

# **Protection and Conservation of the Aquatic Environment**

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**Abstract**: Concerns about environmental protection and their legal expression led to the formation and affirmation of a set of common principles of national, regional and international law. Although they know various formulations and specifications in these three legal systems, their fundamental meaning remains the same, in different situations. They arise and contribute, at the same time, from / to the assertion of the environment in general, as common heritage of humanity.

Keywords: Environment; water; sea; protection

### 1. Introduction

Environmental concerns and their legal expression led to the formation and affirmation of a set of common principles of national, regional and international law. Although they know various formulations and specifications in these three legal systems, their fundamental meaning remains the same, in different situations. They arise and contribute, at the same time, from / to the assertion of the environment in general, as common heritage of humanity.

Taking into account all national legislations aimed at its protection, the adoption of regional or international binding rules converge to establish the special protection, conservation and improvement of the environment, as a world heritage, of all humanity, both in terms of present and future generations. Therefore, the following principles of environmental law are widely recognized: the public interest of environmental protection, conservation, prevention; precaution in the decision making process; the polluter pays principle. However, besides the specific national, communitarian or international expressions of these principles, some rules with territorial application and limited specific implications may be taken into consideration. Although with different contents and concepts, this shows the primordial concept that the environmental protection is a primary and universal objective, for individuals and peoples.

#### 2. Fundamental Principles

In line with the specific objectives and functions which it performs, the environmental law is dominated by a series of general principles which are reflected, in one form or another, in the content and meaning of its rules.

They are recognized as such by law (such as the precautionary principle, the prevention principle, the principle of conservation of biodiversity or the polluter pays principle), or result from provisions scattered in various laws (environmental protection, the public interest objective).

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Along with these "principles", the environmental law establishes "the basic strategic elements", which "lead to the sustainable development of society", such as: creating a national system of integrated environmental monitoring, sustainable use, etc.

## 3. The Legal Regime of National Waters

The legal regime of national waters is regulated by Law no. 107 of 25.09.1996, Water Law<sup>1</sup>. According to article 1, waters represent a renewable natural resource, which is also vulnerable and limited, and indispensable for life and society; waters represent a raw material for productive activities, an energy source and a transportation means, and an important factor in maintaining ecological balance.

Waters are part of the public domain. Protection, enhancement and sustainable development of water resources are actions of general interest.

### 3.1. Public Property

Waters are of general interest, and the State exercises on them the attributes of the public property right, which is inalienable (removed from the civil circuit), indefeasible and undeterminable. Therefore, the following belong to the public domain:

- 1. Surface waters and their minor beds, with lengths of more than 5 km and with hydrographic basins exceeding 10 km<sup>2</sup>, banks and lake basins and underground waters, internal maritime waters, the sea cliff and the beach, with their natural resources and the potential hydropower, the territorial sea and the bottom of seas;
- 2. Minor water beds with lengths less than 5 km and with hydrographic basins not exceeding 10 km<sup>2</sup>, on which waters do not permanently flow, belong to the holders, with any title, of the land where they are formed or flow. The owners of these water beds should use these waters in accordance with the general conditions of water use in that basin;
- 3. Islands, which are not related to land, with the shore at the average water level, belong to the owner of the water bed;
- 4. Underground waters can be used by the land owner to the extent of their use under the law.

Determining the use of water resources, regardless of ownership, is an exclusive right of the Government, exercised by the Ministry of Waters, Forests and Environmental Protection, except geothermal water.

Public waters are administered by "Romanian Waters" National Administration, by the Ministry of Waters, Forests and Environmental Protection, under the law.

The regulation of shipping and its related activities on waterways is done by the Ministry of Transport, by specialized units. The atmospheric phase of the water cycle in nature can be artificially modified only by the Ministry of Waters, Forests and Environmental Protection and by authorized entities, under the law.

#### 3.2. The Right to Use Surface Water

The right to use surface or underground waters, including wells, is determined by the water management authorization and is exercised under its legal provisions. This right includes the evacuation of wastewater, drainage waters or drainage, storm waters, mine waters or reservoir waters, in water resources, after their use.

<sup>&</sup>lt;sup>1</sup> Published in the Official Gazette, Part I no. 244 of 08/10/1996. The Law of waters was completed and mdified by: H.G. no. 83/1997 and H.G. 948/1999; Law no. 310/2004; Law no. 112/2006 and O.U.G. no. 12/2007.

Surface or underground waters can be freely used, in compliance with health and protection of water quality rules for drinking, watering, washing, bathing and other household necessities, if, for these purposes, there are not used facilities or if there are used low-capacity facilities up to 0.2 liters/second, only in order to meet household needs. Any person, on honor, may freely use marine waters, outside the restricted zones, for bathing.

### 4. Protection of the marine environment

Prevention, reduction and control of marine pollution is regulated mainly by two normative acts: Law no. 17 (r) of 07.08.1990 on the legal status of marine waters, territorial sea, the contiguous zone and the exclusive economic zone of Romania<sup>1</sup> and by the United Nations Convention on the Law of the Sea, ratified by Romania by Law no. 110/1996.

### 4.1. Marine pollution

The marine pollution has some particularities. It is, first, the pollution of coastal and enclosed seas, pollution which has two main causes:

- Pollution from industrial residues;
- Oil pollution.

The pollution from industrial residues is derived from the direct discharge in the sea of wastewaters from industries located on the coast, under the (absurd) reasoning that the sea is broad enough to take everything. Seas absorb annually over 6000 t of hydrocarbons from tanker accidents, waste oil refineries, offshore mining, washing and deballasting of ships on the high seas.

The "black blanket" formed at the marine surface suffocates marine life. Instead of dispersing itself, the spilled oil bundles, creating a continuous pellicle that prevents water oxygenation. Towards the shore, the oil pellicle inhibits the photosynthesis of algae and thus the production of oxygen.

The oil is biodegradable under the action of bacteria, but this oxidation process depletes the marine oxygen. In order to decompose a liter of oil, 40,000 liters of water are needed. Thus, in the Indian Ocean (which has coastal countries with a common economic development) there are discharged annually 20,106 tons of residues, while only U.S.A. discharge in their territorial waters around 2105 m3 of industrial waste and about 11.1010 m3 of untreated municipal waters.

In the North Sea, the number of microscopic algae has increased 4 times due to the discharge of waters rich in phosphates and nitrates, besides heavy metals and organohalogen (only the Rhine discharges 30 and 100 tons / day of such pollutants). The disastrous effects of these practices were revealed, for the first time, in the Mediterranean Sea whose fish production has declined drastically in the last 10 years. Moreover, to a number of species, the content of ion of cadmium and mercury, which are highly toxic, exceeded the limits; the multiplication of poisoning microscopic algae, only in the summer of 1989, in the Norwegian fjords, led to the destruction 400 tons of salmon in 3 weeks. A tragic example is the Minamata disease (Japan), caused by severe mercury poisoning. At present, in sea waters, due to industrial discharges and to its accumulation on the food chain, the mercury affected both the fauna of the area (fish) and the man.

The well-known oceanographer J. Y. Cousteau brings into discussion another potential danger: the marine creatures communicate through chemicals, similar in principle, as function, to the pheromones

<sup>&</sup>lt;sup>1</sup> Published in the Official Gazette, Part I no. 99 of 09/08/1990. It entered into force on 07.11.1990. Modified, completed by Law no. 36 of 16/10/2002, Republished in the Official Gazette, Part I no. 765 of 21/10/2002, when it entered into force. Law nor. 17/1990 was modified, for the second time, by O.U.G. no. 130/2007 and approved by Law no. 102/2008, both Documents published in the Official Gazette, Part I no. 780 of 16/11/2007, when it entered into force.

used by insects. A heavy pollution could "jam" this form of communication, with more serious incalculable consequences.

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