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The Greening of Norwegian Fisheries Legislation

Introduction of Environmental Principles to Fisheries Management

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Abstract

The objective of both international and national fisheries management legislation has traditionally been to optimize utilization of individual fish stocks. Recently the environmental effects of fishing, including overfishing, by-catches, and destruction of habitat, have come into focus. International instruments (binding and non-binding) have been adopted to accommodate these concerns through introducing environmental principles (e.g. the precautionary approach and ecosystem approach) to supplement international fisheries law and international environmental law. In 2009 new legislation came into force in Norway to introduce these obligations. The legislation is investigated to assess how environmental considerations are implemented and weighted against other considerations, such as settlement and employment, traditionally important interests in fisheries management. The new legislation means fisheries management must apply objectives and principles across sectors to include utilization of all natural resources. The conclusion is that although the fisheries management agencies still enjoy wide discretion, the implementation of these principles and their integration with other sectors will require a more holistic approach to fisheries management in the future.

Key words: Implementation of international fisheries and international environmental law, Norwegian fisheries law, Norwegian environmental and natural resources law, Norwegian administrative law.

1. Introduction

Focus both internationally and nationally is directed to the effects of fisheries, one of many human activities with major effects on the marine environment.[1] Destruction of habitat, such as coral reefs by bottom trawling, is one example. Overfishing is another threat to the marine environment, affecting the resilience of fish stocks as well as the interaction between species.[2] The FAO has estimated that at a global level about 75 % of fish stocks are either fully-exploited or over-exploited.[3] The combined effects of overfishing, destruction of habitat, and other human activities resulting in pollution and climate change may have serious adverse consequences for the marine environment and biodiversity.

The development of international fisheries law and international environmental law seeks to address these concerns. It includes the UN Fish Stocks Agreement (hereafter referred to as the FSA)[4] and the UN Food and Agriculture Organization (FAO) Code of Conduct for Responsible Fisheries.[5] Both instruments introduce environmental principles, such as the precautionary approach and the duty to protect marine biodiversity, into international fisheries law. The most important addition to international environmental law is the Convention on Biological Diversity (hereafter referred to as the CBD).[6] The obligations under the CBD to conserve biological diversity and to ensure sustainable use of its components in-

1. Report (St.meld.) No. 8 to the Storting (2005–2006) Integrated Management of the Marine Environment of the Barents Sea and the Sea Areas off the Lofoten Islands), pp. 57ff; Lars Føyn, Cecilie H. von Quillfeldt og Erik Olsen (red.), Miljø- og ressursbeskrivelse av området Lofoten – Barentshavet, *Fisken og havet*, No 6/2002, http://www.imr.no/Dokumenter/Rapport_miljobeskrivelse.pdf (accessed 30 October 2009); OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic Quality Status Report 2000 Region I Arctic Waters, Chapter 6 Overall Assessment; Millennium Ecosystem Assessment, 2005; Ecosystems and Human Well-being: Biodiversity Synthesis. World Resources Institute, Washington DC.
2. Pauley, D. et al., "Towards sustainability in world fisheries," 418 *Nature,* 8 August 2002, pp.691–692.
3. The State of World Fisheries and Aquaculture 2008, FAO, Rome, 2009, p. 30.
4. Full title: Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks And Highly Migratory Fish Stocks, New York, 4 August 1995, in force 11 December 2001, United Nations, *Treaty Series,* vol. 2167, p. 3.
5. The Code of Conduct for Responsible Fisheries was adopted by the FAO in 1995. The text is available at http://www.fao.org/DOCREP/005/v9878e/v9878e00.htm (accessed 30 October 2009).
6. The Convention on Biological Diversity, Rio de Janeiro 5 June 1992, in force 29 December 1993, United Nations, *Treaty Series*, vol. 1760, p. 79.

volves all types of human activities and necessarily requires states to apply more integrated and holistic approaches in their environmental policies. The ecosystem approach is developed *inter alia* on the basis of these obligations.[7] The legal status and content of the precautionary principle or approach has been subjected to extensive international academic debate.[8] There is also growing debate on the status of the ecosystem approach.[9]

In 2009 major legislation in this area came into force in Norway. It included the Marine Resources Act (also MRA)[10] and Nature Management Act (hereafter referred to as the NMA).[11] The MRA sectoral legislation provides the legal basis for regulating the harvesting of fish stocks and other living marine resources, while the latter NMA is cross-sectoral, applicable to both the terrestrial and the

7. See more in Section 2.3 about the ecosystem approach.
8. See e.g. James Cameron and Julie Aboucher, "The Status of the Precautionary Approach in International Law," in D. Freestone and E. Hey (eds) *The Precautionary Principle and International Law. The Challenge of Implementation*, Kluwer Law International, the Hague, 1996, pp. 29–52; Owen McIntyre and Thomas Mosedale, "The Precautionary Principle as a Norm of Customary International Law," *Journal of Environmental Law*, vol. 9(2), 1997, pp.221–241; Arie Trouwborst, *Precautionary Rights and Duties of States*, Martinus Nijhoff, Leiden, 2006; Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law & the Environment*, 3rd Edition, Oxford University Press, Oxford, 2009, pp. 152–164; Nicolas de Sadeleer, *Environmental Principles. From Political Slogans to Legal Rules,* Oxford University Press, Oxford, 2002, pp. 91–223 and Tore Henriksen, "The Precautionary Approach and Fisheries: A Nordic Perspective," in N.de Sadeleer, *Implementing the Precautionary Principle. Approaches from the Nordic Countries, EU and USA,* Earthscan, London, 2007, pp. 153–180.
9. Hanling Wang, "Ecosystem Management and Its Application to Large Marine Ecosystems: Science, Law, and Politics," *Ocean Development & International Law,* vol. 35, 2004, pp. 41–74; Erik J. Molenaar, "Ecosystem-Based Fisheries Management, Commercial Fisheries, Marine Mammals and the 2001 Reykjavik Declaration in the Context of International Law," *the International Journal of Marine and Coastal Law,* vol. 17, 2002, pp.561–595; Yoshifumi Tanaka, *A Dual Approach to Ocean Governance. The Cases of Zonal and Integrated Management in International Law of the Sea*, Ashgate, Farnham, 2008, pp.75–82.
10. The full Norwegian title: Lov om forvaltning av viltlevande marine ressursar (havressurslova) av 6. juni 2008. It came into force 1 January 2009. There is no English translation available at present. All translations are by the author and are not official.
11. The full Norwegian title: Lov om forvaltning av naturens mangfold (naturmangfoldloven) av 19. juni nr 100. It came into force 1 July 2009. There is no English translation available at present. All translations are by the author and are not official.

marine environment. These instruments are adopted in part to implement the international obligations of Norway.[12]

The purpose of this paper is to assess this new legislation. Two questions will be discussed: First, to what extent are environmental considerations relevant and weighed in the conservation and management of living marine resources? Second, how will cross-sectoral legislation affect the conservation and management of living marine resources? These assessments will be made on a general level, and the questions will be addressed individually before an overall assessment is made.

2. The Marine Resources Act

2.1 Broadening the scope and status of stewardship

The scope of management of living marine resources is broadened in the MRA in two respects: (1) The geographical scope of the legislation has been extended to include the continental shelf (Section 4 of the MRA).[13] Previously living marine resources on the seabed of the continental shelf were regulated through separate legislation. (2) The MRA includes practically all living marine resources and their genetic resources. It provides for the management of new types of harvesting, in particular bio-prospecting (Sections 9–10 of the MRA).

Living marine resources are defined as belonging to the "community of Norway" (Section 2). One of the purposes of this provision is to recognize the responsibility of the State to manage and conserve these resources.[14] This responsibility is consistent with the obligations of the State under Section 110 b of the Constitution, requiring the State to ensure that "… natural resources should be managed on the basis of comprehensive long-term considerations whereby this right will be safeguarded for future generations … "This responsibility could be described as a kind of stewardship.[15] Specifying the status of living marine resources as a common

12. White Paper (Ot.prp.) no. 20 (2007–2008) Om lov om forvaltning av viltlevande marine ressursar (havressurslova), p. 181 (left column); White Paper (Ot.prp.) no. 52 (2008–09) Om lov om forvaltning av naturens mangfold (naturmangfoldloven), p. 371 (left column).
13. The Act is also applicable to Norwegian flagged fishing vessels operating in areas beyond national jurisdiction, and for stateless vessels operating in Norwegian waters as well as on the high seas (Section 5 of the MRA).
14. White paper no. 20, p. 177.
15. Ole Kristian Fauchald, "Forfatning og miljøvern – en analyse av Grunnloven § 110 B," *Tidsskrift for Rettsvitenskap*, nos 01–02, 2007, pp. 7–8.

property resource implies that the focus will be more on the balancing of different legitimate interests than on the protection of individual stakeholders against State intervention in their freedom of action.[16]

2.2 Conservation and management measures

The MRA provides for different types of measures to regulate harvesting activities. Some involve direct obligations of fishers to land catches, and a duty of care in the exercise of harvesting (Sections 15 and 16 of the MRA). The duty of care would require a vessel to stop trawling in an area where components of coral reef come into the net. The Ministry of Fisheries[17] is accorded authority to adopt measures of different types to regulate the harvest. These include traditional measures such as those that control fishing mortality (e.g. quotas),[18] control the catches, and which regulate the use of fishing gear and techniques.[19] Its competence to adopt regulatory measures is not exhaustively stipulated (Section 16 of the MRA). New types of measures may be developed if the traditional ones are inadequate.

These measures were available under the previous legislation.[20] A new type of measure is a Marine Protected Area (hereafter referred to as an MPA), with reference to Section 19 of the MRA. This is a geographically-defined area where the harvesting of living marine resources is prohibited or particularly regulated, providing more long-term protection than the traditional measures.

2.3 The framework for exercising authority under the MRA

The Ministry of Fisheries is provided with adequate means to conserve harvested resources as well as minimizing the effects of the harvest on other species, the ecosystem, and habitats. However, the provisions providing the legal basis for the measures do not include any conditions as to when and how they may be adopted, nor do they include any explicit obligation to apply the measures. Consequently, the

16. Inge Lorange Backer, *Innføring i naturressurs- og miljørett*, 4. utgave, Oslo: Gyldendal Akademisk, 2005 pp. 126–127.
17. The full name is the Ministry of Fisheries and Coastal Affairs.
18. Sections 11–14 of the MRA.
19. Section 16 of the MRA.
20. Lov om saltvannsfiske av 3. juni 1982 nr 40 § 4 (Act of 3 June 1983 No. 40 relating to Seawater Fisheries etc., Section 4), an unauthorized translation is available in English at http://www.ub.uio.no/ujur/ulovdata/lov-19830603–040-eng.doc (accessed 30 October 2009).

Ministry has an extensive margin of appreciation or discretion under the MRA. Not surprisingly, it has been described as an enabling act.[21]

This does not mean that the Ministry of Fisheries or its subordinate agencies are free to decide as to when and which measures to establish. Their competence is to be exercised within certain legal frameworks, which include the objective (Section 1 of the MRA), the principle of management, basic considerations (Section 7 of the MRA), and relevant international legal obligations (Section 6 of the MRA). The reference to international law in Section 6 means that treaties such as the Fish Stocks Agreement and the CBD and other relevant international legal obligations are incorporated into the MRA.[22] Consequently the management measures to be adopted under the MRA must be consistent with international law, restricting the margin of appreciation. Their impact will depend on how concrete the directions they provide in a particular case.[23] The following assesses the objective, principle of management, and the basic considerations.

Objective

The objective is tripartite: to ensure sustainable and socio-economically profitable management of the resources and to assist in promoting the viability of coastal communities (employment and settlement), with reference to Section 1.

Consequently there is no clear reference to the environmental aspects. In the preparatory works, "sustainable management" has been specified as including sustainable use and long-term conservation of the harvested resources, as well as conservation of other parts of the ecosystem.[24] It may be described as reflecting

21. White Paper no. 20, p. 163.
22. Geir Ulfstein, "Internasjonal miljørettsstilling i norsk rett" in G. Ulfstein (red) *Forholdet mellom internasjonal og nasjonal miljørett. Utvalgte artikler,* Institutt for offentlig retts skriftserie nr 5, Oslo, 2000, p.6, Jan E. Helgesen, *T. Eckhoff Rettskildelære 5. utgave*, Oslo, 2001, p. 300.
23. In the Bøhler case, the Norwegian Supreme Court stated (Rt. 2000 p. 996, at p. 1007) that the relationship between incorporate international law and national law could not be solved by applying a general principle, but must be based on interpretation of the relevant provisions, using the relevant sources and methods.
24. White paper no. 20, p. 177.

the objective of sustainable development.[25] The concept is used in Norwegian legislation to include all human activities that may affect the ecosystems.[26]

As the objective indicates the scope of legitimate considerations to be taken in the management of living marine resources, the Ministry seems to be provided with ample room for maneuvering. The MRA consequently does not only apply to the exploitable "resources" as its title and provisions indicate. The three sub-objectives do not necessarily coincide. They may be conflicting when interests ensuring employment and settlement call for adopting measures that may have negative effects on target stocks or their environment. The wording of the objective does not accord priority to any of the sub-objectives. In fact, the preparatory works stress that the weighting and prioritizing of sub-objectives is a political decision.[27] But it also signals that the weighting of the sub-objectives must ensure that harvesting over time does not undermine the reproductive capacities of the resources.[28] The environmental interests seem to have priority, but under not very clearly-defined circumstances. These circumstances may be identified through the management principle and basic considerations of the MRA.

The principle of management and basic considerations

The principle and the considerations are designed to supplement the objective of the MRA.[29] They may shed light on the content and weighing between the different sub-objectives. The basic considerations include:[30]

- a precautionary approach.
- an ecosystem (based) approach taking into account habitats and biological diversity.
- an effective control with harvesting and other utilization of the resources.
- an appropriate allocation of the resources, *inter alia* contributing to employment and settlement in coastal communities.
- an optimal use of the resources accommodated to marine value-creation.

25. Hans Christian Bugge, *Lærebok i miljøforvaltningsrett*, 2. utg,, Universitetsforlaget, Oslo, 2009, pp. 67–69.
26. Markus Jerkø, "Det norske formålet 'bærekraftig utvikling' ",*Tidsskrift for Rettsvitenskap*, vol. 122 (3), 2009, p. 371.
27. White paper No. 20, pp. 30–31.
28. Ibid, pp. 30–31.
29. Ibid, p. 21, p. 31 and p. 181.
30. Ibid, p. 182 (left column).

- harvesting techniques and use of gear that take into account the need to reduce possible negative effects on living marine resources.
- management measures that ensure the material foundation of Sami culture.

These considerations provide guidance for assessments to be undertaken in the management principle. Next we discuss the principle, then two of the basic considerations (precautionary approach and ecosystem approach).

The principle of management

The principle of management maintains the presumption that harvesting living marine resources is permitted until explicitly restricted. There were discussions during the legislative process to reverse this approach by introducing a general ban (the principle of conservation) on harvesting until explicitly permitted through legislation or decisions.[31] The rationale was to obtain control with the harvest of all living marine resources not only those presently exploited. A general ban would also be in line with the precautionary approach. An alternative – the principle of management – was developed to accommodate these concerns. The rationale for maintaining the traditional approach is that the present management system is adequate. It is based on scientific information, monitoring, and assessment of the marine environment.[32]

The principle implies an obligation for the Ministry to actively manage living marine resources by undertaking assessments of what measures are necessary to ensure sustainable management.[33] This assessment is to be based on available scientific information. The principle involves an obligation to both undertake regular assessments and adopt management measures. However, the preparatory works emphasize that it does not involve any obligation as to how, when, and how often such assessments are to be made.[34] This is left to the discretion of the Ministry.

Basic considerations

When making decisions the Ministry is obligated to take into account each of the considerations. These considerations may actually conflict, for example the

31. Norwegian Official Report (NOU) 2005: 10 Lov om forvaltning av viltlevende marine ressurser (Havressursloven), pp. 109–112 and White paper no. 20, pp. 43–49.
32. White Paper no. 20, p. 51.
33. Ibid, p. 181.
34. Ibid.

optimal use approach and the ecosystem approach may point in different directions. The Ministry of Fisheries is not required to give any of these considerations decisive weight when drawing its conclusions.[35] The balancing of the considerations is within the discretion of the authorities, as long as it is compatible with the objective of the MRA. Obviously, if environmental impacts are not considered or weighted at all in a particular case, the validity of the decision may be questioned. Questions may also be raised about whether environmental considerations under certain circumstances should be given decisive weight and whether they require the Ministry to adopt measures.

A precautionary approach is to be applied consistent "… with international agreements and guidelines." The reference means that the precautionary approach under international instruments is made applicable to the Marine Resources Act. It is interesting to note that the reference is to both legally-binding and non-legally-binding instruments. The legal obligations under the 1995 Fish Stocks Agreement, and the recommendations and guidelines under the FAO Code of Conduct, may both be applied. Consequently, the consideration has a dynamic character.

The Fish Stocks Agreement defines the precautionary approach as meaning "… States shall be more cautious when information is uncertain, unreliable, or inadequate. The absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures."[36] As its objective is to preserve the environment, it may relevant in the understanding of the ecosystem approach consideration.[37] In addition to the definition of the precautionary approach, the Fish Stocks Agreement and the Code of Conduct both include various measures in their implementation, and it is natural to include these in this consideration.

The following will provide some examples of such measures: The obligation not to use the lack of adequate scientific advice as a reason for not taking measures is reflected in an obligation to adopt at the earliest stage possible measures to regulate access to and efforts in a new fishery.[38] The obligation to exercise caution when available information is inadequate is reflected in the obligation to establish and

35. Ibid, p. 182.
36. FSA Article 6 (2).
37. FSA Article 6 (1).
38. FSA Article 6 (6).

use reference points.[39] These will function as safety margins to prevent overfishing, and limit the level of total allowable catches to be set in the management of fish stocks.

The question is how these concrete obligations may be reconciled with the fact that the precautionary approach is only one of several considerations. As mentioned, it is left to the discretion of the Ministry to decide when to adopt measures and also which measures to adopt. On the other hand, the reference to quite unambiguous international obligations provides a strong argument for according the precautionary approach special or particular weight in these circumstances. This interpretation finds support in the legislative background where it is pointed out that the balancing of the different considerations and values through the management principle is to be based on long-term perspectives and the precautionary approach.[40] It is further specified that where there is inadequate scientific information the principle of management requires harvesting of a living marine resource to be regulated.[41] These statements could also be read as an obligation of the authorities to use their competence or discretion under such circumstances to adopt the necessary measures.

An *ecosystem approach* is specified as taking into account habitats and biodiversity. However, neither concept is defined.[42] Although an important argument for including the ecosystem approach is that it reflects international obligations, it does not have any reference to international instruments.[43] The reason is probably that there is no simple or uniform understanding or definition of the concept in international law.[44] The concept has been elaborated by treaty bodies and international organizations.[45] An ecosystem approach to fisheries management

39. FSA Article 6 (3) (b) – (c) and Article 6 (4).
40. White Paper no. 20, p. 52.
41. Ibid.
42. The definitions of these concepts in Sections 3 (c) and 3 (r) of NMA may supplement, as will be discussed later.
43. White Paper no. 20, p. 36.
44. Knut F. Kroepelien, "The Norwegian Barents Sea Management Plan and the EC Marine Strategy Directive: Some Political and Legal Challenges with an Ecosystem-Based Approach to the Protection of the European Marine Environment," *Review of European Community & International Environmental Law,* vol. 16 (1), 2007, at pp. 26–27.
45. Louise Angélique de La Fayette, "A New Regime for the Conservation and Sustainable Use of Marine Biodiversity and Genetic Resources Beyond the Limits of National Jurisdiction," *The International Journal of Marine and Coastal Law*, vol. 24, 2009, pp. 241–243.

is explained in the preparatory works as a requirement to take into consideration the ecosystem effects; the effects of fisheries on ecosystems and vice versa.[46] The resources are to be exploited in a manner that does not lead to loss of biodiversity or destruction of habitats.

It is natural to interpret the consideration in light of the international obligations it is intended to implement. The 1995 Fish Agreement and the CBD are considered to provide its legal basis.[47] The aforementioned includes an obligation to assess the impacts of fishing, other human activities, and environmental factors on target fish stocks and other species of the same ecosystem.[48] If necessary, measures shall be taken to maintain or restore populations of species belonging to the same ecosystem as the target fish stocks.[49]

3. The Nature Management Act: Fisheries management as part of the conservation of natural diversity

3.1 Cross-sectoral application

The introduction of an ecosystem approach to fisheries management is an acknowledgement that harvesting activities have undesirable effects on marine ecosystems. Furthermore, in the management of living marine resources, these effects have to be considered together with effects of other human activities and environmental conditions. The question is whether this is sufficient, and whether there is a need for cross-sectoral legislation to ensure adequate coordination.

In the reasoning of the 2009 Nature Management Act, the need for such a holistic and long-term and legislative-based approach is highlighted.[50] The NMA is aimed at implementing the Convention on Biological Diversity.[51]

46. White paper no. 20, p. 33.
47. De La Fayette, 2009, p. 235; On the link between ecosystem and precautionary approach see Arie Trouwborst, "The Precautionary Principle and the Ecosystem Approach in International Law: Differences, Similarities and Linkages," *Review of European Community and International Environmental Law,* vol. 18 (1), 2009, pp. 26–37.
48. FSA Article 5 (d).
49. FSA Article 5 (e).
50. White paper no. 52, p. 14.
51. Ibid, p. 13 and p. 62.

In broad terms, the NMA has two functions:[52]

First, it provides the legal basis for measures that are applicable and binding across the different sectors. These include strict measures for the protection of species and areas measures to ensure sustainable use of natural resources as well as measures to regulate the introduction of alien species and access to genetic material.

Second, the general provisions of the NMA are to supplement in the interpretation and exercising of authority under sectoral legislation. The management of natural resources is still to be sector-based. This legislation includes the Petroleum Act,[53] Aquaculture Act,[54] Planning Act,[55] and the MRA.[56]

The Nature Management Act is more elaborate than the MRA. In contrast to the MRA, the NMA is not an enabling act. It includes definitions, general provisions on sustainable use (including management objectives and principles), and concrete measures on use and protections as well as procedural requirements.

The NMA is to be implemented through sectoral legislation and subsequently be subjected to several interpreters with different approaches. This raises questions about how to ensure interpretation and application of the NMA consistently across the sectors, and how sectoral regulation of use of the natural resources is coordinated. The objective of this paper is not to answer these questions, but rather to highlight the challenges posed by the combination of sectoral and cross-sectoral legislation within the same subject areas.

3.2 Applicability to the marine environment

The applicability of the NMA is limited to the territorial waters of Norway (Section 2). This comprises the internal waters and territorial sea up to 12 nautical miles around mainland Norway.

However, some provisions of the NMA are also made applicable *mutatis mutandis* to the maritime zones beyond the 12-nautical-mile territorial sea (the 200 mile EEZ and the Continental Shelf). These provisions include the objective, definitions, management objectives, and several principles addressed under Section 3.4 below.

52. Ibid, p. 14.
53. Lov om petroleumsvirksomhet 29. november 1996 nr. 72.
54. Lov om akvakultur 17. juni 2005 nr. 79.
55. Lov om planlegging og byggesaksbehandling 27. juni 2008 nr. 71.
56. White Paper no. 52, pp. 16, 52 and 56 and 64.

The more stringent (integrated) protective measures, such as marine protected areas and priority species, are not applicable to the EEZ or the Continental Shelf. Beyond 12 nautical miles only the sectoral legislation is directly applicable.

In the preparatory work, the argument for not making the NMA fully applicable to the EEZ and the Continental Shelf was that the protective measures could infringe on the rights of other states, such as the freedom of navigation in these zones under the Law of the Sea.[57] It should be noted that Norway undoubtedly may regulate both the petroleum activities and the harvesting of living marine resources through the use of these protective measures. Such resources are subject to the sovereign rights of the coastal state.[58] There were probably other motives as well for not giving the NMA full application in these maritime zones.

3.3 Cross-sectoral protective measures

The cross-sectoral measures adopted under the NMA are only applicable to the territorial sea and the internal waters. Within these zones, marine protected areas may be established where a whole spectrum of human activities may be regulated (e.g. harvesting of living marine resources, navigation, and the establishment of windmills, oil platforms, and other installations, as well as exploration and exploitation of petroleum resources), with reference to Section 39 of the NMA.[59] These are integrated marine protected areas. Furthermore, a fish stock may be designated a "priority species" if it is considered not to be at a viable level (Section 23 of the NMA). Measures to protect the stock may include a ban on the harvesting of the species as well as other human activities in its functional area (Section 24 of the NMA). Measures taken to protect non-targeted species may imply restrictions on the harvest of living marine resources in the same area.

It may be recalled that the Ministry of Fisheries may adopt measures under the MRA to protect living marine resources and areas (Sections 16 and 19 of the MRA). Adopting protective measures under the NMA is relevant where these MRA measures are regarded as inadequate. In contrast to the MRA, specific objectives or requirements for establishing the separate protective measures (Sections 23 and 33

57. Ibid, pp. 68–69.
58. United Nations Convention on the Law of the Sea, 10 December 1982, in force 16 November 1994, United Nations, *Treaty Series*, vol. 1833, p. 3, Article 56(1) (a) and Article 77.
59. Section 39 includes a reference to international law implying that measures that infringe on rights of other states in the territorial sea or internal waters may not be adopted.

of the NMA) and the natural values these measures shall maintain are indicated in the NMA (Section 39 of the NMA). The NMA provides for the protection of a wider set of valuable natural resources.

The protective measures adopted under the NMA will obviously have implications for the management of living marine resources under the MRA. Therefore, the competence to establish the measures is assigned to the King in Council, or the full Cabinet. The purpose is to ensure that all interests are considered when a decision is taken. Sectoral authorities are also to be involved early in the preparation of protective measures (Sections 42–43 of the NMA). The outcome may be that some harvesting could still be permitted within the new MPA and regulated through the MRA (Section 39 of the NMA).

3.4 Supplementing the Marine Resources Act

The NMA will supplement the interpretation and application of the Marine Resources Act in all Norwegian maritime zones. The relevant provisions of the NMA include its objective (Section 1 of the NMA), legal definitions (Section 3 of the NMA) and provisions stipulating general regulations on sustainable use (Chapter II of the NMA). The latter provisions are intended to specify what constitutes sustainable use of natural resources within the overall objective of conservation of the diversity of nature.[60] This includes management objectives (Sections 4 and 5 of the NMA), some of the principles of the NMA (Sections 8 –10 of the NMA), and important societal interests (Section 14 of the NMA). The latter clearly signifies that environmental considerations are not the only considerations of relevance. None of these provisions involves any direct obligations for the Ministry of Fisheries in the exercising of authority under the Marine Resource Act.[61] They are intended to supplement both in the interpretation of its provisions and in the exercising of the authority under the Act (in both the adoption of general regulations and individual decisions).[62] More specifically, they supplement the objective, the management principle, and basic considerations of the MRA and, consequently, clarify the content and scope of the different considerations and how they are to be balanced in the exercising of discretion.

60. White Paper no. 52, p. 75.
61. Ibid. pp. 373 and 375.
62. Ibid, p. 57, p. 81 and p. 102.

The Ministry of Fisheries and other sectoral agencies are charged with interpreting the provisions of the NMA and applying them within the different pieces of sectoral legislation, such as the MRA. Obviously this increases the risk of incoherent interpretation and application of the NMA provisions and, consequently, its effectiveness. One measure to prevent inconsistent practice is the requirement that sectoral authorities are to indicate when taking decisions affecting natural diversity how the applicable principles of the NMA are applied and what weight they are accorded (Section 7 of the NMA, second sentence). Consequently they are obligated to reason their decisions (both the general regulations and the individual decisions). When the Ministry of Fisheries adopts general regulations on quotas, fishing gear, or other technical measures, it is required to indicate how the scientific information, precautionary principle, and the ecosystem approach/combined effects have been applied and weighted when making these decisions. This provides a strong incentive for applying these provisions and providing opportunities for controlling whether they are applied consistently with the NMA and accorded adequate weight. A decision may be invalid if the principles either have not been applied or incorrectly interpreted. However, this requirement of reasoning by the individual public agency does not ensure that the regulatory measures taken by the different sectoral authorities are adequately coordinated, such as between the Ministry of Energy and the Ministry of Fisheries. This question will be touched upon towards the end of this paper.

An analysis of these provisions follows to assess their impact on the interpretation and application of the MRA.

Objective

The objective of the NMA is to preserve the diversity of nature and its ecological processes. The diversity of nature includes biodiversity, diversity of landscape, and geology. As such, its scope is wider than the objectives of conservation and sustainable use of biodiversity under the CBD. The objective is to be achieved through sustainable use and protection, both in short- and long-term perspectives. It reflects the objective of sustainable development, balancing the interests of economic growth with protection of the environment.[63] The objective is also to promote the various values of nature to humans, including cultural values and well-being. The

63. Hans Christian Bugge, 2009, p. 164.

NMA is to promote the intrinsic value of nature.[64] There is a distinct difference between the objectives of the NMA and the MRA, the scope of the NMA having a wider objective. The element of preserving biodiversity expands upon or clarifies the sub-objective of sustainable management under the MRA, the NMA having a wider scope. But how can the diversity of landscape and geology be preserved through management of living marine resources? These elements of the objective indicate that coral reefs or other submarine structures must not only be protected to preserve biodiversity, but also to preserve the submarine landscape itself. The introduction of the concepts of sustainable use and protection, which are not used in the MRA, also expands on the sub-objective of the latter on sustainable management. Management of the harvest may include measures to regulate exploitation, but also more restrictive measures aimed at protecting species or areas. The promotion of different types of values, including immaterial values (well-being and culture), may supplement or expand on the societal interests identified in the objective of the MRA as legitimate interests to be promoted. However, questions may be raised about how to promote new types of interests, such as well-being, within a sector where interests are already firmly established.

Management objectives

The NMA includes two more detailed objectives as the basis for the conservation and management of nature, including living marine resources.[65] They include the objectives for natural habitat types and ecosystems (Section 4 of the NMA) and species (Section 5 of the NMA). The management objectives are to set common standards and to ensure coordination across the sectors.[66] They may be described as objectives of results to be achieved through different types of measures.

The *first* management objective on natural habitat types and ecosystems is both quantitative and qualitative in character. The first element is to preserve the diversity of types of 'habitat' and their diversity of species and characteristically ecological processes. The second element of the management objective is to preserve as far as reasonable the functions, structure, and productivity of ecosystems. The two concepts have different meanings: While 'ecosystem' refers to a specific type of nature, the 'habitat' describes a geographically-defined area (Section 3 (j) and 3

64. White Paper no. 52, pp. 370–371.
65. Ibid, p. 374.
66. Ibid, p. 82.

(t) of the NMA).[67] Ecosystems are a vital part of biodiversity (Section 3 (c) of the NMA). According to the preparatory works, this second element of the objective provides the legal basis for the ecosystem approach.[68]

This management objective supplements the objective of the MRA as well as its basic consideration of ecosystem approach and its specification of habitats and biodiversity. The objective suggests that the management of living marine resources must be scoped to these two types of units and, consequently, be area-based involving a wide spectrum of factors.

A couple of examples illustrate the implications of this objective: The first example is deep-water coral reefs, which are considered characteristic of a particular type of habitat.[69] Bottom-trawling may have detrimental effects on coral reefs. In order to preserve this type of habitat, restrictions or even bans on the use of such gear must be considered, and may be required in order to attain this objective. The second example concerns ecosystems. As recognized by the NMA, an ecosystem is characterized by its functions, structure, and productivity. One of the functions of an ecosystem is that species provide food for other species in the food chain. Sea birds and marine mammals prey on fish targeted in commercial fisheries may be affected by the harvest. If too extensive, the harvest may also have what is described as a "cascading effect" lower in the ecosystem.[70] The removal of predators may lead to unchecked proliferation of other species and negatively impact the ecosystem. The fulfilment of this management objective may require the consideration of adoption of quotas limiting the harvest of target fish stocks. As the ecosystem is to be maintained "… as far as reasonable …," not every negative effect of harvesting is to be prevented.

The *second* management objective is directed at species and is to be achieved through the long-term conservation of species and their genetic diversity and that they occur in viable stocks throughout their natural living area (Section 5 of the NMA). Furthermore, their area of ecological functioning (e.g. spawning area, grazing area) and their ecological conditions are also to be conserved as far as necessary. The objective is quite ambitious, as all types of species are to be maintained at

67. Ibid, p.374.
68. Ibid, p.375.
69. Ibid.
70. Ransom A. Myers et al., "Cascading Effects of the Loss of Apex Predatory Sharks from a Coastal Ocean," *SCIENCE*, vol. 315, 2007, pp. 1846–1850.

viable levels, irrespective of whether they are subjected to any harvest.[71] However, it is a natural element of the overall objective of the conservation of biodiversity under Section 1 of the NMA. Biodiversity includes the diversity of species and the genetic variations within them (Section 3 (c) of the NMA).

This management objective supplements the understanding of the objective as well as the basic consideration of ecosystem approach under the MRA. This article can only present some examples of its implications. For instance, selective harvesting of larger and older individuals may affect the genetic composition and subsequently the resilience of the stock.[72] Fulfilling the objective would call for measures to avoid such selective harvests. The objective of maintaining stocks of species at viable levels throughout their living areas is not very precise. However, as the MRA does not include any specific provision regulating the levels at which the living marine resources should be maintained, this target under the NMA may be of some assistance in indicating the level. As this management objective involves the conservation of all species, the measures adopted under the MRA must also be aimed at conserving other species affected by the fishery. A species may become part of the 'ecological conditions' if it preys on the resource, or if it is harvested with the resource (by-catch), or in other ways harmed by the fishing gear or techniques used.

The introduction of these two objectives into the management of living marine resources will be demanding, in particular because there is inadequate scientific information about marine ecosystems and habitats. The preservation of these two objectives may also conflict with socio-economic sub-objectives under the MRA.[73] Therefore, it is important to view these objectives against the 'principles' considered in the following. These principles guide the implementation of the management objectives.

Principles

The principles applicable to the EEZ and the Continental Shelf, as well as the territorial sea and internal waters, include the principle of knowledge-based public decision-making (Section 8 of the NMA), the precautionary principle (Section 9

71. White Paper no. 52, p. 375.
72. Pauley, D. et al., "Towards sustainability in world fisheries," *Nature*, vol. 418, 8 August 2002, pp. 691–692.
73. Hans Christian Bugge, 2009, p. 164.

of the NMA), and the ecosystem approach/cumulative effects principle (Section 10 of the NMA). Other general provisions, such as the requirement on use of environmentally-safe techniques (Section 12 of the NMA) and setting of quality standards on natural diversity (Section 13 of the NMA), are only applicable within the territorial sea and will not be considered here.

These principles are explicitly characterized as 'guidelines' in the exercise of authority (Section 7 of the NMA), to signal they are not necessarily to be decisive when decisions are taken under the NMA, the MRA, or other sectoral legislation.[74]

Knowledge-based decision-making

Under this principle, decisions made under sectoral legislation affecting nature shall be based on scientific and traditional knowledge (Section 8 of the NMA). This principle is particularly important in the management of living marine resources as there is no similar requirement under the MRA. The assessments to be made under the management principle of the MRA are assumed to be based on the best available scientific information.[75] It will be applicable to general regulations as well as individual decisions taken under the MRA as far as they concern the diversity of nature.

The scientific knowledge is to include information on the state of the species as well as the extent and the ecological state of habitats, knowledge necessary to implement the two management objectives described above. It shall also include information on the effects of human activities and environmental conditions. The wording of the principle suggests that this information includes both the effects of individual activities (such as the harvest of living marine resources) and combined effects. The latter is necessary to undertake the assessments required under the ecosystem approach principle of NMA Section 10.

The provision does not directly regulate how the knowledge is to be acquired. The information may be derived from available environmental impact assessments. If the available scientific knowledge is inadequate, the authorities could be required to provide new information.[76] As the principle applies only when taking specific decisions, the authorities are not directed to undertake any general assessments of, or to monitor the status of, the marine biodiversity and ecosystems. However, the

74. White Paper no. 52, p. 378.
75. White Paper no. 20, pp. 181–182.
76. White Paper no. 52, pp. 379–380.

obligation of the fisheries management authorities to provide and have available general information on the state of living marine resources and their environment may be derived from the FSA and CBD and the Environmental Information Act.[77]

The principle does not entail an absolute requirement, as it would be impossible to acquire full scientific knowledge on every aspect of species, habitats and ecosystems, particularly the marine ones. Therefore, it includes a proportionality reservation ("… as far as reasonable … ") to balance the costs of acquiring new information, the character of the case, and the risks of activity to nature.[78] As will be discussed, the precautionary principle is applicable in situations where there are scientific uncertainties.

Non-scientific information related to the use of and interaction with nature is also part of the knowledge-base. According to the second paragraph of Section 8 of the NMA, knowledge based on the practices and experiences of generations is relevant (also known as traditional knowledge) as far as it promotes the sustainable use and conservation of natural diversity. Such information is to be taken into account in the adoption of decisions under sectoral legislation, a somewhat weaker obligation than with scientific information. Such information would also be relevant in the management of living marine resources, for example, information on living areas or ecological functional areas of species, and the interaction between species.

The precautionary principle

Under Section 9 of the NMA, the precautionary principle comes into play in two situations: *First*, when a decision is taken without adequate information about its effects on the environment, and *second* in situations where there is a risk of serious or irreversible damage to nature. In the first situation, the decision is to be aimed at preventing substantial damage to natural diversity, while in the second, a lack of knowledge may not be used as an excuse for not taking adequate measures.

As the MRA includes a reference to the precautionary approach in international instruments (including the Fish Stocks Agreement), it may be questioned whether this principle provides any supplement. As the precautionary approach under the Fish Stocks Agreement requires the exercise of caution when available information

77. Lov 5. september 2003 nr. 31 om rett til miljøinformasjon, § 8. See also Norwegian Official Report (NOU) 2005: 10, p. 39.

78. White paper no.52, p. 91.

is inadequate and not to use inadequate scientific information as an excuse for not adopting conservation measures, it seems to imply a lower threshold for its application than the precautionary principle under the NMA. As there will always be uncertainty regarding available scientific information, the precautionary approach will always be relevant. On the other hand, the relevant provisions of the FSA are of an ambiguous character, particularly those concerning species other than those harvested and habitats. The precautionary principle of the NMA provides a more specific guideline in these situations. It must also be borne in mind that the assessment of risk of damage under the NMA is related to a broader object (diversity of nature) than under the precautionary approach of the MRA, so the thresholds of 'substantial' and 'damage' should be read in this context.

With respect to the application of the precautionary principle in the second situation, the preparatory works confirm that under certain circumstances there may be implied an obligation for the sectoral authorities – the Ministry of Fisheries – to exercise its discretion under the MRA to adopt or revise measures where there are major threats to the marine environment.[79] This is consistent with analysis of the precautionary approach outlined above.

Ecosystem approach and cumulative effects

Under the third principle, there is a requirement to assess one type of impact on natural diversity together with present and future combined strains on the relevant ecosystem (Section 10 of the NMA).

In contrast to the MRA, this principle of ecosystem approach addresses only one of its elements: the cumulative effects on the environment.[80] It implies a requirement to undertake a holistic and integrated evaluation, in which the impacts of a particular activity are not to be evaluated in isolation, but together with other impacts on the same ecosystem[81] and their combined strains. All types of impacts on the ecosystem are to be assessed: human activities (e.g. pollution, harvest and physical alteration) as well as environmental conditions, local as well as global impacts (e.g. climate change). Although one activity alone is considered to have modest effects on the ecosystem, in combination with other impacts it may have harmful and even non-linear effects. The future combined strains to the ecosystem

79. Ibid, p. 381.
80. Ibid, p. 102.
81. 'Ecosystem' is defined in Section 3 (t) of the NMA.

are to be included in the assessment too. The principle aims to prevent a piece-meal approach well-known to traditional sectoral approaches.

The principle does not in itself provide any directives on what consequences are to be drawn from this assessment. The assessment would form part of the knowledge-base on which decisions are to be taken, and provide relevant information in respect of the attainment of the management objectives under the NMA, and the ecosystem approach under the MRA. The precautionary approach of the MRA, as supplemented by the precautionary principle of the NMA, would provide guidance on the measures to be taken. Such evaluation would be included in the assessments to be undertaken under the management principle of the MRA. The outcome may be adoption of stricter measures than an isolated evaluation of the stock or impacts of fishing activities would require.

Important societal interests

It is not only environmental interests and values that are relevant and obligatory in the management of the use of natural resources. This may be recalled from the objective of the NMA, which includes a particular provision regulating the relationship to societal interests: In adopting measures these considerations are to be weighted against "… other important societal interests …" (Section 14, first paragraph of the NMA). In addition, due regard has to be taken to Sami interests (same section, second paragraph).

Societal interests are both legitimate and obligatory elements in the exercise of authority under sectoral legislation. Other than the reference to their importance, societal interests are not specified and may cover a wide spectrum from social via economic to cultural interests.[82] They partly overlap with the interests included in the objective of the MRA, such as socio-economic profitability and employment, and settlement in rural areas.

In some way this provision weakens the impact of the management objectives and the guidelines provided by the principles in the interpretation and application of the MRA. The preparatory works emphasize that it does not mean the management objectives may be disregarded, but that societal interests may call for the use of other measures, or that the management objectives may be reached over a longer period of time.[83]

82. White Paper no. 52, pp. 383–384.
83. Ibid, pp. 375–376.

This balancing between environmental and societal interests is about 'sustainable use' of natural resources, which the provisions of the NMA are intended to specify.[84] It is important that all elements of sustainable use are explicitly identified. The problem is that the rather ambiguous wording of Section 12 of the NMA may provide the decision-makers with too much discretion in drawing their conclusions. In contrast to the environmental principles, there is no requirement for sectoral authorities to include in their reasoning of their decision any information on what societal interests are considered relevant and their weight (Section 7 of the NMA).

4. Conclusions

The analysis of the Marine Resources Act and the Nature Management Act clearly reflects that environmental considerations have become integrated elements of the management of living marine resources. The objective of sustainable development is reflected in both acts. In that sense, fisheries legislation is greening.

The MRA provides the Ministry of Fisheries with the measures necessary to ensure conservation of marine biodiversity. However, it still enjoys a wide margin of appreciation in applying them. The Ministry is to promote the fishing industry as well as securing settlement and employment in coastal communities. In all aspects, environmental considerations are relevant. The centre of attention will be on how they are weighted when the authorities exercise the responsibility accorded through the MRA.

The main impact of the NMA on management of living marine resources will be the supplement it may provide to the objective and the basic considerations under the MRA and the assessments to be undertaken through its management principle. The ecosystem approach in particular is supplemented through the management objectives and the ecosystem approach/cumulative effects principle. Obviously this will strengthen the weight of the ecosystem approach in the application of the MRA. The duty to reason measures taken under the MRA – although limited – provide a certain transparency to the decision-making process. This may ensure that the principles of the NMA are in fact used in supplementing the MRA, and that there is some coherency across the different sectoral legislation. It can

84. Ibid, p. 75.

provide environmental NGOs or others with new opportunities to challenge the legality of the measures if the principles are not applied, interpreted incorrectly, or are inadequately balanced.

However, the NMA lacks the means to properly coordinate the various sectors, which may promote different and perhaps conflicting interests. This is particularly noticeable in the EEZ and the Continental Shelf, where there is no legal basis for establishing integrated MPAs. An MPA established in the EEZ under the MRA will not formally prevent the area from being opened to petroleum activities under the Petroleum Act. But the decision taken by the Ministry of Fisheries under the MRA, as supplemented by the NMA, may add relevant and considerable weight to the decision-making under the Petroleum Act, which is also to be supplemented by the NMA. Under all circumstances, coordination between conflicting uses and interests will have to be – and is in fact – intended to be solved at the highest political level. The plans for integrated management of Norwegian maritime zones developed by the Government and approved by the Parliament provide for such overall coordination. Two plans have been adopted, one for the Barents Sea and sea areas of the Lofoten Islands,[85] and the other for the Norwegian Sea.[86]

References

Backer, Inge Lorange, *Innføring i naturressurs- og miljørett*, 4. utgave, Oslo: Gyldendal Akademisk, 2005.

Birnie, Patricia, Alan Boyle and Catherine Redgwell, *International Law & the Environment*, 3rd Edition, Oxford: Oxford University Press, 2009.

Bugge, Hans Christian. *Lærebok i miljøforvaltningsrett*, 2. utg., Oslo: Universitetsforlaget, 2009.

Cameron, James and Julie Aboucher, "The Status of the Precautionary Approach in International Law," in D. Freestone and E. Hey (eds) *The Precautionary Principle and International Law. The Challenge of Implementation*, the Hague: Kluwer Law International, 1996, pp.29–52.

Fauchald, Ole Kristian, "Forfatning og miljøvern – en analyse av Grunnloven § 110 B," *Tidsskrift for Rettsvitenskap*, nos 01–02, 2007, pp.1–84.

85. Report No. 8 to the Storting (2005–2006) Integrated Management of the Marine Environment of the Barents Sea and the Sea Areas off the Lofoten Islands, p. 15.
86. Report No.37 (2008–2009) to the Storting Integrated Management of the Marine Environment of the Norwegian Sea, pp. 10–12.

de La Fayette, Louise Angélique, "A New Regime for the Conservation and Sustainable Use of Marine Biodiversity and Genetic Resources Beyond the Limits of National Jurisdiction," *The International Journal of Marine and Coastal Law*, vol. 24, 2009, pp. 221–280.

Føyn, Lars, Cecilie H. von Quillfeldt og Erik Olsen (eds.), "Miljø- og ressursbeskrivelse av området Lofoten – Barentshavet," *Fisken og havet*, No 6, Bergen: Institute of Marine Research, 2002.

Helgesen, Jan E., *T. Eckhoff Rettskildelære 5. utgave*, Oslo: Universitetsforlaget, 2001.

Henriksen, Tore "The Precautionary Approach and Fisheries: A Nordic Perspective," in N.de Sadeleer, *Implementing the Precautionary Principle. Approaches from the Nordic Countries, EU and USA,* London: Earthscan, 2007, pp. 153–180.

Jerkø, Markus "Det norske formålet 'bærekraftig utvikling,'" *Tidsskrift for Rettsvitenskap*, vol. 122 (3), 2009, pp.354–387.

Kroepelien, Knut, "The Norwegian Barents Sea Management Plan and the EC Marine Strategy Directive: Some Political and Legal Challenges with an Ecosystem-Based Approach to the Protection of the European Marine Environment," *Review of European Community & International Environmental Law,* vol. 16 (1), 2007, pp.24–35.

McIntyre, Owen and Thomas Mosedale, "The Precautionary Principle as a Norm of Customary International Law," *Journal of Environmental Law*, vol. 9(2), 1997, pp.221–241.

Molenaar, Erik J., "Ecosystem-Based Fisheries Management, Commercial Fisheries, Marine Mammals and the 2001 Reykjavik Declaration in the Context of International Law," *the International Journal of Marine and Coastal Law,* vol. 17, 2002, pp.561–595.

Myers, Ransom A. et al., "Cascading Effects of the Loss of Apex Predatory Sharks from a Coastal Ocean," *Science*, vol. 315, 2007, pp.1846–1850.

Pauley, D. et al., "Towards sustainability in world fisheries," 418 *Nature,* 8 August 2002, pp. 689–695.

de Sadeleer, Nicolas, *Environmental Principles. From Political Slogans to Legal Rules*, Oxford: Oxford University Press, 2002.

Tanaka, Yoshifumi, *A Dual Approach to Ocean Governance. The Cases of Zonal and Integrated Management in International Law of the Sea*, Farnham: Ashgate, 2008.

Trouwborst, Arie, *Precautionary Rights and Duties of States*, Leiden: Martinus Nijhoff, 2006.

Arie Trouwborst, "The Precautionary Principle and the Ecosystem Approach in International Law: Differences, Similarities and Linkages," *Review of European Community and International Environmental Law,* vol. 18 (1), 2009, pp. 26–37.

Ulfstein, Geir, "Internasjonal miljørettsstilling i norsk rett" i G. Ulfstein (red) *Forholdet mellom internasjonal og nasjonal miljørett. Utvalgte artikler,* Oslo: Institutt for offentlig retts skriftserie nr 5, 2000.

Wang, Hanling, "Ecosystem Management and Its Application to Large Marine Ecosystems: Science, Law, and Politics," *Ocean Development & International Law,* vol. 35, 2004, pp.41–74.

Millennium Ecosystem Assessment, *Ecosystems and Human Well-being: Biodiversity Synthesis*. Washington DC: World Resources Institute, 2005.

OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic, *Quality Status Report 2000*, London, 2000.

The State of World Fisheries and Aquaculture 2008, FAO, Rome, 2009.

Norwegian Official Report (NOU) 2004: 28 *Lov om bevaring av natur, landskap og biologisk mangfold (Naturmangfoldloven)*.

Norwegian Official Report (NOU) 2005: 10 *Lov om forvaltning av viltlevende marine ressurser (Havressursloven)*.

White Paper (Ot.prp.) no. 20 (2007–2008) *Om lov om forvaltning av viltlevande marine ressursar (havressurslova)*.

White Paper (Ot.prp.) no. 52 (2008–09) *Om lov om forvaltning av naturens mangfold (naturmangfoldloven)*.

Report (Stortingsmelding) No. 8 to the Storting (2005–2006) *Integrated Management of the Marine Environment of the Barents Sea and the Sea Areas off the Lofoten Islands*, available in English at http://www.regjeringen.no/nb/dep/md/dok/regpubl/stmeld/20052006/Report-No-8-to-the-Storting-20052006.html?id=456957 (1 November 2009).

Report (Stortingsmelding) No. 37 (2008–2009) *to the Storting Integrated Management of the Marine Environment of the Norwegian Sea*, available in English at http://www.regjeringen.no/nb/dep/md/dok/regpubl/stmeld/2008–2009/report-no-37–2008-2009-to-the-storting.html?id=577875 (1 November 2009).

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«Позеленение» норвежского рыбного законодательства: введение в экологические принципы управления рыболовством

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Резюме

Целью управления рыболовством как в международном, так и в национальном законодательстве традиционно было наиболее оптимальное использование отдельных видов рыбы. В последние годы появились многочисленные подтверждения эффекта, оказываемого рыбодобычей на экологическую обстановку, например, хищнический лов, перевылов и разрушение сред оби-

тания. На некоторых участках рыбодобыча считается основной угрозой морскому биологическому разнообразию. Был принят ряд международных документов (как обязательных так и добровольных) для того, чтобы найти выход для решения этих проблем путем ввода экологических принципов (например, предупреждающий подход и экосистемный подход), для добавления к международному регулирования о рыболовстве, а также к международному регулированию об экологии. Все внимание теперь уделяется внедрению этих принципов в национальное законодательство. В 2009 году в Норвегии вступило в силу новое законодательство в отношении введения этих обязательств. Новое законодательство также оценивает, как учитываются требования экологии при осуществлении и введении других требований, таких как урегулирование и занятость, которые являются традиционно важными при управлении рыболовством. При этом также подразумевается, что управление рыболовством будет отвечать целям и принципам, применимых секторов использования всех природных ресурсов. Статья рассматривает воздействие этих норм по управлению рыболовством. В заключении подчеркивается, что, хотя органы управления рыболовства все еще обладают обширными полномочиями, выполнение этих принципов вместе с интеграцией с другими секторами потребует более целостного подхода к управлению рыболовством в будущем.

Ключевые слова: Выполнение международного законодательства по рыболовству и международных экологических законов, закона о прибрежном рыболовстве Норвегии, закона об экологии и о природных ресурсах, норвежское административное право