Ministerial foreword

Scotland has one of the world's richest, most productive and biologically diverse seas, and it is essential that we protect and enhance our marine environment for future generations. As well as being biologically important, our seas and coasts are home to many essential marine industry sectors that support and sustain communities around Scotland.

The publication of this assessment brings together a wide range of data on the marine environment and the activities that take place in our seas. This assessment provides a comprehensive look at our seas, from rare species of plants and animals to the value generated by marine industries as diverse as aquaculture and tourism.

Scotland's Marine Assessment 2020 provides an up-to-date review of the current state of Scotland's seas, updating Scotland's Marine Atlas published in 2011 and delivering on our statutory requirement to prepare an assessment under the Marine (Scotland) Act 2010. The assessment has identified priority areas that we need to address to protect our marine environment, not least how we continue to tackle the climate emergency. We will use the outputs to inform future marine policy, including the development of a Blue Economy Action Plan as well as the forthcoming review of Scotland's National Marine Plan in 2021. The evidence in this assessment will help us plan for future sustainable development and use of our marine area in a way that will protect and enhance the marine environment whilst promoting both established and emerging industries.

We are clearly in a time of significant change and uncertainty, but also of great opportunity. Scotland has long been looked to as a global leader in driving forward environmental protection and in our ambitious climate change and renewable energy targets.

I am determined that will continue and this assessment will provide a crucial building block in developing the evidence-based policies to support that endeavour.

I would finally like to take this opportunity to recognise and acknowledge the commitment and input from a wide range of people throughout the development of this assessment. The completion of this assessment is an excellent example of collaboration, with more than 250 individuals, four statutory organisations and many colleagues from the academic community, under the umbrella of the Marine Alliance for Science and Technology for Scotland, working together over a two year period, on a common goal to deliver this high quality assessment.



Roseanna Cunningham MSP Cabinet Secretary for Environment, Climate Change and Land Reform

Introduction

Scotland's Marine Assessment 2020 (SMA2020) is the third in a series of reports describing the state of the marine environment produced by the Scottish Government. 'Scotland's Seas: Towards Understanding their State', published in 2008, was followed, in 2011, by 'Scotland's Marine Atlas: Information for the National Marine Plan'.

SMA2020 is another step forward in understanding how marine systems work and the impact that human activities are having. However, in the last ten years the impact of climate change has become increasingly apparent. Furthermore, the concepts of natural capital and ecosystems services are now widely accepted as a way of better understanding the benefits to society from Scotland's seas. Both these topics have been included in greater detail than presented in Scotland's Marine Atlas (2011).

SMA2020 is a statutory requirement, a prerequisite of a review of Scotland's National Marine Plan. An assessment of the key human pressures by marine region is also required. It is the first, bespoke, attempt at such an assessment across all 21 Scottish Marine Regions and Offshore Marine Regions, which themselves have been created since the publication of Scotland's Marine Atlas (2011).

This document summarises the key findings for each topic as well as presenting headlines and next steps. For much of SMA2020 the cut-off date for data was the end of 2018. Where practicable, more recent data have been used. Data published in the last few months have not been incorporated into the assessments.

In 2021, the human pressures on Scotland's seas are significant. The situation is further complicated by climate change. However, Scotland has an extremely able and active

community of natural, economic and social scientists of which more than 250 have contributed to SMA2020.

Scotland is fortunate in being able to rely on the academic community, through the Marine Alliance for Science and Technology for Scotland (MASTS), for unstinting support in delivering this assessment. Scotland also has dedicated teams in Marine Scotland, NatureScot, the Scottish Environment Protection Agency and the Joint Nature Conservation Committee. The contributions from staff belonging to these organisations and MASTS institutes has been immense. I thank every single one of them.

Reports such as SMA2020 require consistent and sustained work over several years. The dedication of those members of Scotland's Seas Data Assessment Group has made my job as chair more straightforward. My deepest gratitude to all involved. I also thank the peer reviewers who have been extremely diligent in their work. Their comments have been most helpful in finalising SMA2020.

The ocean is essential to life on Earth. SMA2020 presents a snapshot of the state of the seas around Scotland. We will continue to work on the major challenges ahead. I hope that SMA2020 will enhance peoples' understanding of what is occurring in the seas around Scotland and encourage progressive processes that will guarantee a balance between utilisation and protection.

Colin Moffat

Chair, SSDAG March 2021