Cynulliad Cenedlaethol Cymru | National Assembly for Wales Y Pwyllgor Newid Hinsawdd, Amgylchedd a Materion Gwledig | Climate Change, Environment and Rural Affairs Committee Gwaith dilynol ar reoli Ardaloedd Morol Gwarchodedig yng Nghymru | Follow up work on Marine Protected Area management in Wales MPA03

Ymateb gan : Unigolyn Evidence from : Individual

Dear CCERA Committee Chairman and members,

Follow up work on Marine Protected Area management in Wales

Thank you for the opportunity to contribute to your follow-up work. It is encouraging and welcome that the Committee has taken this initiative.

I made a comprehensive, evidenced submission to the 2017 inquiry, provided oral evidence to the Committee and wrote twice subsequently, attempting to correct some of the erroneous and misleading statements provided to the Committee by the Cabinet Secretary and in other organisation's submissions.

I refer you to my 2017 submission (dated 9 February 2017 ¹, copy available on request) for my personal and professional credentials. The comments included herein are my personal professional views derived from extensive experience and knowledge and/or reliable source evidence.

Since the 2017 inquiry I have fully retired. Despite having a comprehensive network of well-informed connections still involved in MPA work, I have learned first hand just how opaque Welsh Government (WG) is with respect to publicly available information about MPA management. I have found it extremely difficult to access or obtain anything but the most superficial information through public channels. This difficulty clearly has a direct bearing on the achievement of *Turning the Tide?*'s Recommendation 3.

I remain as concerned now, as I did in 2017, about the difficulty for members of the public and third sector interests not professionally involved with MPA management, and without a network of relevant professional contacts, to make an informed, evidence-based, response to this follow up.

Turning the Tide? and the WG response

The *Turning the Tide?* (TtT) report and its recommendations were very welcome. However, although it accurately identified many of the problems concerning MPA management in Wales, it was disappointing that, with the evidence available to the Committee at the time, its conclusions and recommendations were not stronger.

 $^{^1}$ http://senedd.assembly.wales/documents/s59592/MPAW%2020%20Individual%20-%20Blaise%20Bullimore.pdf

The similarities in issues and conclusions in the report concerning MPAs in England, *Marine Protected Areas Revisited*, by the House of Commons Environmental Audit Committee², published during the time of TtT inquiry, were striking, as was the considerably blunter and more robust language.

The Cabinet Secretary's response to TtT was shockingly and unacceptably weak; it missed or disregarded crucial points and specific responses were misguided. Whilst it was clear that the Committee shared this view, as demonstrated by the subsequent letters to and questioning of the Cabinet Secretary, her subsequent replies failed to address the substantive shortcomings in Welsh Government's formal response to the report.

In my 2017 submission, oral evidence and subsequent letters to the Committee, I stressed my concern about the routine use of misleading language by WG (and others). From the imprecise nature of some of the questions asked in this follow-up inquiry, I fear that this continues and the CCERA Committee has been, at least in part, deflected or distracted from its stated purpose.

1. What progress has been made by the Welsh Government against the recommendations in the Committee's report?

Recommendation 1 (WG to provide leadership and ensure all management authorities, including WG, are actively engaged in MPA management)

The term *management* is used by WG in two senses: the management of process, primarily at the "network" level, and the management of activities with the potential to damage or disturb the features of MPAs. WG routinely focus on their responsibility toward network management, and in doing so disregard and deflect attention from their responsibilities for activity management for the protection of MPAs.

WG have indeed, with considerable support from the MPA Management Steering Group (MSG), coordinated and delivered the MPA Network Management 2018-2023 Framework and 2018-2019 Action Plan. Whilst these documents are welcome and have value, there remain significant gaps; see also response to question 4 below.

WG's preoccupation with process and process management (as distinct from a focus on and identification of meaningful action), its constant going over old ground and its foot-dragging frequently makes it seem like it is deliberately attempting to prevaricate and slow progress down rather than to lead.

WG shows little sign of recognition of the leadership shown by the independent members of the MSG (*i.e.* the members additional to NRW; these members have long, first-hand, real-world experience of attempting to secure management in EMS, the NRW representatives listed in the MSG minutes do not). On the contrary, WG has unjustly highlighted the responsibilities of other management authorities for delivering site management – which most have been trying and struggling to do without support from WG for many years– whilst WG have neglected their own management responsibilities. It is difficult to avoid the use of the phrase "smoke and mirrors" to describe WG's effort to distract attention from its failure to meet its management responsibilities through implied criticism of the efforts of other management authorities. It appears clear that WG either prefers to see itself, or wishes others to see it, as the overarching supervisor of MPA management rather than actually also being one of the crucial actors.

² House of Commons Environmental Audit Committee <u>Marine Protected Areas Revisited Tenth Report of Session 2016–17. April 2017</u>

WG have undoubtedly put pressure on those management authorities defined in the Conservation Regulations ³ as relevant authorities. However, to a considerable extent this was quite unnecessary since most of these have been working together collaboratively as 'Relevant Authority Groups' (RAGs) since the late 1990s. Since that time, RAGs have been frustrated in what they were able to achieve by the inability to secure meaningful and effective engagement from WG and such other management authorities as the Ministry of Defence. WG's direction to contribute to MPA management has, therefore, been directed at those that had been already trying, for two decades in most instances, and has ignored those that were not, including themselves. The failure to clearly identify WG responsibilities or identify any actual management action by WG, particularly in the Action Plan, is a serious omission and shortcoming; see also response to Q.4 below.

WG has also continued to be utterly preoccupied with its focus on the MPA "network" whilst apparently failing to recognise, or at least to clearly acknowledge, that any network (however it is defined – see comment below on Recommendation 7) is the sum of its parts. Undoubtedly overarching structures and directions need to be identified and agreed, but no network of any kind will deliver unless all the components, in this case the individual MPAs, are delivering against the objectives set for them. WG's preoccupation with creating a paper-based network is at the expense of the management of the sites that contribute to that network.

While WG has undoubtedly failed to implement necessary MPA management, the Assembly itself is partially culpable in permitting WG's failure. A recent (2019) paper *The impact of the Marine and Coastal Access Act (2009) on Welsh inshore fisheries and marine management* published in Marine Policy ⁴ concluded, *inter alia*, that: "NAW has not used its legislative powers to create enforceable duties akin to those of the IFCAs ⁵. Thus, in Wales, the inshore fisheries management regime responsible for managing some of the most damaging impacts in marine protected areas, has side-stepped its responsibilities with respect to improving their management and condition by failing to implement less damaging fishing activities." This aspect should be borne in mind by the Committee when it returns to looking at the UK Fisheries Bill LCM and the anticipated Welsh Fisheries Bill.

Recommendation 2 (appropriate level of resources)

WG have not adequately addressed the issue of resources since the TtT report.

The recommendation that WG should ensure that there is sufficient staffing to deliver its marine conservation responsibilities is ambiguous. It is unclear whether this refers to WG's own in-house staff, or the level of staffing more generally to deliver WG's marine conservation responsibilities.

Does WG have enough in-house staff? No. The number of WG staff specifically tasked with marine conservation and biodiversity has increased marginally since 2010, but it is still not enough and just a tiny fraction of the hugely increased complement of the WG's Marine and Fisheries Division – just four (including a secondee from the UK Joint Nature Conservation Committee) of the 104 posts identified in the most recent M&FD structure chart.

³ Conservation of Habitats and Species Regulations 2010

⁴ Terry, A., Lewis, K. & Bullimore, B., 2019. *The impact of the Marine and Coastal Access Act (2009) on Welsh inshore fisheries and marine management.* Marine Policy, <u>99</u> (2019) 359–368. Copy appended. See also Terry, A., Lewis, K. & Bullimore, B. (2017) *Managing the inshore marine environment in the Marine and Coastal Access Act era: the Welsh experience* available at: http://eprints.uwe.ac.uk/34112/ ⁵ IFCA – Inshore Fisheries and Conservation Authorities in England

Is there sufficient dedicated staff to support MPA management regionally or nationally? No. Although the MPA MSG concluded that a seven management-area approach, each with a support officer, was the preferred option for Wales' MPA network, WG and NRW argued that the approach was unaffordable and, by insisting on a grossly inequitable contribution structure, they ensured that the other management authorities were able to force through their argument. It appears that there has been no further discussion of area-based funding. Further, it is understood that that the MPA MSG meeting records misleadingly implied that the failure to accept the funded seven–area option was the agreed decision of all members whereas, in actuality, it was presented as a *fait accompli* by WG and NRW, on the basis that neither were prepared to contribute the resources appropriate for the national bodies with lead responsibilities.

Recommendation 3 (WG to increase public awareness of MPAs)

Whilst public awareness of the marine environment and its protection has undoubtedly increased since the 2017 inquiry, largely because of flagship TV series such as Blue Planet II and its spin-offs, the efforts of NGOs and from international programmes such as World Oceans Day, it is difficult to find evidence of WG efforts to promote MPAs to the public in Wales.

Certainly, briefings on Welsh MPAs have been provided to extremely select, WG-invited, groups of individuals and representatives of socio-economic interest groups such as Welsh Marine Fisheries Advisory Group (WMFAG) and Welsh Marine Action and Advisory Group (WMAAG), but this falls far short of the specific requirement of this recommendation to increase <u>public</u> awareness. Likewise, increases in transparency have been limited in scope.

Recommendation 4 (risk based enforcement strategy)

The Cabinet Secretary's response to TtT claimed that since WG already operated a risk-based and intelligence-led approach to marine enforcement, a new strategy was unnecessary. Whilst this may (or may not) be true in respect of fisheries, I am unaware of any evidence that it extent it extends to MPA protection. It is regrettable that the public fanfare announcing the recent acquisition of new enforcement vessels is not matched by a clear and transparent strategy for how and for what purposes they will be deployed for MPA protection.

Recommendation 7 (define understanding of an Ecologically Coherent Network of MPAs in Welsh waters)

Welsh Government's January 2019 report to the National Assembly for Wales on MPAs in Wales, in fulfillment of the requirement of section 124 of the Marine and Coastal Access Act 2009, claims "Significant progress has been made during this reporting period towards Section 123 of the Marine Act and towards establishing an ecologically coherent, well managed network of MPAs in Wales." However, it fails to identify what WG understands by "ecologically coherent network". This is coupled by a tendency for the Welsh Government to focus on a UK Network ⁶, rather than the gaps and needs of a Welsh network.

⁶ Welsh Government written statement 2 May 2017 <u>Completing the Welsh contribution towards an ecologically coherent, well-managed network of Marine Protected Areas in the UK</u>

I make no comment on WG's action or inaction toward meeting the remaining TtT recommendations.

2. Has the management of Welsh seas received sufficient resource and strategic direction?

Despite this follow-up inquiry's stated purpose, this question is very general and does not address management of MPAs *per se*. I make no comment on WG's general approach, resourcing and strategic direction of wider marine management except to note that WG has thrown substantial financial and staff resources at fisheries management; for example, new enforcement vessels and new evidence and data team. Doubtless WG will claim these are supporting MPA management. Unarguably they have the <u>potential</u> to do so, but they must be appropriately directed if they are to contribute to MPA management and protection. I am unaware of evidence that this is the case. I therefore address this question in terms of MPA management only.

The answer is unequivocally no in terms of resources (also see response above to action on Recommendation 2).

Whilst resources have indeed been allocated to address the actions in the MSG 2018-19 Action Plan, these actions are strategic only, and are strongly focused on process, monitoring and marine licensing rather than on action to manage and reduce harm from ongoing activities. Resources are being insufficiently directed to where they are most needed to deliver tangible results and make a difference to the unfavourable condition of many of Wales' marine features.

However, resources available for funding the crucial roles of EMS officers supporting Relevant Authorities Groups (RAGs) have been cut even further since I retired as an EMSO in 2016. Following the example set by NRW to withdraw core funding to RAGs, severely reducing their capacity to employ EMSOs to undertake the "day job", other management authorities have, as was predicted at the time of the 2017 inquiry, also ceased or reduced making funding contributions (I am sure the remaining EMSOs can provide any necessary detail).

RAGs now appear reliant on grant aid for specific projects. Whilst such targeted funding must indeed be welcome, project work needs to be underpinned by some kind of infrastructure to facilitate it. Further, project-based funding aid is routinely limited to short-term and innovative projects. Much is also generally unpredictable, competitive and subject to rapidly changing passing fads that are often, at best, peripheral to genuine management priorities. The reality is that much MPA management "day job" work cannot necessarily be innovative or flavor of the month, nor should it be a seven-day wonder. Project-focused grant-aid is in no way an acceptable substitute to core funding of flexible, multi-role officers focused on delivering priority action for MPAs

In stark contrast to the meagre resources invested by WG in MPA management at the "strategic" level (which should be for the benefit of society as a whole), it is noteworthy that WG has directly funded the Welsh Fishermen's Association ⁷ (WFA), representing a single, small economic sector, to the tune of almost a million pounds since 2013 in order to help it represent and defend its members interests, despite fishing being a key pressure on the condition of Wales' MPA features.

In terms of strategic direction, the answer is more mixed; this is addressed above in the comments on action on Recommendation 1).

⁷ Welsh Government FoI ATISN 12325 - WFA funding 11 June 2018

3. How has the condition of Wales' MPA's have changed?

NRW's 2018 indicative site condition reports ⁸ have, for the most part, not shown improvement since Wales' European Marine Sites (EMS) were designated. Further, it seems that as more data and information are added, the evidence grows that the condition of the features being monitored, particularly habitat features, are worse than previously assumed and, in some cases, apparently continuing to deteriorate.

Whilst the Skomer MCZ's monitoring programme shows many species features as being in favourable condition, others are not ⁹. Of particular concern is the year on year attrition of the pink sea fan population, one of the very few marine invertebrate species listed for special protection in the 1981 Wildlife and Countryside Act. Despite this, it is currently impossible to conduct an investigation, or to safeguard the remaining population, because there is reluctance to even discuss closing an experimental area to fishing activity.

Incidentally, it is noteworthy that the WFA are the only socio-economic interest that is afforded the opportunity to scrutinise NRW's (evidenced) Article 17 EMS condition assessment reports and, without having to provide any counter-evidence, to challenge them before publication.

4. Do the MPA Network 2018-2023 Framework and 2018-2019 Action Plan address the key issues of effective management of multi-use MPAs?

The term "multi-use" is misleading and inappropriate in this context. I raised this issue in my response to the 2017 inquiry but the inappropriate use of the term has continued.

The purpose of MPAs designations are primarily for nature / habitat /wildlife conservation or protection purposes, albeit trying to accommodate with as little hindrance as possible, as broad a range of socio-economic activities as possible so long as they are non damaging (as was clearly identified in the opening paragraph of the TtT report). The designations are not for multi-use or multi-purpose zones, one interest of which may be nature conservation. The difference between the two might appear to be subtle: it isn't; it is profound since it sets the baseline for how MPA management is understood, approached and implemented. The difference needs to be understood and taken into account: the primary purpose of MPA designations is nature protection and conservation. Constant reference to multi-use or multi-purpose MPAs simply serves to rewrite and dilute the agenda for MPA management.

Notwithstanding the above major caveat, the answer to the question in respect of MPA management is unequivocally no, they do not.

Certainly the Framework document is a reasonable overarching document. It contains useful, background, context setting information, though it applies to the marine area generally and not just MPAs. It also includes some potentially useful aspirations if – <u>if</u> – they are real commitments. Nevertheless, there appear to be omissions, errors and misleading content. For example, the list of examples of MPA management activity that is provided is very weak

⁸ Available on NRW's webpage

⁹ Pembrokeshire Marine SAC indicative site level feature condition assessments 2018 NRW Evidence Report No: 233; Skomer MCZ Project Status report 2017:

https://cdn.naturalresources.wales/media/688024/eng-report-251-skomer-mcz-project-status-report-2017-18.pdf; Skomer MCZ Annual report 2017-18:

https://cdn. natural resources. wales/media/686279/eng-report-250-skomer-mcz-annual-report-2017. pdf

and includes both examples that are untargeted MPA awareness raising and others that are not management at all. It bears a striking resemblance to a similar list in an NRW publication but with editing to remove identification of the Skomer MCZ (then MNR) from the few clearly targeted actions that are included. To carry out a thorough critique of the document would take considerable time and effort for limited benefit.

WG's preoccupation with process and process management as distinct from the identification of meaningful action was introduced above. Whilst, clearly, management necessities, both strategically and locally need to be identified as precursors to the introduction of meaningful action, despite the considerable bulk of evidence accumulated over the last two decades ¹⁰ as to which issues need to be addressed and the management most necessary to address them, WG (and NRW) appears mired in process, determined to repeatedly go over old ground and to create overly complex, though frequently naïve, assessment and prioritisation protocols.

When so much time and effort is taken to micro-manage prioritisation, the actual implementation of meaningful action gets lost; it is so much easier to continually prioritise and stall than to actually take tangible management action that requires effort and may be unpopular with one or more marine sectors. It frequently feels that by being so focused on process and re-inventing the wheel that WG is deliberately attempting to prevaricate rather than lead.

The Action Plan must be welcome, although it clear that some actions are soft targets and others are repackaged from elsewhere.

The failure to identify actions for WG to manage activities which directly cause pressure or threat to MPAs despite the clear recognition in the Framework document that management "is a shared responsibility across management authorities, including those who have statutory obligations to manage Welsh seas", and the identification (in Annex 3), albeit briefly and superficially, of WG's responsibilities for direct management action ¹¹ (Framework Annex 3 also clearly demonstrates the very limited responsibilities of NRW for managing marine activities that may impact MPAs).

The Assessing Welsh Fishing Activities project is described as a collaborative work between NRW and WG to assess the impacts of fishing activities on Welsh MPAs ¹². The outputs appear to have been completed two years or so ago or more. The NRW website reports that forty of the highest risk interactions, such as mobile gears on sensitive reef habitats, have been provided to Welsh Government, yet there appears to be no evidence of action from WG to introduce any management measures to address these likely damaging activities. In stark contrast, as a result of an analogous exercise in England, measures were introduced to stop the highest risk interactions until and unless it could be determined, on a site by site basis, that they were not causing significant damage.

For WG to make a truly effective contribution to improving MPA management and condition it must introduce management measures, be they management of fisheries or other activities over which it has jurisdiction, which are specifically designed to protect, meet the

For example: Wales' Marine SAC management schemes; NRW's LIFE Natura 2000 Programme (2012-15) and its outputs - Prioritised Action Framework, Thematic Action Plans, Prioritised Improvement Plans

¹¹ WG's MPA management responsibilities for marine activities under its jurisdiction are clearly identified in the Conservation Regulations, both generally (Regulation 9) and specifically (Regulation 38(2)) and in the *Marine and Coastal Access Act* sections 125, 134 (through cross-reference to s.129) and 189 (through cross-reference to ss.153 – 155).

 $^{^{12}\} https://naturalresources.wales/about-us/our-projects/marine-projects/assessing-welsh-fishing-activities/?lang=en$

conservation objectives for, or improve the condition of MPAs whether nationally or locally. The only example I am aware of where such action was taken concerned the prohibition of scallop dredging in certain areas, which was in response to the threat of infringement action by the European Court, and which WG is now being actively attempting to roll back in Cardigan Bay (in the first instance).

5. Do the MPA Network 2018-2023 Framework and 2018-2019 Action Plan support the management of Welsh MPAs to conserve Welsh marine biodiversity?

Some elements have the <u>potential</u> to do so but, as should be clear from the foregoing comments, significant additions and shifts in emphasis are required to make a material difference to management and, ultimately, the condition of both individual MPAs and the so-called network. The emphasis must be moved from displacement activity and process detail so that strategic and local site management of damaging or disturbing activities at all scales, local to international, are addressed with effective management measures. Only if all the management authorities, <u>including WG</u>, undertake or contribute to specific and focussed management action will there ever be any possibility of making the progress to a "well managed" network of sites whose features condition and biodiversity eventually turn around and improve.

It cannot be stressed too strongly that the need for MPA management and the need for genuine, meaningful, government support in Wales is not new. It did not arrive with the Marine and Coastal Access Act or with Wales' recent environmental legislation. The pressures, impacts and threats to the marine environment within EMS and the only existing MCZ have been known from at least the late 1990s and mid 1980s respectively. Despite careful identification of potential solutions and management measures necessary, RAGs and the former CCW respectively were severely and routinely frustrated in securing action. Hence, while the new Framework and Action Plan will be welcome if and when they deliver results, members should recall that they are built on earlier foundations, to which they should pay due credit, and they are very late to the party.

Do the MPA Network 2018-2023 Framework and 2018-2019 Action Plan take account of lessons learned from current MPA management activity in Wales?

Inevitably, given that the independent members of the MPA MSG are long standing members of one or several EMS Relevant Authorities Groups, they brought their experience and knowledge of MPA management activity or, more accurately, the paucity of management activity in EMS, the Framework and Action Plan reflect this wealth of expertise to some extent, though not enough.

EMS officers have considerable, long-standing, first-hand, on-the-ground experience in attempting to identify management requirements and secure their introduction. A single EMS officer has an advisory-only role to the MPA MSG. Nevertheless, the experience brought by that officer is not immediately evident to the uninformed reader of the Group's meeting records. It is regrettable that these officer's experiences, particularly of the difficulties in securing management action, have not been more obviously taken into account or reflected or supported in the MSG's outputs.

Sadly, no contribution or engagement was invited from Wales' only MCZ, the former Skomer MNR, leaving the management experience gained there over three decades unrecognised and untapped.

I regret that I have run out of time to make any further response to this follow-up inquiry other than to repeat how warmly I welcome this important follow-up work by the Committee and to urge members to be tenacious in their scrutiny role and holding WG to account.

Attachments

Terry *et al* 2019. The impact of the Marine and Coastal Access Act (2009) on Welsh inshore fisheries and marine management. Marine Policy 99 (2019) 359–368. *Terry_Lewis_Bullimore* 2018_Welsh inshore mgmt.pdf



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The impact of the Marine and Coastal Access Act (2009) on Welsh inshore fisheries and marine management



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ABSTRACT

This paper is based on a qualitative study undertaken between April 2016 and February 2017 of key informants and secondary documents concerned with the management of the Welsh marine environment in the pre and post Marine and Coastal Access Act (2009) (MCAA) era. Since taking over direct responsibility for the Welsh marine environment, the Welsh Government has failed to integrate fisheries management and marine conservation as effectively as has been achieved by relevant English authorities, particularly Inshore Fisheries and Conservation Authorities (IFCAs). A key contributing factor to this failure is that, whilst MCAA created a clear statutory framework for England's IFCAs, Welsh Government resisted the imposition of similar management duties for Wales, and, subsequently, the National Assembly for Wales has not used its legislative powers to create a suitably robust Welsh regime. Furthermore, the suspension in 2016 of the stakeholder 'Inshore Fisheries Groups' has partly dismantled the relatively weak co-management regime in Wales. Although the Welsh Marine Fisheries Advisory Group remains, its scope has been much reduced. Post MCAA, the Welsh system has centralised decision making, creating a more remote and less responsive management structure than had existed previously.

1. Introduction

Inshore waters up to six nautical miles from the coast fall outside the scope of the EU Common Fisheries Policy. Under the Sea Fisheries Regulation Act 1966, which consolidated fisheries regulation Acts dating from 1888, the inshore fisheries around the coast of England and Wales had been managed and enforced by twelve Sea Fisheries Committees (SFCs), which had powers to make byelaws to restrict or prohibit fishing, taking of fish and methods of fishing, as well as regulating fisheries for shellfish [1]. SFCs had the power to appoint fishery officers who had enforcement powers against vessels involved in sea fishing [2]. Although SFCs had been operating for over 100 years, the aim of a 2004 review of marine fisheries and environmental enforcement, the 'Bradley Review' [3], was to recommend options for the most effective organisation of enforcement to meet conservation objectives and the long-term needs of the fishing industry in England and Wales. It noted that "...local control and stakeholder involvement in Sea Fisheries Committees is a critical factor" [4,5] and concluded there was a place for such committees, albeit in need of modernisation [6] and development in terms of their functions to be reflected in a name change such as "Inshore Fisheries and Environmental Managers" [7]. The report recommended a single Welsh SFC [8].

Subsequently, on 3 April 2008, UK Government published a draft Marine Bill addressing marine conservation zones, spatial planning, licensing, enforcement and coastal access for recreational purposes, as well as inshore fisheries management. During its passage, Welsh Government (WG) put forward its own agenda for the management of Welsh inshore fisheries.

The outcome was the Marine and Coastal Access Act 2009 [9] (hereafter referred to as MCAA) which introduced a new system of marine management in the UK, its provisions covering the inshore (0–12 miles) and offshore (12–200 miles) regions. MCAA was deemed necessary to ensure "...clean healthy, safe, productive and biologically diverse oceans and seas, by putting in place better systems for delivering sustainable development of the marine and coastal environment" [10]. It created the independent Marine Management Organisation to deliver marine functions in relation to England and for non-devolved UK matters. MCAA also established a marine policy framework for the UK, including provisions for a joint, high-level UK Marine Policy Statement and regional marine plans [11].

MCAA covers marine planning, licensing, creation and management of Marine Conservation Zones (MCZs), management of inshore

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fisheries, enforcement powers and coastal access. MCAA does not apply uniformly across the whole of the UK, the arrangements for the management of inshore fisheries are different in England, Wales, Scotland and Northern Ireland.

The impacts of MCAA have been explored from a variety of perspectives; ecosystem protection, stakeholder engagement, marine spatial planning, highly protected marine reserves [12], failures of participatory processes to advance MCZs [13]; efficacy of inshore fisheries co-management [14,15]; satisfaction of stakeholders in fisheries comanagement amongst English Inshore Fisheries and Conservation Authorities (IFCAs) [16] and failures to significantly reduce the complexity of English marine management structures [17]. Future developments are also analysed with respect to the UK. [18] However, although MCAA created a 'Welsh Zone', extending the jurisdiction of the Welsh Ministers for certain functions to the median line, discussion of the impacts of MCAA on Wales is notably absent in the published literature.

This paper addresses this knowledge gap by examining the impact of MCAA on the management of Welsh inshore fisheries and marine conservation management. Our study compliments Pieraccini and Cardwell's (2016) analysis of post-MCAA fisheries co-management in England and Scotland [19]. Their study considered the change through two theoretical perspectives, "...Habermasian deliberative democracy and Deweyan political pragmatism" [20]. The authors identified and tested three aspects of fisheries co-management; actors' authority over decision making (empowerment); actors' diversity (membership); the right to self-nomination (procedures for external inclusion); they concluded that "...the three key elements of co-management identified are more developed in England than they are in Scotland" [21]. Since this paper was published, the authors have undertaken a study of Welsh inshore fisheries and marine management enabling comparison with Wales [22] Fig. 1.

Prior to the SFCs with responsibility for Welsh inshore fisheries management being dissolved on the commencement of MCAA, WG announced that Welsh Ministers would "...manage our marine environment and fishing industry" rather than create a Welsh IFCA [23]. On the introduction of MCAA, WG assumed full responsibility for the management and enforcement of sea fisheries around the Welsh coast, delivered by a new, highly-centralised, in-house Fisheries Unit [24] reporting directly to the Minister. In 2013 this Unit was merged with WG's Marine Branch to form the Marine and Fisheries Division (MFD).

From an inshore fisheries management perspective, this was surprising as the Welsh commercial sea fisheries sector is dominated by small-scale vessels (93 per cent are less than 10 m in length) [25] targeting different types of species on a seasonal or opportunistic basis, predominantly in inshore fishing grounds. Fishing grounds are localised, occasionally exploited by larger foreign or UK owned vessels targeting particular species such as scallops. Given the Bradley Review's emphasis on the need for "...local control and stakeholder involvement," [26] the highly centralised model favoured by WG seemed to go against its advice and against best practice as outlined in numerous case studies [27].

The aim is to examine how the application of MCAA in Wales has led to a distinctive Welsh marine and fisheries management regime, and apply Pieraccini and Cardwell's theoretical lens to investigate the nature of Welsh inshore marine management with respect to three indicators of co-management. Our objectives are to: compare the different ways in which MCAA applies in Wales compared to England; consider how the management structures set up by WG and the strategies it has employed since assuming power over Welsh marine resources relate to suggested best-practice in the management of communal resources as recommended by the institutional school of communal resource management [28]; and compare key elements of the post-MCAA Welsh marine and fisheries management structure against Arnstein's (1969) ladder of participation [29]. This improves understanding of Welsh inshore fisheries and marine management and provides an opportunity

to test the post-MCAA Welsh system against Pieraccini and Cardwell's findings. This case study demonstrates the consequences of adopting a centralised model of marine and fisheries management with implications for all coastal states.

First the key theoretical issues relating to inshore marine management are examined followed by an explanation of the research methodology. Finally, the form and function of the Welsh post-MCAA marine and fisheries management structure are compared against theoretical best practices.

2. The theoretical context

2.1. Co-management of communal natural resources

Inshore fisheries and the marine environment are communal resources, shared between commercial fishermen, often from different communities and countries and different types of users. A healthy marine environment attracts recreational divers and recreational fishermen with secondary benefits to hotels, restaurants and other tourist related businesses that may have no direct interaction with the local marine environment [30]. Co-management is a goal of many institutions responsible for maintaining their productivity, the principle implying that centralised state management is shared with others. In recognising the problems of over-simplifying state versus local actors, plus acknowledging the complexities in the term community, [31] Pieraccini and Cardwell advocate that "...co-management is ...best conceptualised not as a formal inter-scalar partnership, but an iterative, collaborative problem solving process." [32]

Prior to the WG takeover of the management of Welsh inshore fisheries, it undertook discussions with stakeholders to ascertain what type of management model might be adopted [33].

A study of eight co-management schemes identified characteristics that enabled them to operate effectively [34]. The key findings were that stakeholder groups should be wide-ranging and the co-management groups should be formalised within the fisheries management structure, consistent with the institutional school of communal management [35] who emphasise the limitations of centralised management. [36,37]However co-management remains contested [38].

Despite Woolmer's study demonstrating the benefits of co-management-including increased understanding between stakeholder groups and between stakeholders and managers, more effective fisheries management measures and increased willingness to comply with regulations - WG adopted a centralised management model.

2.2. Deliberative democracy versus a pragmatist approach to comanagement

Important in the discussion of co-management is the question, who has the power of identifying participants and how is that determined? Pieraccini, and Cardwell focus upon three elements; deliberative democracy, co-management, and pragmatism [39]. Deliberative democracy states that institutions should enable individuals or groups affected by particular decisions to engage in rational discourse [40], leading to mutual understanding, a key outcome of Habermas's proceduralist approach [41]. According to discourse theory, the success of deliberative politics depends not on a collectively acting citizenry but on the institutionalization of the corresponding procedures and conditions of communication [42]. For deliberative democracy to be legitimate, all stakeholders need to have a voice in decision making [43], those affected defined as '...anyone whose interests are touched by the foreseeable consequences of a general practice regulated by the norm at issue [44].

In contrast, Dewey's 'pragmatist approach' [45] emphasises that decision making is a messier process involving multiple, partial perspectives and understandings. Dewey's idea of an 'emergent public' is an "...assembly of people called into being by the problem of being affected by actions that are beyond their individual control" [46], virtually defining

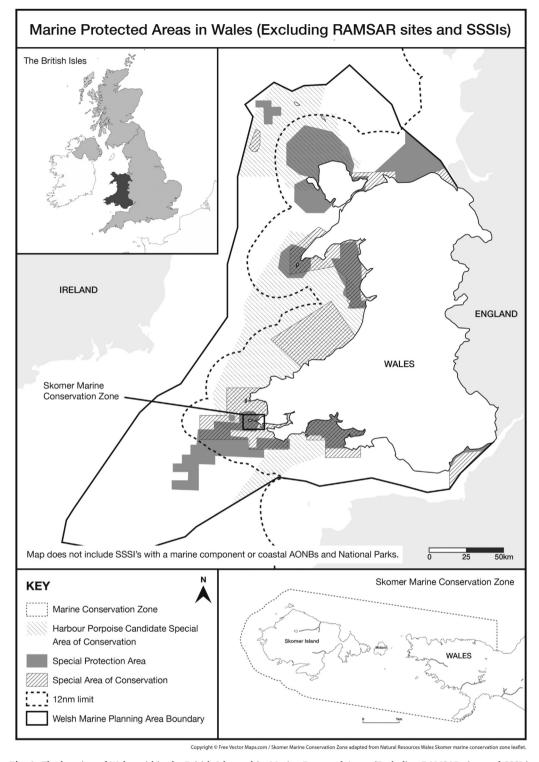


Fig. 1. The location of Wales within the British Isles and its Marine Protected Areas (Excluding RAMSAR sites and SSSIs).

the communal nature by which marine resources are used. Users may have different perspectives, but need to understand other viewpoints to achieve a pragmatic outcome, probably involving compromise. This contrasts with Habermas's idea of selfless, moral individuals able to make value-free judgements based on evidence, exempt from pre-conceived ideas. Given the nature of marine management, Pieraccini and Cardwell conclude that the pragmatic approach is the most compelling way of organising decision-making within a co-management regime. This is because marine fisheries impacts not only on fishermen, but also conservationists, recreational boat users and anglers, tourist businesses,

divers, shore-based services, supplying all these sectors and being supplied by them. As questions regarding the sustainability of fisheries resources become more prominent, an emergent public becomes more aware of the issues and in turn more interested in participating in decisions that affect the resource and in this way fuels a demand to become more involved [47].

The importance of this idea for co-management is that there needs to be a right for "...members of the public to emerge and self-identify in response to a problem that they see as affecting them, and create of themselves an interested public... and that ...potential co-management

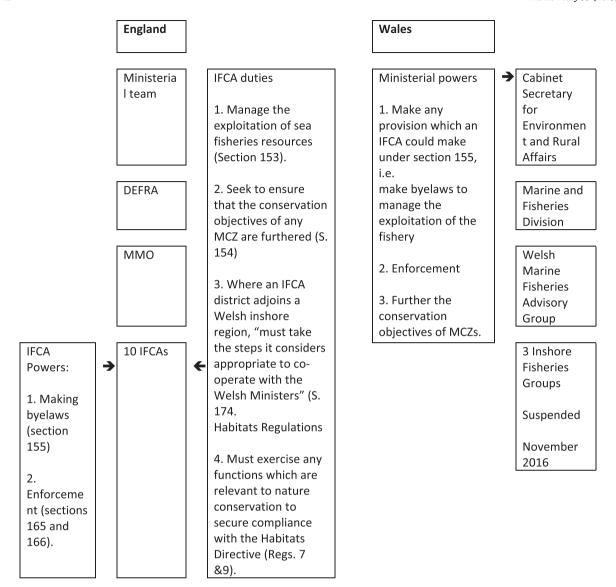


Fig. 2. Comparing the post-MCAA marine conservation and fisheries management powers and duties as applied to England and Wales.

stakeholders should be allowed to self-nominate, rather than only being chosen by an external body." [48] To ensure that such a body doesn't become too unwieldy, sifting of potential stakeholders is necessary, but this should be transparent and the organising authority should explain its reasons for non-inclusion.

Pieraccini, and Cardwell therefore argue that for co-management of fisheries to be legitimate, it needs to incorporate "...empowerment (from classical co-management literature), deliberants' diversity (from Habermas), and ways to limit external exclusion by giving the opportunity to members of the public to self-nominate (from Dewey)" [49]. On the basis of these three criteria, they identified the main differences between Scottish Inshore Fishing Groups (SIFGs) [50] and English IFCAs concluding that the three key elements of co-management are more developed in England than Scotland.

3. Methodology

Our research was undertaken from April 2016 to February 2017. A qualitative approach was adopted based upon semi-structured interviews with key interviewees who represented fishing groups within Wales, officers of marine conservation organisations with responsibility for Wales and individuals who had provided evidence to the National Assembly of Wales (NAW) Environment and Sustainability Committee

on the 2012 consultation on the failed introduction of Highly Protected Marine Conservation Zones. These interviews were undertaken face to face, by Skype or telephone. A snowball technique enabled the researchers to reach individuals who had been, or still were, members of the two post-MCAA liaison and advisory bodies, namely, the Inshore Fishing Groups (IFGs), or the Welsh Marine Fisheries and Advisory Group (WMFAG).

All responses were treated confidentially, other than where their views had already been made public, for example in minutes of meetings or correspondence available on the internet. The records of the interviews were fully transcribed, whilst the data from all IFG and WMFAG minutes were systematically transferred to spreadsheets to compare key elements of business such as numbers attending, makeup of attendees, agendas, who raised issues and whether the issues were resolved satisfactorily in that or subsequent meeting [51]. All data was stored in compliance with the ethical standards of the University of the West of England. Twenty-four individuals participated including commercial and recreational fishermen (some of who were former IFG members and chairpersons), current and former WMFAG members, representatives from IFCAs, marine conservationists, independent marine consultants and academics working on marine related issues, and former Fisheries Officers who had worked in the pre and post-MCAA management regime. WG MFD and Natural Resources Wales

(NRW) [52] declined our invitations to participate. [53]

Secondary sources included minutes of meetings (WMFAG, the IFGs, Seafish Wales Advisory Committee and the Environment and Sustainability Committee of the Welsh Assembly, such as the 2012 WG review of the post-2010 management regime) as well as Hansard and the NAW Record of Proceedings. The archives of the former South Wales SFC provided information on enforcement and prosecutions and allowed comparison of the quality of information regarding issues relating to fisheries management with post-2010 sources. Freedom of Information requests were made to WG MFD.

4. MCAA implementation for inshore fisheries and conservation as applied to Wales and England

Two factors are striking when comparing the post-MCAA Welsh and English inshore fisheries and conservation structures; first the lack of statutory duties on Welsh fisheries and conservation managers, in contrast to the comprehensive IFCA framework; second, the non-statutory and limited liaison/advisory nature of the groups that interact most closely with the fishing and wider marine management stakeholders, namely WMFAG and the South, Mid and North Wales Inshore Fishing Groups (Fig. 2).

Thus the Welsh Ministers retain close control, through the MFD, of all key aspects of inshore marine management.

4.1. Part 6 of MCAA: Management of inshore marine fisheries and conservation [54]

4.1.1. England: Inshore Fisheries Conservation Authorities (IFCAs)

We set out the English system here to facilitate a clear comparison with the Welsh regime.

MCAA confers power on the Secretary of State to create inshore fisheries conservation districts in England [55], for each of which there must be an Inshore Fisheries Conservation Authority. [56] Membership, powers and duties of IFCAs are comprehensively set out. Two duties are imposed on an IFCA: firstly, managing the exploitation of sea fisheries in its district [57]; secondly, ensuring that the conservation objectives of any MCZ in its district are furthered, without being compromised by its fisheries management duties. [58] In England, the key duties of an IFCA are to manage the exploitation of the fishery *and* to protect any MCZs in its district. IFCAs also have powers, including making byelaws [59] for the purpose of performing these duties, as well as enforcement powers [60].

Under the Habitats Regulations [61], all public bodies (including IFCAs) must exercise any functions which are relevant to nature conservation to secure compliance with the EU Habitats Directive [62]. IFCAs are also identified as a `relevant authority', with power to establish or contribute to establishing management schemes for European Marine Sites (EMS). [63]

Where an IFCA district adjoins a Welsh inshore region, it "...must take the steps it considers appropriate to co-operate with the Welsh Ministers" [64]. The remit of IFCAs is therefore founded on the basis of the need to integrate conservation objectives with one of the key anthropogenic pressures impacting the marine environment: fisheries.

4.1.2. Wales: Inshore fisheries in Wales: the role of the Welsh government For Wales, the position is set out in a much shorter Chapter [65].

Welsh Ministers have the power to make any provision which an IFCA could make under section 155 [66], i.e. make byelaws for the purpose of managing the exploitation of the fishery and furthering the conservation objectives of MCZs, but powers are discretionary, and Welsh Ministers cannot be required to exercise them. In relation to Wales, MCAA is silent as to *duties* equivalent to those imposed on IFCAs: in other words, in Wales, there is no statutory requirement to manage the exploitation of the fishery resource, or to further the conservation objectives of MCZs, or to co-operate with adjoining English IFCAs [67].

The underlying reasons for this situation relate to the devolution settlement [68]. During the passage of MCAA, the Welsh Minister for Rural Affairs adopted the position that it was politically unacceptable for Westminster to impose duties on the Welsh Ministers:

"...there seems to have been a great deal of interest in the duties placed, or not placed, on Welsh Ministers as they relate to IFCAs in the Marine Bill. ... I do not agree with the principle that UK legislation should put duties on Welsh Ministers. Giving us powers... is important, but placing duties on us is not appropriate for UK legislation... Welsh Ministers will be accountable to the Assembly and to the people of Wales... on any implementation of powers" [69].

This issue was discussed in NAW Sustainability Committee [70] and in Westminster. The Member of Parliament for Bridgend stated:

"It is a matter of great concern that the Bill does not provide any duty towards sustainable inshore fisheries management in Wales... A specific responsibility for sustainable fisheries management and the promotion of marine conservation zones should be placed on Welsh Ministers... The Bill presents the one opportunity for such a legal and lasting commitment, as the National Assembly has no power to lay down such duties. [71] Wales must not be left with a lower standard of certainty and accountability for fisheries management than England". [72]

The Minister and WG's lawyer argued that the democratic accountability of Welsh Ministers was greater than IFCAs, and that there would be little difference between the Welsh and English management regimes. Consequently, no duties were imposed on Welsh Ministers under MCAA.

It is also a source of contention [73] that, under the Habitats Regulations, whereas IFCAs are `relevant authorities' in respect of EMS management, and historically the Welsh SFCs had been, the WG MFD is not. As noted above, relevant authorities may exercise their EMS management functions in collaboration with others, and in Wales generally do so through long-established (though non-statutory) relevant authority groups (RAGs). Despite WG's separate duty as a `competent authority' to contribute to EMS conservation [74] and its earlier assurances that proposed changes arising from MCAA would not affect its participation in RAGs, [75], WG MFD has, since MCAA, declined to contribute to the work of RAGs in Wales [76]. Loss of the Welsh fisheries management authority from RAG membership undermines fully integrated and collaborative management approaches [77].

Despite having the legislative competence to do so since 2011, NAW has not imposed enforceable IFCA-style duties on WG. Under the MCAA framework, there remains a weakness, as the executive powers on WG cannot be enforced. NAW could address this lacuna in the Welsh inshore fisheries regime by bringing forward primary legislation setting out a more robust statutory framework for Wales with enforceable duties placed on the Welsh inshore fisheries manager, including mechanisms to deliver conservation objectives and to work collaboratively with other fisheries managers.

4.2. The post-2010 Welsh inshore fisheries management structure

The Minister for Rural Affairs [78] took over responsibility in April 2010. Forums for stakeholder dialogue were introduced by establishing the Welsh Marine Fisheries Advisory Group (WMFAG) and three Inshore Fisheries Groups (IFGs) representing North, Mid and South Wales. Unlike IFCAs, MCAA does not set out membership, powers and duties of these Welsh bodies and, as with Scottish Inshore Fisheries Groups (SIFGs), they have no statutory powers or duties. Minutes of IFG meetings suggest that their most important function was stakeholder liaison. Apart from specifying that IFGs and WMFAG had no more than one representative from an environmental organisation, a study of the IFG minutes suggests a fluid membership, and commercial fishingheavy representation on the three groups.

The intention seems to have been to create a participatory structure

Table 1 The purpose of IFGs and the expected abilities of IFG members^a.

| Proposed functions of IFGs | Expected abilities of IFG members |
|--|---|
| Provide proposals to WMFAG relating to fisheries management within the group's region. Assist WMFAG to engage with those with interests in fisheries and the marine environment within the region. Provide feedback to wider stakeholders within the IFG region on local policy implications | Demonstrate they can represent a wide range of people for a particular interest. Demonstrate, where possible, that they are able to represent more than one organisation Demonstrate they are able to feedback to a wide range of stakeholders on local policy implications Demonstrate knowledge of and experience relevant to the fishing industry |
| | Demonstrate knowledge of that experience relevant to the fishing industry |

change the status quo.

whereby stakeholders could express their opinions, experiences and ideas in geographically distinctive IFGs [79]. IFG information would then be analysed and discussed further at WMFAG, which would make recommendations to the Minister. IFGs seem intended to have acted as sounding boards and information conduits from WG to stakeholders, in theory, enabling a participatory process to operate within a centralised system, but to be effective the information being passed upwards would need to produce results 'on the ground'. The danger was that if this did not happen, fishermen and other stakeholders within the IFGs might become disillusioned and would view the participative process as a form of tokenism. [80,81]

4.2.1. Inshore Fishing Groups [82]

Comprised mainly of representatives from WG (MFD officers), commercial fisheries associations, recreational fishermen, environmental interest groups, and Natural Resources Wales [83,84], IFG purposes were as shown in Table 1.

In the consultation period, the NGO umbrella group Wales Environment Link (WEL) supported the proposals, but warned that "... membership of both the WMFAG and IFGs must be open, transparent, communicative and clear",... that the membership is equally weighted and all stakeholders are appropriately represented" and that "advice from both the IFGs and the WMFAG to the Minister, along with the associated minutes and agendas of meetings should be made publicly available" [85].

Despite this, one respondent told us that IFGs had "...little or no conservation remit" [86]. Conservation interests were limited to NRW and one other, and were outnumbered by MFD and the commercial fishing industry representatives [87]. According to three of our respondents, NRW did not attend in their conservation advocacy role but as the statutory environment and nature conservation advisor [88], and IFG minutes indicate that when present NRW [89] explained WG policy rather than advocated for environmental issues [90]. Thus, IFGs contained only one independent conservation representative. Unlike IFCAs, neither IFG nor WMFAG minutes were available on the WG website and had to be accessed via a Freedom of Information request [91]. Several respondents including a past IFG chairperson commented that paperwork was frequently circulated less than 48 hours before a meeting, hampering members from canvassing the views of those they represented and undermining the basis of the stakeholder-led management structure. Where the Minister or MFD rejected WMFAG advice, reasons were not provided [92]. While IFGs enabled regional issues to be raised, increased bureaucracy meant longer time-scales for decision making, as compared with the earlier SFC regime [93].

Once the system was operating, further weaknesses were exposed. Arnstein [94] outlines a 'ladder of participation'. At levels one and two, forms of non-participation are used by powerful actors to impose their agendas. Participation as tokenism (levels three to five) occurs when participants hear about interventions and may say something about them, which power holders denote as 'input'. However, participants are unlikely to have any effect on the intervention. At levels six to eight, participation provides citizens with more power to negotiate and

Demonstrate they are able to attend quarterly meetings of the IFG

Prior to the setting up of IFGs, the fifth goal of the 2008 Welsh Fisheries strategy was to develop 'partnership working' [95,96], implying level six on the ladder. One respondent indicated that IFGs members believed that they would, via the WMFAG, directly influence fisheries policy. [97] In practice, IFGs had little influence on decision makers. Ideas were filtered via WMFAG, which itself made limited progress. By the spring of 2014, IFG minutes reflect frustration among members who believed that their views had been ignored in the numerous consultations that had been initiated since 2010 [98]:"...although issues had previously been discussed during meetings members felt that opinions put forward had been overlooked" [99]. A number of respondents told us that business related to conservation initiatives was..."exclusively top-down, usually highly selective and very short briefings from WG officials. No discussion was allowed, just brief updates" [100]. Thus, in practice, IFGs were operating at no more than level two or three on Arnstein's ladder. In November 2016, they were suspended.

4.2.2. The Welsh Marine Fisheries Advisory Group (WMFAG)

The original remit of the WMFAG is outlined in Table 2.

Membership was determined by WG, but it appears to have been ineffective: "It would be fair to say that it has had a bit of a bumpy ride for the first couple of years of its existence. There has not been an awful lot of progress in terms of recommendations made" [101]. By August 2016, WMFAG's six roles had been reduced to one: "...to assist us in formulating appropriate policies, plans, strategies and law related to marine fisheries in Wales" [102]. It still acted as an adviser but lacked power as WG could ignore its recommendations. Although not suffering the same fate as IFGs, at best it sits at four or five on Arnstein's ladder. It is dominated by commercial fishing interests [103]; of the 14 members, nine represent commercial fishing groups, four are public bodies and just one represents environmental interests. Whilst WMFAG has been retained, it still appears to be ineffective. [104] Following the suspension of the IFGs, its new role lacks clarity as there is no mechanism to take on board the concerns of stakeholders.

Table 2 The purpose of WMFAGa.

| 1 | Provide expert advice to the Fisheries Unit and Minister for Natural Resources on issues relating to Fisheries Management |
|---|---|
| 2 | Assist the Fisheries Unit to engage with those with interests in fisheries and the marine environment |
| 3 | Feedback to the IFGs on national policy implications |
| 4 | Represent the views of the IFGs at WMFAG meetings |
| 5 | Monitor and evaluate the effectiveness of policies and strategies relating to fisheries management |
| 6 | Be closely linked to marine stakeholder structure and the Minister for Natural Resources |
| | |

^a These are no longer available on the Welsh Government website.

^a These are no longer available on the Welsh Government website.

In 2016, WG set out its policy on stakeholder engagement suggesting it was still seeking advice on how best to consult with stakeholders six years after it had taken responsibility for management, with pledges that its approach would be based upon participation with them. WG's approach therefore seems to have simultaneously achieved two conflicting and potentially damaging outcomes. Firstly, by establishing IFGs dominated by industry-dominated groups [105], WG marginalised the role of environmental interests and wider stakeholder representation. Secondly IFGs also became 'talking shops', which led to frustration amongst the membership, which may hamper the creation of a more effective co-management regime in future [106].

4.3. Scottish Regional Inshore Fishing Groups (SRIFGs) [107]

Five Scottish Regional Inshore Fishing Groups (SRIFGs) represent Scottish inshore commercial fishing interests [108]. SRIFGs [109] are non-statutory bodies that can only advance management recommendations to Marine Scotland. SRIFGs aim to improve the management of inshore fisheries in the 0–6 nautical mile zone of Scottish waters, and give commercial inshore fishermen a strong voice in wider marine management. They function more like former Welsh IFGs and WMFAG, but have more influence than either, including a well-established website. SRIFGs have representatives only from the commercial fishing sector, dominated by large fishermen's associations whose representatives sit on multiple SRIFGs. [110]

4.4. Comparing IFCAs, SRIFG, IFGs and WMFAG

In contrast to the Welsh and Scottish groups, IFCAs have representatives from ten sectors apart from commercial fishing [111], providing a broader range of viewpoints. Whilst Welsh IFGs were broader than SRIFGs, WMFAG's requirement that members were experts in fisheries management excluded many `emergent groups and individuals' lacking technical expertise. IFG requirements that members needed to `demonstrate knowledge of and experience relevant to the fishing industry' would similarly have been a barrier to self-inclusion. In practice, according to some of our IFG and WMFAG respondents, WG controlled IFG and WMFAG membership and revoked membership with no mechanism for objection by members [112].

When applying deliberative democracy, co-management, and pragmatism to the Welsh system, neither the former IFGs nor WMFAG have statutory authority and therefore lack empowerment. However, it was possible for individuals, normally commercial fishermen, local authority and other professionals, such as harbour officials to attend meetings, providing slightly greater opportunity for self-nomination than for SRIFGs, albeit within a narrow range of interest groups [113]. Nomination for inclusion on IFGs was allowed if individuals were identified as having relevant scientific background or as suitable chairpersons. Thus, whilst membership of IFGs might have been slightly less exclusive than SRIFGs, IFG and WMFAG minutes indicate that in practice very narrow groups dominated discussions [114]. Agendas were guided by MFD and, to a lesser extent, representatives of commercial fishing groups. As the lack of progress on IFGs became more apparent, especially from 2014, inclusivity of membership of the groups almost became irrelevant as attendance by non-WG groups began to fall, disillusionment with the lack of progress increased. [115,116] Therefore, even had membership been more inclusive, it seems unlikely that emergent groups would have wanted to attend such unproductive meetings. [117] Since the suspension of IFGs only WMFAG remains, but its remit has been criticised for separating the wider marine environment and 'fisheries', despite the fact that "...the recommendations of the group have direct implications for the environment". [118]

5. Conclusions

The post MCAA Welsh system centralised decision-making, creating

a more remote, less responsive management structure than had existed previously. The non-statutory IFGs and WMFAG fail Dewey's democratic legitimacy test with respect to the three elements of co-management; empowerment, inclusiveness of membership and procedures allowing self-nomination. Despite reiterating the desire "...to improve management of local fisheries as a partnership between WG and fishermen" [119] and the Minister's "...ultimate ambition... that the Welsh Government co-manages our fisheries with stakeholders...",[120] there is no evidence that co-management has been practised in post-MCAA Wales.

Additionally, MCAA did not create marine conservation duties for WG and the NAW has not used its legislative powers to create enforceable duties akin to those of the IFCAs. Thus, in Wales, the inshore fisheries management regime responsible for managing some of the most damaging impacts in marine protected areas, has side-stepped its responsibilities with respect to improving their management and condition by failing to implement less damaging fishing activities [121]. Although a substantially greater proportion of the Welsh inshore marine environment is under an MPA designation and therefore, on paper, better protected than those of England or Scotland, in practice, proactive management is lacking and this apparent protection is often ineffective. [122] This is exacerbated by what is now acknowledged as resource and capacity constraints [123], delaying WMFAG's priority workstreams on fisheries and the introduction of improved management measures for EMS to ensure compliance with the Nature Directives. [124] However it could be argued that an equally important reason is that, in its inshore fisheries management function, WG has not engaged meaningfully with the EMS RAGs, despite having being invited multiple times, reflecting its tendency to separate fisheries from marine management [125].

The fundamental weakness in the adoption of MCAA in Wales was the failure to create enforceable IFCA-style duties. The view that there would be greater democratic accountability in Wales than in England has not been realised, resulting in extremely slow progress with respect to fisheries, marine conservation management and the creation of MCZs. The failures are exacerbated because the `emergent public' has failed to emerge with sufficient force to ensure that its elected representatives have acted [126].

Our findings have implications for the wider post-Brexit governance regime in the UK where powers are being transferred from the EU to Westminster, with no guarantee that accompanying duties will be adopted. The Welsh case study also demonstrates that as predicted by Ostrom [127], the scale of management needs to be appropriate for the scale at which the marine environment is used, whether for fishing or wider purposes.

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Declarations of interest

None.

References

- [1] Sea Fisheries Regulation Act 1966, Section 5 (http://www.legislation.gov.uk/ ukpga/1966/38/Section/5) (Accessed 5 July 2018). The Act is now repealed.
- [2] Sea Fisheries Regulation Act 1966, Section 10.
- [3] Review of Marine Fisheries and Environmental Enforcement, DEFRA, (2004)

- <http://webarchive.nationalarchives.gov.uk/20080306064503/http://www.defra.gov.uk/environment/enforcement/report.htm> (Accessed 10 April 2016).
- [4] Paragraph 6.5, ibid
- [5] Local political influence and monitoring was mainly achieved through Local Authority membership of the SFC.
- [6] Paragraph 6.2, ibid
- [7] Paragraph 6.15, ibid
- [8] Paragraph 13.13, ibid
- [9] Marine and Coastal Access Act (2009) http://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf (Accessed 5 April 2106).
- [10] S.J. Boyes, M. Elliott, The excessive complexity of national marine governance systems – Has this decreased in England since the introduction of the Marine and Coastal Access Act 2009? Mar. Policy 51 (2015) 57–65, https://doi.org/10.1016/j. marrol 2014 07 019
- [11] The Marine Policy Statement, designated under MCAA (Part 3), sets out the priorities and objectives of the UK Government, the Welsh Government (WG), the Scottish Executive and the Northern Ireland Assembly in their marine areas. It also provides for the preparation of marine plans which take account of the MPS and which will cover most of the UK marine area.
- [12] A. Appleby, P.J.S. Jones, The marine and coastal access act—A hornets' nest? Mar. Policy 36 (2012) 73–77, https://doi.org/10.1016/j.marpol.2011.03.009.
- [13] De Santo, E. M. (2016) Assessing public participation in environmental decision-making: Lessons learned from the UK Marine Conservation Zone (MCZ) site selection process. Marine Policy 64, 91–101 https://doi.org/10.1016/j.marpol. 2015.11.003.
- [14] R.M. Msomphora, Conflict resolution and the delegation of authority in fisheries management: the case of Outer Hebrides Inshore Fisheries Group in Scotland, Mar. Policy 73 (2016) 263–275, https://doi.org/10.1016/j.marpol.2016.08.006.
- [15] R.M. Msomphora, Stakeholder participation and satisfaction in the process of developing management plans: the case of Scottish Inshore Fisheries Groups, Ocean Coast. Manag. 116 (2015) 491–503, https://doi.org/10.1016/j.ocecoaman. 2015.09.015.
- [16] L.D. Rodwell, J. Lowther, C. Hunter, S.C. Mangi, Fisheries co-management in a new era of marine policy in the UK: a preliminary assessment of stakeholder perceptions, Mar. Policy 45 (2014) 279–286, https://doi.org/10.1016/j.marpol. 2013.09.008.
- [17] S.J. Boyes, M. Elliott, The excessive complexity of national marine governance systems – Has this decreased in England since the introduction of the Marine and Coastal Access Act 2009? Mar. Policy 51 (2015) 57–65, https://doi.org/10.1016/j. marpol.2014.07.019.
- [18] L.D. Rodwell, S. Fletcher, G.A. Glegg, M. Campbell, S.E. Rees, M. Ashley, E.A. Linley, M. Frost, B. Earll, R.B. Wynn, L. Mee, P. Almada-Villela, D. Lear, P. Stanger, A. Colenutti, F. Davenportj, N.J. Barker Bradshaw, R. Covey, Marine and coastal policy in the UK: challenges and opportunities in a new era, Mar. Policy 45 (2014) 251–258, https://doi.org/10.1016/j.marpol.2013.09.014.
- [19] M. Pieraccini, E. Cardwell, Towards deliberative and pragmatic co-management: a comparison between inshore fisheries authorities in England and Scotland, Environ. Polit. (2016), https://doi.org/10.1080/09644016.2015.1090372.
- [20] *ibid*, 2
- [22] Terry, A., Lewis, K. & Bullimore, B. (2017) Managing the inshore marine environment in the Marine and Coastal Access Act era: the Welsh experience available at: http://eprints.uwe.ac.uk/34112/)
- [23] Welsh Assembly Government 2009. Written Statement Marine and Coastal Access Bill; Inshore Fisheries Management in Wales, Elin Jones, Minister for Rural Affairs, available at: http://wales.gov.uk/about/cabinet/cabinetstatements/2009/090720marine/?Lang=en/ (Accessed 10 May 2016).
- [24] Rees, G. (2008) Letter responding to consultees on proposed change to the Management of Welsh Inshore Fisheries. http://www.swsfc.org.uk/pdf_docs/WAG%20Review%20response%20.pdf (Accessed 16 December 2012).
- [25] Marine and Fisheries Operations Branch Report January- March 2018, Licenses for 28 vessels 10 m and over, 383 under 10 m. https://beta.gov.wales/sites/default/files/publications/2018-09/marine-and-fisheries-operations-branch-report-january-march-2018.pdf (Accessed 1 October 2018).
- [26] Review of Marine Fisheries and Environmental Enforcement, DEFRA, (2004) Paragraph 6.5.
- [27] For example Ostrom's Design Principles for Managing Common Pool Resources (see footnote 27). Other design principles exist, but take a broadly similar approach. For example,see: Hannah, S., Folke, C. & Maler, K.G. (1995).Property rights and environmental Resources in: S. Hannah & M. Munasinghe (Eds.) Property rights and the environment: Social and ecological issues, Washington, DC Beijer International Institute of Ecological Economics and The World Bank, pp. 15–29, and; E. Pinkerton, M. Weistein, (1995) Fisheries that work: Sustainability Through Community-Based Management, David Suzuki Foundation, Vancouver, BC. Canada
- [28] E. Ostrom, Governing the Commons: The Evolution of Institutions for Collective Action, Cambridge University Press, Cambridge, 1990.
- [29] S. Arnstein, 'A ladder of citizen participation', J. Am. Inst. Plan. 35 (4) (1969) 216–224, https://doi.org/10.1080/01944366908977225.
- [30] The recreational sector is likely to be as important as the commercial sector in the provision of employment, whilst it is possibly more than ten times greater than the value of commercial finfish and shellfish landings, although this excludes the aquaculture and gathering sectors. http://eprints.uwe.ac.uk/34112/1/Managing%20Welsh%20inshore%20marine%20env.AT-KL-BB.amended%20May.2018%

- 20%281%29.pdf> p13 (Accessed 10 September 2016).
- [31] A. Agrawal, C.C. Gibson, Enchantment and disenchantment: the role of community in natural resource conservation, World Dev. 27 (4) (1999) 629–649, https://doi.org/10.1016/S0305-750X(98)00161-2.
- [32] Margherita Pieraccini & Emma Cardwell (2016) Towards deliberative and pragmatic co-management: a comparison between inshore fisheries authorities in England and Scotland, Environmental Politics, 25:4, 729-748, p. 731 citing Plummer, R. and Baird, J., 2013. Adaptive co-management for climate change adaptation: considerations for the Barents region. Sustainability, 5 (2), 629-642. doi:10.3390/su5020629.
- [33] Letter from Department for Rural Affairs Welsh Assembly Government to Stakeholders, dated 9 June 2008.
- [34] Woolmer, A. (2009) Partnership approaches to fisheries management: lessons for Wales, Salacia-Marine, Marine Ecological Consultancy for WWF Cymru. This was an independent study designed to help inform the debate prior to the implementation of MCAA in Wales.
- [35] E. Ostrom, Governing the Commons: The Evolution of Institutions for Collective Action, Cambridge University Press, Cambridge, 1990.
- [36] M. Hara, J.R. Nielsen, Experiences with fisheries co-management inAfrica, in: D.C. Wilson, J.R. Nielsen, P. Degnbol (Eds.), The Fisheries Co-management Experience: Accomplishments, Challenges and Prospects, Kluwer Academic Publishers, Dordrecht, The Netherlands, 2003, pp. 81–97.
- [37] T. Thornton, J. Hebert, Neoliberal and neo-communal herring fisheries in Southeast Alaska: reframing sustainability in marine ecosystems, Mar. Policy 61 (2015) 366–375, https://doi.org/10.1016/j.marpol.2014.11.015.
- [38] J. Nielsen, P. Degnbol, K. Viswanathan, M. Ahmed, M. Hara, Mustapha, N. Abdullah, Fisheries co-management—an institutional innovation? Lessons from South East Asia and Southern Africa, Mar. Policy 28 (2) (2004) 151–160, https://doi.org/10.1016/S0308-597X(03)00083-6.
- [39] Pieraccini, M. & Cardwell, E. (2016): Towards deliberative and pragmatic comanagement: a comparison between inshore fisheries authorities in England and Scotland, Environmental Politics http://dx.doi.org/10.1080/09644016.2015. 1090372.
- [40] J. Habermas, Between Facts and Norms, MIT Press, London, 1996.
- [41] J. Habermas, The Theory of Communicative Action, Volume 2: Lifeworld and System: A Critique of Functionalist Reason, Beacon Press, Boston, 1987.
- [42] (a) J. Habermas, Between Facts and Norms, MIT Press, London, 1996;
 (b) M. Pieraccini, E. Cardwell, Towards deliberative and pragmatic co-management: a comparison between inshore fisheries authorities in England and Scotland, Environ. Politics (2015) p733, https://doi.org/10.1080/09644016.2015.
 1090372.
- 43] J. Habermas, Moral Consciousness and Communicative Action, MIT Press, London,
- [44] (a) J. Habermas, Between Facts and Norms, MIT Press, London, 1996, p. P298; (b) M. Pieraccini, E. Cardwell, Towards deliberative and pragmatic co-management: a comparison between inshore fisheries authorities in England and Scotland, Environ. Politics (2015) p731, https://doi.org/10.1080/09644016.2015. 1090372.
- [45] J. Dewey, The Public and Its Problems: An Essay in Political Inquiry, Edited and With an Introduction by Rogers, Pennsylvania State University Press, M. L. University Park, Pennsylvania, 2012.
- [46] M. Pieraccini, E. Cardwell, Towards deliberative and pragmatic co-management: a comparison between inshore fisheries authorities in England and Scotland, Environ. Politics (2016) p734, https://doi.org/10.1080/09644016.2015. 1090372.
- [47] N. Marres, The issues deserve more credit: pragmatist contributions to the study of public involvement in controversy, Social. Stud. Sci. 37 (5) (2007) 759–780, https://doi.org/10.1177/0306312706077367.
- [48] M. Pieraccini, E. Cardwell, Towards deliberative and pragmatic co-management: a comparison between inshore fisheries authorities in England and Scotland, Environ. Polit. (2016) p735, https://doi.org/10.1080/09644016.2015.1090372.
- [49] M. Pieraccini, E. Cardwell, Towards deliberative and pragmatic co-management: a comparison between inshore fisheries authorities in England and Scotland, Environ. Polit. (2016) 735, https://doi.org/10.1080/09644016.2015.1090372.
- [50] Six of these operated from 2013 to 2016. In 2016, they were replaced by five Regional Inshore Fisheries Groups. https://www.gov.scot/Topics/marine/Sea-Fisheries/InshoreFisheries/rifgs (Accessed 10 July 2017).
- [51] These raw data are too big to include in this paper and as some of the attendees required anonymity before the FOI was granted, they cannot be made available.
- [52] NRW is the statutory environmental regulatory and conservation authority for Wales which was established in April 2013 and took over the duties of the former Countryside Council for Wales (nature conservation body) and Environment Agency (environmental regulator).
- [53] Despite making the report available to WG Marine and Fisheries Division prior to making it freely available on the University of West of England website, we have received no reaction from them.
- [54] IFCAs have responsibility for fisheries and marine conservation out to 6 miles.
- [55] Marine and Coastal Access Act (2009) (Section 149) http://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf (Accessed 5 April 2016).
- [56] Marine and Coastal Access Act (2009) (Section 150) \http://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf> (Accessed 5 April 2016).
- [57] Marine and Coastal Access Act (2009) (Section 153) \http://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf> (Accessed 5 April 2016).
- [58] Marine and Coastal Access Act (2009) (Section 154) \(\http://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf) (Accessed 5 April 2016).
- [59] Marine and Coastal Access Act (2009) (Section 155) http://www.legislation.gov.

- uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf> (Accessed 5 April 2016).

 [60] Marine and Coastal Access Act (2009) (Sections 165 & 166) http://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf (Accessed 5 April 2016).
- [61] Conservation of Habitats and Species Regulations 2010 (SI 2010/490).
- [62] The EU Birds and Habitats Directives, (Directive on the conservation of wild birds 79/409/EEC, later 2009/147/EC; Directive on the conservation of natural habitats and of wild fauna and flora 92/43/EEC), collectively known as the Nature Directives, aim to contribute towards ensuring bio-diversitythrough the conservation of natural habitats and species, by maintaining or restoring at favourable conservation status, habitats and species of European importance (Habitats Directive Article 2). To achieve this, they provide for the creation of Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) respectively. SPAs are designated for the protection of certain bird species which are listed in the Birds Directive, including some species of seabirds. SACs are designated for the protection of certain types of habitats and species listed in the Habitats Directive, and include marine habitats and species. Together the sites form a pan-European network called Natura 2000. The Nature Directives are implemented in England and Wales under the Conservation of Habitats and Species Regulations 2010 (the Habitats Regulations), which consolidate the earlier Conservation (Natural Habitats, & c.) Regulations 1994) and subsequent amendments; the Habitats Regulations refer to SACs and SPAs having a marine element as a European Marine
- [63] Regulations 6 and 36.
- [64] S174 MCAA
- [65] Marine and Coastal Access Act (2009) Chapter 3 Part 6 http://www.legislation.gov.uk/ukpga/2009/23/pdfs/ukpga_20090023_en.pdf (Accessed 5 April 2016).
- [66] Marine and Coastal Access Act (2009) (Section 189) (http://www.legislation.gov. uk/ukpga/2009/23/pdfs/ukpga 20090023 en.pdf> (Accessed 5 April 2016).
- [67] For seven years following the implementation of the new management regime, despite repeated attempts by Devon and Severn IFCA to establish contact with the adjoining Welsh inshore fisheries manager, no meetings took place between the fisheries managers in the Bristol Channel region. It is understood that a constructive meeting took place in the summer of 2017 and further developments are awaited with interest.
- [68] Devolution refers to the statutory granting of powers from the Parliament of the United Kingdom to the Scottish Parliament, the National Assembly for Wales, the Northern Ireland Assembly and the London Assembly and to their associated executive bodies the Scottish Government, the Welsh Government, the Northern Ireland Executive and in England, the Greater London Authority and combined authorities. The National Assembly for Wales, as a consequence of the Government of Wales Act 1998, possesses the power to determine how the government budget for Wales is spent and administered. The 1998 Act was followed by the Government of Wales Act 2006 which created an executive body, the Welsh Assembly Government; separate from the legislature, the National Assembly for Wales. It also conferred on the National Assembly limited legislative powers. In 2011 further legislative powers were transferred from the UK Parliament to the National Assembly for Wales.
- [69] Elin Jones, Minister for Rural Affairs giving evidence to the National Assembly for Wales Sustainability Committee, 26th February, 2009. https://www.assembly.wales/Committee%20Documents/SC(3)-04-09%20%20Transcript%20(PDF, %20198kb)-26022009-119847/sc20090226qv-Cymraeg.pdf (Accessed 10 August 2016).
- [70] NAW Sustainability Committee Report into the Implications of the Marine Bill on Wales: Recommendation 6: The Committee recommends that the same level of duties placed on the Inshore Fisheries and Conservation Authorities in England regarding the sustainable management of fisheries and the conservation of Marine Conservation Zones are included for Wales to avoid any divergence in the future. This document does not appear to be any longer on the WG site.
- [71] Note that at the time, National Assembly for Wales (NAW) would have needed to obtain a Legislative Competence Order from Westminster to bring forward such a provision.
- [72] Mrs Madeleine Moon, Member for Bridgend, Hansard, Columns 750-753, 23 June 2009.
- [73] Correspondence between EMS relevant authority groups and WG MFD;
- [74] Welsh Ministers are identified as both appropriate and competent authorities in the Habitats Regulations 3(1) and 7(1)b respectively. As such, their duties toward EMS management include those in Regulation 9: "The appropriate authority and the conservation bodies must exercise their functions under the enactments relating to nature conservation so as the secure compliance with the Habitats Directive" (Regulation 9(1)) and a competent authority must, in relation to a marine area, exercise any of their functions which are relevant to marine conservation, so as the secure compliance with the requirements of the Habitats Directive." Regulation 9(3).
- [75] In reply to a consultation response asking "How will the new structure be represented on SAC Relevant Authority Groups? WAG will need to be a Relevant Authority, not just a Competent Authority", WG's response was "There is no reason why WAG could not be a member of these groups". Welsh Government response to the consultation on the Government's proposal for the future management and enforcement of inshore fisheries in Welsh waters, 12/09/2008: This document is no longer available on the WG website.
- [76] Interview sources: marine conservation managers
- [77] This is ironic given the progressive environmental legislation that has been passed by the WG eg The Well-being of Future Generations (Wales) Act 2015 and The Environment (Wales) Act 2016 which respectively take a long-term holistic view of social and economic development and promote sustainability.

- [78] Subsequently renamed (2013) Minister for Natural Resources and (2017) Cabinet Secretary for Energy, Planning and Rural Affairs.
- [79] Wales Marine and Fisheries Strategic Action Plan (2013) p5 para 14 \(\text{https://beta.gov.wales/sites/default/files/publications/2018-05/strategic-action-plan-formarine-and-fisheries.pdf\) (Accessed 10 April 2016).
- [80] Arnstein's ladder of participation explains the impact that such top-down exclusionary approaches have on the members of participatory groups, S. Arnstein, 'A ladder of citizen participation', J. Am. Inst. Plan. 35 (4) (1969) 216–224, https://doi.org/10.1080/01944366908977225.
- [81] G. Parker, C. Murray, Beyond tokenism? Community-led planning and rational choices: findings from participants in local agenda-setting at the neighbourhood scale in England, Town Plan. Rev. 83 (1) (2012) 1–28, https://doi.org/10.3828/ tor. 2012 1
- [82] IFGs were suspended by the Head of Fisheries in November 2016.
- [83] Their composition was quite fluid with `individual fishermen' attending some meetings. E.g. See Mid Wales IFG minutes 20/09/2011; 4/12/2012; 25/06/2013.
- [84] Independent membership of the 18 Mid Wales IFG meetings, for which there is an attendance register, averaged 48 per cent of attendees. This fell to an average of 40 per cent in the last nine meetings as frustration with the slow rate of progress increased. Numbers attending averaged 14 per session for the first nine meetings but fell 21 per cent to 11 per session in the last 9 meetings.
- [85] Response to WAG proposals for future Sea Fisheries Stakeholder Input Framework for Wales: Developing a partnership approach to fisheries management February 2010 http://www.waleslink.org/sites/default/files/WEL_response_to_fisheries_consultation_Feb_2010.pdf (Accessed 6 December 2016).
- [86] Interview source: Conservation manager
- [87] The fishery is a public resource (as has been demonstrated in the Fisheries White Paper Sustainable fisheries for future generations: consultation document, DEFRA October 2018- para. 2.3) and therefore establishing IFGs with an overwhelming presence of those with a commercial interest in the fishery creates an on-built conflict of interest. https://www.gov.uk/government/consultations/fisheries-for-future-generations-consultation-document.
- [88] Interview sources: Conservation manager and two former IFG members
- [89] NRW replaced the Countryside Council for Wales in April 2013.
- [90] For example, South Wales IFG minutes 26/05/2011; Mid-Wales IFG minutes; North Wales IFG minutes 23/07/2015. However between 20/09/2011 to 30/09/2014, the Mid-Wales IFG minutes have no record of any Countryside Council for Wales, Environment Agency or NRW representative making a contribution to any of the eleven meetings.
- [91] The information had been made available on WG MFD portal in 2017, though, at the time of writing (August 2018) they no longer appear on the newly created website containing WG marine information (reports etc.) and there is no indication on that site where the minutes may be obtained.
- [92] Interview sources: Former IFG members
- [93] Interview sources: former SFC and WGG MFD fisheries officers, former SFC and IFG members.
- [94] S. Arnstein, 'A ladder of citizen participation', J. Am. Inst. Plan. 35 (4) (1969) 216–224, https://doi.org/10.1080/01944366908977225.
- [95] Welsh Fisheries Strategy 2008 p1 \(\text{http://www.webarchive.org.uk/wayback/archive/20111004153152/http://www.swsfc.org.uk/pdf_docs/walesfisheriesstratjuly08.pdf\) (Accessed 17 December 2016).
- [96] My ultimate ambition is that the Welsh Government co-manages our fisheries with stakeholders...Minister for Natural Resources and Food (18th June 2016) Marine and Fisheries – Future Direction and Strategic Action Plan: Supporting Document in conjunction with the Ministerial Oral Statement.
- [97] Interview source: former IFG member
- [98] See Mid Wales IFG minutes 27/02/2014; North Wales IFG minutes 1/05/2014; South Wales IFG minutes 15/05/2014.
- [99] Mid-Wales IFG minutes 06/05/2014 (FoI request).
- [100] Interview sources: IFG and WMFAG members
- [101] Jim Evans, Welsh Fishermen's Association evidence to Environment and Sustainability Committee, 6/02/2014, p20 http://senedd.assembly.wales/documents/s24218/6%20February%202014.pdf (Accessed 14 December 2016).
- [102] http://gov.wales/topics/environmentcountryside/marineandfisheries/stakeholder-engagement/welsh-marine-fisheries-advisory-group/?Lang=en (Accessed 19 December 2016).
- [103] WMFAG membership: Welsh Government; Natural Resources Wales; Welsh Local Government Association; Seafish Industry Authority; Wales Environment Link; Welsh Aquaculture Producers Association; Welsh Federation of Sea Anglers (WFSA); Welsh Fishermen's Association; Cardigan Bay Fishermen's Association; Llyn Pot Fishermen's Association; Llyn Fishermen's Association; North Wales Fishermen's Co-operative Ltd; South West Wales Fishing Communities; West Wales Shellfisherman's Association. Wales Environment Link, June 2018, Response: CCERA Committee Inquiry on the Impact of Brexit on Fisheries in Wales, http://www.waleslink.org/sites/default/files/180618_wel_response_to_ccera_fisheries_inquiry.pdf) (Accessed 27 July 2018).
- [104] Wales Environment Link, June 2018, Response: CCERA Committee Inquiry on the Impact of Brexit on Fisheries in Wales, p 4 (http://www.waleslink.org/sites/ default/files/180618_wel_response_to_ccera_fisheries_inquiry.pdf> (Accessed 27 July 2018).
- [105] K.H. Mikalsen, S. Jentoft, From user-groups to stakeholders? The public interest in fisheries management, Mar. Policy 25 (4) (2001) 281–292, https://doi.org/10. 1016/S0308-597X(01)00015-X.
- [106] At the last IFG meetings (South-Wales, 13/09/2016), (Mid-Wales, 14/09/2016) and (North-Wales, 15/09/2016), attendees (excluding WG and NAW officers)

- were asked to set out a SWOT analysis of IFGs. The main response from all groups was that IFG had been talking shops and had made virtually no progress since their inception. This was attributed to a lack of communication, especially responses by WG to suggestions from grassroots members. In addition, given the fact that agendas had been dominated by WG, it was felt strongly that there was a lack of clear planning or prioritisation of issues by WG and a lack of clear timelines from discussion to action.
- [107] For a more detailed description of SIFGs see: Pieraccini, M. & Cardwell, E. (2016): Towards deliberative and pragmatic co-management: a comparison between inshore fisheries authorities in England and Scotland, Environmental Politics http:// dx.doi.org/10.1080/09644016.2015.1090372.
- [108] From 2013-2016 six Inshore Fishing Groups were designated. In 2016 they were changed to five Regional Inshore Fishing Groups. https://www.gov.scot/Topics/marine/Sea-Fisheries/InshoreFisheries/rifgs (Accessed 10 October 2017).
- [109] Pieraccini and Cardwell's research was undertaken before the change from Inshore Fisheries Groups to Regional Inshore Fisheries groups and the former groups will therefore be referred to in this paper.
- [110] In this respect, they are even more dominated by the commercial fishing sector than Welsh IFGs.
- [111] Recreational fishing, Environment, Marine science, Marine social science, Aquaculture, Archaeology, Marine tourism (including sailing and diving), and Estuarine management, Ports and harbours and sales and processing.
- [112] Interview sources: Former IFG members
- [113] For example, in the South Wales IFG a harbourmaster was chosen as a suitable chair.
- [114] Of the forty separate issues raised in the eighteen Mid-Wales IFG meetings between September 2011 and September 2016, only six were introduced by non-WG members (Mid-Wales IFG minutes).
- [115] Two issues raised by Mid-Wales IFG members (not WG officials in 20th September 2011 meeting), namely: lack of enforcement of fisheries offences; a reduction in the number of fisheries officers, remained unresolved in the last meeting (14th September 2016) (Mid-Wales IFG minutes).
- [116] The Specified Crustaceans (Prohibition on Fishing, Landing Sale and Carriage) (Wales) Order 2015. <a href="http://gov.wales/topics/environmentcountryside/marineandfisheries/SeaFisheries/commercialfishing/com/pliance-monitoring/crustaceanVlegislation/vreview/?Lang=en (Accessed 17 December 2017).
- [117] Independent membership (Non-MFD, NRW and the IFG chair) of the 18 Mid Wales IFG meetings, for which there is an attendance register, averaged 48 per cent of attendees. This fell to an average of 40 per cent in the last nine meetings as frustration with the slow rate of progress increased. Numbers attending averaged 14 per session for the first nine meetings but fell 21 per cent to 11 per session in

- the last 9 meetings.
- [118] Wales Environment Link, June 2018, Response: CCERA Committee Inquiry on the Impact of Brexit on Fisheries in Wales, p 4 (http://www.waleslink.org/sites/ default/files/180618_wel_response_to_ccera_fisheries_inquiry.pdf> (Accessed 27 July 2018).
- [119] Wales Marine and Fisheries Strategic Action Plan (2013) p 5 (https://beta.gov. wales/sites/default/files/publications/2018-05/strategic-action-plan-for-marine-and-fisheries.pdf) (Accessed 27 July 2018).
- [120] Minister for Natural Resources and Food (18 June 2016) Marine and Fisheries-Future Direction and Strategic Action Plan: Supporting Document in conjunction with the Ministerial oral statement
- [121] Welsh Government are working with Natural Resources Wales on a project to evaluate the impacts of fishing on features of Marine Protected Areas (MPAs) in Wales but there have been significant delays in Welsh Government's delivery on this and, as yet, no decisions or public communication on management required by the assessments. Wales Environment Link, June 2018, Response: CCERA Committee Inquiry on the Impact of Brexit on Fisheries in Wales, p 5. df">http://www.waleslink.org/sites/default/files/180618_wel_response_to_ccera_fisheries_inquiry.p>df (Accessed 27 July 2018).
- [122] NAW Climate Change, Environment and Rural Affairs Committee inquiry into Marine Protected Areas in Wales; oral evidence Blaise Bullimore: http://senedd.assembly.wales/documents/s61973/5%20April%202017.pdf (Accessed 6 July 2016).
- [123] Wales Environment Link, June 2018, Response: CCERA Committee Inquiry on the Impact of Brexit on Fisheries in Wales, p 3.
- [124] Natural Resources Wales, 2016. Assessing Welsh Fisheries Activities Project. (https://naturalresources.wales/about-us/our-projects/marine-projects/assessing-welsh-fishing-activities/?Lang=en) (Accessed 10 September 2017).
- [125] Wales Environment Link, June 2018, Response: CCERA Committee Inquiry on the Impact of Brexit on Fisheries in Wales, p 4–5. https://www.waleslink.org/sites/default/files/180618_wel_response_to_ccera_fisheries_inquiry.p df (Accessed 27 July 2018).
- [126] Despite the fact that there is widespread support amongst the British public for new laws that ensure we fish responsibly and protect the marine environment, with 79 per cent believing governments have a moral duty to ensure sustainable fishing. Client Earth, 2018. Press release: British public overwhelmingly support greater fisheries protections after Brexit. https://www.clientearth.org/british-public-support-fisheries-protections-brexit/ (Accessed 25 July 2018).
- [127] E. Ostrom, Governing the Commons: The Evolution of Institutions for Collective Action, Cambridge University Press, Cambridge, 1990.