Implementation of the environmental legal mechanism of nature protection for regulating recreational activities in a particular territory

S I Lesnykh
Sochava Institute of geography SB RAS, Russia, Irkutsk

E-mail: tyara@irigs.irk.ru

Abstract. Recreational activities are associated with significant loads on all territorial components and are regulated by relevant environmental legislation that often causes conflicts of interest. The Lake Baikal area due to its uniqueness has own (additional to the generally accepted) system of environmental legislation that greatly exacerbates conflicts of interests: it helps to preserve nature but making the conduct of any economic activity almost impossible. For the legal regulation of public relations regarding nature preserving and recreational activities, the environmental legal mechanism is applied. The results of applying this mechanism on Lake Baikal area is considered through the combination of the residents' interests in a healthy environment and ensuring their material needs. Using the tool of legal environmental zoning, the framework of Lake Baikal protection has been visualized, which helps to “see” intersections of all regulations on the area and determines the priority right of land-use. The comparison of legal environmental zoning categories with maps of current land-use lets to determine contradictions in real and permitted land-use, which allows finding the best option for using different parts of the Lake Baikal area. In the end, the calculation of recreational load standards for tourism activities in the central ecological zone of the Baikal natural territory was carried out.

1. Introduction
Recreational environmental management is the largest consumer of natural, cultural and historical resources. It is referred to as alternative types of environmental management not related to the direct withdrawal of natural resources. Despite this, it has a significant impact on ecosystems and their components, regional and national economies and lifestyle of local communities and peoples. Among all types of economic activity, recreational activity directly depends on the preservation of the existing quality of the environment as its main resource, which is the guarantor of attractiveness for tourists. Various researchers indicate [1] that recreational activities should be developed in a controlled, integrated and sustainable foundation, applying the principles of intelligent and effective planning. This approach can bring significant economic benefits to the region without serious environmental and social problems [2]. Poorly regulated and controlled recreational activities can lead to disastrous consequences for the territory [3].

To conduct recreational activities, of particular interest for are the territories, the allocation of which is motivated by the criterion of their natural, historical and cultural value at the same time. These territories are the most promising in terms of economic development, and any activity in such
territories always becomes a subject to a conflict of interest. There is a limited natural capital with various interests and needs of the local population, production capital, production and consumption [4, 5]. On the one hand, it is necessary to preserve the unique natural objects and their biodiversity; on the other hand – to ensure the economic development of the territory, in which these objects are located, through the environmentally oriented use of the preserved objects for the benefit of people.

The concept of nature conservation existing in Russian environmental legislation implies the existence of two types of territories [6]: territories with the "usual" environmental-legal regime, which are subject to the general requirements of environmental legislation, and those with a special legal regime, within the boundaries of which stricter restrictions and prohibitions apply. The Federal Law “On Environmental Protection” regulates the protection of territories with the ordinary legal regime. It establishes fundamental, crosscutting and unified principles of environmental protection, which are specified in the principles of sectoral legislation (water, forestry, land, etc.) [7]. Thus, the Land Code regulates relations on the use and protection of land, based on the idea of it as a natural object protected as an essential component of nature, and, at the same time, as immovable property, an object of ownership and other rights to land. The principle is the priority of protecting land as an essential component of the environment and the means of production over the use of land as immovable property. Similar environmental priorities are enshrined in water and forest legislation. Strict compliance with the requirements for the rational use of natural resources is a rather effective way of protecting the environment and allows us to find a compromise between nature protection and the economic development of the territory.

An important feature of unique territories is the presence of additional environmental legislation protecting this uniqueness. Here, the same land area falls under several legal regimes: a specific category of land, territorial zone and zone with special conditions for the use of territories [8], and the main disputes between representatives of different interest groups arise precisely in determining the priority right of use. The sustainable economic development of such a territory is threatened; residents cannot be engaged in the usual economic activities and are forced to leave settlements in search of work [9]. Even recreational activities are at risk. Compliance with high environmental requirements encourages investors to use expensive resource-saving technologies, which significantly increases the cost of a recreational product and makes recreational activities (especially small private companies) unprofitable.

In this regard, the development of principles for effective planning and regulation of recreational activities becomes especially relevant.

2. Methodology
Nature, its objects and complexes are the main and only object of public relations regulated by environmental law. Among all branches of law, only environmental law is focused on the preservation of nature as the "basis for the life and activities of peoples," to ensure the public interests of environmental well-being, which is achieved through the environmental legal mechanism.

The environmental legal mechanism is an agreed system of measures and requirements provided for in environmental law or in accordance with them as well as actions and processes carried out in the implementation of these norms aimed at the consistent and effective achievement of the goals of environmental law [10]. A specific feature of the environmental-legal mechanism is the absolute acceptance of the principle of the natural condition of human and social life. This fully reflects the goal of environmental law: the preservation and restoration of the favorable state of the environment.

The environmental legal mechanism has relatively autonomous organizational, economic and ideological structural elements [11]. Thanks to a wide range of compound structural elements (rationing, standardization, environmental impact assessment, examination, audit, monitoring, education, etc.), the environmental-legal mechanism can provide their optimum through a legal impact on nature protection and nature-resource processes: development from the all-public point of view [12]. It is possible to solve quite effectively various tasks of regulating economic activities and protecting the environment.
The criterion for the effectiveness of the environmental legal mechanism is the quality of legal regulation of relations, taking into account each element of this mechanism and the degree of implementation of the relevant environmental legal norms [10].

The result of the work of the mechanism is a legal attitude aimed at solving a specific economic problem. Theoretically, three solutions are acceptable: an alternative to interests (under the economic version, ecology suffers, with environmental economics and human economic well-being); a combination of interests (it is supposed to take into account the environmental interests of citizens in a healthy environment and ensure their necessary material needs); joint interests (the ecological interest of the territory becomes an integral part of the economic interest of the enterprise).

3. Results and discussion
Lake Baikal, being unique in natural characteristics, is also unique in the concentration of all kinds of regulatory legal acts in the field of environmental protection and acute conflicts of interest. This is the only water facility, for which a law was created in 1999 that provides legal regulation in the field of its protection and the main rules for conducting economic activities, the Federal Law "On the Protection of Lake Baikal." There are also a large number of complementary and clarifying legislative and legal acts of various levels.

As a unique natural territory with the own system of state regulation, Lake Baikal has more restrictions than a common water body. Thus, in addition to coastal and coastal protective strips, as well as the conservation zone, the boundaries of the site of the World Natural Heritage, Lake Baikal, coincide with the boundary of the Central Ecological Zone of the Baikal Natural Territory (CEZ BNT). Since 2015, according to the order of the Government of the Russian Federation No. 368 (of March 5, 2015), the water protection zone of Lake Baikal has been equated with the CEZ BNT. As a result of the imposition of environmental laws, the entire Lake Baikal CEZ fell into a system of severe environmental restrictions on economic activity, which made the sustainable economic development of these territories extremely difficult [13] and significantly aggravated conflicts in environmental management [14].

Moreover, to regulate recreational activities in the Russian Federation, there is Federal Law No. 132-FZ On Basics of Tourism Activities (of November 24, 1996) and other regulatory acts and town planning regulations that ensure a balanced solution to socioeconomic problems and the preservation of a favorable environment. The purpose of the legislation on recreational environmental management is to regulate relations between state administration and control bodies, local governments, owners, and users (including tenants and harvesters).

As a result of the combination of two legislative formations, environmental protection (common and directly connected with Lake Baikal) and recreational one, it became impossible to conduct economic activities even in the territories intended for this. Therefore, in areas allocated for recreational use but located within the boundary of the water protection zone of the CEZ BNT, the capital construction projects were prohibited. To resolve the current contradiction, the order of the Government of the Russian Federation No. 507-r (of March 26, 2018) established new boundaries of the water protection zone of Lake Baikal for inter-settlement territories and for coastal settlements to ensure the livelihood of the population and the development of tourism. Thus, the environmental legal mechanism was implemented through the combination of the environmental interests of citizens in a healthy environment and the provision of their necessary material needs.

We have developed a legal environmental zoning tool [15] to make decisions in the context of multi-level environmental constraints and significant conflicts of interest in our territory, complementing the environmental legal mechanism for nature protection with a clear representation of the effect of environmental law. The legal framework visualized in this way allows us to "see" on the ground the imposition of all legal regulations and determine the priority right to use the territory.

The comparison of legal zoning categories with real use maps clearly shows contradictions in real and permitted use, which makes it possible to find the best option for using different areas.
Using this mechanism, we calculated recreational load standards for organized and unorganized recreation in the CEZ BNT of the Irkutsk Region. Data on the use of the territory recorded in the land cadaster revealed the following zones (figure 1). 1. Direct impact: the territory of permanent stay of tourists and vacationers bearing the residential functions. 2. Stabilization (preservation) of recreational loads: frames the direct impact zone and is calculated for the established level of recreational load. 3. Indirect impact: frames the direct impact zone and the stabilization zone, is regularly used for walks and excursions. Recreational loads are mainly the formation of a road traffic network. 4. Unloaded zone.

![Figure 1](image_url)

**Figure 1.** Norms of recreational load for organized and unorganized recreation in the CEZ BNT of the Irkutsk Region (the Maloye More Strait, Lake Baikal). Zones: 1 – direct impact, 2 – stabilization (preservation) of recreational loads, 3 – indirect impact, 4 – unloaded.

The direct impact zone includes the site of localization of recreational loads produced by organized and amateur tourists, including areas of tourist and recreational development as well as sites for beach-picnic and tent recreation. It shows the greatest intensity and combination of all types of impacts arising during tourist and recreational use of the territory.

The stabilization zone is the guarantor of the non-deterioration of the natural environment state provided that the relevant planning and engineering measures are preserved and carried out strictly
within the framework of the existing development and taking into account the permitted use of land plots. For territories experiencing moderate recreational load (not exceeding the established standards), the dimensions of the zone were adopted equal to those of the allocated development areas, direct impact zones (figure 1). For areas where the anthropogenic load in the direct impact zone is significantly exceeded (more than 4 people/ha), the dimensions of this zone are increased to the area necessary to reduce the load to the maximum permissible one (figure 1).

Indirect impact zone. According to paragraph 5 of the Order of the Ministry of Economic Development of the Russian Federation No. 83 (of February 21, 2020), the permissible load on local terrestrial ecosystems in the Central Ecological Zone of the Baikal Natural Territory should be observed in the territory surrounding the accommodation sites of recreants, depending on their number in the radius: up to 50 people – 500 m, up to 100 people – 600 m, up to 200 people – 800 m, up to 300 people – 1000 m. In this regard, an indirect impact zone is allocated, guaranteeing the sustainable development of the territory (figure 1).

The unloaded zone (figure 1) shows the area of the territory, which can take over the main number of organized tourists and allows the development of the appropriate infrastructure without degrading the quality of the environment.

4. Conclusion
Conducting recreational activities, like any other type of management, involves the influence on the components of the ecosystem. Although owing to recreational activities there is no direct seizure of natural resources, we can talk about their exhaustion. Exhaustion in this case is determined by the threshold of load on natural resources, the excess of which degrades the quality of the resource up to its complete degradation.

In Russian environmental legislation designed to regulate public relations regarding nature, the concept of nature conservation is a priority and implies the existence of territories with an "ordinary" environmental legal regime, and territories with a special legal regime, within whose borders stricter restrictions and prohibitions apply. Recreational activities often involve territories that have a special legal regime because these territories possess unique natural resources.

For effective planning and regulation of recreational activities, it is advisable to involve the environmental legal mechanism for environmental protection. Through the legal impact on environmental and natural resource processes, it ensures their optimal development and effectively solves various tasks of regulating economic activities and protecting the environment. Thus, on the example of the formation of the CEZ BNT, we show the implementation of the environmental legal mechanism in ensuring the consistent and effective implementation of environmental law in the field of protecting Lake Baikal as well as taking into account the environmental interests of citizens in a healthy environment and ensuring their necessary material needs.

The use of legal environmental zoning as an organizational and legal tool for information support of environmental management and protection of the environment allows simultaneously displaying the effect of all regulatory and legal restrictions at a particular site of the territory. This provides easy navigation of the legislative space shown on the ground, taking into account the characteristics of the territory, determine the priority right to use the territory and find the optimal permitted option for recreational activities. The calculation of recreational load standards for organized and unorganized recreation in the CEZ BNT of the Irkutsk Region made it possible to differentiate the territory depending on the intensity of impact (direct, stabilization, indirect, and unloaded) and recreational use. Further analysis of each of the designated zones for the stability of their ecosystems to recreational loads will determine possible scenarios for the development of the situation and will become the basis for environmentally safe recreational activities.

Of special interest is the specific peculiarity of the environmental and legal mechanism of environmental protection: unconditional adoption of the principle of natural conditionality of human and social life (absolute dependence of man and society on nature, its resources and state). This fact
allows determination of the priority right to use the territory when solving conflict situations based on environmental legislation and protecting the rights of nature.

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