Wilderness Protection in Norway

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1. Introduction

Norway has always been a sparsely populated country. As of January 2015 there were 16 persons per km$^2$ on the Norwegian mainland. Mainly because of low soil productivity and reliance on natural resources, the population has traditionally been spread throughout the country, except at high elevations (47 per cent of the Norwegian mainland is mountainous). Hence, even if population density has been low, most areas in Norway have been subject to significant human interference throughout the past 800 years. The emerging valuation of wilderness in the Norwegian context coincided with efforts to gain independence from Sweden and burgeoning nationalist sentiments during the nineteenth century. It also coincided with significant population growth and greater use of nature for hunting, fishing, farming and forestry. There was thus tension between the valuation of wilderness among intellectuals and the wealthy, and the increasing dependence of the rural poor on scarce natural resources.

Also today we find tensions along similar lines: farmers – especially those engaged in forestry – generally oppose initiatives to protect wilderness and emphasise voluntary approaches to the establishment protected areas; by contrast, national authorities and NGOs have tended to promote a top–down approach to nature protection – inter alia, through the wilderness concept.

Currently, Norway ranks among the European countries with highest population growth, and the medium estimate is that the population will grow from today’s 5 million to close to 8 million by 2100. Despite the long-term general policy of maintaining a geographically spread

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2 www.ssb.no/en/natur-og-miljo/statistikker/arealstat. This includes the three categories ‘open firm ground’, ‘bare rock, gravel and rock fields’ and ‘perpetual snow and glaciers’.


4 Ibid., pp. 25–35.


6 www.ssb.no/en/befolkning/statistikker/folkfram
population, including very high support to agriculture, there has been significant increase in the urban population and decrease in the rural population in many areas.

Against this background, we should expect pressures on wilderness areas in Norway to be modest. However, there are many factors that point to increased pressure on wilderness areas – not least the construction of cabins and holiday homes, expansion of energy production and infrastructure, construction of roads and railways, the need for increased extraction of natural resources due to expected lower revenues from fossil energy resources, as well as the general increase in economic activity.

Wilderness protection has been on the agenda of the Norwegian administrative authorities for several decades. One early definition of ‘wilderness’ was developed in the 1970s by Statistics Norway for a committee established to propose reforms to the country’s nature protection policy. By this definition, the term ‘wilderness’ applied to areas located more than five kilometres from significant infrastructure. The definition has subsequently been further refined; in its early form, it listed the following types of technical infrastructure that would prevent an area from qualifying as ‘wilderness’:

- public roads and railways, except tunnels

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7 See OECD, Agricultural Policy Monitoring and Evaluation 2013: OECD Countries and Emerging Economies (Paris: OECD, 2013) pp. 42–3, where support in Norway is highest among the countries examined, and is estimated at more than 60 per cent of gross farm receipts.
8 www.ssb.no/en/befolkning/statistikker/befett
9 A. Skonhoft and H. Solem, ‘Economic growth and land-use changes: the declining amount of wilderness land in Norway’, Ecological Economics, 37 (2001), 289–301, p. 296, finds, on the basis of data from 1988 and 1994, ‘that the consumption of wilderness land is greatly influenced by crowding in a broad sense, interpreted as county-specific demographic and geographic factors in this cross-section analysis. The population density effect is particularly strong for wilderness land of the least restrictive character [i.e. more than one km from major infrastructure.]’
10 Ibid., p. 298: ‘the level of economic activity, correcting for variations in population density, explains between 46 and 65 per cent of the variations in the amount of wilderness land among the counties for the two broadest categories of wilderness land. Hence, in these cases, the higher level of GDP per capita in a region, the less wilderness land. … Secondly, the fixed effects models reveal a negative, and linear, connection between GDP per capita growth and conversion of wilderness land; the higher the economic growth, the higher the consumption of wilderness land.’
11 See NOU 1980:23, Naturvern i Norge, pp. 33–5. The maps show areas located more than 5 km from roads, railroads, human settlements and regulated waterways, and were originally prepared for southern Norway only. The maps were extended to the rest of the Norwegian mainland in NOU 1986:13 Ny landsplan for nasjonalparker, pp. 31–2. On the historical background, see also T. Skjeggedal, T. Arnesen, J. Kveli, G. Markhus, P.G. Thingstad, G. Wollan and J. Aasetre: Inngrepsfrie naturområder som verkty for arealforvaltning, Steinkjer: Nord-Trøndelagsforskning, 2005 (NTF-notat 2005:6), pp. 20–21. The authors trace the concept back to the 1960s and ‘70s as being inspired by the 1964 US Wilderness Act. The concept of wilderness as used in Norway has close links to the ‘purism construct’ as elaborated in the United States; see O.I. Vistad and M. Vorkinn, ‘The wilderness purism construct: experiences from Norway with a simplified version of the purism scale’, Forest Policy and Economics, 19 (2012), 39–47, p. 40.

- forest roads, farm tracks, access roads and roads to summer farms exceeding 50m in length
- tracks improved to enable use by tractors and off-road vehicles
- tracks approved for motor vehicles when the ground is not snow-covered (in Finnmark, the northernmost county of Norway)
- power lines carrying 33 kV or more
- reservoirs (entire extent of water at highest regulated water level), regulated rivers and streams
- above-ground pipelines
- power plants, penstocks, canals, levees, embankments and flood protection works.

The definition of wilderness was initially developed to assist committees established to work on further developing Norwegian nature conservation policy, in particular in the context of national parks.\(^\text{13}\) As further discussed below, the definition has since been revised and has become a decision-making tool for other policy and administrative decisions. It is currently administered by the Norwegian Environment Agency.

A new approach to wilderness issues can be derived from the Norwegian Nature Index which was first published in 2010.\(^\text{14}\) The Index provides a general overview of the status and trends of ecosystems based on expert opinions of natural scientists. Among its purposes is to serve as a tool for decision-making authorities. Most of the reference values for the indicators are set as the status of ecosystems without human interference (‘undisturbed environment’). However, as has been pointed out, it would be a misconception to interpret this as if the general objective were to achieve an undisturbed environment.\(^\text{15}\) Even though the Nature Index is related to wilderness and might significantly influence how the concept is used in future nature management, this will not be explored in detail here, due to its recent development and current lack of formal linkage to decision-making processes. That said, this recent development may contribute to developing the wilderness concept in Norway along lines that fit in well with the general description of the concept in the first chapter of this book, by promoting greater emphasis on the undisturbed and natural character of wilderness.


\(^{14}\) www.environment.no/Topics/Biological-diversity/The-Norwegian-Nature-Index/

In the following, we explore the definition of wilderness in the Norwegian legal context, analysing the legal protection of wilderness in Norway, and discussing the implementation and enforcement of the legal framework for wilderness areas. The chapter concludes with some reflections on the future of wilderness protection in Norway.

The discussion focuses on the Norwegian mainland. However, it should be noted that Norway also exercises jurisdiction over several remote islands: Svalbard, Jan Mayen, Bouvet and Peter I Island, and has claims to Queen Maud Land in Antarctica. Norway has adopted the Svalbard Environmental Protection Act\(^\text{16}\) and established extensive protected areas on Svalbard and Jan Mayen. These islands and areas are characterised by very limited human interference and therefore vast tracts of wilderness.

2. What is ‘wilderness’ in the Norwegian legal context?

Norway adopted a comprehensive and updated act on nature protection, the Nature Diversity Act, in 2009.\(^{17}\) The Act does not single out ‘wilderness’ as a concept deserving particular attention; and in the preparatory works, there was limited focus on wilderness.\(^{18}\) The concept was discussed mainly in the context of protected areas, in particular in relation to national parks, which may be established only ‘where there is no major infrastructure development’.\(^{19}\)

One of the most controversial topics discussed during the preparation of the Act was whether areas should be subject to automatic protection due to their current status of vulnerability. The result was Chapter VI on ‘selected habitat types’, according to which the government may adopt regulations designating specific habitat types as ‘selected’ throughout or in parts of Norway. Such decisions are to be based on 1) trends for or the status of the habitat type, 2) whether the habitat type is important for ‘priority species’ (see sections 23 and 24 of the Act), 3) whether a significant proportion of the natural range of the habitat type is found in Norway and 4) whether international obligations apply to the habitat type. While the degree of wilderness as defined by the Norwegian Environment Agency may be relevant under these criteria or as a separate criterion (the above-mentioned criteria are not exhaustive), it does not


\(^{18}\) NOU 2004:28, Lov om bevaring av natur, landskap og biologisk mangfold (Naturmangfoldloven), report of an expert committee, chapter 17, see in particular pp. 320–21. The concept is barely mentioned in the government’s proposal: see Ot.prp. no. 52 (2008–2009), Om lov om forvaltning av naturens mangfold (naturmangfoldloven).

\(^{19}\) Section 35 of the Nature Diversity Act.
appear to be particularly important and it was not mentioned in relevant parts of the preparatory work. However, virgin or old forests are among the nature types mentioned as particularly significant.20

Wilderness has been of some importance under planning and agricultural legislation. There are two main instruments under the Planning and Building Act (2008)21 that are of relevance to wilderness areas. Wilderness areas may be identified in municipal plans and thus be afforded protection against specific projects.22 Further, wilderness issues are relevant to environmental impact assessments.23 The regulations under the Forestry Act (2005)24 mention wilderness as an essential factor when applications for financial support to forest roads are to be considered.*

It is against this background that the ‘wilderness’ concept as administered by the Norwegian Environment Agency has been further developed. One reason appears to be the loss of relevance of the original concept for management purposes, as there seemed to be no significant changes in the extent of wilderness in recent years. Another, perhaps more important, reason seems to be the trend towards using the wilderness classification for administrative processes – in particular in connection with establishing new protected areas, drafting land-use plans, designing agricultural support schemes, and deciding on specific development projects.

The revised definition introduces a new concept: ‘interference-free areas’ (inngrepsfrie områder),25 by which is meant areas that are between three and five km (‘zone 1’) and between one and three km (‘zone 2’) from significant technical infrastructure. Moreover, the revised definition adds new categories of infrastructure that would prevent areas from qualifying as wilderness, or interference-free:

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20 The proposal was based on an extensive mapping and assessment of nature types in Norway, which identified 63 nature types as particularly important from a biodiversity perspective. Many of the vulnerable or threatened nature types are situated in cultural landscapes: see NOU 2004:28 pp. 434 and 626 and Ot. prp. no. 52 (2008–2009) pp. 271–88. See also A. Lindgaard and S. Henriksen (eds), Norwegian Red List for Ecosystems and Habitat Types 2011 (Trondheim: Norwegian Biodiversity Information Centre, 2011).
22 See chapters 11 and 12 of the Planning and Building Act, in particular sections 11-8, 11-9, 12-5 and 12-7.
23 See chapters 4 and 14 of the Planning and Building Act and the associated government regulation (Forskrift om konsekvensutredninger, FOR-2009-06-26-855).
24 www.ub.uio.no/ujet/lovdata/lov-20050527-031-eng.pdf (English translation). For more details, see the discussion below.
25 www.miljoenvironnement.no/no/Tema/Miljoovervaktning/Inngrepsfrie-naturomrader-i-Norge-/Hva-er-INON/ (available in Norwegian only).

- massive towers and windpower turbines
- stone quarries
- infrastructure for winter sports (downhill installations and ski jumps)
- minor hydropower stations that do not involve the construction of reservoirs

The use of the revised definition as a basis for land-use planning has been controversial.\(^\text{26}\)

One argument has been that the definition means that minor projects may lead to highly significant loss of wilderness and interference-free areas. Another argument has been that the informal introduction of the concepts into public administrative practices lacks political legitimacy. It has also been held that there is a weak connection between the concepts and officially endorsed environmental objectives such as biodiversity and recreation.

Against this background, the concepts as developed in Norway can be subjected to critical examination based on the purposes that they serve. First, we may ask whether the concepts take sufficient account of user interests, ecosystem services, biodiversity and restoration capacity.\(^\text{27}\) It can be argued that infrastructure that is highly relevant for such purposes has been omitted – not least, private cabins and infrastructure for farming, reindeer herding, hunting and tourism. Moreover, the focus on infrastructure means that activities that can be conducted independent of infrastructure are not taken into account, such as tourism, sports, hunting and fishing, and gathering of berries, mushrooms, etc. Finally, the Norwegian definition does not include any definition of the status of the area in terms of previous human interference. This is significant, since many areas in Norway are still recovering from extensive logging that took place more than 100 years ago. Against this background, we may question whether the wilderness according to the Norwegian definition is sufficiently ‘wild’ or ‘interference-free’ in the sense of being unaffected by human activities.\(^\text{28}\)

Secondly, the definition is based on distance from significant infrastructure. This means that

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26 The government that took office in October 2013 promised to discontinue the use of ‘interference-free areas’ as a tool in land-use planning, see Politisk plattform for en regjering utgått av Høyre og Fremskrittspartiet, Sarbuvollen, 7 October 2013, p. 60. See also the Proposal from several members of the Storting (Parliament) regarding interference free areas, Parliamentary Document 8:37 S (2009–2010).


28 In these respects, the Norwegian definition deviates from the IUCN definition of wilderness areas (category Ib): see N. Dudley (ed.), *Guidelines for Applying Protected Area Management Categories* (Gland, Switzerland: IUCN, 2008), pp. 14–16.
certain important areas that have wilderness characteristics – in particular, virgin and old forests in southern Norway – fall outside the scope of the concept since they do not fulfil the distance criterion. If we assume that infrastructure has been constructed mainly in areas with valuable natural resources, it can be argued that the Norwegian definition is not sufficiently representative of the diversity of nature types, and that there is an inherent overrepresentation of unproductive land and underrepresentation of productive land.

Thirdly, the wilderness concept encounters particular challenges when applied to areas used by nomadic indigenous populations, such as Sami reindeer herders, or other areas where local traditional use of natural resources takes place. Traditional use may serve to protect particular habitats or species and thus have lasting impact on biodiversity in an area. The biodiversity thus developed may be viewed as worthy of conservation. However, new lifestyles and technical innovations may change traditional use of the land and extend the use to new areas. It has been argued that application of the wilderness concept to areas subject to indigenous and local use may be alien to the views of indigenous or local populations. Against this background, it is often challenging to apply the wilderness concept to the Sami areas and areas that have been subject to extensive use by local populations.

3. Legal protection of wilderness areas

This section first examines how Norway has provided legal protection to wilderness areas through legislation on protected areas, focusing on national parks and nature reserves. Thereafter follows a discussion of how wilderness issues are addressed in legislation regarding land planning, forestry, energy production and management of water resources.

3.1 National parks and nature reserves

Norway has assigned protected area status to approximately 17 per cent of the Norwegian mainland, of which 36 national parks amount to 9.7 per cent and 2051 nature reserves amount to 1.7 per cent. According to section 35 of the Nature Diversity Act, national parks may be established only on ‘[l]arge areas of natural habitat … where there is no major

30 In this context, the Nature Diversity Act includes specific procedural provisions aimed at ensuring that proper account is taken of the interests of Sami and local populations, see sections 8, 14, 41 and 43 of the Act.
31 Protected landscapes fall outside the scope of this chapter as they are essentially established in areas where human interference is significant; see section 36 of the Nature Diversity Act.
32 www.miljostatus.no/Tema/Naturmangfold/Vernet-natur/Vernet-areal-Norge/
infrastructure". Hence, national parks were generally established in mountainous areas otherwise used mainly for grazing, hunting, gathering of mushrooms and berries, sports, and tourism. In recent years, however, some national parks have been established in areas that are closer to significant human settlements and are subject to more extensive human activities.

Section 35 of the Nature Diversity Act does not provide for any possibility of restoring wilderness for the purpose of establishing a national park. This means that the authorities have few options when considering whether to establish national parks on productive land. Moreover, the establishment of national parks in such areas would entail significant challenges in terms of striking a balance between a low degree of human interference and the interests of local populations in harvesting natural resources, such as hunting and fishing, and in promoting recreational and commercial use. Many national parks have been established on private land and include private cabins.

Traditionally, Norwegian nature reserves have been established in areas that have been subjected to negligible human interference and are of great importance to biodiversity. Section 37 of the Nature Diversity Act has extended nature reserves so that they may be established also in areas with significant human interference, and where the purpose of the protected area is dependent on continued human interference. Moreover, section 37 promotes restoration of areas, for example in order to re-establish wilderness characteristics. We may safely assume that the vast majority of Norwegian nature reserves contain biodiversity that has not been subjected to significant human interference. Nature reserves tend to be small (average size: 2.75 km²), and many are located close to significant infrastructure. While such reserves do not qualify as wilderness or interference-free areas according to the above definitions, they may qualify as wilderness areas according to IUCN category Ib. Some nature reserves are located within national parks or protected landscapes. Especially where they are located within national parks, nature reserves can be assumed to cover areas with a high degree of wilderness.

In sum, while Norway’s national parks do protect significant wilderness areas, they do not

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33 The preparatory works indicate that section 35 should be read as referring only to the original list of infrastructure: see Ot.prp. no. 52 (2008–2009), supra note 18, p. 410. Norwegian national parks have generally been categorised as IUCN category II (national parks) and not as IUCN category Ib (wilderness areas).
34 Ytre Hvaler National Park, established in the coastal region just south of Oslo in 2009, is the most clearcut example to date: see www.ytre-hvaler.no/hovedEnkel.aspx?m=66538.
35 For example, Dovre National Park contains three nature reserves: Kattuglehøi, Mesætermyre and Veslehjerkinntjønnin.
ensure representativeness of nature types. Moreover, they may fail to ensure effective protection of wilderness if the concept is extended beyond the infrastructure covered by the Norwegian concepts – for example, to private cabins, recreational use, hunting, fishing and grazing. Nature reserves, on the other hand, are more useful for protection of a broader range of nature types, and they normally afford a stricter level of protection. Many nature reserves are located close to human infrastructure and activities, and may therefore not qualify as wilderness. Other nature reserves are located within national parks and thereby constitute core areas of wilderness.

3.2 Spatial Planning and Environmental Impact Assessment legislation

Two major elements of the Planning and Building Act are relevant to the legal protection of wilderness areas: the adoption of municipal plans (‘municipal master plans’ and ‘zoning plans’), by which municipalities regulate construction and activities outside of national parks and nature reserves; and the duty to conduct environmental impact assessments. There is no explicit reference to wilderness areas or interference-free areas in the Act. Such areas are mentioned only in the Regulation on Environmental Impact Assessments.36

Most of the Norwegian mainland consists of zones for agriculture, nature, outdoor recreation and reindeer husbandry according to municipal master plans under section 11–7 of the Planning and Building Act. Such zoning protects the areas against major infrastructure projects, but not against agricultural activities, including forestry. We find wilderness and interference-free areas within these zones. In addition, wilderness and interference-free areas may be protected as ‘zones requiring special consideration’ under section 11–8(c) of the Act. Such zones can be established as buffer zones to national parks or protected landscapes (but not as buffer zones to nature reserves). Municipalities may also adopt binding decisions that protect wilderness and interference-free areas against certain projects and activities (e.g. construction of cabins and agricultural infrastructure, and recreational activities) within zones for agriculture, nature, outdoor recreation and reindeer husbandry according to section 11–11 of the Act.

Zoning plans are more specific than municipal master plans. Zoning plans may be used to safeguard wilderness and interference-free areas on the basis of sections 12–5 no. 5, 12–6 and 12–7 of the Act. Due to the option of prohibiting for example cabins and agricultural

36 See section 4 of the Regulation on Environmental Impact Assessment, FOR 2009-06-26 no. 855.
infrastructure, zoning plans may establish protection that goes beyond the Norwegian
concepts of wilderness and interference-free areas.

In 2011 the government adopted ‘National Expectations regarding Regional and Municipal Planning’, according to which counties and municipalities are expected to take into account the need to protect interference-free areas in their planning procedures.\(^{37}\) Decisions regarding municipal master plans and zoning plans may be subject to objections by national or regional authorities.\(^{38}\) Based on the National Expectations, the existence of wilderness or interference-free areas may justify such objections. The Ministry of Climate and Environment has not integrated wilderness or interference-free areas in general guidelines regarding regional and municipal planning, but the Norwegian Environment Agency has issued specific guidelines on how interference-free areas should be taken into account.\(^{39}\) As of this writing (December 2014) the government has not yet decided how it will proceed with its plans to discontinue the use of interference-free areas as a tool in land-use planning. Protection of wilderness and interference-free areas through planning decisions remains essentially within the discretionary power of the municipal authorities.

Section 4(b) of the Regulation on Environmental Impact Assessment requires that environmental impact assessments be conducted where planning or project decisions concern activities that ‘are located in or are in conflict with important interference-free areas’.\(^{40}\) The duty to assess implications for interference-free areas has not been further specified in the Regulation or in associated guidelines. Nevertheless, we may assume that such environmental impact assessments must evaluate the consequences on interference-free areas, and that failure to do so might provide legal grounds for invalidating subsequent planning and project decisions. That said, however, given the reluctance of the Norwegian Supreme Court in a case to invalidate a decision regarding the location of the US Embassy due to lack of an environmental impact assessment,\(^{41}\) Norwegian courts may be unlikely to contribute to strict enforcement of such environmental impact assessment requirements.


\(^{38}\) See sections 4-2 and 5-4 of the Planning and Building Act.

\(^{39}\) www.miljokommune.no/Temaoversikt/Naturmangfold/Inngrepsfri-natur-i-planleggingen/ (in Norwegian).

\(^{40}\) Forskrift om konsekvensutredninger, FOR 2009-06-26 no. 855 (translation by the author).

\(^{41}\) *Norsk Retstidende* 2009, p. 661.
Decisions other than those that are subject to environmental impact assessment under the Planning and Building Act are subject to the Instructions for Official Studies and Reports (utredningsinstruksen).\textsuperscript{42} The Instructions establish the duty of public authorities to take account of environmental considerations when taking decisions regarding regulations and implementation guidelines. Section 2.3.2 of the Instructions defines environmental considerations as ‘other significant consequences’ that shall be considered where relevant. According to section 2.3 of the Guidelines issued by the Ministry of Climate and Environment, the public authorities are expected to consider whether proposals will have significant consequences for interference-free areas.\textsuperscript{43} However, failure to take such considerations does not affect the legal validity of decisions.

### 3.3 Other legislation

In the following, we briefly discuss obligations concerning wilderness and interference-free areas under the Forest Act (2005), the Energy Act (1990) and the Water Resources Act (2000).\textsuperscript{44}

**The Forest Act (2005)**

The Forest Act contains several provisions aimed at ensuring the ecological sustainability of forestry.\textsuperscript{45} However, wilderness and interference-free areas are not explicitly mentioned in these provisions, or in the Regulation on Sustainable Forestry or the associated Living Forest Standard.\textsuperscript{46} While significant resources have been expended on mapping environmentally valuable forests, in particular virgin and old forest, the forest legislation contains no legal requirements and few incentives against forestry in wilderness or interference-free areas, including virgin and old forests.\textsuperscript{47} Nevertheless, the effects of forestry on such areas are

\textsuperscript{42} www.regjeringen.no/upload/FAD/Vedlegg/Statsforvaltning/Utredningsinstruksen_eng.pdf (English translation).
\textsuperscript{43} Ministry of Climate and Environment, Miljøutredninger etter utredningsinstruksen, document T–1349, adopted December 2000.
\textsuperscript{45} See in particular sections 4, 5, 7 and 13
\textsuperscript{46} See sections 4 and 5 of Forskrift om berekraftig skogbruk, FOR 2006-06-07 no. 593 (in Norwegian), and www.levendeskog.no/levendeskog/vedlegg/51Levende_Skog_standard_Engelsk.pdf (in English). The Living Forest Standard contains the following standard (section 20): ‘In larger continuous forest areas with particular environmental and recreational value due to the limited scope of technical encroachments, new forest road construction should be avoided.’
\textsuperscript{47} The authorities may require notification when forest owners plan to conduct logging in virgin or old forests: see section 11 of the Forestry Act. As yet, no regulation has been adopted to implement section 13 of the Act which provides for protection of forest areas of particular environmental value. According to section 4 of the Living Forest Standard: ‘At least 5 % of productive forest areas shall be managed as areas of ecological
relevant and may in certain cases be mandatory considerations. The only regulation adopted under the Forest Act that contains explicit reference to wilderness areas concerns subsidies.\footnote{48 Forskrift om tilskudd til nærings- og miljøtaltak i skogbruket, FOR 2004-02-04 no. 447, sections 5 and 6. The Ministry of Climate and Environment stated in its budget for 2015 that the government has removed formal rules regarding interference free areas in rules regarding forestry, see Klima- og miljødepartementet, Prop. 1 S (2014–2015), p. 193.}

It states that subsidies cannot be provided for the construction of permanent roads that reduce wilderness areas, but that such subsidies may still be provided if the roads only reduce interference-free areas. Moreover, the regulation states that subsidies may be provided to cover losses from not being able to construct roads in wilderness areas. Such support could be used to facilitate logging in interference-free and wilderness areas.\footnote{49 An assessment from 2010 indicates that there had been little use of such support: see Statens landbruksforvaltning and Direktoratet for naturforvaltning, Skogsveibygging og hensynet til inngrepsfrie naturområder i Norge (INON), April 2010, pp. 30–31.}

In addition, applications to construct roads for agricultural purposes must provide information on whether they will affect wilderness or interference-free areas.\footnote{50 See the application form referred to in section 2–1 of Forskrift om planlegging og godkjenning av veier for landbruksformål, FOR 1996-12-20 no. 1200.} Hence, the impacts on wilderness and interference-free areas shall be taken into account when permits are granted for the construction of agricultural roads, and subsidies cannot be provided to such roads if they will interfere with wilderness areas.

\textit{The Energy Act (1990)}

The Energy Act and its associated regulations set the general framework for the establishment of infrastructure for windpower and hydropower, as well as power lines. While the Act and associated regulations do not mention wilderness or interference-free areas, there is significant focus on such issues in the guidelines published in 2007 by the Ministry of Climate and Environment and the Ministry of Petroleum and Energy. The guidelines on windpower state that the degree of conflict with interference-free areas shall be considered, and identify the following interference-free areas as having high conflict potential:

interference-free areas that contain wilderness, that cover areas that are uninterrupted from the sea to the mountains, and that are located in regions with few interference-free areas. The guidelines state that it is a general objective to preserve interference-free areas, but they do not set norms for when small hydropower plants may be established in conflict with existing interference-free areas: they merely advise applicants to contact the county governor’s office where conflicts may arise. There are no relevant rules or guidelines on the construction of
power lines.


Hydropower is relevant under both the Energy Act and the Water Resources Act. As is the case with the Energy Act, the Water Resources Act and its associated regulations do not mention wilderness or interference-free areas. Since 1973, the Norwegian Parliament has adopted plans for protecting rivers against the establishment of hydropower plants. Currently, 394 rivers are subject to such restrictions. However, in 2005 the Parliament decided that hydropower plants of up to one MW may be established in protected rivers. Guidelines on small hydropower plants (up to 10,000 kW) were issued in 2007, establishing a detailed framework for considerations of impact on wilderness and interference-free areas. Interference-free areas that contain wilderness, that cover areas that are uninterrupted from the sea to the mountains, and that are located in regions with few interference-free areas are identified as being of high value; other interference-free areas are identified as being of medium value. The guidelines state that projects which entail significant interference in wilderness areas or a significant reduction of high-value interference-free areas should be avoided. Moreover, the degree of conflict with interference-free areas may justify requirements that the project be adjusted.

3.4 Concluding remarks

The definition of wilderness and interference-free areas is not set out in any legally binding document, and may be amended through administrative decisions. It is unclear whether such decisions must be taken by the Norwegian Environment Agency, the Ministry of Climate and Environment or the government. Since government regulations refer to the concept, it can be argued that any amendments to the definitions should be decided by the government.

Wilderness protection in Norway has been conducted mainly through the establishment of national parks and nature reserves. Norway has fulfilled its political commitment under the CBD to protect 17 per cent of the mainland area, and current policy focuses more on management issues than on protection of new areas. One remaining main challenge, however, is to increase the representativeness of nature protection in Norway. This challenge is closely associated with the protection of remaining wilderness in ecologically productive and densely

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populated areas. The concept of interference-free areas is of particular relevance in this context, due to the lower requirement concerning distance to major infrastructure.

Outside of national parks and nature reserves, there is only weak legal protection of wilderness and interference-free areas. Such areas may be subject to development based on political decisions by municipalities, but with the possibility of transferring such decision to the Ministry of Local Government and Modernisation if objections are raised by the relevant public authorities. There are no legal restrictions regarding forestry, windpower plants, hydropower plants or power lines in wilderness or interference-free areas. The existing guidelines may be revised by the relevant ministries. Private parties cannot invoke violation of the guidelines as a basis for invalidation of administrative decisions by the courts.

4. Implementation and enforcement

*Loss of wilderness in Norway*

The area of wilderness has been estimated at 48 per cent of the total land area of mainland Norway in 1900, 34 per cent in 1940, 12.2 per cent in 1988, 11.7 per cent in 2008 and 11.6 per cent in 2013.\(^{53}\) The loss of wilderness has thus been significantly reduced,\(^{54}\) but may be increasing in recent years.\(^{55}\) One major reason for the reduction appears to have been the establishment of national parks which prohibits the construction of major infrastructure.\(^{56}\) Another important reason can be the limited interest in human use of the remaining wilderness areas – but this seems to be changing due to increasing interest in, *inter alia*, mining, hydropower, tourism and construction of cabins.\(^{57}\)

The situation regarding interference-free areas is likely to be more nuanced, as many such areas are located outside of national parks. Approximately 45 per cent of Norway’s mainland

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\(^{54}\) This is despite predictions to the contrary: see Skonhoft and Solem, *supra* note 9, p. 299.

\(^{55}\) The Norwegian Environment Agency has reported that the loss of wilderness increased from 130 km\(^2\) in the period 2003–2007 to 183 km\(^2\) during 2008–12, see [www.miljodirektoratet.no/no/Nyheter/Nyheter/2014/Mars-Fortsatt-press-pa-inngrepsfri-natur/](http://www.miljodirektoratet.no/no/Nyheter/Nyheter/2014/Mars-Fortsatt-press-pa-inngrepsfri-natur/).

\(^{56}\) Twenty-four of a total of 37 national parks have been established since 1986, including most of the national parks of more than 1,000 km\(^2\) in area (four before 1986, and nine subsequently).


area is interference-free. The reduction of interference-free areas is higher than for wilderness, and has been increasing significantly in recent years, from 726 km² during 1998-2002 to 860 km² during 2003-2007 and 888 km² during 2008-2012.⁵⁸ The percentage lost is almost identical to that for wilderness. The main reasons for loss of interference-free areas between 1988 and 2013 was roads for forestry (4373 km²) and generation and transport of electric power (1626 km²).⁵⁹ Even if there has been a decrease in the construction of forest roads, such infrastructure is likely to remain a significant cause of loss of interference-free areas, especially in regions with few remaining interference-free areas. The main reason is the call for increased subsidies in order to facilitate the availability of forest resources in remote areas.⁶⁰ The focus on the production of renewable energy as a means to mitigate climate change can be expected to lead to further loss of interference-free areas due to power generation and transport.⁶¹

*The practice of wilderness protection*

From the above statistics, it may seem that the rules and procedures regarding construction of forest roads have not been effective in containing their impact on wilderness and interference-free areas in Norway. This is confirmed by a geographically limited assessment of the cases at one county governor’s office which indicates that construction of such roads is accepted in almost all instances.⁶² But the figures may also indicate that the number of applications has gone down, and that applications are limited to those cases where construction of such roads is expected to yield significant economic returns.

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⁵⁸ See www.miljostatus.no/Tema/Naturmangfold/inon/ (in Norwegian).


⁶⁰ See Riksrevisjonen, Riksrevisjonens undersøkelse av bærekraftig forvaltning av norske skogressurser, Dokument 3:17 (2011–2012), pp. 13, 73–75 and 103–104, where the Office for the Auditor General and the Ministry of Agriculture and Food emphasised the need to focus on infrastructure to facilitate forestry, and where unclear policy regarding interference free areas is singled out by regional authorities as a major concern. See also Statens landbruksforvaltning og Direktoratet for naturforvaltning, Skogsveibygging og hensynet til inngrepsfrie naturområder i Norge (INON). Vurderinger og anbefalinger til Landbruks- og matdepartementet og Miljøverndepartmentet, April 2010, pp. 15–16.

⁶¹ The number of hydropower plants has increased from about 900 in 2004 to 1443 by the end of 2012: see Torodd Jensen (ed.), *Beregning av potensial for små kraftverk i Norge*. Forutsetninger, metodebeskrivelse og resultater, Norges vassdrags- og energidirektorat report 19/2004, p. 10, and www.nve.no/no/Energi1/Fornybar-energi/Vannkraft/ (in Norwegian). As of June 2013, there were 696 applications for small hydropower plants and 106 applications for windpower plants pending before the Directorate, and the Directorate has been criticised for taking too much time to finalise such cases: see Riksrevisjonen, Riksrevisjonens undersøkelse av effektivitet i konsekjonsbehandlingen av fornybar energy, Dokument 3:5 (2013–2014), and chapter 7 of NOU 2012:9 Energiutredningen – verdiskaping, forsyningsstabilitet og miljø.

Infrastructure for electricity transportation is exempted from the rules concerning zoning under the Planning and Building Act (section 1–3), and the construction of power plants can be made subject to a fast-track procedure (section 6–4). Hence, the extent to which such projects are allowed to reduce wilderness and interference-free areas essentially depends on decisions at the national level. Effective implementation of the guidelines regarding small hydropower plants may possibly reduce the loss of interference-free areas. There are no corresponding guidelines applicable to the construction of power lines, so such infrastructure is subject to relevant procedures only in cases where environmental impact assessments are required.

It has not been possible to carry out an exhaustive assessment of how wilderness and interference-free areas have been taken into account in planning decisions and environmental impact assessments. One assessment of cases in 2010 concerning planned activities that would affect interference-free areas revealed that few such cases were brought to the offices of county governors (54) and that the governors advised against the plans in 40 per cent of the cases. Information concerning final decisions was available for eight plans only: six were accepted, one was accepted with amendments, and only one plan was rejected.63 Against this background, it may seem that wilderness or interference-free status rarely prevents plans from being adopted. However, as in the case of forest roads, wilderness or interference-free status may prevent such plans from being elaborated in the first place, ensuring that only the most economically significant plans are brought forward. The latter point could be supported if wilderness and interference-free areas are addressed effectively in environmental impact assessments. A significant number of assessments deal with wilderness and interference-free areas. Moreover, the electronic maps of wilderness and interference-free areas are user-friendly and should facilitate appropriate consideration of such areas.64 As pointed out above, municipalities may also protect wilderness or interference-free areas more proactively through planning decisions. Municipalities have been encouraged to adopt such decisions through the ‘National Expectations regarding Regional and Municipal Planning’ and guidelines, but information on the extent to which municipalities have used planning decisions to protect wilderness or interference-free areas does not seem to be available. Nevertheless, at least

64 www.miljodirektoratet.no/no/Tjenester-og-verktøy/Database/INON/ (in Norwegian).
some counties have elaborated plans that address wilderness and interference-free areas. So far, evidence regarding implementation through planning and environmental impact assessments may indicate a relatively high degree of effectiveness in the use of the instruments – but significant uncertainty remains as to the effects for wilderness protection.

Implementing wilderness protection under the Nature Diversity Act (2009)

The core protection of wilderness and interference-free areas takes place through the establishment of national parks and nature reserves. In 2003, the government and the Parliament adopted a policy of more extensive recreational and commercial use of national parks. Moreover, in 2009 a local management reform was introduced, to extend to all national parks: decision-making power will be moved from regional government agencies (county governors) to local management boards composed of municipal, county and, where relevant, Sami politicians. Against this background, it can be questioned whether national parks will preserve their character of wilderness or interference-free areas. According to section 35 of the Nature Diversity Act, ‘[n]o activity that has a lasting impact on the natural environment … is permitted … unless such impact is essential to achieving the purpose of protection’. Section 48 of the Act permits local management boards to ‘grant exemption’ from the protected area regulation and from section 35 of the Act if ‘important public interests make it necessary’. The decision shall weigh the ‘important public interests against the interests promoted by the protected area’, and ‘particular emphasis shall be placed on the importance of the protected area for the overall network of protected areas and on whether a corresponding protected area can be established or developed elsewhere’. The decisions of local management boards can be appealed to the Norwegian Environment Agency. While certain categories of infrastructure that are considered to be essential from the perspective of the public interest, such as power lines and water reservoirs, may be allowed in protected areas, the preparatory works indicate that this option is to be available only in exceptional cases.

65 The only regional plan for wilderness and interference free areas was adopted by Møre and Romsdal County in 2000. In addition, wilderness and interference free areas have been taken into account in some other area-specific and sector-specific plans.
66 This was done in the context of the revised budget, St.prp. no. 65 (2002–2003), pp. 140–53.
According to section 37 of the Nature Diversity Act, within a *nature reserve* no activity is allowed that ‘reduces the conservation value of the area as described in the purpose of protection’. Nature reserves are generally subject to stricter regulations than are national parks. Section 37 states that nature reserves ‘may be given absolute protection from all activity, projects and access or passage’. Section 48 of the Act, as discussed above, also applies to nature reserves. Moreover, even if the vast majority of nature reserves are not subject to the local management reform of 2009, almost all nature reserves located within national parks and many nature reserves located within protected landscapes are subject to the reform. Hence, the reserves that are most likely to qualify as wilderness areas are managed by local management boards, and these reserves would also be subject to the policy decision of 2003 on more extensive use. However, this decision aims at striking a balance between conservation and user interests, and in nature reserves the former are likely to prevail.

A number of interference-free areas and some wilderness areas are located within protected landscapes. Such protected area status affords some protection, since projects that ‘substantially alter the nature or character of the landscape’ are prohibited (section 36 of the Nature Diversity Act). However, many of the important landscape protection areas are subject to the local management reform, and they are subject to less strict protection against new infrastructure than are national parks and nature reserves.

Against this background, the local management reform, taken together with policy decisions to promote more extensive use of protected areas, may possibly undermine the legal protection provided to national parks, nature reserves and protected landscapes. Protected landscapes and national parks seem vulnerable to such developments, whereas nature reserves are much more likely to preserve their wilderness characteristics. Nature reserves are likely to afford protection against recreational use, hunting and fishing. However, the Ministry of Climate and Environment has recently accepted significant interferences with nature reserves by reference to section 48 of the Nature Diversity Act and by redefining the borders of protected areas. Moreover, cancellation of protected area status and redefinition of the borders of protected areas are political decisions that cannot be overturned by courts. It

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70 In addition, 171 nature reserves had been subject to a previous local management reform initiated in 1998, see Fauchald and Gulbrandsen, supra note 67, pp. 208–209.
71 One famous case involves Åkersvika Nature Reserve, a Ramsar Site.
remains to be seen whether the courts will accept extensive resort to section 48 in cases involving wilderness or interference-free areas.72 Current efforts at adopting and updating management plans for protected areas may assist in preventing loss of wilderness and interference-free areas.

The role of the public in challenging decisions that impact on wilderness

There are few possibilities for environmental NGOs or other interested parties to initiate court cases regarding projects that are planned in wilderness or interference-free areas, due in part to the lack of legal bases for claims, and in part to the high costs of bringing cases to Norwegian courts.73 A search of the Norwegian database on court decisions revealed only two appeal court cases in which wilderness or interference-free areas had been mentioned.74 One case concerned reconstruction of accommodation in connection with summer pasture, where interference-free area was mentioned as one factor of importance when determining the rights of location of the building.75 The second case concerned compensation for lost opportunity to construct a hydropower plant as a consequence of the establishment of a nature reserve. The court referred to the fact that the plant would have been located in an interference-free area as one reason for deeming it unlikely that a concession would have been granted for constructing the plant, and thus as a reason for not awarding compensation.76

Concluding remarks

Against this background, we can observe that, except for those that have protected area status, enforcement of the protection of wilderness and interference-free areas in Norway is problematic from a legal perspective, as this protection is established primarily by non-binding instruments. Moreover, with the exception of electricity production and transportation, decision-making power is largely delegated to political bodies at the local level. The procedures for securing implementation of the non-binding instruments are to some extent transparent and allow for involvement of the public. Beyond the statistics on the loss of

72 One case before a court in the first instance concerning Sørdalen Nature Reserve provide decision-makers with extensive margins of discretion under section 48 (decision Oslo Tingrett 23 December 2013).
74 www.lovdata.no . The database contains all Supreme Court and appeal court decisions, but only a small selection, approximately 1 per cent, of decisions from courts of first instance. Hence, there may exist other cases than those mentioned here.
75 Rettens gang 2007, p. 5.
76 Rettens gang 2012, p. 1421.
wilderness and interference-free areas and a few limited studies, however, little aggregate information is available on how the non-binding instruments are followed up. Moreover, the non-binding status of the instruments means that stakeholders are unable to prevent incursions into wilderness and interference-free areas where there is lack of political will to protect such areas. Restoration of wilderness or interference-free areas is mentioned in some documents, but there is currently no policy decision promoting this approach.

5. The future of wilderness protection in Norway

In Norway, the extension of the ‘wilderness’ concept to interference-free areas and the use of the concepts as a basis for land-use planning have been controversial – in particular in relation to the forest industry, but also as related to the production and transport of electric power.77 The government that took office in October 2013 promised to discontinue the use of ‘interference-free areas’ as a tool in land-use planning,78 and the Ministry of Climate and Environment has followed up by ceasing to mention wilderness and interference-free areas in relation to the Norwegian mainland in its budget and announcing that formal references to interference-free areas have been deleted in rules concerning forestry.79 This chapter has shown that the legal protection of wilderness and interference-free areas is weak when such areas are located outside protected areas, and that protection seems to be weakening also for areas located within protected areas. Due to the lack of legal instruments that mention wilderness and interference-free areas, the government can decide to abandon these concepts as nature management tools without having to propose legislation to the Norwegian Parliament.

In the Norwegian context, the wilderness concept is also vulnerable from a natural science perspective. Studies have shown that there is no particularly strong link between biodiversity and wilderness areas in Norway.80 One main reason is that the remaining wilderness areas are located in mountainous areas with low levels of biological productivity and biodiversity (diversity of nature types in particular). A further important reason is that the Norwegian criteria for defining wilderness seem disconnected from concerns regarding loss of biodiversity. However, the inclusion of interference-free areas may change this situation.

77 See Proposal from several members of the Storting (Parliament) regarding interference-free areas, Parliamentary Document 8:37 S (2009–2010).
78 Politisk plattform for en regjering utgått av Høyre og Fremskrittspartiet, Sarbuvollen, 7 October 2013, p. 60.
80 See, e.g., T. Skjeggedal et al. supra note 11, pp. 43–89.
significantly. It seems clear that interference-free areas are regarded as biologically important in many municipalities and regions, especially in regions with few such areas remaining.

The ‘wilderness’ and ‘interference-free areas’ concepts as defined in Norway are more closely related to landscape effects and the interests of recreational users than to biodiversity. Consequently, even if the concepts lack clear links to biodiversity, they may still be justified on the basis of aesthetical and ethical arguments. However, even if we take this point into account, the Norwegian concepts will need to be redefined in light of recent developments and international trends in wilderness protection, if they are to continue to serve as administrative tools for land planning and project decisions. The three basic characteristics of wilderness as set out in this volume – size, absence of permanent human interference and degree of natural intactness – could constitute useful points of reference for such a revision.

Due to the current legal status of the country’s remaining wilderness areas – they are essentially protected as parts of national parks – abandoning the use of the Norwegian ‘wilderness’ concept as an administrative tool may not be significant for future protection of wilderness in Norway. Essentially, the future protection of these areas will depend on the enforcement of protected area legislation. By contrast, abandoning the concept of ‘interference-free areas’ as an administrative tool can be expected to have important negative implications for future protection of wilderness in Norway.

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81 See Riksrevisjonen, supra note 57, pp. 51–52 and 57–60.