

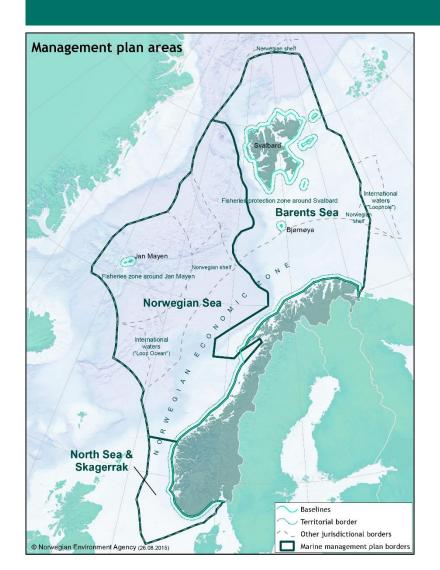
Integrated Marine Management Plans

Norway's methodology and experience

Eirik Drabløs Pettersen, Norwegian Environment Agency, October 6th, 2015



Context



Protecting the riches of the seas (2002)
Barents Sea – Lofoten (2006, updated 2011)

• 961 000 km²

Norwegian Sea (2009)

1 170 000 km²

North Sea – Skagerrak (2013)

• 142 100 km²

Coastal zone (landward side of baseline)

- 125 000+ km²
- Coastline app. 100 000 km



Marine-Coastal Integration

Marine areas → Seaward of baseline

- Management plans (i.e. white papers), large areas
- 2.272 million km²
- Endorsed by parliament
- Integrated, ecosystembased management
- Relatively few sectors
- Measures etc. implemented through sectoral laws
- Large, open sea areas
- MSFD not implemented

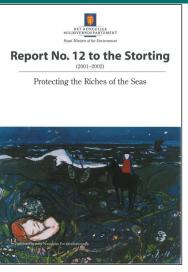
Coastal areas - Landward of baseline +1nm

- Local + regional management plans
- Local (i.e. municipal) plans enforced through the Planning and building act
- Regional plans are advisory
- 125.313 km² (inkl Svalbard og Jan Mayen)
- Ecosystem based
- Involves many sectors
- Lots of different types of activities
- Smaller, more closed off areas
- Water Framework Directive implemented

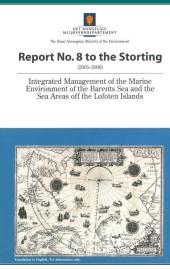


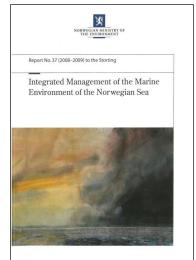
Methodology – marine management

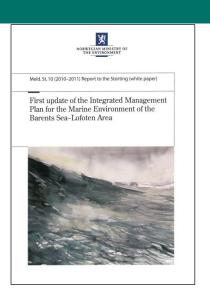
- Knowledge based
- Ecosystem based
- Cross-sectoral cooperation
- International cooperation





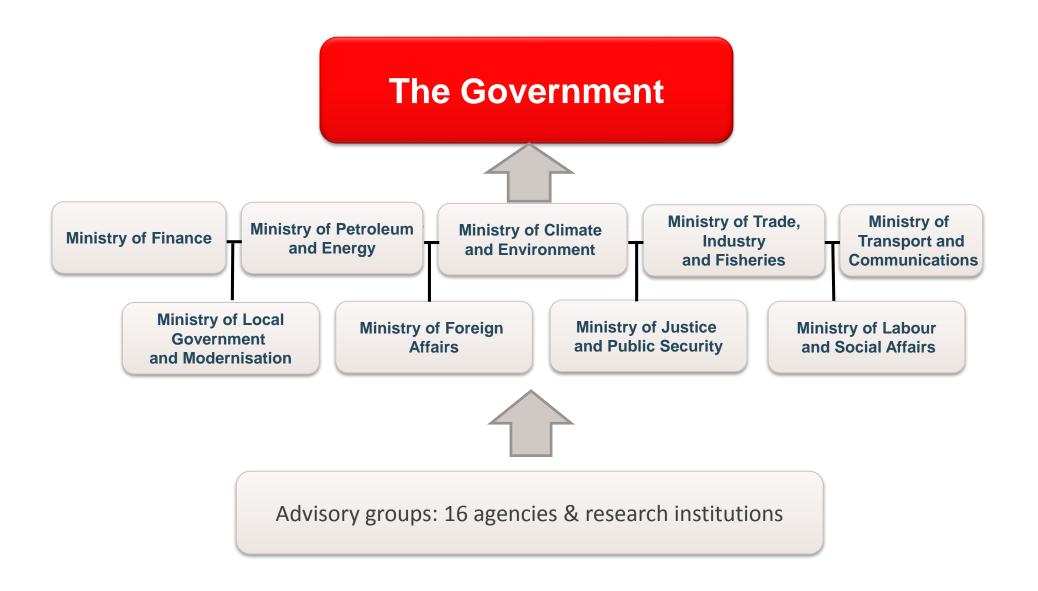








Norwegian marine management plans - Organization



Cross sectoral cooperation

PARTICIPANTS IN THE MANAGEMENT FORUM:

Norwegian Environment Agency (chair and secretariat)

Directorate of Fisheries

Institute of Marine Research

National Institute of Nutrition and Seafood Research

Norwegian Coastal Administration

Norwegian Mapping Authority

Norwegian Maritime Directorate

Norwegian Petroleum Directorate

Norwegian Polar Institute (secretariat)

Norwegian Radiation Protection Authority

Norwegian Water Resources and Energy Directorate

Petroleum Safety Authority Norway

Advisory Forum on Monitoring

PARTICIPANTS IN THE ADVISORY FORUM ON MONITORING:

Institute of Marine Research (chair)

Directorate of Fisheries

Norwegian Environment Agency

Norwegian Meteorological Institute National Institute of

Nutrition and Seafood Research

Geological Survey of Norway

Norwegian Institute for Air Research

Norwegian Institute for Nature Research

Norwegian Institute for Water Research

Norwegian Polar Institute

Norwegian Petroleum Directorate

Norwegian Radiation Protection Authority

Norwegian Maritime Directorate



Development of the scientific basis – North Sea and Skagerrak

Stakeholder involvement

Scientific basis (2008-2010):

Description of the environment and resources (including particularly valuable areas)

Status reports from industries

Report on social and economic conditions

Impact assessment for sectors

(2010-11):

Petroleum Activities

Renewable energy production

Fisheries and aquaculture

Shipping

Land-based and coastal activities

External pressures (long-range pollution, climate change, ocean acidification, alien species) Synthesis reports (2011-2012):

Cumulative environmental effects

Vulnerability of particularly valuable areas

Conflicting interests and the need for coordination

Proposed indicators for a monitoring programme

Analysis of Population, Economic activity and ecosystem services

Priority knowledge needs

White Paper (2013):

Integrated
Management of
the Marine
Environment in
the North Sea
and Skagerrak
(Management
Plan)



Time frame/work load North Sea mgmt plan

- 3-5 years/management plan
- 15 different agencies and institutions + 9 ministries
- 50+ scientific/technical reports → 6 synthesis reports → 1 white paper



Benefits

Challenges

- Moving from a sectoral to an integrated and holistic approach
- Coordination and cooperation between different sectors
- Addressing the cumulative impacts of various activities on the ecosystem
- Managing and balancing multiple and sometimes conflicting objectives and competing interests

- Improve coastal/marine integration
- Assessment of cumulative effects
- Cross-sectoral processes are demanding
- Qualitative approach



Resources in English

Norwegian Marine Management plans

Protecting the riches of the seas (2001-2002):

 $\frac{\text{http://www.regjeringen.no/en/dep/md/documents-and-publications/government-propositions-and-reports-/reports-to-the-storting-white-papers-2/20012002/Report-No-12-2001-2002-to-the-Storting.html?id=452041}{\text{2002-to-the-Storting.html?id}}$

Management plans available in English

http://miljodirektoratet.no/no/Havforum/Forside/English/

The scientific basis for the management plan for the North Sea - English summary reports:

http://www.miljodirektoratet.no/no/Tema/Vann_og_hav/Nordsjoen/Forvaltningsplan-for-Nordsjoen-Skagerrak/Rapporter-fra-faggruppa/Click the links named "engelsk"

State of the environment

Environment.no

State of the environment in Norway. Includes information on all three marine management areas including indicators in the Barents Sea etc.

http://www.environment.no/Topics/Marine-areas/

Also includes information on other environmental issues, interactive maps etc.

Environmental values in Norwegian marine areas

http://www.havmiljo.no

Example of follow-up programme:

http://www.mareano.no

