

Marine Governance in an Industrialised Ocean

A Marine Renewable Energy case study

Glen Wright

PhD Candidate, Australian National University, College of Law
Research Fellow, IDDRI, SciencesPo

glen.w.wright@gmail.com • www.glenwright.net



Introduction

The oceans are undergoing a period of unprecedented industrialisation. Our rapidly growing population and resource consumption have driven us to look further afield in search of food, energy, and resources. This search has now reached the edge of our land boundaries and continued into the sea. Yet the oceans are no longer considered inexhaustible, and conflicts between human uses are increasingly common as competition for space and resources intensifies. Traditional single-sector mechanisms for governing the marine environment are not apt to manage these challenges, and new marine governance paradigms are rapidly evolving to fill this gap.

How can legal and regulatory structures support development of innovative new marine-based industries while also protecting an increasingly fragile and crowded marine environment?

Method

This thesis uses the UK's nascent marine renewable energy (MRE) industry as a case study to explore emerging marine governance issues. This thesis thereby aims to contribute both to the advancement of modern marine governance mechanisms and to the advancement of sustainable new marine industries, particularly MRE.

The research comprises:

- Application of existing marine governance discourses to MRE
- Interviews with key industry participants
- Participation in Marine Scotland and MESMA workshops



Map showing leased areas in the Pentland Firth and Orkney Waters, Scotland. How such leases are allocated and managed is the subject of considerable debate.

Source: Orkney Marine Renewables²

Research Questions

1. Rights and ownership

- Private vs. common ownership
- Exclusivity of use

2. Resource Management

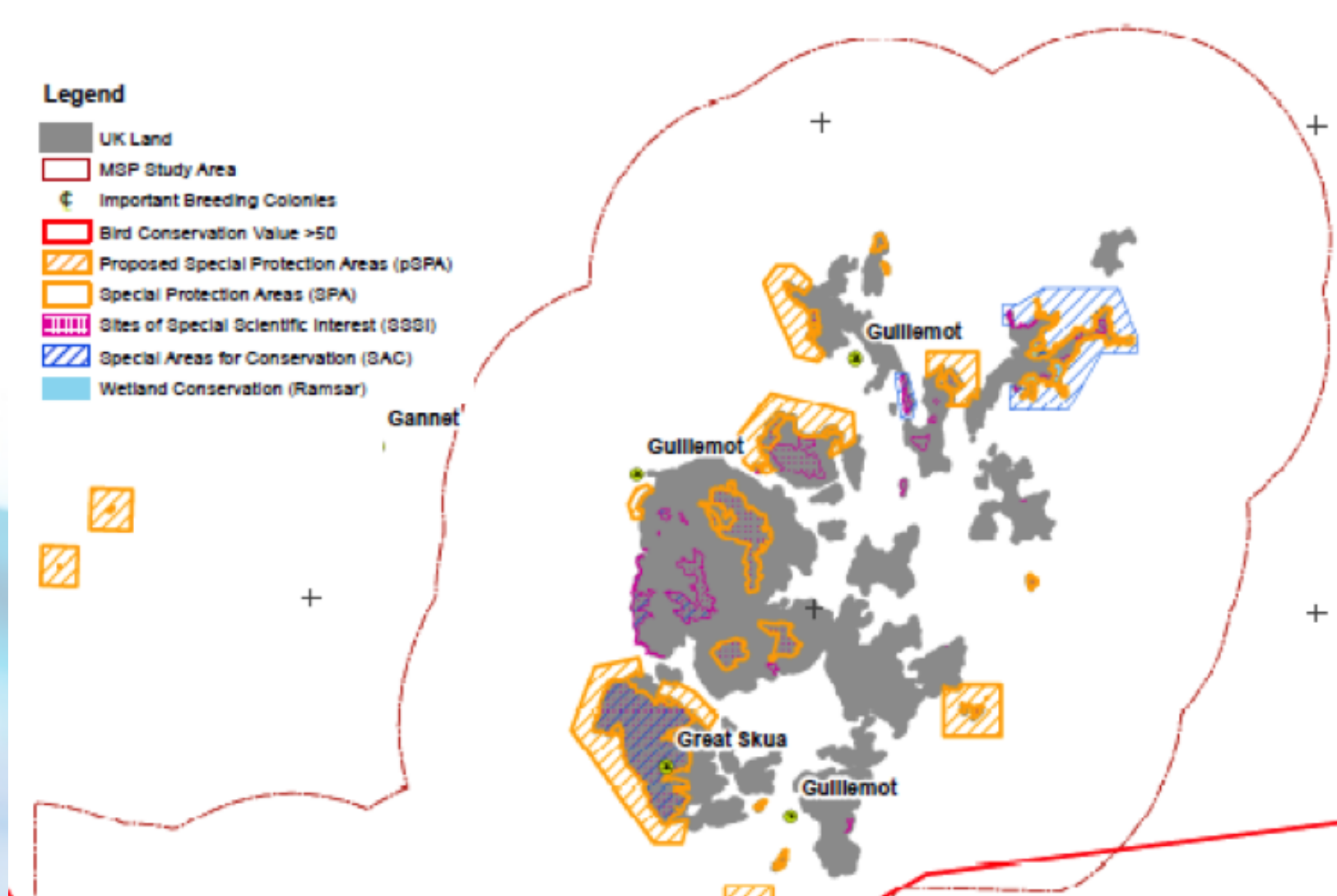
- Who has rights to access and use marine resources? Under what conditions?
- How and by whom are such rights determined and protected?

3. Environmental Impacts

- How do we balance demand for resources with long-term sustainability?
- How are environmental impact assessment (EIA) frameworks to be applied?

4. Ocean Space

- How can we manage competing uses?
- How do Marine Spatial Planning frameworks relate to emerging uses?



MRE and other new marine industries must integrate with existing uses and environmental laws. This map shows a range of existing environmental designations in a prospective area in Orkney, Scotland.

Source: Marine Scotland¹

¹ Adapted from Marine Scotland, *Pentland Firth and Orkney Waters Marine Spatial Plan Framework: Regional Locational Guidance*, Marine Energy (2010)

² Adapted from Orkney Marine Renewables website: <http://www.orkneymarinerenewables.com/runners-and-riders.asp>