

# The Second State of Natural Resources Report (SoNaRR2020)

## SoNaRR2020 Register marine assessment of SMNR

Natural Resources Wales

Final Report

Mae'r ddogfen hon hefyd ar gael yn Gymraeg

# About Natural Resources Wales

Natural Resources Wales's purpose is to pursue sustainable management of natural resources. This means looking after air, land, water, wildlife, plants and soil to improve Wales's well-being, and provide a better future for everyone.

## Evidence at Natural Resources Wales

Natural Resources Wales is an evidence-informed organisation. We seek to ensure that our strategy, decisions, operations and advice to Welsh Government and others are underpinned by sound and quality-assured evidence. We recognise that it is critically important to have a good understanding of our changing environment.

We will realise this vision by:

- Maintaining and developing the technical specialist skills of our staff;
- Securing our data and information;
- Having a well resourced proactive programme of evidence work;
- Continuing to review and add to our evidence to ensure it is fit for the challenges facing us; and
- Communicating our evidence in an open and transparent way.

Title: **SoNaRR2020 Register marine assessment of SMNR**

Peer Reviews: Internal and external peer review

Restrictions: None

# The Second State of Natural Resources Report (SoNaRR2020) contents

This document is one of a group of products that make up the second State of Natural Resources Report (SoNaRR2020). The full suite of products are:

**Executive Summary.** Foreword, Introduction, Summary and Conclusions. Published as a series of webpages in December 2020

**The Natural Resource Registers.** Drivers, Pressures, Impacts and Opportunities for Action for eight Broad Ecosystems. Published as a series of PDF documents and as an interactive infographic in December 2020

**Assessments against the four Aims of SMNR.** Published as a series of PDF documents in December 2020:

SoNaRR2020 Aim 1. Stocks of Natural Resources are Safeguarded and Enhanced

SoNaRR2020 Aim 2. Ecosystems are Resilient to Expected and Unforeseen Change

SoNaRR2020 Aim 3. Wales has Healthy Places for People, Protected from Environmental Risks

SoNaRR2020 Aim 4. Contributing to a Regenerative Economy, Achieving Sustainable Levels of Production and Consumption

**The SoNaRR2020 Assessment of Biodiversity.** Published in March 2021

**Assessments by Broad Ecosystem.** Published as a series of PDF documents in March 2021:

Assessment of the Achievement of SMNR: Coastal Margins

Assessment of the Achievement of SMNR: Enclosed Farmland

Assessment of the Achievement of SMNR: Freshwater

Assessment of the Achievement of SMNR: Marine

Assessment of the Achievement of SMNR: Mountains, Moorlands and Heaths

Assessment of the Achievement of SMNR: Woodlands

Assessment of the Achievement of SMNR: Urban

Assessment of the Achievement of SMNR: Semi-Natural Grassland

**Assessments by Cross-cutting theme.** Published as a series of PDF documents in March 2021:

Assessment of the Achievement of SMNR: Air Quality

Assessment of the Achievement of SMNR: Climate Change

Assessment of the Achievement of SMNR: Energy Efficiency

Assessment of the Achievement of SMNR: Invasive Non-native Species

Assessment of the Achievement of SMNR: Land use and Soils

Assessment of the Achievement of SMNR: Waste

Assessment of the Achievement of SMNR: Water Efficiency

**Updated SoNaRR evidence needs.** Published in March 2021

**Acronyms and Glossary of terms.** Published in December 2020 and updated in March 2021

### **Recommended citation for this section of the report:**

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# Marine Natural Resource Register Assessment of SMNR

SoNaRR2020

## Aim 1: Stocks of Natural Resources are safeguarded and enhanced

### Aim 1: Progress towards meeting the aim

- 1.1 Evidence on the state and condition of marine natural resources in Wales provides a mixed picture. Some features are in good condition, such as grey seals and some seabirds, while others are highly variable, including intertidal and subtidal habitats. In some cases, such as coastal and marine water quality, there are significant issues that have ramifications for other aspects of the marine ecosystem.
- 1.2 The existing operational offshore wind farms in Welsh waters have a generating capacity of 726MW (Carbon Trust, 2018). Various studies have highlighted the potential for further renewable energy development in Welsh waters due to the abundant wind, wave, tidal stream and tidal range resource (The Crown Estate, 2011, Welsh Government, 2011).  
Confidence Assessment: High
- 1.3 Data limitations make assessing the current condition and trends of commercially targeted marine fish and shellfish species at a Welsh inshore level (to 12 nautical miles) challenging. There are similar data deficiencies for shellfish species including commercially targeted shellfish stocks. However, a recent summary for the ICES Celtic Seas ecoregion (within which the Welsh inshore area sits) states that overall fishing mortality for shellfish, demersal, and pelagic fish stocks has reduced since the late 1990s, and mean mortality is now closer to the level that produces maximum sustainable yield (MSY), with 30 of 45 stocks now fished at or below MSY (ICES, 2019).  
A number of initiatives, either in place or planned, will contribute valuable information on the sustainability of marine fisheries activities and their locations in Welsh waters, including:
  - Assessment and management outputs of the Assessing Welsh Fishing Activities project;
  - WG/NRW Marine Evidence Strategy;
  - WG Fisheries and Aquaculture Evidence Plan 2019-21 (including freshwater fisheries);
  - Ongoing domestic fisheries management reform e.g. proposed Whelk Management Measures 2020;
  - Stock assessment methods have been developed for razor clam and whelk, and further stock assessments to be commissioned and developed for other commercial fish and shellfish stocks through the Fisheries and Aquaculture Evidence Plan;

- Welsh Fishermen’s Association, Marine Stewardship Council and Welsh Government project to undertake assessments of Welsh fisheries and develop Fisheries Improvement Plans.;
- Mandatory catch recording for all Welsh licensed fishing boats under 10 metres in length; and
- Inshore vessel monitoring system (iVMS) for licensed fishing boats under 12 metres in length

## **Aim 1: Obstacles remaining to meeting the aim**

- 1.4 For the most part, we don’t have a good enough understanding of stock status and the dynamics of fishing effort, its distribution and resulting catches to be able to determine the extent to which the extraction of fisheries resources within Welsh inshore waters is being carried out sustainably. There is consensus across industry, Welsh Government and NRW on the need to progress with initiatives already underway, and augment with further planned work to better understand both the status of fish and shellfish stocks and environmental impacts of fisheries activities. NRW’s Assessing Welsh Fishing Activities Project is supplying evidence-based assessments of the potential impacts of fishing gears on the features of European marine sites in Wales (NRW, 2020).
- 1.5 In general, we have an incomplete understanding of some pressures due to the challenges in monitoring the marine environment and subsequently establishing a causal link between pressures and observed impacts. We need to better understand the temporal and spatial distribution and impact of activities and related pressures.

## **Aim 2: Resilient Ecosystems**

### **Aim 2: Progress towards meeting the aim**

- 2.1 The assessment of marine resilience shows that the extent and connectivity of intertidal and subtidal habitats is stable or good on the whole.  
Confidence Assessment: HIGH
- 2.2 Blue Carbon Study highlighting potential for mitigating Climate Change.
- 2.3 Adoption of the Welsh National Marine Plan
- 2.4 New MPAs to protected mobile species – three sites to protect harbour porpoise; one new SPA and two extensions to existing SPAs

### **Aim 2: Obstacles remaining to meeting the aim**

- 2.5 There are issues with diversity and condition of some habitats, due in some cases to a decline in the typical species found within the feature, and in others due to pressures such as elevated nutrients, chemical contaminants, established populations and new records of INNS, coastal squeeze and developments.  
Confidence Assessment: Medium

## **Aim 3: Healthy Places for People**

### **Aim 3: Progress towards meeting the aim**

- 3.1 After a long period of improvement, in 2019 100% of bathing waters met the minimum standard and 83% were assessed as excellent. Some issues remain with the standard of shellfish waters protected areas, but improvements have been made. Confidence Assessment: High

### **Aim 3: Obstacles remaining to meeting the aim**

- 3.2 Of the 55 estuarine and coastal water bodies around Wales, 24 fail the standard for dissolved inorganic nitrogen, however these failures rarely lead to excessive growth of algae or impacts on the ecosystem. Since 1990, trends in phosphorus loads have gone down but there is no significant trend in discharges of nitrogen from catchments to the sea.  
Confidence Assessment: High
- 3.3 In 2019, an average of 475 litter items per 100m stretch of beach were recorded (Marine Conservation Society, 2019).  
Confidence Assessment: High

## **Aim 4: A Regenerative Economy**

### **Aim 4: Progress towards meeting the aim**

- 4.1 In 2018, £3.24m (662 tonnes) of fish and £8.57m (4,539 tonnes) of shellfish (excluding cockles) were landed in Welsh ports by vessels registered in Wales (Seafish, 2020). £0.76m (860 tonnes) of cockles were landed in the NRW managed fisheries in the Dee Estuary and Burry Inlet (Seafish, 2020). There are 440 registered fishing vessels in Wales in 2018, of which 410 are less than 10m in length and 30 are greater than 10m in length. There are an estimated 1,193 fishermen in the Welsh fleet (MMO, 2019).

In 2017, aquaculture operations produced £1.05m of finfish (234 tonnes) and £1.87m of shellfish (1,545 tonnes) (Seafish, 2020). In 2015, aquaculture supported approximately 23 full time equivalent staff across Wales and provided over £3.5 million GVA

A number of initiatives, either in place or planned, will contribute valuable information on the sustainability of marine fisheries activities and their locations in Welsh waters.

- 4.2 In 2018, coastal and seaside tourism was estimated to be worth £968 million and totalled 4.6 million trips (Great Britain Tourism Survey, 2018)

## **Aim 4: Obstacles remaining to meeting the aim**

- 4.3 Our incomplete understanding of fish and shellfish stock status and the dynamics of fishing effort, its distribution and resulting catches, as described in 1.1.3. However, the initiatives described will help towards more efficient use of these natural resources.