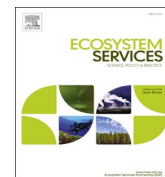


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The future Dutch Environment and Planning Act in light of the ecosystem approach

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ABSTRACT

This paper discusses whether the future Dutch Environment and Planning Act has embraced the ecosystem approach as a leading paradigm.

1. Introduction

In the Netherlands the government is working on a legislative project that will fundamentally change the structure of Dutch environmental law: the Environment and Planning Act (hereafter EPA). Although the EPA has already been adopted ([Official Government Gazette, 2016](#), 156), it will not enter into force before all necessary implementing legislation is adopted. One of the main reasons for the fundamental change is the idea that current and future challenges concerning the use and protection of the environment cannot be tackled effectively using the current legal instruments, which are scattered all over a large range of statutory regulations. At the national level there are approximately 4700 provisions spread over 35 Acts, 120 governmental decrees (Orders in Council), and 120 ministerial decrees. The transition towards a sustainable society requires a structural change since current legislation and instruments do not focus sufficiently on sustainable development ([Parliamentary Papers II, 33962, No. 3](#), p. 6).

The EPA will – possibly in 2019 – replace fifteen existing legislative acts concerned with environmental law, including the General Act on Environmental Permitting, the Water Act, the Spatial Planning Act and the Crisis and Recovery Act, and incorporate the area-based components of eight other acts, such as the Environmental Management Act ([Parliamentary Papers II, 33962, No. 186](#)). The key objective of the proposed legislation is sustainable development. The goal of sustainable development is codified in Article 1.3 EPA that aims to emphasize that not only the needs of the current generation but also those of

future generations are important in the application of the Environment and Planning Act.

In current legislation and accompanying explanatory memoranda the ecosystem approach and the concept of ecosystem services is scarcely mentioned. Since these concepts are quite widely adopted and used by other disciplines, there is sufficient reason to integrate them in the field of (environmental) law as well ([Mertens et al., 2012](#), p. 31). In our paper we aim to analyze whether and to what extent the future Dutch EPA supports an ecosystem approach. Will the Netherlands set an example by introducing an ecosystem approach in the EPA? Will the new act hinder the implementation of an ecosystem approach in environmental governance? Has the concept been a topic of debate during preparation of the new legislation? And if not, should that be considered a missed opportunity or does the EPA itself offer sufficient flexibility to implement such an approach? We will answer these questions in an explorative manner by analyzing the EPA, parliamentary papers and literature.

The first part of the paper starts with an explanation for the delay of integrating an ecosystem approach in the field of (environmental) law and then discusses the link between the concepts of the ecosystem approach, ecosystem integrity and ecosystem services. A number of indicators are described to evaluate environmental legislation in the light of an ecosystem approach. The second part of the paper will analyze the EPA by using the assessment framework elaborated in the first part.

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2. The ecosystem approach, ecosystem services and environmental law

At present there is wide agreement on the need to shift from a sectoral approach in environmental governance to a more ecosystem-based governance approach (Kidd et al., 2011); a governance approach that focuses on the ecological boundaries of the ecosystem, with the objective to facilitate both the sustainable use of the ecosystem and the maintenance of ecosystem integrity (Platjouw, 2016, p. 1). An ecosystem approach thus requires a governance approach that encompasses the entire geographical area of the ecosystem (e.g. a forest, lake, or estuarine) as well as an approach that integrates different interests and uses while maintaining the integrity of the ecosystem.

Though necessary, this shift towards more ecosystem-based governance is not easily accomplished. While other scientific disciplines have widely embraced concepts as the ecosystem approach and ecosystem services, environmental law appears not to be ready for this transformation yet. An important explanation for this delay in the field of law is the apparent tension between the requirements of the ecosystem approach and the architecture and design of environmental law (Platjouw, 2016; Woolley, 2014).

2.1. The challenges of environmental law

A first important challenge is the fact that jurisdictional boundaries often cut across habitats and ecological areas, at national as well as trans-national levels (Borg, 2012). The fragmentation of environmental law poses serious challenges to the aim of ecosystem-based governance as parts of ecosystems often are regulated by a set of laws and regulations that regulate the human relationship with the ecosystem in relatively diverse manners. These pieces of legislation that aim to conserve nature (nature conservation legislation), regulate industrial activity such as renewable energy production, mining, agriculture, forestry (sector legislation), and set environmental quality objectives, such as the Dutch Environmental Management Act and the Dutch Water Act, are in addition often implemented by different sectoral authorities. Following the principle of Environmental Policy Integration (EPI), these sectoral authorities usually have developed their own methods and traditions to govern ‘their’ natural resources without much cross-sectoral cooperation or harmonization (Bugge, 2010, p. 8–12). EPI, as a concept, appeared in the context of sustainable development. In the *United Nations General Assembly, 1887 Brundtland Report*, and subsequently in the *Rio Declaration on Environment and Development, 1992* and in *UNCED, 1992 Agenda 21*, EPI was strongly advocated. In short, the principle refers to the integration of environmental objectives and considerations into sector policy-making and planning (e.g. energy, transport, agriculture, and urban development) and is considered to be a key principle for realizing sustainable development. EPI means moving environmental issues from the periphery to the center of decision-making, whereby environmental issues are reflected in the very design and substance of sectoral policies (European Environment Agency, 2005). Though it may allow for giving a higher priority to environmental issues in relation to traditional sector and economic objectives, it might be rather complicated and difficult to implement the principle in concrete terms at sector level. While many “win-win” opportunities exist for achieving environmental and sector policy objectives together, there will also inevitably be highly complex and controversial trade-offs to be made between the three dimensions of sustainable development (Perrson, 2004). When sectors have developed rather diverse traditions and methods to make these trade-offs, ‘holistic’ ecosystem approaches are difficult to implement and realize. In case of both fragmented environmental law and governance it will thus be rather difficult to realize a ‘holistic’ ecosystem-based governance approach.

A second challenge arises through the open and discretionary nature of parts of environmental law and governance. Law often

requires public authorities to weigh and balance different interests and values when deciding on whether to grant licenses. Certain laws explicitly require a comparison of advantages and disadvantages of projects, other laws require the application of environmental principles that implicitly involve the weighing and balancing of interests and values. Many decision-making processes are nowadays resolved on the interpretation of the precautionary principle or some sort of codification of that principle (Peel, 2005). Moreover, environmental law contains an amount of vague and ambiguous concepts, such as ‘sustainable’ or ‘responsible’ that (implicitly) provide room and flexibility to public authorities when making decisions. This flexibility can have positive effects for environmental governance and can probably be justified by the need for the adaptive management of our ecosystems (e.g. Biber, 2013; Graig and Ruhl, 2014; Ebbesson, 2010). The secretariat of the Convention on Biological Diversity (*Secretariat of the CBD, 2004*) encouraged adaptive management in the context of the ecosystem approach:

“The ecosystem approach requires adaptive management to deal with the complex and dynamic nature of ecosystems and the absence of complete knowledge or understanding of their functioning. Ecosystem processes are often non-linear, and the outcome of such processes often show time-lags. The result is discontinuities, leading to surprise and uncertainty. Management must be adaptive in order to be able to respond to such uncertainties and contain elements of “learning by doing” or research feedback [...]”

At the core of the ecosystem approach is the recognition of complexity, constant change and lack of knowledge (Karkkainen, 2002). Thus, management of ecosystems and natural resources must be adaptive and allow for experimentation and learning that can then trigger adaptation. Institutions for protection must be capable of adapting, provide mechanisms for constant monitoring and evaluation of progress against benchmarks, and they must be able to cope with surprise because of the inevitable uncertainty involved (Karkkainen, 2002). Wiersema (2008, p. 23) notices that “[w]ith an emphasis on learning, comes also an emphasis on flexibility. For learning to be effective, institutions – whether legal or political or scientific – must be able to adapt to the new knowledge that learning provides. And to be adaptive, institutions must be flexible”.

Though this rationale for flexibility and openness in environmental law is understandable, it also entails risks (Adler, 2015). Most importantly, the maintenance of ecosystem integrity may not be ensured. According to Bugge (2010, p.62) “[i]t remains difficult to use this discretion in a manner that will lead to sustainable outcomes, particularly when many diverging interests are involved, and these interests are of various types and strengths; both multiple and conflicting public interests, and several contradictory private interests, and interests at different levels – local, national and international. The interests range from clear and short term economic profit on the one hand, to uncertain, vague, long term effects on ideal, ‘soft’ and disputed values such as environmental values and future concerns at the other end of the spectrum.” Indeed, notwithstanding the possibility to integrate and weigh ‘environmental’ values, there is no guarantee that these values will actually affect the outcome of a particular decision. Moreover, administrative discretion and flexibility allows public officials to integrate and weigh in their own manner, which may result in an inconsistent approach towards the ecosystem and fragmented governance of different parts of the same ecosystem.

Given these rationales in favor of and against flexibility in environmental law, it appears rather difficult to structure and design environmental law in a way that both reduces its open and discretionary nature as well as it allows for flexibility and adaptive management approaches.

2.2. Ecosystem integrity and ecosystem services

Despite the apparent tension between the requirements of the

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