for spurdog.
Coastal PO – potential for positive moves in terms of equitability of quota	Quota management (& licensing, transferability, capping of under 10m licenses)	Quota management (Finfish, mixed fishery, equitability)	Stock assessments – need to be more local, work with local boats.
Discard ban Non-transferable quota		Lack of fisheries enforcement	Quota management – can't improve North Devon fishing without more quota/ access to quota/ equitability in division of quota.
Bass ban (mixed fishery and dead discarding) Shoreside facilities (Ilfracombe)		Water quality - shellfish	Bass management -vital part of earnings

Annex D – Outputs from the small group discussion on MPA funding.

Participant's views on who currently funds MPA management and governance.

Type of finance/support	Examples	
Public sector	Marine Management Organisation (MMO) Local Authorities/Councils Environment Agency – catchment partnership Dept. for Communities and Local Government - DCLG Defra Natural England Inshore Fisheries and Conservation Authority (IFCA) Joint Nature Conservation Committee (JNCC) Harbour Authorities (public) Landowners (public)	
Private sector	Harbour Authorities (private) Utilities, eg South West Water (upstream thinking programme) EDF (Porlock Bay)	
	Commercial bodies, eg:	
	Taxpayers Tourism Crowd funder Landowners/lease owners (private) Non-Government Organisations (NGOs)	
Grants	National grants	
	EU grants: Interreg Agri-environment schemes EMFF (fisheries)	
In kind/voluntary time	Officer time contribution to projects Citizen science, for example Seasearch voluntary efforts such as, beach cleans	

Participant's ideas on where funding for MPAs could be sourced

Potential sources of finance	Ideas/examples	comments
Tourism tax	Not sure what it would look like – look to EU for examples	Need to educate visitors about 'designations'
	Increased carpark feesRoad/bridge/ferry tolls	Controversial
Visitor willing to pay	Add £ to a bill – restaurant/hotel	Be clear what it is for - sell the idea to visitors
User pays	 Shipping/aggregates industry tolls Licencing fees – angling fishing Producer organisation donations Fines for bad practice 	Need to be clear where money goes
Corporate responsibility	 Marine specific companies – surf and watersports companies, yacht companies Transport companies Commercial sponsorship 	Encourage businesses to include natural capital risks and opportunities in business plans Potential to reward in-kind with tax breaks?
Grants & other sources of short-term finance	Specific grant funders (aimed at coastal/nature/environment) Heritage lottery, Esmee Fairbairn, Coastal Communities Crowd funding	Need to link to 25 Year Environment Plan Use to 'kick start' long term funding

Non-monetary resources identified by participants

Non-monetary resources	comments
Volunteers	To spread the word and commit time to projects
The Pioneers	Visibility needs to be improved – what is it about?
Tap into unused skills	Identify people who would possibly help with administration/ business activities
Publicity and education	Use volunteers for outreach; Educate teachers/feed into curriculum
Change behaviour	Educate people about how their actions today could save costs in future (waste reduction/beach cleans) and encourage participation in activities
In kind resource from organisations	Officer time Equipment loan
Networking	Shared experience of working on the same issues

Annex E – attendees

Nama	atteriaces	Organization
Name	Delle	Organisation Chair North Davin Fisherman's Association
John	Balls	Chair - North Devon Fishermen's Association
Andy	Bell	Manager - North Devon Biosphere
Andrew	Bengey	RNLI/ Charter boat
Ben	Bengey	Ilfracombe Fisherman
Georgie	Blow	Coastal Survey Officer - Somerset Wildlife Trust
Simon	Breeze	County Ecologist - Somerset County Council
Isabelle	Bromham	Watersports Development Officer- North Devon Council
Phil	Byers	North Devon Chamber of Commerce
Rodney	Cann	North Devon Council
Jenny	Carey-Wood	Manager - North Devon Coast AONB
Phoebe	Chope	Torridge Oysters and Mussels
Sarah	Clark	Devon & Severn IFCA
Rose	Day	National Association of AONBs
David	Dooley	Appledore Sub-Aqua Club
Dominie	Dunbrook	Senior Economic Development Officer- North Devon Council
Tim	Glover	Blue Marine Foundation
Neal	Gray	Marine Management Organisation
Brett	Grosvenor	Technical Specialist Planning - Environment Agency
Phillip	Hackett	Torridge District Council
Roger	Hall	Porlock Bay Oysters
Bruce	Hamman	Appledore Fisherman
Keith	Hiscock	Associate Fellow - Marine Biological Association
Tara	Hooper	Plymouth Marine Laboratory
Peter	Howard	Biosphere Reserve Foundation
Chrissie	Ingle	North Devon Biosphere
Shaun	Kay	Fisherman - Appledore
Paul	Labistour	Harbour Master Bideford - Torridge District Council
Aisling	Lannin	Marine Management Organisation
Jan	Maclennan	Natural England
Emma	Mckinley	Cardiff University
Paul	Minshull	Strategic Resilience Officer - Cornwall Council
Jenny	Oates	Manager UK SEAS - WWF
Mel	Parker	Natural England
Ed	Parr Ferris	Conservation Manager - Devon Wildlife Trust
Stephen	Perham	Clovelly Harbourmaster and Fisherman
Sian	Rees	Plymouth University
Adam	Rees	Blue Marine Foundation
Peter	Richardson	Head of Ocean Recovery - Marine Conservation Society
Morven	Robertson	Blue Marine Foundation
Toby	Roxburgh	WWF
John	Shortridge	Appledore Fisherman
Felicity	Sylvester	Brilliant Fish CIC
Lucy	Taylor	Cardiff University
Sue	Wells	Marine Conservation Manager- National Trust
Libby	West	Devon & Severn IFCA
Nick	White	North Devon Marketing Bureau
Catherine	Whitley	Blue Marine Foundation
Beth	Wills	University of Surrey
Sarah		WWF
Salall	Young	VV VV IT