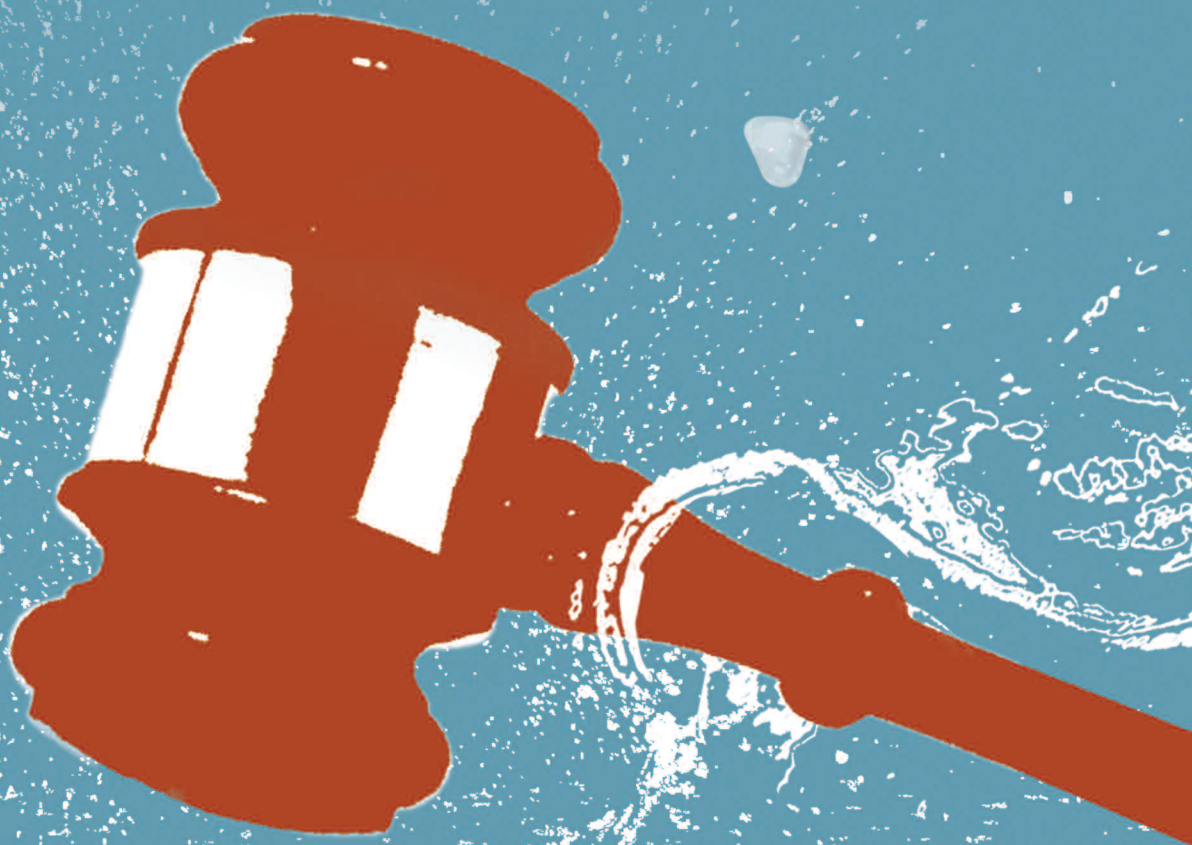




Ecological damage and ecological torts

How does society deal with and remediate
damage to water and aquatic
environments?



Delphine Loupsans

With the active participation of the permanent members of the “Ecological damage” work group

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“*Law comprises both rules and politics, ideals and harsh reality, neutrality and bias, and is positioned both above social battles and right in the middle of them.*” (R. Abel, 1998)

Preface

Ecological damage concerns all environments (terrestrial, aquatic, continental, marine). This book examines primarily the issues concerning water and aquatic environments, however, it should interest all stakeholders working in the field of biodiversity.

Water is a major factor in geopolitics, ecology, law, physics, chemistry, medicine, literature, geography, history, the arts, the economy, etc., in short, water concerns virtually every field of study. How could it be any other way? Yet in spite of its omnipresence, in some cases it is also very rare. Fresh water represents only 2.5% of all the water on the planet and the quantity that is both accessible and available for human activities represents only 0.01% of that total. The many and varied human activities, both public and private (fishing, drinking water, hydropower, irrigation, sanitation, etc.) have evolved over time due to scientific and technical progress and to changes in mentalities.

The law, the product of each society, bears witness to that progress and those changes. It is in fact a reflection of our “social compact”. In addition, those many and varied human activities also explain the emergence of conflicts concerning the use of water that must be settled, where possible by participatory processes, but also by regulations and, where necessary, by the intervention of a judge. Consequently, uses of water must comply with the applicable laws and regulations. The law serves as a means to regulate the use of water.

In addition to conflicts concerning how water resources are shared by users, the environment itself can be directly affected by highly diverse forms of damage and disturbances that all modify the ecosystem. These modifications result in a loss of biodiversity and malfunctions in the ecological system that can cause major damage, notably when they lead to the long-term decline of a species, to virtually irreversible alterations in habitats and, in some cases, to prohibitions concerning water usage (e.g. shutting down of abstractions for drinking water). Such cases are forms of ecological damage due to negative impacts on water and aquatic environments. The consequences may be difficult to counteract or even irreversible. The legal system must, in such cases, protect the environment by calling notably on dissuasive measures (i.e. penalties). However, dealing with ecological damage remains difficult, notably because this work constitutes a legal sector in its own right and it must take into consideration many non-legal factors, e.g. physical-chemical, biological, technical, economic and social aspects.

It is precisely this aspect that this book highlights by calling on the cumulative scientific, technical and multi-disciplinary expertise available at the agency and on the knowledge produced by the human and social sciences. In doing so, it complements the contribution of the earth and life sciences by focussing on the multiple dimensions of the phenomenon and the indispensable participation of numerous stakeholders, with different rights and responsibilities, different work cultures, traditions and concerns, who must learn to work together.

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Abstract

To cover such a complex legal topic and facilitate the task of readers, it was decided to organise the subject in five chapters addressing the five aspects representing the main issues involved in dealing with ecological damage. This division does not mean that the above aspects are not interrelated, but an in-depth discussion on each facilitates the presentation of the issues and serves to guide the reader in a progressive understanding of the topic as a whole. Each chapter reviews the current grey and academic literature on the given topic and highlights the problems encountered by the authorities, while also discussing the progress made and the knowledge acquired in the process.

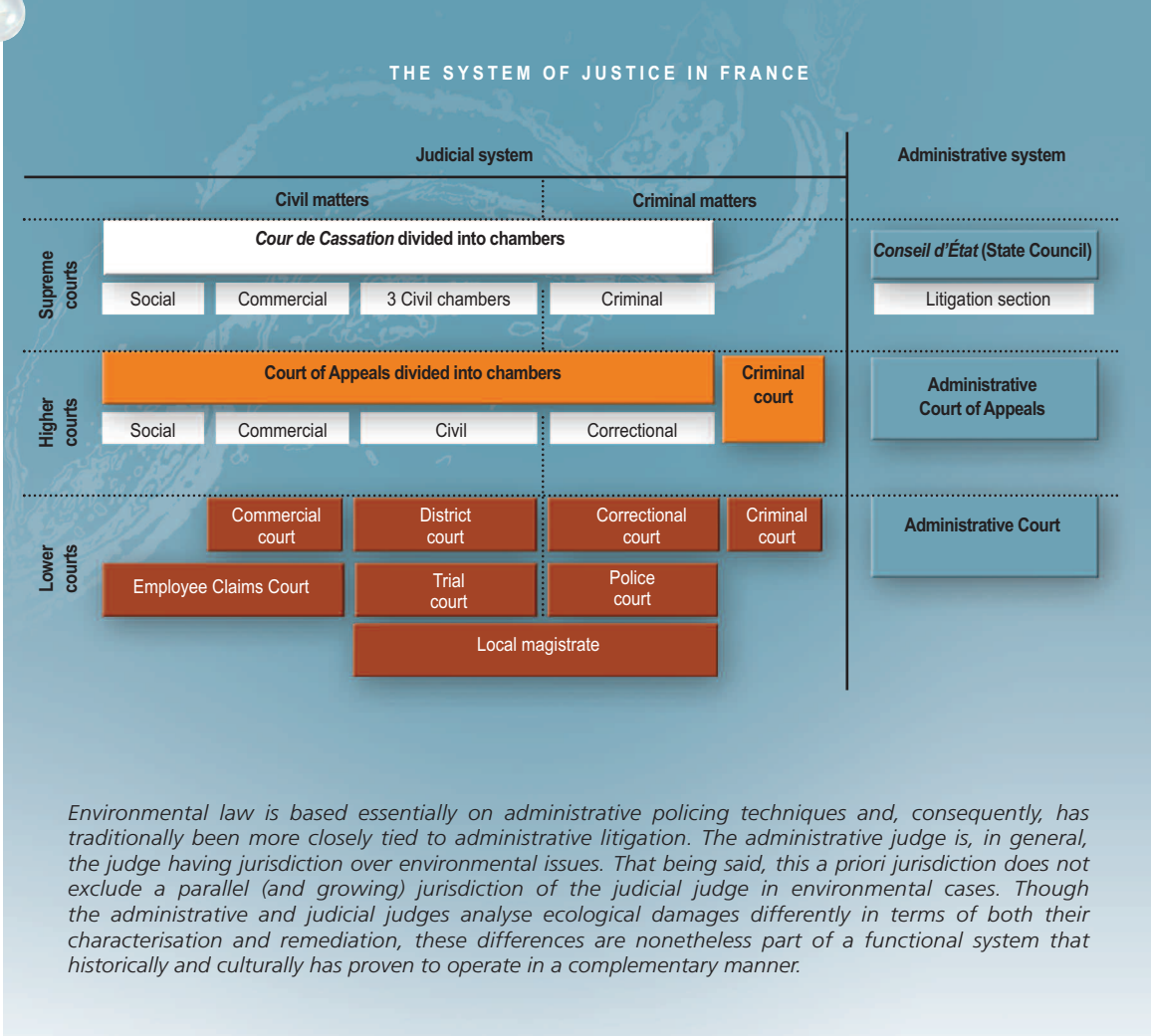
Legal basis and liabilities for damage caused to water and aquatic environments. Issues involved in characterising ecological damage

This first chapter looks at the long-standing decision to adopt an anthropocentric view of damage whereby compensation is accorded only for torts suffered by human beings (material, moral or corporal damages). The discussion shows that though a more ecocentric approach has begun to be accepted in addition to the dominant vision, a number of issues remain that explain why ecological damages do not systematically constitute a tort as defined by the legal system or, more precisely, the legal systems. The chapter stresses the point that the French judiciary approaches ecological damages in **different manners**.

This is due to the fact that France has a dual system of justice, i.e. it in fact has two systems, the administrative and the judicial (see Figure 1) that are increasingly influenced by European law (notably the Court of Justice of the European Union), which has a unitary system and encourages the Member States to institute the polluter-pays principle. The two systems in France each have their own history and culture, and each has developed its specific approach to characterising, assessing and remediating ecological damage.

At the end of the chapter, it will have become clear why environmental damage is not the same thing as ecological damage and why ecological damage does not necessarily result in an ecological tort. These distinctions in the terminology will help the reader in better understanding the legal complexities when dealing with ecological damages, notably by differentiating between the three forms of legal liability (environmental, civil and criminal) potentially involved and the different types of legal procedure (administrative and judicial).

Figure 1



The system of justice in France. Two spheres of jurisdiction, two types of judge.

When the legal, scientific and technical sectors work together.
Technical aspects involved in dealing with ecological damage

This second chapter explains that the complexity of the law for water and aquatic environments requires that the legal, scientific and technical sectors work together. This collaboration can take place both in formulating the laws and regulations and in their implementation. Effective collaboration is also possible in proving the existence of ecological damage, of a tort and of a liability. One of the most evident barriers in dealing with ecological damage is the fact that judges and jurists in general receive **training** in the human and social sciences which bring into play rationales and a terminology that differ significantly from those used by the earth and life sciences. Similarly, the work and methods employed by jurists are not those of a technician or scientific researcher, a situation which creates different approaches and perceptions to issues. Collaboration between the legal and scientific sectors is far from easy. That being said, it is not impossible and progress has been made. One example is the ministerial circular (23 May 2005) stipulating that a prosecutor be designated specifically for

environmental issues in each office of a State prosecutor or Prosecutor general. Another example is a series of contacts, such as those between Onema* personnel and prosecutors, that contribute to establishing the necessary links. A judge needs proof of the facts on which to base his decision. A judge also needs to understand the situation and to grasp the impact of damage for society.

Assessing damage during a trial. From an assessment of damage to an assessment of remedies

On the basis of the information provided to the reader in the first two chapters, this third chapter presents the framework established for assessments. To that end, the reader is plunged into the heart of judicial procedures in order to highlight the need to clearly distinguish between the different types of assessment activity with which a judge may be confronted at different, but very precise moments in a given procedure. The discussion will make clear that the decision to remediate an ecological tort depends on the independent judgement of the judge. It is always a decision by the court that creates or denies the existence of an ecological tort and determines whether the defendant must remediate the situation according to precise conditions. The assessment is therefore a means, among others, used by the judge during the procedure to justify and inform his decision. Assessments are however a highly complex process that must be undertaken in a methodical manner, step by step, particularly in combined (civil and criminal) cases, the most common situation for damage to water and aquatic environments.

Territorial considerations in the legal situation and how they apply to ecological damage

This fourth chapter highlights the link, not always clearly apparent, between the reaction to ecological damage and the local territory. Different aspects of the link are discussed. The first aspect concerns the unequal exposure of territories to risks of ecological damage. The second concerns the differences in reactions of populations in different territories to ecological damage due to their different sensitivities and past history. This aspect raises questions concerning the presence of active forces, notably in the form of non-profit groups. A further consideration deals with the geographic specialisation of courts and jurists, which is gaining momentum, notably with the creation of “zones of competence” and changes of venue for trials that are in some cases desired (or desirable). This chapter makes it clear that all the above factors influence the manner in which ecological damage is perceived and dealt with.

The time factor in handling ecological damage

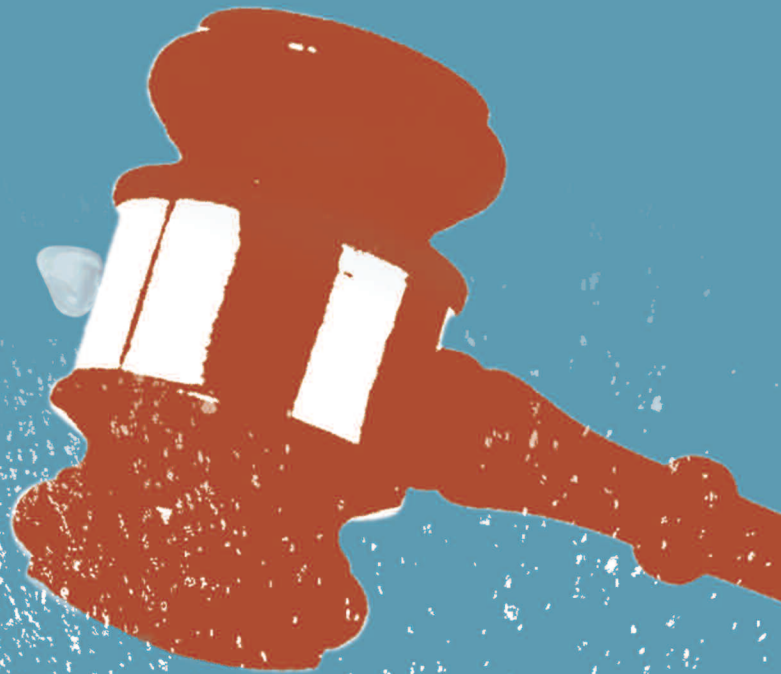
This fifth and last chapter discusses the impact of time on dealing with ecological damage. First of all, because most of the issues surrounding environmental situations are conditioned by decisions producing effects over the long term. Secondly, because the time horizons in the legal and social spheres are not necessarily those observed in nature. Times (deadlines, etc.) in the legal sphere are set by the participants in that sphere and, measured on the human scale, must not exceed certain limits because the enforcement of laws supposes that there be a timely reaction to offences, however it is also possible to anticipate on future developments, i.e. to devise principles and rules for the long term. This means that some control is required over times in the environmental sphere. But damage is characterised by its great diversity in terms of how it is identified, its degree, effects and duration. Under these conditions, how is it possible to assess damage, all the damage, but only the damage? After a certain lapse of time, it may be difficult to ascertain the full extent of damage, its causes and effects. The chapter explains that the intervention of the system of justice will be all the more effective that it takes place rapidly and selects suitable penalties and remedies.

* As of 1 January 2017, the Agency for marine protected areas, the Technical workshop for natural areas, the National agency for water and aquatic environments (Onema) and the French national parks joined forces to form the French biodiversity agency.
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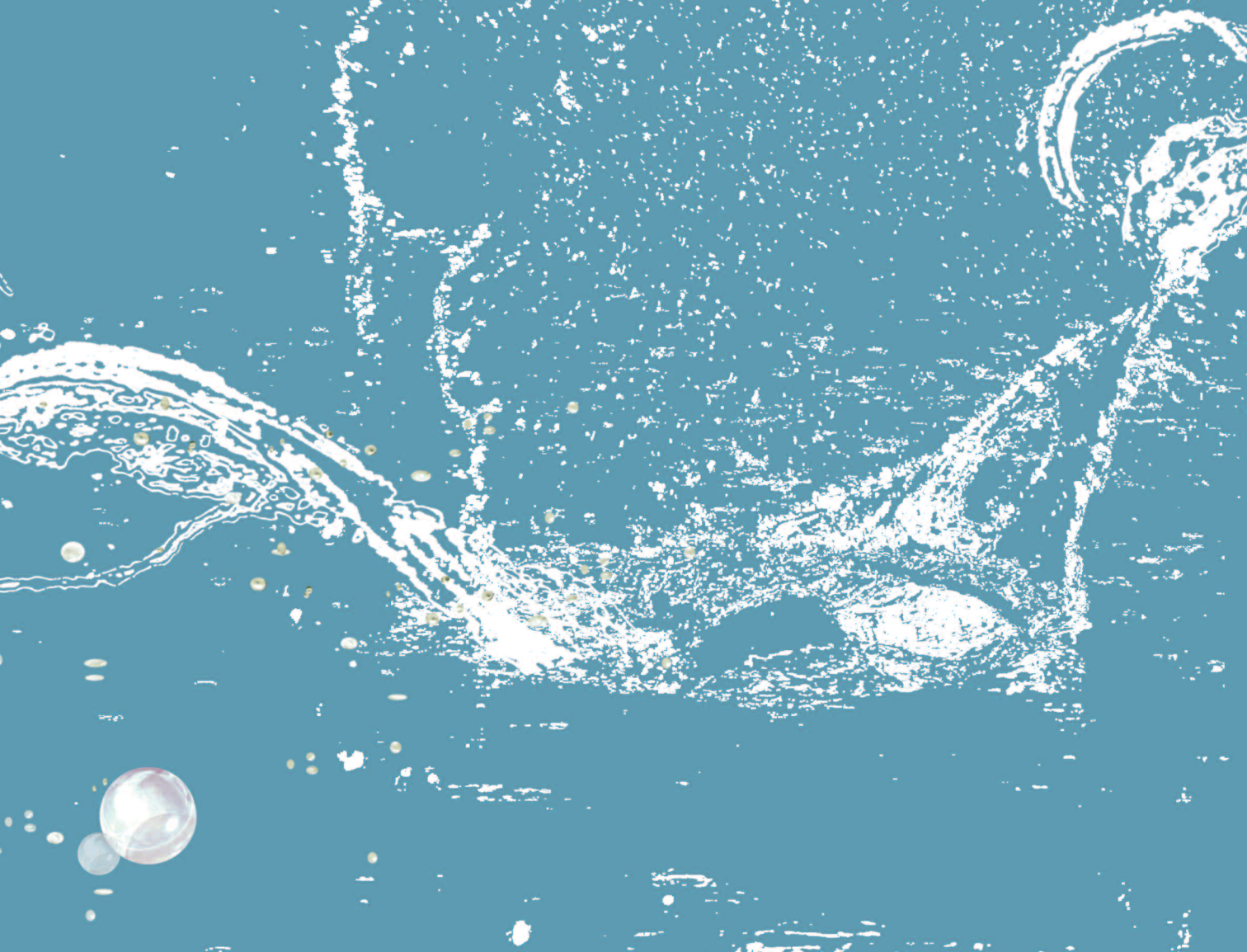


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Introduction

Damage has been inflicted on the environment for a very long time, however the legal system in France addressed the problem only **recently**. But once undertaken, the attention paid has been **constant and dynamic in its evolution**. The 1810 decree-law constituted the first legislative text targeting the effects of unclean and dangerous facilities. Sanitary regulations (drinking water, wastewater, waste) were progressively instituted over the 1800s and 1900s. However, it was the 1964 Water law (18 December 1964) on water distribution and regimes, and on controlling water pollution, that marked the first major step in setting up water legislation.

The 1970s saw the creation of the first Ecology ministry (F. Charvillat, 2003), then the vote of two important laws on 10 and 17 July 1976 concerning environmental protection and on regulated installations. From that point on, environmental law developed seemingly as a symptom of an environmental crisis increasingly highlighted by scientific progress and changes in social perceptions (C. and R. Larrère, 1997). Should that be seen as a coincidence? No, because **it is on the issues surrounding damage that environmental law has developed**, thanks to efforts by national and international judges. The impact of European environmental law, notably in the field of remedying ecological damage, has been enormous (see Directive 2008/99/EC (19 November 2008) on the protection of the environment through criminal law and Directive 2004/35/EC (21 April 2004) on environmental liability with regard to the prevention and remediation of environmental damage).

That being said, from the very first steps taken, the issue of characterising, assessing and remedying ecological damage was (and remains today) a central concern, even though the reality of damage has been scientifically observed and is socially acknowledged (O. Fuchs, 2011).

Ecological damage, i.e. damage inflicted on nature, also called purely ecological damage, raises numerous questions, scientific, political, legal, social, economic, cultural and technical. What type of environment should be protected? Which particular sites should be preserved? According to which criteria? What means should be adopted to counter environmental degradation? How can damage to the environment be remediated? Who may launch legal proceedings? Is there a risk of upsetting the existing legal system and its functioning by acknowledging the existence of purely ecological damage, i.e. a form of damage other than that affecting humans? Is it possible to evaluate purely ecological damage? How can a penalty be adapted to the principles of social justice? Should training for judges and prosecutors be modified? Is there a risk of assigning an overly important role to scientific opinions and thus of reducing the independence of judges? What relationship do humans have and want to have with nature? How can the notion of irreversibility be taken into account when it does not exist in legal doctrine? To the above fundamental questions must be added those arising from the process of identifying, assessing and remedying damage, involving the intervention of a wide array of public and private stakeholders. Who should run the assessment? On the basis of what knowledge?

Who should take action to counter environmental pollution (what is the role of governmental agencies, civil society and of the lobbies)? Who will defend nature for the sake of nature? Are lawyers correctly trained for that purpose? Who should be the judges of environmental litigation? Are specialised courts required?

Clearly, ecological damage raises a number of **hybrid concerns**, at the crossroads between many disciplines that no one person can master simultaneously. Consequently, it brings into play numerous stakeholders with different rights and responsibilities, different work cultures, traditions and concerns that are nonetheless complementary, and who are fully capable of ignoring each other and even of mutually suspecting each other (D. Guihal, 2008).

Measures to control delictual and even criminal behaviour are gravely hindered by this complexity (see Box 1). In spite of the proliferation of regulations (and their lackings), penalties are rare and rarely dissuasive (L. Neyret et al., 2012). This situation is highly prevalent even though the “polluter pays” principle should contribute to raising awareness of risks before damage is done and to improving the implementation of penalties and remedies where the law foresees them. Environmental inspectors, entrusted with the mission of enforcing regulations, are at best virtually invisible and at worst contested and denied any legitimacy in their work. The end result is that **the implementation of water law as a whole is largely negated**. This ineffectiveness of water law is manifested in two, interrelated manners. Either the law is not correctly implemented and the reason should be identified, or the law is not accepted by the concerned citizens and it is the **rule of law** itself that is put into question.

But effective enforcement of water law is indispensable in implementing public policy to protect water resources and the environment. Water law establishes the **legal framework** for public policy and its effective enforcement, i.e. its acceptance by citizens, is the **source of its legitimacy** and recognition. It is the role of the public authorities to determine how the law should be implemented given the precise objectives set, e.g. achieving good ecological status of water. **Assessment of ecological damage is a fundamental factor in its remediation and consequently in the effectiveness of the law**. A failure to deal with ecological damage would signal the incapacity of society, which claims to promote sustainable development, to implement the necessary policies and to adapt to the challenges and necessities of our time.

Box 1

Ecological delinquency

The concept of “ecological delinquency” is fairly recent and was put forward as a social problem for the first time during the first convention of the French society for environmental law in 1976 in Strasbourg. In 1979, it was the central topic of the 17th French criminology convention in Nice. During that meeting, E. du Pontavice noted in his presentation titled “Contribution of foreign experience concerning ecological delinquency” that “though changes may be observed, we must nonetheless conclude that many of our contemporaries are still of the opinion that certain ecological offences are not morally reprehensible”. He added “an industrial manager would be surprised and outraged to find himself among the accused, next to a pimp or a thief (...). Judges hold the same widely shared assumptions in that they do not understand the harmfulness of pollution (...) and consequently do not condemn offenders or sentence them to ridiculously low fines”.



Today, there has clearly been a change in social perceptions of ecological delinquency such that it is now possible to consider certain types of damage and disturbances as the actions of a new category of delinquents. Above and beyond the new ecological awareness, the change in perceptions has modified how people judge delictual behaviour. The evolution of our societies toward sustainable development is the sign of increased ecological, social, economic and cultural awareness of the need to shift to a new system offering economic viability, social equity and ecological sustainability. The legal system, the backbone of our societies, has created a large number of laws and regulations, even excessively large according to some.

It is therefore not the absence of a legal framework that stands in the way of acknowledging the existence of ecological delinquency and, consequently, ecological damage. Enforcement of the laws and regulations depends on the willpower and the means invested in the effort.

Onema*, in its role as a national agency in implementing water policy and ensuring its effective application, took up this issue in order to coordinate the work to make available its multi-disciplinary technical and scientific expertise and its vast experience in the field.

This document was written with the support of a work group led by the author and bringing together professionals from different fields and with different perspectives (professors of law, scientists active in multiple sectors, environmental inspectors, experts from the agency and beyond, etc.). It also benefited from the knowledge produced by scientists working both within and outside the academic sphere, jurists and managers in charge of protecting and restoring aquatic environments. Finally, it took into account a number of current discussions in order to clarify certain misunderstandings, pave the way for greater awareness and facilitate the spread of information on certain recent advances that continue to drive progress in the field.

This document was structured on the principle of scientific reflexivity in order to provide information and analysis methods to water stakeholders, including Onema itself and now the French biodiversity agency. It constitutes the first step in an ambitious project that will contribute to revealing and analysing the issues involved in dealing with ecological damage, review the progress made and discuss the work that remains to be done.

It is intended primarily for water managers and public and private stakeholders directly involved in implementing water policy.

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