



Briefing to the Climate Change, Environment and Infrastructure Committee

Marine Environmental Management

November 2021

This note covers progress to date in a number of key NRW work areas, and also highlights some barriers and opportunities for further progressing sustainable marine environmental management.

1. NRW's role in marine environmental management

NRW's general purpose is to pursue the sustainable management of natural resources. This role extends to the marine environment which makes up almost half of the territory of Wales. NRW's role in relation to marine environmental management is wide ranging including, for example: advice, evidence, regulation including marine licensing, monitoring, coastal flood risk/erosion management, incident response, protected site management, cockle fisheries management (Dee and Bury inlet) and the Dee navigation authority.

2. Progress to date, forward barriers and opportunities

Marine consenting and licensing

NRW delivers marine licensing on behalf of Welsh Ministers for licensable activities throughout the Welsh Zone. For example, between June 2020 and November 2021, in the

marine renewable sector NRW issued 12 marine licences; 5 licences relate to construction, alteration or improvement works associated with the renewable energy sector and 7 licences were issued in respect of project site survey work. Welsh Government are the enforcement authority for marine licensing in Wales.

NRW's Marine Licensing Team also provides bespoke pre-application advice. Pre-application advice has clear benefits to the applicant, helping to identify issues upfront, understand requirements of the marine licence process and has the potential to reduce the formal determination period. To support customers, we have also increased the amount of web content available on the marine licensing process and guidance on the evidence and assessment required to accompany applications.

To support marine renewable projects and reduce administrative burden, we have been developing a number of Ways of Working agreements between NRW and other regulatory authorities. We continue to share best practice with other marine licensing authorities. This has been particular benefit for the marine renewable sector where sharing experiences from projects in Scotland helped to inform our approach to adaptive management.

Barriers and opportunities: There is significant overlap between regulatory duties and responsibilities which can pose challenges to developers and requires good co-ordination by the regulatory bodies. Major infrastructure projects, especially energy, require multiple approvals and permits. It would be beneficial to ensure alignment of regulatory regimes, to streamline aspects, avoiding duplication of effort and providing clearer routes for stakeholder input.

There is often a perception that marine licensing applications for developments in areas of policy priority ought to be able to be "fast tracked". However, NRW must equally robustly assess all applications by following the statutory decision-making process and supporting assessment and advisory process which together provide important environmental, human health and safety, procedural and legal safeguards. Speed of determination is mainly dependant on the quality of the information provided by the developer. Increased engagement in pre-application advice and engagement with other stakeholders will support the submission of robust licence applications and help decrease the determination timescale of an application.

A key barrier to obtaining consents for marine renewable energy is the uncertainty surrounding key environmental impacts, stemming from both a scarcity of baseline environmental data, and a lack of direct evidence of the impacts of specific energy devices. Further relevant opportunities are covered below under OREP and marine planning.

Marine renewable energy and the Offshore Renewable Energy Programme

The combination of regulatory and advisory functions places NRW at the forefront of supporting sustainable marine renewable energy (MRE) development in Wales, which has great potential to further support carbon reduction targets. In 2019 we established NRW's Offshore Renewable Energy Programme (OREP) as a direct response to increasing scale of MRE development, and growing political, public and policy interest in Wales, including meetings with the First Minister in 2019 to explore developing our role.

The overall aim of OREP is to reduce the environmental and consenting risks of MRE development. Specifically, OREP has built NRW's capacity and expertise to deliver:

- Improved case management and pre-application advice
- Development of key positions and guidance
- Additional dedicated staff resource that focuses solely on MRE - developing and maintaining continuity of the necessary expertise
- Critical evidence to reduce consenting uncertainties and address the perceived conflict between the twin climate and biodiversity emergencies
- Increased external engagement with key stakeholders.

We are currently advising on 15 major and / or novel and complex MRE plans and projects. In addition, OREP enables development of key guidance and evidence projects; for example, development of guidance on the use of Adaptive Management as a tool that can allow developments to be consented when the environmental effects are not well understood.

NRW also engages with strategic initiatives across Wales and the UK to improve MRE delivery, such as: The Crown Estate's Offshore Wind Evidence & Change Programme and the WG Marine Energy Programme & Tidal Lagoon Challenge.

Barriers and opportunities: OREP is temporarily funded until March 2022 when the benefits will come to an end. The number of plans and projects that NRW will be advising on and regulating will continue to increase significantly, especially with the prospect of new fixed and floating offshore wind and the Tidal Lagoon Challenge. Investment into NRW to secure the OREP approach to delivering MRE is required longer-term to meet this demand for MRE whilst at the same time supporting other government priorities for the environment. To illustrate the capacity needs, NRW's current engagement in the Awel y Mor offshore windfarm project has been ongoing since 2019 and to date amounts to 320 hours of advisor's time.

Ongoing and increased investment is also needed to improve the marine environmental evidence base to help reduce environmental risk and to facilitate efficient and timely decision-making and, ultimately, deployment. This is a shared responsibility for Government, developers and NRW.

NRW is the statutory consultee for advice on development consents and marine licences in Welsh waters within 12nm. JNCC has this responsibility in the Welsh offshore marine area beyond 12nm. Similar functions have been successfully streamlined around Scotland and England, with advisory responsibilities delegated to Nature Scot and Natural England. This has reduced complexity and increased efficiencies for developers, regulators and advisors. A similar arrangement could usefully be adopted to address the anomaly around Welsh waters.

Marine planning

The Welsh National Marine Plan (WNMP) provides the primary framework for sustainable marine development. NRW has undertaken substantial work to support implementation of the WNMP. This includes developing marine licensing procedural guidance, advisory positions, training staff, and a marine casework handbook to support application of advisory principles and plan policy in our advice.

Barriers and opportunities: Strategic sectoral planning and a developing a spatial approach for marine planning will provide greater support to identify key resource areas, alongside sensitivities and constraints, to help minimise consenting risks by steering developments to locations where impacts to the environment and other users are lower. NRW is now taking a lead role in providing the evidence to support WG in the development of more spatially prescriptive planning, by identifying the spatial environmental considerations for different sectors.

Marine evidence gaps and gathering

Since its creation NRW has made a strong commitment to be an evidence-based organisation. We seek to ensure that our strategy, decisions, operations and advice to Government and others are underpinned by sound quality-assured evidence.

The [Welsh Marine Evidence Strategy](#) (2019), jointly developed by WG and NRW, outlines the high-level strategic marine evidence priorities needed to support marine policies and plans in Wales. The strategy provides a framework for collecting evidence including research and development, monitoring and surveillance, and secondary analysis and synthesis, whilst improving collaboration.

Within NRW, the Marine and Coastal Evidence Programme produces a prioritised list of evidence needs on an annual basis. The Marine Monitoring Programme is also prioritised, with a regular cycle of monitoring, focusing on the Water Framework Regulations (2019) and Marine Protected Areas.

Over the past few years, the country nature conservation bodies, JNCC and other UK partners have reviewed risk-based priority monitoring options for most UK marine habitat and species groups. A business case has been developed in support of all the preferred monitoring options and submitted to DEFRA.

NRW's marine evidence priorities for the next year include monitoring, collation of baseline information to inform multiple work areas (e.g. marine mammal distributions, habitat mapping), work to inform offshore renewable energy advice and blue carbon studies.

We collect our evidence through a variety of routes, including work in house, work contracted out, citizen science projects and collaborations with other organisations, including academia, Government and industry.

We anticipate that at least 15 marine and coastal evidence reports will be produced in 2021. The majority of our reports are published on our website here: [Natural Resources Wales / Marine and coastal evidence reports](#). A further set of reports were produced in 2020 and are now being converted to accessible format before being uploaded to our website.

Barriers and opportunities: It is fundamentally important that we understand the state of our marine and coastal environment if we are to make sound decisions concerning management. However, the funding available for marine monitoring falls well short of what is required. For example, the preferred Welsh option for inshore benthic monitoring totals at just over £3 million (including existing staff and resources). Excluding staff that would come to about £2 million. The resources for marine monitoring have decreased over the last 9 years.

Many of our evidence needs are complex problems that need to be tackled with multi-year research programmes. Unfortunately the annual cycle of funding makes it extremely difficult for NRW to enable this.

In the future we hope to work with the Environment Platform Wales to create better links with academia and to disseminate our research needs.

MPAs, ecosystem resilience and restoration

Improving the management and condition of the Marine Protected Area (MPA) network is a priority for NRW in order to deliver marine ecosystem resilience. A wide range of NRW's advisory, evidence, regulatory and operational work contributes to this. We routinely deliver actions in the Wales MPA Network Management Action Plan across our functions. We were also able to use capital funding made available by WG during 2020-2021 to undertake a range of improvements to sites including, for example, artificial habitat enhancement in seawalls around Milford Haven and feasibility work to explore saltmarsh restoration at Rhymney Wharf.

NRW is also providing advice and evidence to support WG's project to complete the MPA network through the designation of Marine Conservation Zones.

Barriers and opportunities: Understanding condition of MPAs is essential to informing appropriate action. Following publication of a full suite of indicative MPA site condition assessments in 2018, we are approaching completion of a project to develop new reporting indicators to apply as part of a planned full revision of NRW's conservation objective advice for MPAs. This will ensure we are giving the best advice and assessments to support decision-making on activities in and near MPAs.

Restoration is a key focus now for marine ecosystem resilience including most recently a commitment within the Programme for Government for a targeted programme of restoration of saltmarsh and seagrass habitats (also key blue carbon stores). Active restoration in the marine environment presents substantial practical challenges but nevertheless work is underway from which we can learn and take further action. NRW is already leading on an European Maritime and Fisheries Fund-funded project actively restoring native oyster habitat in Milford Haven with an emphasis on learning how to scale up such projects. The Natur am Byth partnership project includes an ambitious marine element focussing on restoration of sea grass, oysters, pink sea fan and crawfish. We have also published opportunity maps indicating potential areas for restoration of a range of marine and coastal habitats (see Annex 2).

Most recently, NRW has begun to develop a prioritised, integrated forward work programme for active restoration that reflects the wider practical, evidence, advice and regulatory implications for NRW of this developing area.

Blue carbon

NRW has undertaken important research in relation to blue carbon to support enhancing blue carbon stores in Wales, including:

- Quantifying the blue carbon potential of the Welsh marine and coastal environment (See Annex 1)

- Current research to further identify carbon storage and sequestration at a feature and MPA level across the network; this work is also identifying management options to enhance the carbon sink in Wales

Barriers and opportunities: There is no framework for protection of blue carbon *per se* and hence enhancement needs to be seen as a wider societal benefit derived from effective and sustainable management of the marine environment that enhances ecosystem resilience, biodiversity, habitat extent and condition. We have prioritised a forward work programme to embed consideration of blue carbon in all aspects of our advice, and to further develop the evidence on how and where we can enhance the sequestration of blue carbon in marine and coastal areas.

Coastal management

The coastal interface is an area where the impacts of climate change are felt acutely due to sea-level rise. NRW has put in place an Integrated Coastal Management Programme to bring together different work streams in NRW, including flood risk management, biodiversity, planning, regulation and access, to address the particular challenge of climate change at the coast. The programme is delivering a wide range of action, including, for example a joined-up approach to guidance assessing and addressing coastal squeeze, taking account of recent WG policy development in this area.

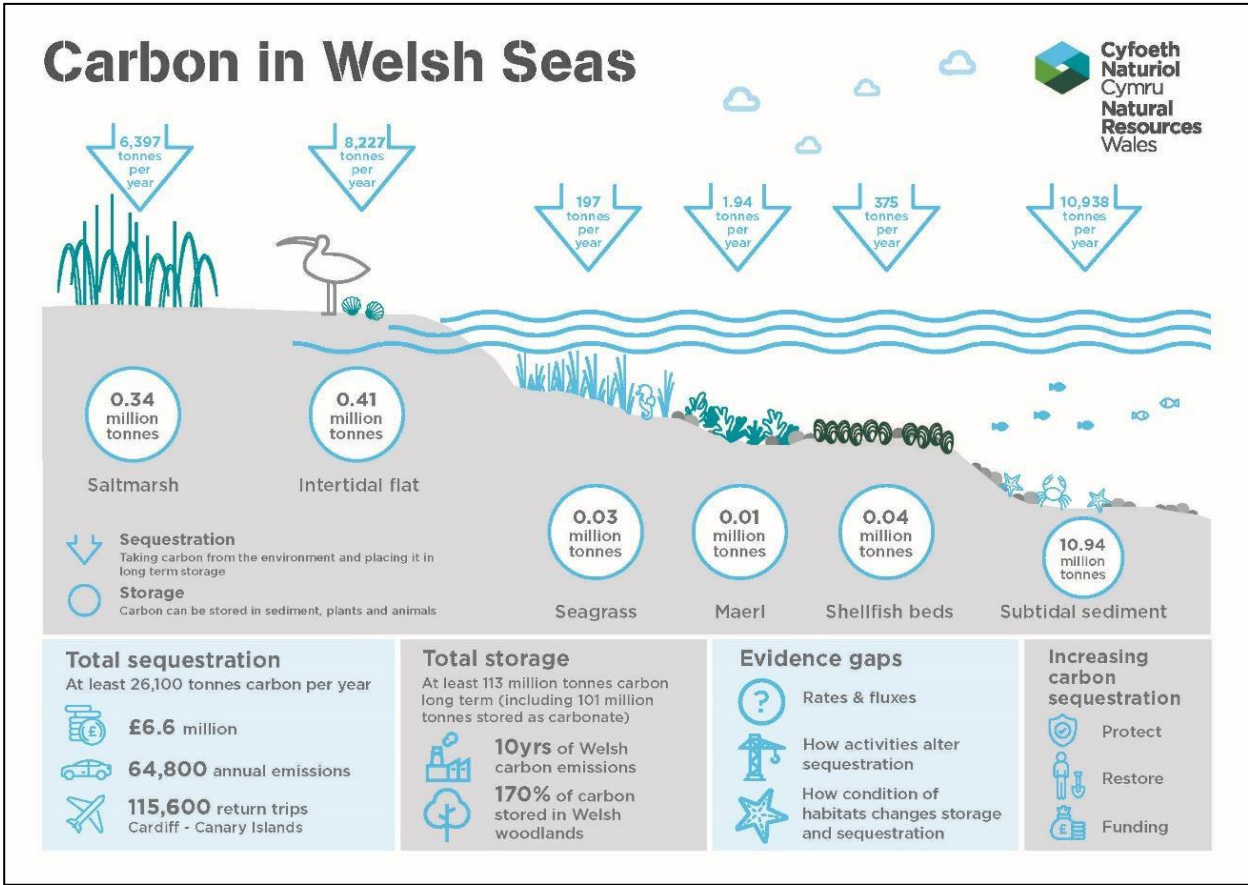
Barriers and opportunities: The coastal area is subject to a highly complex legislative and regulatory framework. Addressing the key challenge of climate change and rising sea levels will require addressing a number of barriers and requires significant dialogue and engagement with local communities to identify effective solutions to the issues they face. Shoreline Management Plans are non-statutory documents but should be a crucial tool in enabling the sustainable management of our coastline. Nature based solutions such as restoring coastal habitats (e.g. salt marsh) or using techniques such as beach nourishment, provide opportunities to deliver multiple benefits in terms of coastal protection, biodiversity gains and blue carbon.

Stakeholder engagement

Engaging with a range of marine and coastal stakeholders is a core element of both NRW's strategic and operational work. We participate actively in a range of partnerships including, for example, the Wales Marine Action and Advisory Group and Offshore Consenting Strategic Advisory Group. We published the Marine Area Statement in 2019, the culmination of a programme of engagement with a range of our partners to identify the key priorities and opportunities for the sustainable management of the marine area. We continue to work collaboratively to deliver the actions identified within the Area Statement.

Barriers and opportunities: A recognised barrier to stakeholder engagement and collaborative working is a lack of capacity amongst marine partners in Wales, coupled with a lack of awareness amongst coastal communities of the challenges and opportunities presented by marine and coastal environments. This has been recognised in the work of the Wales Marine Action Advisory Group around a Blue Recovery. There is an opportunity to influence funding streams in Wales in a way that can build capacity and awareness and therefore support more active engagement and delivery of marine and coastal projects and activities.

Annex 1: Summary of blue carbon in Welsh seas



Annex 2: Summary of the benefits of restored marine and coastal habitats

