



Legal basis and liabilities for damage caused to water and aquatic environments

Issues involved in characterising ecological damage

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Introduction

The sources of the law dealing with damage to water and aquatic environments are both **internal and external** in nature (see Box 2). Applicable laws are the result of international treaty and customary law, European law and national law in the form of the constitution and the legislative and regulatory texts governing the environment in general and water in particular. All of these legal instruments are part of what is called the internal legal system either because they were produced by the French authorities themselves or because they were drafted by supra- or international authorities and subsequently transposed into the French legal system by a French law. All of these sources contribute, as we shall see, to characterising ecological damage because they assist in defining it, specifying it and translating it into legal terms of use in a legal procedure addressing the damage according to the various liability regimes that enable a judge (administrative, civil and/or criminal affairs) to take it into account and remediate it, as the case may be.

Box 2

The hierarchy of norms

Laws have many, diverse origins. They may be international (treaties, etc.), European (directives, regulations, etc.) and national (Constitution, law, regulation, custom, jurisprudence, doctrine, etc.). The hierarchy of norms is the ranking of all applicable laws and regulations making up the legal system of a constitutional State. Its purpose is to settle conflicts between laws given that, in principle, a lower level must comply with a level above it. The hierarchy of norms, derived from the pyramid of Kelsen, consists of superposed layers with additional customary and treaty elements which now form a rather complex assembly (said to be post modern). Put briefly, international law sets a number of rules, but European law determines much more decisively internal French law, itself organised as a hierarchy (Constitution, organic laws, laws, decrees, ministerial rulings and local by-laws), in general with written sources, but also with some non-written sources, said to be customary. Jurisprudence equally plays a fairly significant role in environmental issues, due to the part played by the judge in rendering decisions, assigning liabilities and often interpreting the meaning of the applicable rules.



Sources of water law and its evolution toward integrated management designed to limit actions affecting environments

Environmental law, above and beyond the fundamental principles, is made up of several large subsets based on their own specific principles and characteristics:

- the laws on the protection of the natural patrimony (protection of species and territories);
- the laws on environmental protection (which includes water law);
- the laws on controlling pollution and disturbances (regulated installations, etc.);
- the laws on hazards (natural or technological).

Similar to environmental law, water law has **evolved** considerably over the years, due primarily to **pressures exerted by European and international law** since the 1970s.

Water law is innovative, but also complex and highly specific. Its main function is to facilitate the management and governance of a vital resource that is subject to multiple uses and potential sources of conflict, and involves both quantitative and qualitative issues (Loupsans & Drobenko, 2015). For all these reasons, **balanced management** of water resources is necessary. This notion was incorporated in French law by article L. 211-1 in the Environmental code (C. Env.), which was drawn from the 1992 Water law (3 January 1992). The priority objectives of this management technique are to satisfy needs in terms of individual and public health, public safety and drinking water for the population. It must also satisfy or reconcile different uses, activities and projects, as well as ensure the preservation of aquatic ecosystems and wetlands, protection against pollution, restoration of water quality and the development and protection of water resources (Art. L. 211-1 C. Env.).

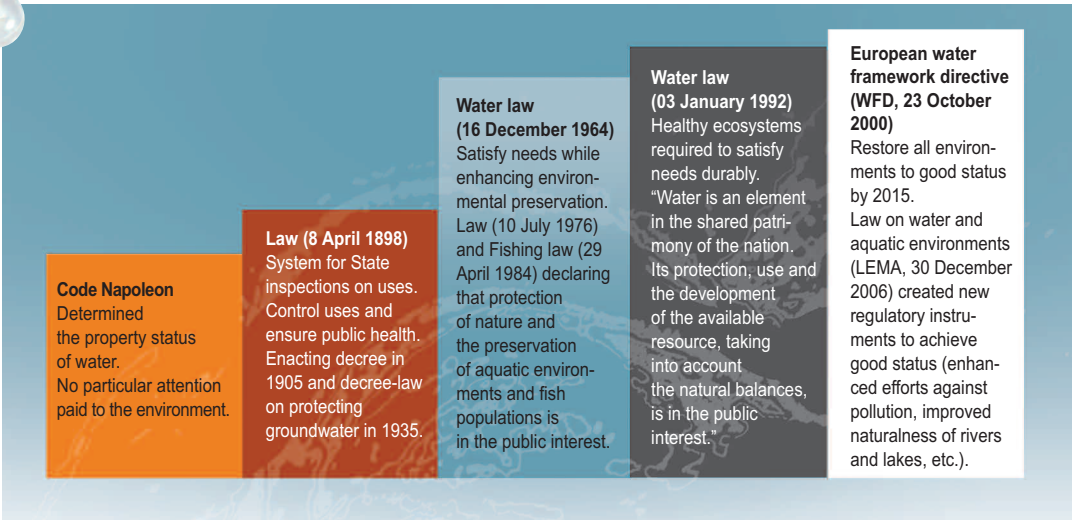
But it quickly became apparent that regulations on water uses and on activities impacting its quality and/or quantity were not sufficient. The shift in French law toward integrated management signals an awareness of the need to widen the scope of public policies.

Integrated management can be defined as a social and political process of coordinating decisions and actions concerning water, the aquatic environments and, more generally, all the various components that make up a hydrological unit and have an impact on water quality and flows. It implies, on the basin or sub-basin scale, maintaining the quantity of water resources, treating water as an economic resource having social value, protecting water quality, preserving aquatic ecosystems and, last but not least, controlling flood risks (Loupsans, 2014). The concept of integrated management was first mentioned during the International conference on water and the environment in Dublin in 1992. It is an element in the **sustainable-development paradigm** (Brundtland report, 1987) that prescribes better integration of the many facets of development while also protecting the natural environment.



Consequently, integrated water management requires public policies and a legal framework that take into account the environmental, social and economic dynamics affecting the resource. Very often, that implies going well beyond solely national issues, to the point that the challenge for national, European and international stakeholders lies in reconciling, in a cooperative framework, these three aspects by drafting principles, rules and procedures suited to the different levels. That is why the European Union (EU) and its predecessor, the European Economic Community (EEC), have since 1972 made an effort to codify laws and regulations in order to protect water resources and environments (Loupsans, 2013). This process led the French legislator, in 1992, to adapt French water law to the European context and to widen the scope of the 1964 law by filling out the basic principles of the policy, by adding planning tools and by **reinforcing inspections on activities impacting the environment**. The European water framework directive (WFD, 2000), transposed into French law in 2004, was a further step in this direction. Then the Law on water and aquatic environments (LEMA, 2006) filled out and reinforced the provisions contained in the 1992 law and created the National agency for water and aquatic environments (Onema) as well as the framework for the missions, notably inspections, that were assigned to the agency (see Figure 2).

Figure 2



The main steps in the development of water law in France.

Box 3

Water pollution and legal problems, Paris, Librairies techniques, 1968, 204 pages

In this book published in 1968, Michel Despax presented the legal problems arising from water pollution and the solutions contained in French and international law. He was the first to explore a field that had long been neglected by jurists, even though the scientific community had for years expressed its concern over the multiple forms of degradation in the natural environment, due to uncontrolled industrial and technical development. This book makes it possible to draw up the list of the legal instruments available at the time to counter a phenomenon whose seriousness is now evident to one and all, and to assess the effectiveness of those instruments or the lack thereof. The book, whose conclusions remain as valid today as they were 50 years ago, made clear that there was no lack of instruments to fight pollution and its consequences. However, as the author demonstrated, they must be put to good use.



The response of the legal system to damage inflicted on nature in order to control behaviour affecting environments

As of 2008, pursuant to the European directive on environmental liability (2004), French law finally acquired a definition of “damage caused to the environment”, that was used in the French law on environmental liability (LRE, 2008). This step forward in dealing with damage caused to the environment, though imperfect, took into account the obligations contained, among other sources, in the WFD. It is also fully in line with the dynamic process initiated by the Constitutional charter for the environment, adopted on 28 February 2005 by the two houses of Parliament in joint session (Constitutional law 2005-205 (signed on 1 March 2005) establishing the Charter for the environment, published in the Official journal on 2 March 2005).

With the Charter, **environmental law** and the **right to a healthy environment** acquired constitutional standing. The Charter is now part of the body of constitutional rules and principles, i.e. the preservation of the environment is now on an equal footing with the 1789 Declaration of the Rights of Man and of Citizens and with the economic and social rights. The Charter acknowledges the right of each person to live in an environment that is balanced and healthy, the right to access information held by public authorities and to participate in formulating the public decisions affecting the environment, however it also **imposes obligations on those causing damage to participate in remediating said damage**.

This point was reiterated by the Constitutional Council in its decision on 8 April 2011, when it noted that observance of articles 1 and 2 of the Charter for the environment “is mandatory not only for public and administrative authorities, each in their respective domains, but also for private persons and entities” and that “each must remain vigilant concerning damage to the environment that may be caused by one’s activity” and that “legal action seeking redress may be engaged if compliance with that obligation is lacking”.

This principle received jurisprudential consecration with the Erika decision in 2012 (Cour de Cass. Crimm., 25 September 2012, decision no. 3439), which stands out as a landmark decision in that it acknowledged the existence of an **ecological tort**. That being said, though this highly publicised event bore witness to significant political, social and legal progress, the very small number of similar decisions means that a number of issues remain undecided. The recent modifications, contained in Law 2016-1087 (8 August 2016) to restore biodiversity, nature and landscapes, should provide some answers due to the insertion of article 1386-19 and the following in the Civil code, given that the legislator has now defined the conditions for the civil remediation of an ecological tort.

Environmental damage or ecological damage?

Law is the product of the social conscience, consequently the knowledge and data provided by the earth and life sciences are not sufficient in characterising damage to nature. Many stakeholders reflect on and participate in characterising damage to nature and specifically that caused to water and aquatic environments, namely jurists, decision-makers, scientists in multiple fields of the human and social sciences and in the earth and life sciences, water managers, non-profits active in environmental protection and human rights, economic players, health professionals, State services and agencies, etc. All of this input, provided by professionals in different fields, each with their work habits, training and experience, contributes to influencing the law and how it is practised. However, the law is also clearly situated historically and socially. It evolves because the opinions of the stakeholders and social perceptions change over time (Honegger, 2014). That explains why, though an anthropocentric vision of damage was long favoured, due notably to the anthropocentrism of liability law which has difficulty with the ecocentric nature of ecological damage (Rebeyrol, 2010), changes in social perceptions led to what Pinatel (1979) gingerly termed “**technical adjustments**” that, fundamentally, consist of reconciling economic and social development with ecological preservation via measures in the administrative, civil and criminal domains.

Today, two schools of thought, the anthropocentric and the ecocentric (Reyberol, 2010; Fuchs, 2011), form the foundation for most of the legal thought and practises involved in characterising damage caused to nature, including that caused to water and aquatic environments.

The **anthropocentric school** focusses on **damage caused to humans**. In this case, the literature speaks of **environmental damage**. This concept is used to describe diverse situations that vary as a function of the territorial scale. For example, internationalists use it for ecological catastrophes or environmental refugees fleeing humanitarian catastrophes caused by grave disturbances to the environment (see Box 4). In French law, the concept is used to describe damage where a legal subject (the human being) has suffered a loss and may request remediation. The damage exists due to the degradation of the environment, e.g. damage to human health, damage to property (buildings, crops, animals, etc.), damage to activities (tourism, recreational activities, etc.). The impact is measured not on the basis of the environment and ecosystem functioning, but on that of the damage directly caused to the human being. In other words, in the framework of this concept, it is the human being who, on the basis of his legal capacity and as the direct victim of damage caused to water and aquatic environments, will request remediation for the damage directly suffered. The environment is taken only indirectly into account.

The **ecocentric school** focusses on **damage inflicted on nature, also called ecological damage or purely ecological damage**. This type of damage does not have a legally identified victim because the environment does not have legal standing. This is damage to the non-possessed or non-possessable elements of nature. Most often, this type of damage is conceived as impacting entire systems (ecosystems, the biosphere) or more limited elements (e.g. a species). Roughly speaking and in our field of study, this damage may be divided into three categories depending on the impacted aspects of the aquatic environment:

- damage to the available quantity of water (discharge and regime);
- damage to water quality;
- damage to habitats.

The impact is measured with respect to an objective, a quality standard or a negative trend observed with respect to a situation assessed previously. As we will see later, remediation of ecological damage must overcome the obstacle of identifying a person entitled to request remediation because, in this case, the legal subject (the human being) does not hold any rights over the damaged element(s) of the environment. It is generally a legal entity (the State, non-profits, public agencies, etc.) that is entitled to request remediation for purely ecological damage, given that it is endowed with legal standing and has been assigned the mission of ensuring the integrity of the common good. In such cases, contrary to damage caused to humans, the damage directly impacts the environment.

Environmental damage causing population movements

In 1985, a report by the U.N. environment programme (UNEP) defined “environmental refugees” as “people obliged to leave their habitual homes temporarily or permanently due to an ecological catastrophe that adversely affects their lives or living conditions”. The concept of environmental refugees concerns movements of population **within a country or to another country** following serious environmental damage affecting entire groups of people. Situations involving “environmental refugees”, also called “ecological refugees”, “ecorefugees” and “climate refugees” in the scientific literature (Cournil, 2008; Cambrézy, 2013) are **neither isolated nor rare**. Examples are the 200 000 people displaced after the accident in Bhopal, India, the 375 000 after Chernobyl, 100 000 after Seveso in Italy and 1.4 million after hurricane Katrina in New Orleans. Elsewhere, melting ice has forced the migration of Inuits and rises in sea levels have obliged people in the South Pacific to leave their islands. The government of the Maldives recently acquired land in Madagascar in preparing for a massive movement of the population (Betaille, 2009).

This phenomenon is now widespread and taken very seriously by international institutions. For example, the U.N. High Commissioner for Refugees (UNHCR) made clear reference to the phenomenon in 1997 and according to the International organisation for migration (IOM), by 2050, over 2% of the world population will have been displaced due to the climate (2008).

In Europe, the *Environmental change and forced migration scenarios (Each For)* European research programme was launched specifically to study the issue of forced migrations (2007-2009). Two objectives were set for the programme. The first objective was to identify and describe the causes of forced migration with respect to environmental degradation and change, and the links between the environmental factors and other economic, social and political phenomena in Europe and in the main countries of out-going migration. The second objective was to draft scenarios for future forced migrations due to climate change. The research team identified 22 countries “at risk” and issued five sets of recommendations including changes to legislation targeting effective recognition of the status of ecological refugees.

To date, **there are no *ad hoc* legal instruments that guarantee assistance or legal protection for ecological refugees** in either the international texts on the environment or in those concerning refugees or foreigners (Kiss, 2004). This difficulty in categorising the victims as “ecological refugees” is due notably to the fact that the phenomenon is the result of several interwoven dynamics, namely those of the ecosystems, economic activities and the social attachment to a given environment (Andrieux, 2009). However, it is also due to the fact that the causes are environmental, but the consequences are humanitarian (Noblet, 2009). This explains why the authorities managing the causes (Ecology ministries, UNEP, environmental directorates, etc.) are not the same as those managing the consequences (ECHO, the EU aid office, OCHA, the UN aid office, UNHCR, etc.).

The difficulty in categorisation is consequently due not only to the multi-sectoral aspect of the phenomenon, but also to the financial implications and the difficulties in assigning responsibilities.



In this document, we will use a concept of ecological damage incorporating elements drawn from both of the dominant schools, the anthropocentric and the ecocentric. We see ecological damage as an impact on the environment and on the functioning of an ecosystem that can constitute a tort for humans and nature. This definition has the advantage of conforming to the actual situation of environmental inspectors in charge of reporting damage to water and aquatic environments, as well as to the diversity of the legal system. One of the duties of environmental inspectors is to inspect water uses. This means that though their general mission is to report and characterise damage, exclusively on the basis of scientific and technical elements, they can also observe and report, notably in court, on impacts on the functions of ecosystems of direct benefit to humans, functions also known as “ecosystem services” (see Figure 3).

The originality of the French approach, compared to a number of foreign legal systems, lies in this hybrid nature (see Box 5). The diversity of the tort charges that can be made following ecological damage is also an indication of the difficulty, according to some, or of the choice, according to others, in deciding in favour of one or the other of the two schools.

Box 5

How do foreign legal systems approach the anthropocentric/ecocentric debate?

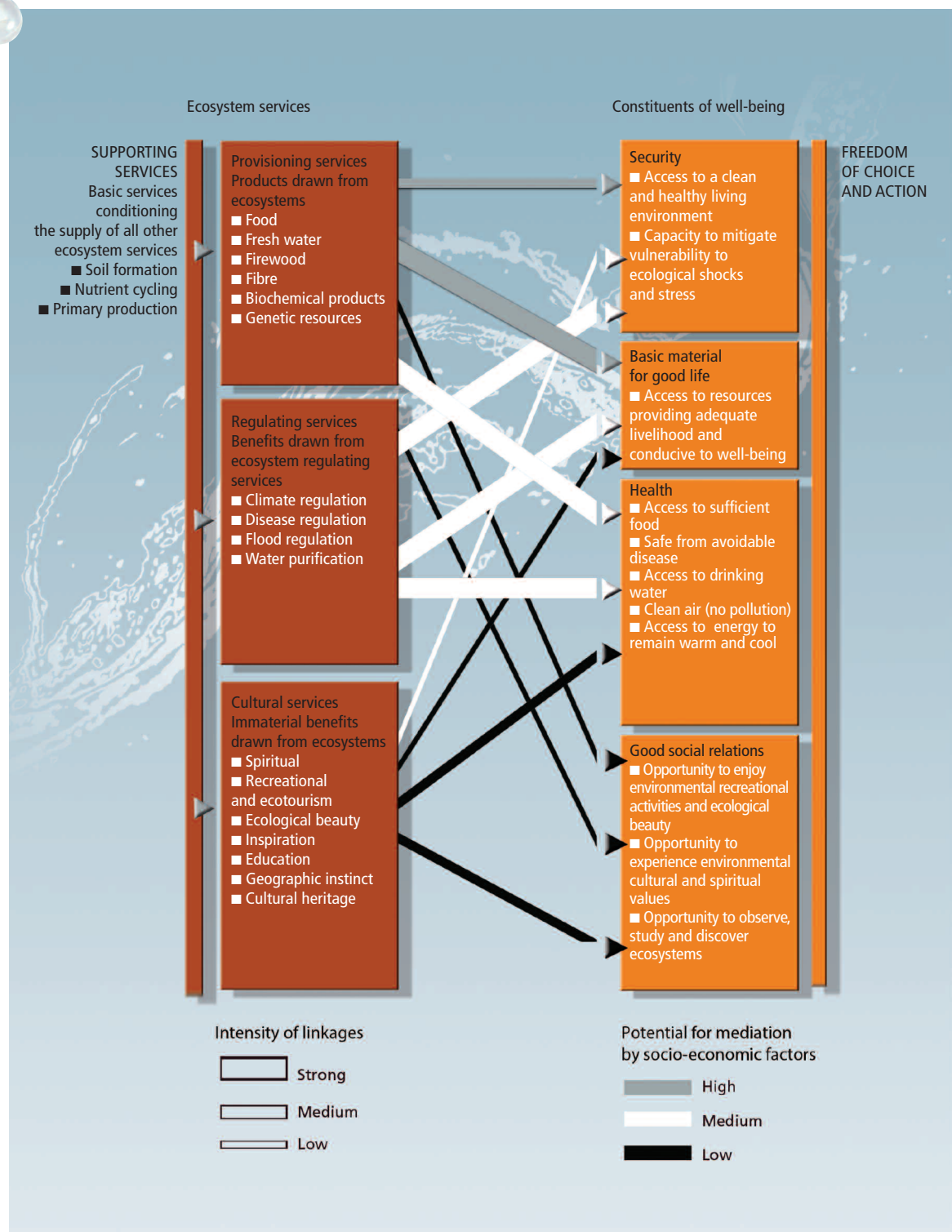
In France, legal doctrine initially opted clearly in favour of the anthropocentric approach, however a number of recent changes have signalled that the French system is today much more a hybrid system. Environmental inspectors experience this situation every day in their work.

Our European and international neighbours are also confronted with this dilemma. But several of them have explicitly decided to adopt one or the other of the two schools of thought.

Germany and Switzerland have adopted a definition of damage that clearly centres on human beings, i.e. the anthropocentric concept. In Germany, the notion of *Umwelteinwirkung* (impact on the environment), anchored in German law by the law on liability in environmental matters (10 December 1990), defines damage as environmental damage, i.e. as a violation against a person or property. The environment is perceived as a vector, a mediator in violations against human life, health or property. Until 2004, Switzerland did not allow remediation of damage against nature. This prohibition has since been lifted, but the topic is still the subject of major controversy (Fuchs, 2011).

Italy and federal law in the U.S. have adopted an ecocentric approach to damage. In Italy, the law dated 18 July 1986 and the position of the Constitutional Court starting in 1987 defined, step by step, a general condition of liability for any person who, due to their own fault, causes damage to nature and determined that the “environment” comprises all natural and cultural resources, i.e. the conservation, rational management and improvement of the natural environment, the existence and conservation of species, etc. The same type of definition may be found in the legislation on polluted soil and the maritime transport of petroleum products in the United States (Fuchs, 2011).

Figure 3



©Millennium ecosystem assessment, Nations-unies, 2006

Ecosystem services are the ecosystem functions that benefit human beings.

It should be noted that the intensity of the links and the potential for mediation differ depending on the ecosystem and regions (Blanchart, de Tourdonnet, 2014).



Are the terms “ecological damage” and “ecological tort” synonymous?

The distinction between damage and a tort is very clear in civil, criminal and administrative liability law and will be discussed in further detail below.

It may be said that **damage is the cause and the tort is the consequence**. Damage is an objectively observable fact. It is what an environmental inspector see, observes and reports, e.g. fish floating on the surface of a lake following chemical pollution, an abnormal colour of the water in a stream affected by chemical pollution, unusually high nitrate concentrations in a river (see below the case of the village of Salsigne).

The tort consists of the consequences (see Table 1). For example, the legal consequences are generated by the chemical pollution of a river, the destruction of wetlands or habitat destruction in a ditch. The loss of a drinking-water abstraction (the tort) due to the excessive level of nitrates in a river (the damage) is another perfect example. Torts are generally assessed on the basis of their impact on humans (moral or material harm, etc.). This is because according to standard liability law, only certain, direct and personal damage may be deemed to be a tort (see Figure 4). It is this principle that has long been and continues to be an obstacle in acknowledging ecological torts. In an oversimplification, it could be said that only nature, having suffered damage, has the legal standing to press charges. In addition, nature would have to prove that it suffered a direct loss (tort), i.e. that it was directly targeted by the illicit act. But things have changed (notably since the Erika incident, see Box 6) and continue to change. It was during the Erika trial that the judicial judge accepted for the first time to qualify ecological damage as the cause of a tort to nature, independently of any torts to humans. Following that decision, the commission presided by Mr. Yves Jegouzo, law professor, submitted a report to the government on the remediation of ecological torts. A number of laws were proposed, however the Biodiversity law (2016-1087, 8 August 2016) was the first to effectively introduce the concept of remediation of ecological torts by creating the article 1386-19 in the Civil code. The article stipulates that “any person causing an ecological tort must remediate it”. The following article states that only ecological torts resulting from “non-negligible damage to the elements or functions of ecosystems or to the collective benefits drawn by humans from the environment” shall be eligible for remediation. The conditions for remediation and the coordination with other administrative and criminal procedures are also laid out. This progress should resolve a number of practical problems and improve remediation of ecological torts.

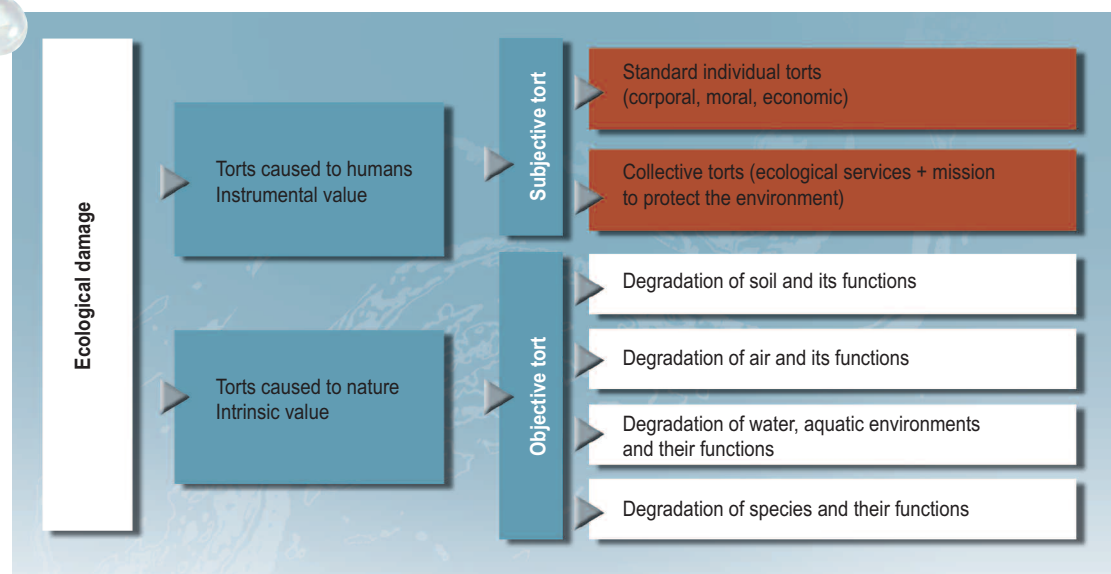
This constitutes a significant advance for liability law.

Table 1 The various tort charges available to the judge following ecological damage.

Examples of damage caused to water and aquatic environments	Commercial losses suffered due to pollution	Injury to the brand image of local governments (or) Negation of efforts made by non-profits	Disease contracted due to exposure to hydrocarbons during cleaning work	Disappearance of certain species, harm to biological functions
Torts charges* available to the judge following ecological damage	Deterioration of patrimony i.e. Material and economic tort	Personal injury i.e. Moral tort	Personal injury i.e. Corporal tort	Damage to the environment i.e. Ecological tort

**Tort charges may be levelled separately or jointly as was the case in the Erika trial where material, moral and ecological torts were acknowledged (Paris District Court, 16 January 2008).*

Figure 4



Legal interpretation of environmental deterioration, from damage to the tort charges. A proposed nomenclature (Neyret & Martin, 2012).

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University of Strasbourg

Box 6a

The Erika case, the first acknowledgement of an autonomous, ecological tort

On 11 December 1999, the tanker Erika, registered in Malta and transporting several thousand metric tons of heavy fuel oil, suffered structural damage during a storm while it was crossing the Bay of Biscay. The next day, the ship sank in the French exclusive economic zone and part of the fuel oil transported leaked into the ocean, soiling over 400 kilometres of coastline running from the tip of Brittany to the Charente-Maritime department.

Civil suits were initiated by several non-profits, local governments and individuals against the owner of the ship, the charterer, the lessor and the technical and nautical management firm. In its judgement on 16 January 2008, the District Court in Paris found all of the defendants guilty of polluting the French waters and waterways along the Atlantic coast. However, in the civil case, the judges deemed that the International convention on civil liability for oil pollution damage (29 November 1969), modified by the 1992 protocol, was not applicable due to the limitation of liability to the ship owner. The Paris Court of Appeals confirmed on 30 March 2010 the decision concerning the State action and devised a new classification for the various torts. The patrimonial and non-patrimonial torts suffered by legal subjects were considered “subjective torts” and the ecological tort, not suffered by a legal subject but consisting of harm to interests protected by law, was considered an “objective tort” and a “collective tort”. In this manner, the Court of Appeals solved the problem of the absence of any personal harm suffered by damage to nature. The *Cour de Cassation* acknowledged indirectly the concept of an ecological tort as direct or indirect deterioration of the environment, caused by the offence, i.e. an ecological tort independent of the standard torts suffered by the plaintiffs, i.e. the non-profits and local governments (Alexis Deborde, 2013).

Salsigne, a case of ecological damage in southern France (Aude) resulting in different torts

Salsigne is a small village in the Aude department (SW France), near Carcassonne and not far from Toulouse, where work is increasingly rare, but life is agreeable. Fishing is an important activity in the area. Vegetable gardens may be found everywhere. Unfortunately, Salsigne is also the story of pollution observed essentially in the Moulin stream (Le Sindilla), a tributary to the Orbiel (see Figure 5) near the former gold mines of Salsigne that were for many years the main employer in the area. Mining in the area around Salsigne went back centuries. Gold was discovered at the end of the 1800s. A characteristic of the gold ore in Salsigne was its very high content of arsenic. For every ton of gold produced, ten tons of arsenic were produced, which explains the large quantities of arsenic-based by-products that polluted the air, soil and water. Production of arsenic on the Salsigne sites rose to 10 000 tons per year. Pesticide factories set up near by to use the arsenic. In 1996, the last operator entered judicial liquidation. From 1997 to 1999, the Regional environmental directorate (DRIRE) and the Environment and energy-management agency (ADEME) took the initial steps to secure the sites and installations. Starting in 2000, several rehabilitation projects were launched by a number of stakeholders. Tremendous efforts were made, however the overall project was not sufficiently organised with a single manager and a comprehensive strategic plan. Not all the sites were rehabilitated with the same rigorous methods or on the basis of the same financial resources. As a result, even today, certain waste sites that were poorly sealed and incorrectly rehabilitated on unstable terrain, or in contact with groundwater, continue to send a non-negligible amount of residual pollution to the Orbiel.

Upstream of the sites, the river is dry. Just downstream of the bridge, the bottom of the river bed is a goldish orange colour. Less than two metres from the point where the orange colour and the water appears, a colourless flow has been observed which may be the source water in the stream. The water is also goldish orange in colour. The bed itself is clogged with an orange substance. Over a distance of almost 200 metres, the orange colour dominates in the Moulin stream. Further downstream, due to new tributaries, the orange colour fades, but the water in the stream remains a dull grey. This is due to the presence of iron, lead, mercury, cadmium and above all arsenic in high and stable quantities.

Arsenic is known as a highly toxic substance that causes serious digestive disturbances that can lead to death (arsenic was long used as a poison). The lethal dosage is between 70 and 180 milligrams. Other toxic properties have also been observed, notably vascular risks and atherosclerosis in the carotid arteries discovered in 2002. Arsenic is above all carcinogenic and can lead to skin and internal cancers. These different toxic properties led the World health organisation (WHO) in 1993 to lower the guidelines for arsenic in drinking water from 50 to 10 µg per litre. The WHO guideline was incorporated in European law (Directive 98/83/EC adopted by the Council on 3 November 1998) and in French law (Decree 2001-1220 (20 December 2001)) as a maximum permissible value and a quality limit, set at 10 µg/l instead of the 50 µg/l initially set in 1989.

This case of ecological damage has occupied the legal authorities (see Figure 6) and the press (see Figure 7) for a number of years.

Figure 5



a, b, c © Delphine Loupsans - AFB

Chemical pollution.
a) Bed of the Orbiel clogged with an orange substance containing high levels of lead, mercury, cadmium and arsenic.
b) Sign indicating that the water is not potable.
c) Confluence of the Orbiel with the Gresillou, where a chemical reaction occurs turning the water milky white.

Figure 6

BORDEREAU D'ENVOI
Procès-verbal de prélèvement

Code de l'environnement
Livres II Milieux physiques

PROCÈS-VERBAL NUMERO
20130129-2663-01

ONEMA
Office national de l'eau et des milieux aquatiques
Service départemental de l'Aude
24 Impasse Solfero
11000 - CARCASSONNE
Mél : sd1@onema.fr
04 68 47 52 87 Fax: 04 68 25 24 03

DATE DES FAITS : vendredi 11 janvier 2013

LOCALISATION DES FAITS
Cours d'eau : ruisseau du Moulin
Commune : SALLES-CABARDES
Lieu-dit : le Sindilla

OBJET DE LA PROCEDURE
cours d'eau de couleur orange

NUMERO D'ORDRE	DESIGNATION DES PIECES
1	Procès-verbal de prélèvement (2 feuillets)
2	Textes législatifs et réglementaires (2 feuillets(s))
3	Prélèvements, mesure de terrain et photos (2 feuillets(s))

INDEXATION ET NOMBRES D'EXEMPLAIRES

II	II
- 1 original + 1 copie Procureur de la République - TGI Carcassonne	
- 1 copie DDTM	
- 1 copie archives ONEMA-11	

TRANSMIS LE

Cachet et signature du chef de service

Union des Pêcheurs de l'Aude
Siège social par décision Ministérielle de 4 Octobre 1992
Bureau 69, Rue Georges-Champanelle
11000 CARCASSONNE
Tél: 04.29.76.50

Le 11 OCTOBRE 1990

Le Président de l'Union des Pêcheurs de l'Aude

à Monsieur LE PROCUREUR DE LA
REPUBLIQUE. TRIBUNAL DE
CARCASSONNE.

MONSIEUR LE PROCUREUR DE LA

Pour la présente lettre, j'ai l'honneur de vous adresser, en vertu de la loi du 10 juillet 1965, les documents suivants :
- le rapport d'analyse par le CENARAF ainsi que de rapport de la brigade de l'Agence d'Orbiel, je porte plainte contre « en tant que Président de l'A.N.P.F. Union des Pêcheurs de l'Aude pour soutien d'action de la société de pêche de Longues »
- De plus, je me réserve le droit de me porter partie-civile par la suite.
- Rattaché POUERCEL avocat de la fédération départementale de pêche aura la charge de défendre les intérêts de mon A.N.P.F. et de la société de pêche de Longues «Orbiel».
- De ce fait, je vous prie Monsieur le Procureur de bien vouloir poursuivre dès ce jour, toutes enquêtes et mesures nécessaires.
- Restant à votre entière disposition si vous le désirez, veuillez agréer Monsieur le Procureur de la République l'assurance de ma haute estime et de mon respectueux dévouement.

FALANDRY GERARD
Président de l'Union des Pêcheurs de l'Aude

Involvement of the legal authorities.
a) A report filed by Onema, confirming the pollution, in 2013.
b) A complaint lodged by the Aude fishing union in 1990.



La pisciculture est en deuil

Triste spectacle sur les berges de l'Orbiel depuis avant-hier soir entre Conques et Villalier



Un véritable carnage pour la faune de l'Orbiel... et malheureusement ce n'est pas nouveau...

■ Une fois encore, un cours d'eau audois doit faire face à une cruelle pollution chimique. D'où vient-elle ? Quels sont ses auteurs ? Pour l'instant, personne ne peut répondre. Une seule chose est certaine : près de 50 % des poissons sont bel et bien morts en quelques heures.

Rien d'anormal

dore, dont on ne sait encore d'où il vient, ni sa nature. Il faudra attendre quelques temps pour cela. Mais il est certain qu'il ne pardonne pas. Comme le soulignait hier M. Limalme, président de pêche à Conques :

« Nous avons vécu toutes nos douleurs, explique M. Limalme. L'un des responsables de l'usine, le directeur s'étant absenté pour la journée. Après plusieurs analyses, nous n'avons rien trouvé. Nous attendons un suivi régulier pour les jours à venir. »

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b

La pollution semble liée à l'usine de Salsigne

Du cyanure dans l'Orbiel

Les poissons meurent. Danger pour l'homme. Les rejets d'eaux industrielles dans la rivière ont été arrêtés, les pompages sont interdits



Dans l'Orbiel pollué, les poissons meurent. Les populations sont inquiètes et les interrogations sont loin d'être levées.

■ Les salariés des Mines et Produits Chimiques de Salsigne avaient pourtant averti les autorités concernées du risque énorme de pollution qui menaçait l'Orbiel. Mieux, ils les avaient invitées à prendre les dispositions nécessaires. En vain ?

C'est la question que l'on est en droit de se poser après la violente pollution dont a été victime la rivière, hier. Au pont de Montplaisir, une fois encore, les poissons flottaient le ventre en l'air. L'alerte a été donnée, immédiatement, les services spécialisés de la D.D.A.S.S. de la préfecture, les pompiers et quelques responsables de la Fédération de pêche

arrivaient sur les lieux. Ils y effectuaient les prélèvements nécessaires. Sur place, on avait l'impression que la plupart des personnes tentaient de minimiser la pollution.

Reste que les premières analyses laissent apparaître une teneur pratiquement nulle en cyanure en amont de l'usine de Salsigne, mais forte en aval (jusqu'à 1 mg/litre d'eau dans la rivière et 3 mg/l dans les bassins de l'usine) et en arsenic. Y a-t-il eu infiltration, débordement ou est-ce simplement la conséquence directe des rejets, autorités, d'eaux industrielles de l'usine de Salsigne

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de leurs jardins s'ils avaient été arrosés avec l'eau de l'Orbiel. Hier, rien n'était fait pour rassurer la population qui ne connaît que trop bien l'état de la rivière et le goût peu agréable de l'eau coulant des robinets dans les chambrées du village.

A Conques où l'on sait qu'un peu plus haut, à la mine de Salsigne, le strict minimum du personnel est maintenu pour assurer la sécurité. Les risques de pollution, plus graves et dangereux pour l'homme que celle d'hier, sont sans doute multipliés depuis l'arrêt de l'activité des M.P.C.S.

Gérard CATHALA

pour les hommes mais aussi pour l'écosystème

ure et arsenic, produits toxiques

Les poisons violents dont les premiers proviennent instantanément, le second, à l'instar de l'arsenic et ne plus des lors consommés à l'insu des pêcheurs.

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vestie d'une mission que le président René Limalme est prêt à expliquer dès samedi à l'assemblée générale de la pêche.

Les analyses effectuées par la DDASS et la SNC ne sont pas suffisantes, il faut plus et en personnes responsables, le bureau du "Scion conquis" est prêt à assumer.

pas suffisantes, il faut plus et en personnes responsables, le bureau du "Scion conquis" est prêt à assumer.

En attendant l'ouverture de la pêche à Conques risque fort d'être tristounette.



FOCUS

Gestion des risques

SALSIGNE : D'OR ET DÉJÀ... UNE HISTOIRE SANS FIN ?



Hervé PILLOL, ingénieur de recherche UMR 5615 Dynamiques du droit / Unité mixte de CNRS Université Montpellier 1

Le 8 juillet 2014, le préfet de l'Aude a pris un arrêté portant suspension de la mise sur le marché, à titre gratuit ou onéreux, des légumes racines, des légumes (feuilles, des poireaux, du thym et des escargots ramassés dans la vallée de l'Orbiel et aux environs du site industriel de Salsigne, sur le territoire de huit communes. La raison de cette mesure tient au fait que ces produits présentent des concentrations en arsenic et en métaux lourds supérieures aux teneurs "au-delà desquelles la sécurité des populations ne peut être garantie".

Cette suspension, d'une durée d'un an, n'est pas nouvelle : depuis 1997 et la mise en place d'un plan de surveillance dans la région, elle est systématiquement prorogée alors que les pouvoirs publics ont naguère reconnu qu'il paraissait "difficile de pérenniser la reconduction régulière d'un arrêté de suspension sans chercher des solutions plus durables". Mais, pour l'instant, ainsi que le précise le préfet en se fondant sur les conclusions d'une campagne d'échantillonnage des productions alimentaires de la vallée, "les concentrations observées ne semblent pas évoluer". A cela, rien de vraiment étonnant : le secteur minier de Salsigne figure dans la liste des 28 sites à risques, constitués d'une

"menace pour la santé humaine ou l'environnement". Cet inventaire a été établi par l'Etat, en application de l'article 20 de la directive 2006/21/CE du Parlement et du Conseil du 15 mars 2006 relative à la gestion des déchets de l'industrie extractive. Déjà, en 2008, à l'occasion d'une visite sur le site, la Direction générale de l'environnement avait identifié des "zones de dépôts de déchets mal confinés, mal réhabilités et instables, ou traversés par des sources qui contribuent à maintenir un fond de pollution résiduelle non négligeable dans l'Orbiel". Très récemment, les conclusions d'une thèse en géochimie isotopique environnementale, dirigée par le professeur Joël Lancelot, ont révélé que 10% seulement de l'arsenic dissous dans les eaux de surface de la rivière sont d'origine naturelle, ce qui démontre, à rebours, toute l'importance de la pollution d'origine anthropique persistant après réhabilitation de la zone.

Telle est la situation à Salsigne, dix ans après la fermeture de la dernière mine d'or de France métropolitaine et la cessation des activités métallurgiques attachées au traitement du minerai. C'est dire si, en dépit des importants travaux de réhabilitation réalisés successivement par l'Agence

de l'environnement et de la maîtrise de l'énergie (Ademe) et le Bureau de recherches géologiques et minières (BRGM), le passif environnemental laissé par près de cent vingt ans d'une exploitation souvent chaotique, constitue, aujourd'hui encore, un héritage embarrassant, particulièrement délicat à liquider en termes de dégradation des aménités naturelles, d'impact sanitaire sur la santé des populations locales, et de recours contentieux.

Exemple ou contre-exemple, Salsigne offre de nombreuses pistes de réflexion

C'est à partir de ce constat préoccupant que des chercheurs montpelliérains ont souhaité initier, à l'occasion d'un colloque consacré au site, une démarche prospective pluridisciplinaire susceptible de poser de nouveaux cadres d'analyses utiles à une meilleure appréhension des risques environnementaux et sanitaires associés à la poursuite des activités extractives. En effet, l'étude de l'ancien complexe industriel se situe au carrefour des sciences humaines et sociales et des sciences dites "dures". Elle intéresse non seulement les juristes, les historiens, les économistes ou les sociologues mais encore les géochimistes, les écotoxicologues ou les médecins

Press articles.

a) Article in the local press, Midi Libre, June 1990.

b) Article in the local press, Midi Libre, February 1992.

c) Humorous drawing, Midi Libre, March 1996.

d) Article in the technical press, Environnement et Technique, November 2014.



The different liability regimes used to remediate torts arising from damage to water and aquatic environments

In law, a legal liability implies an obligation to answer for the damages before a court and to assume the consequences, whether administrative, civil and/or criminal (Camproux-Duffrène, Labarussias-Comment, 2011). The term “liability regimes” means the legal instruments available to the judge to remediate a tort suffered by nature. As noted above, there are different types of judges and French law has a dual approach, both anthropocentric and ecocentric, to ecological damage. As a result, there are several liability regimes used to remediate the torts caused by damage to nature and, consequently, different manners in handling damage and remediation by the different judges.

Administrative judges rarely acknowledge ecological damage and do not remediate ecological torts

The administrative judge is one of the judges having jurisdiction over environmental issues. Administrative judges apply what is called the **regime of administrative police** and the **regime of environmental liability**, drawn from public law. Consequently, they punish actions or lack of action that do not comply with environmental regulations (contained in the Environmental code, but also in various other codes such as the Urbanism code, the Rural and maritime fishing code, the General code on the property of public entities, etc.) and can also sanction operational interventions of legal entities under public law likely to impact the environment. Administrative liability in environmental matters may also arise from decisions made either by the Court of Justice of the European Union, which indicates how that liability must be implemented (CJEU, 9 March 2010, *Raffinerie Méditerranéenne et autres c/Ministères italiens et autres*. Affaire C-378/08) or by the European Court of Human Rights (ECHR, 12 July 2005 *Affaire Okay et autres c/Turquie* req. 36220/97).

To date, administrative judges in France have rarely acknowledged purely ecological damage in the framework of administrative liability. They admit the possibility if specific conditions exist (CAA, 19 December 2013, *SCI Sceaux Houdan Quatre Chemins* req. 12VE00916), but they have done so only in rare cases such as the *Assoc. Club mouche Allier* decision on 23 April 2009 (CAA Lyon, 23 April 2009, *Assoc. Club mouche saumon Allier*: JurisData N° 2009-004038; AJDA 2009, p. 1429).

They do not accept the notion of an ecological tort and refuse to remediate damage unless the conditions establishing liability, notably a causal link, exist. Christian Huglo has spoken of the “traditional refusal of the administrative judge to remediate ecological torts” (Huglo, 2013).

Finally, **administrative judges have never had the opportunity to apply the directive and law on environmental liability** (LRE, Art. L. 161-2 C.). It would appear that in spite of the texts (notably Directive 2004/35), the absence of administrative liability in matters of remediation of ecological torts constitutes an obstacle to instituting compensatory measures (Drobenko, 2016).

The regime of environmental liability established by the LRE means that administrative judges can now take up affairs on the basis of the standard principles of liability in view of remediating, in application of the “polluter pays” principle, damage caused to the environment (Art. L161-1 and following in C. Env.). (See Box 6a.)



Box 6b

An example of coordination between European and French law concerning the remediation of damage to water, species or protected natural habitats

Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage (Annex II Remediation of damage to water or protected species or natural habitats)

“Remedying of environmental damage, in relation to water or protected species or natural habitats, is achieved through the restoration of the environment to its baseline condition by way of primary, complementary and compensatory remediation (...).”

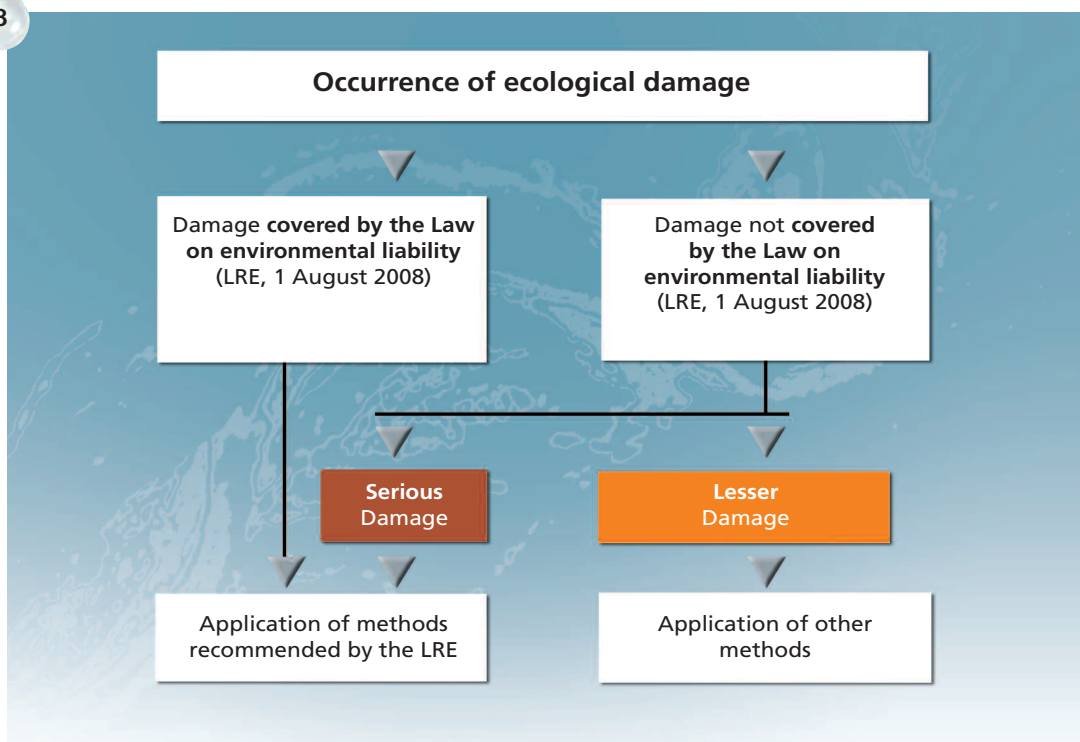

Law 2008-757 (1 August 2008) on environmental liability - Art. 1 (Article L.162-9 in the Environmental code)

“Measures to remediate damage to water, species and habitats mentioned in paragraphs 2 and 3 of section I in article L. 161-1 aim to restore these natural resources and their ecological services to their baseline condition and to eliminate any risk of serious harm to human health. The term “baseline condition” means the condition of the natural resources and ecological services at the time of the damage and that would have continued to exist if the environmental damage had not occurred. The assessment of the baseline condition is based on the best available information.”

That being said, application of the law on environmental liability (LRE) raises a number of difficulties. First of all, assessment methods for ecological damages must be developed in order to carry out the remedial measures (compensation in kind) where possible. However, we will see in Chapter 3 that the situation is complicated, but that the discussions continue. Secondly, the coordination with the other liability regimes (civil and criminal) must be improved. Finally, the LRE established a liability regime only for certain damages caused to the environment. The law effectively targets damage impacting the good ecological status of water as defined by the WDF, but it is nonetheless restrictive in that it takes into consideration only damage deemed to be “significant” (see Annex II of the 2004 directive) and measurable (see Figure 8).

As of today, it may be said that **administrative litigation concerning damage to aquatic environments is primarily based on administrative-police measures and on administrative acts** (explicit or tacit decision) concerning verifications on activities, including administrative sanctions against those infringing on the regulations applying to their activities. The related litigation and that concerning liability for public constructions fills out this particular domain. This litigation is characterised by cases concerning the review of legality and by the liability regimes (fault, no-fault, exceptionally for gross negligence).

Figure 8



Assessment methods are proportional to the seriousness of the damage. Source: H  l  ne Gaubert, CGDD.

Punishment by the criminal-court judge of offenders causing ecological damage

The law on criminal liability, applied by a criminal-court judge, is the branch of law that aims not to remediate the infraction, but to sanction the offender causing damage, including ecological damage when it constitutes a crime. The judge applies the Penal code and takes action to enforce the law in the interest of society. The sentence is intended to be dissuasive and consequently preventive. In this case, the water police no longer acts in the framework of the administrative police, but in that of the judicial police. Environmental inspectors work under the authority of the State prosecutors.

In terms of criminal liability, there must be an offence that results in damage to the environment. In a standard case, the judge pronounces a sentence that may range from a fine to a prison term.



The judge must sentence individually (Law 2014-896 (15 August 2014) on individual penalties and to reinforce the effectiveness of criminal penalties). In applying the penalty system, the judge may proceed immediately with sentencing or delay it, for example to provide the offender with time to remediate the situation and put an end to the offence. This is a common procedure in matters of ecological damage. It is a means, notably for criminal-court judges entrusted with defending the interests of society, to adjust the sentence to the seriousness of the offence and to the social and economic situation of the offender, and to bring the offender and victim together in a criminal procedure aiming to remediate the situation and even to reconcile the parties.

A judge is free to decide to apply a special procedure whereby he issues an injunction, under risk of fine, to restore the damaged area (Art. L173 L 173-5 C. Env.). This procedure is a means to obtain compensation in kind for the ecological damage and to **shift from a punitive procedure to an approach known as reparative or restorative justice**. The ministerial circular (21 April 2015) on criminal policy concerning environmental damage set the guidelines.

Criminal liability is therefore a means to promote ecological considerations as an essential value due to the educative function characterising criminal law (Camproux-Duffrène, Labarussias-Comment, 2011).

Remediation of ecological damage by the civil-court judge

The law on civil liability, applied by a civil-court judge, is the branch of law that determines the remediation of torts caused to a person by damage to their rights, either patrimonial (to which a monetary value can be assigned) or extrapatrimonial (to which a monetary value cannot be assigned). The judge intervenes only once the damage (the cause) has occurred to remediate the tort (consequence) affecting the person who brought the case before the court. The victim is said to sue for damages before a Trial Court or a District Court. All types of damage, including ecological damage, may cause various torts that can be remedied by the justice system (Art. 1240 and following in C. Civ., formerly article 1382). Remediation takes place either in kind (through the return of the environment to its baseline condition or, failing that, compensation in kind), the preferred solution wherever possible, or in the form of financial damages (according to the principle of financial compensation).

In civil law, a return to the baseline condition corresponds to the concept of restoration in ecological terms. This consists of turning the situation back to the baseline condition, i.e. what it was before the damage occurred (Viney, Jourdain, 2001). A return to the baseline condition has been accepted in court decisions because, for example, the *Cour de Cassation* did not refuse the restoration of a stream that had been reworked without authorisation (C. Cass., 14 September 1999, Hello, N° 98-84.345, Dr. Env., 20000, N° 82, p.4).

Compensation in kind is somewhat different and consists of restoring ecosystem functions, most often however on a site other than that which suffered the damage because restoration of the first site is not possible. This frequently raises ecological problems because it is often forgotten that the sites where compensation (see Chapter 3) is to take place are already the result of a compensation in the sense that there are no longer any truly wild lands in France.

Financial compensation consists of paying an amount of money that will supposedly be used to remediate the tort suffered due to the loss caused by the damage. The purpose of civil liability in this case is to indemnify the victim with an amount equivalent to the loss. Financial compensation nonetheless raises considerable problems due to the principle that damages may be used as the recipient sees fit, i.e. the judicial authorities may not check that the money received is in fact used to remediate the damage for which it was awarded.

The civil liability regime enables the civil judge, on the basis of the Civil Code, to compensate the damage that was caused to nature and that it causes to humans (Art 1240 and following in C. Civ.). However, it also very recently made it possible for a third party to initiate legal proceedings on behalf of nature. Article 142-2 in the Environmental Code stipulates that non-profit groups (...) may exercise the rights accorded to plaintiffs in cases dealing with direct or indirect torts to the interests that the group was established to protect.



Conclusion

Two assistant judges at the *Cour de Cassation* usefully noted in 2007 that the judicial system has without any doubt rendered decisions that remediate ecological torts. They added that the decisions took place under conceptual ambiguities that lessened their doctrinal impact.

In 2017, these observations remain perfectly valid. It must be said that major progress has been made. Legislative initiatives, progress in the jurisprudence or simply greater social awareness have all shifted in the direction of improved characterisation of ecological damage and gradually better acknowledgement and remediation of ecological torts through more or less elegant adaptation of the different liability regimes. The insertion of the concept of ecological torts in the Civil Code via the law to restore biodiversity is the latest clear sign of that trend. This gigantic and encouraging effort continues. The news contains reports on that progress nearly every day. Whether the reports concern the passions aroused by the risk of a legal decision being overturned, the raised voices of the non-profits defending those who have no voice or the projects initiated by the Minister of Justice, ecological damage is a topic in the news that is taken seriously into account by the concerned public authorities. However, it would be presumptuous to say that this progress is sufficient.

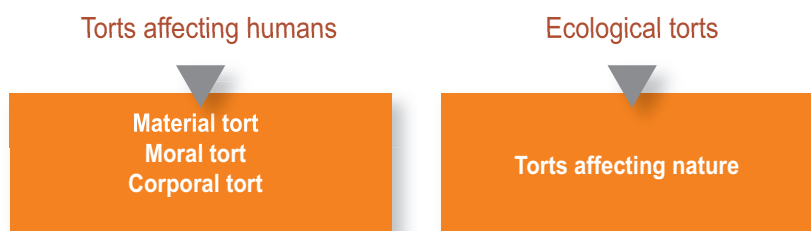
Legal decisions acknowledging ecological damage and granting remediation of the ecological torts caused are few and far between, and do not reflect a consistent legal doctrine. As noted, the administrative, civil and criminal judges have different approaches. And even within a given liability regime, depending on the facts and how they are interpreted by the jurisdictions, different decisions can be rendered in resolving litigation. A number of factors explained this situation. One of those factors is the difficulty that judges have in understanding ecological damage, which is defined using highly technical legal instruments.

Key concept

Ecological damage is an **impact** on the environment and on the functioning of an **ecosystem** that can constitute a **tort** for humans and **nature**.

Key points in understanding the subject

Ecological damage may result in several types of torts for which the victim or a representative may request **remediation**.



Key points to remember

There are three different types of judge and three **liability** regimes used to remediate torts arising from **damage** to **water and aquatic environments**.

Environmental liability

To date, administrative judges in France have rarely acknowledged ecological damage in the framework of administrative liability.

They do not acknowledge the existence of ecological torts.

Administrative judges have never had the opportunity to apply the Directive and Law on environmental liability (LRE) and consequently have never examined the concept of ecological damage.

Civil liability

Remediation takes place **either in kind** (through the return of the environment to its baseline condition or, failing that, compensation in kind), the preferred solution wherever possible, or in the form of **financial** damages (according to the principle of financial compensation).

Criminal liability

The judge may pronounce a sentence that may range from a fine to a prison term. The sentence represents the repressive function of criminal law.

A judge may also decide to apply a special procedure whereby he issues an injunction, under risk of fine, to restore the damaged area. This procedure is a means to obtain compensation in kind for the ecological damage and to shift from a **punitive procedure** to an approach known as **reparative** or **restorative justice**.