# LEGAL PROBLEMS OF RATIONAL NATURE MANAGEMENT IN THE ARCTIC ZONE OF THE RUSSIAN FEDERATION

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### **ABSTRACT**

The paper examines the environmental and legal problems of rational nature management in the Arctic zone of the Russian Federation being based on an analysis of the works by Russian and foreign scientists. The main ecological and legal directions for the development of rational nature management in the Arctic zone of the Russian Federation, such as (1) the creation of transboundary specially protected natural areas and an increase in the number of national ones; (2) elimination of objects of accumulated harm to the environment, within the framework of which not only the object of accumulated harm itself is disposed, but measures are taken to improve ecological systems; (3) development of aquaculture. It is shown that the development of legal support and management decisions in the field of rational environmental management in the Arctic should be based on coordinated actions of all Arctic states and on the ecosystem approach.

**Keywords:** Rational nature management. Arctic. Arctic ecosystems. Arctic zone. Specially protected natural areas.

## PROBLEMAS JURÍDICOS DE GESTÃO RACIONAL DA NATUREZA NA ZONA ÁRTICA DA FEDERAÇÃO RUSSA

PROBLEMAS LEGALES DE LA GESTIÓN RACIONAL DE LA NATURALEZA EN LA ZONA ÁRTICA DE LA FEDERACIÓN DE RUSIA

### RESUMO

O artigo examina os problemas ambientais e jurídicos da gestão racional da natureza na zona ártica da Federação Russa, baseando-se na análise de trabalhos de cientistas russos e estrangeiros. As principais orientações ecológicas e jurídicas para desenvolvimento da gestão racional da natureza na zona ártica da Federação Russa, tais como (1) a criação de áreas naturais transfronteiriças especialmente protegidas e um aumento no número de áreas nacionais; (2) eliminação de objetos de dano acumulado ao meio ambiente, dentro da estrutura da qual não apenas o próprio objeto de dano acumulado é eliminado, mas medidas são tomadas para melhorar os sistemas ecológicos; (3) desenvolvimento da aquicultura. Mostra-se que o desenvolvimento do apoio jurídico e das decisões de gestão no campo da gestão ambiental racional no Ártico deve ser baseado em ações coordenadas de todos os estados árticos e na abordagem ecossistêmica.

**Palavras-chave:** Gestão racional da natureza. Ártico. Ecossistemas árticos. Zona ártica. Áreas naturais especialmente protegidas.

### RESUMEN

El documento examina los problemas ambientales y legales de la gestión racional de la naturaleza en la zona ártica de la Federación de Rusia basándose en un análisis de los trabajos de científicos rusos y extranjeros. Las principales orientaciones ecológicas y legales para el desarrollo de la gestión racional de la naturaleza en la zona ártica de la Federación de Rusia, tales como (1) la creación de áreas naturales transfronterizas especialmente protegidas y un aumento en el número de áreas nacionales; (2) eliminación de objetos de daño acumulado al medio ambiente, en cuyo marco no solo se elimina el objeto de daño acumulado en sí, sino que se toman medidas para mejorar los sistemas ecológicos; (3) desarrollo de la acuicultura. Se muestra que el desarrollo de apoyo legal y decisiones de gestión en el campo de la gestión ambiental racional en el Ártico debe basarse en acciones coordinadas de todos los estados del Ártico y en el enfoque por ecosistemas.

**Palabras-clave:** Gestión racional de la naturaleza. Ártico. Ecosistemas árticos. Zona ártica. Áreas naturales especialmente protegidas.

# INTRODUCTION

The Arctic is a very special region from a geographical point of view. Its circumpolar position determines the biogeographic unity of the unique Arctic natural environment, which is extremely sensitive to the negative impact on it due to the severity of the climate. A significant part of the largest solid uniting natural ecosystems of the planet is located in the Arctic zone; the preservation of them must be ensured by a special regime for their protection, including environmental and legal means. The richest natural resources (the presence of giant deposits of minerals, reserves of marine biological resources) are extremely attractive from the point of view of their future possible development to increase the economic well-being of the states located in the region. The possibility of intensifying shipping in the region, which has opened as a result of climate warming, is of great interest today. From year to year in the Arctic zone there is an intensification of economic activity and the volume of natural resources development is increasing. This process can hardly be stopped. However, the special "sensitivity" of the Arctic natural environment predetermines the need to develop and apply more stringent environmental protection measures in the region. Normative regulation of relations for the rational use and protection of natural resources of the Arctic zone of the Russian Federation should be built exclusively based on a scientifically grounded balance of environmental and economic interests. This task cannot be solved without the formation in the Russian Federation of an appropriate legal regulation system in this area.

According to clause 5 from the Fundamentals of State Policy of the Russian Federation in the Arctic for the period up to 2035 (approved by the Decree of the President of the Russian Federation dated March 05, 2020 No. 164), environmental protection is one of the main national interests of the Russian Federation in the region. In the mentioned Fundamentals, ensuring rational nature management is recognized as one of the priority tasks in the field of environmental protection in the Arctic (p. 15). Note that its implementation as one of the most effective mechanisms in environmental protection (BOGOLYUBOV, KRASNOVA, 2018. P. 183) in the process of economic activity needs more detailed legal regulation more than ever; the study of environmental and legal problems of rational nature management in the Arctic is promising, timely and in demand. The purpose of this work is to identify the main directions of development of rational nature management in the Arctic zone of the Russian Federation, as well as the existing problems of legal regulation in this area.

# **METHODS**

The study of environmental and legal problems of rational environmental management in the Arctic was carried out by analyzing the works of foreign (*P. Bekker, B. Collins, K. Noussia, J. Nyman, R. Van De Poll, H. Woker* et al.) and Russian scientists devoted to the legal protection of natural resources in the Arctic (*S.A. Bogolyubov, I.A. Ignatyeva, I.O. Krasnova, N.G. Zhavoronkova* et al.). In addition, the study was based on an analysis of existing regulatory legal acts, as well as on an analysis of draft regulatory legal acts that have not yet been adopted but regulate activities in the Arctic zone of the Russian Federation and the use of its natural resources.

The methodological basis of the research was formed by the dialectical method, which made it possible to learn in unity the essence and basic patterns of environmental and legal problems of rational nature management in the Arctic. Philosophical and logical techniques, comparative and structural analysis also contributed to the achievement of the goal set in the introduction. With the help of a formal legal technique, the essence and significance of environmental and legal norms and political and legal provisions aimed at the most efficient use of the natural resources of the Arctic were established.

## RESULTS AND DISCUSSION

When developing legal support and making management decisions in the field of rational environmental management in the Arctic, one should consider the special sensitivity of the Arctic ecosystems. They have largely undergone changes in recent decades as a result of global warming and the associated significant reduction in the Arctic ice cover. Intensification of comprehensive scientific research in the region (such as, for example, the study of the structure describing the seabed near the Spitsbergen archipelago; the use of modern floating observatories for year-round observations related to the geology of minerals and geophysics, aerology oceanography, and meteorology; remote sensing of the Earth, etc.) requires the development of common approaches in the development of the legislation of the Arctic states for effective interaction in the process of their implementation (WOKER, SCHARTMÜLLER, DØLVEN, 2020, p.1, 5, 7, 8). In addition, the melting of Arctic ice opens new areas for navigation and exploration of natural resources, which also involves the adoption of new adequate legal measures (NOUSSIA, 2020, p.98).

The situation is complicated by the uncertainty in the delimitation of the national jurisdictions of the Arctic states and the existence of unresolved problems in the form of maritime boundaries of different states in the Arctic waters (BEKKER, 2020, p.163). As the Arctic is characterized by significant legal and institutional fragmentation, then the effective environmental management here requires coordinated actions of all Arctic states based on transboundary legal consistency, as well as an ecosystem approach (PLATJOUW, 2019, p.1, 2, 7, 10) or ecosystem management of human activities (ZHAVORONKOVA, AGAFONOV, 2018, p.114, 121).

It is recognized in science that the development of minerals in the Arctic is associated with a great risk to environmental sustainability, although it contributes to the economic development of the corresponding regions of the Arctic states (COLLINS, KUMRAL, 2020, p.297). Moreover, the discretionary powers of the authorities of the Arctic states, which primarily pursue the goal of obtaining the maximum economic effect, are often sufficiently limited in their actions at the legislative level in the field of environmental management; this negatively affects the state of the environment in the region (PLATJOUW, SOININEN, 2019, p.1).

In our earlier scientific developments, it was substantiated that rational use of natural resources is understood as such use of nature, which leads to maximum environmental efficiency, in contrast to sustainable use of natural resources (not associated with violation of legislation but is not the most effective option for interaction between society and nature) (LUNEVA, 2019, p.143). The system of rational nature management relations in the Arctic should include relations that lead to an increase in the sustainability of ecological systems: (1) improvement of the natural environment and the ecological situation, and enhancement of the quality of natural complexes, natural and natural-anthropogenic objects; (2) restoration of the natural environment; (3) "additional" reproduction of natural resources (after the completion of compensatory reproduction of natural resources); (4) other relationships aimed at increasing the sustainability of ecological systems.

We believe that extremely fragile and sensitive Arctic ecosystems are capable of building resilience in the following cases: (1) the creation of transboundary specially protected natural areas and an increase in the number of national ones (hereinafter SPNAs) in the region, including through the system of marine protected areas; (2) elimination of the accumulated harm to the environment in the Arctic zone; (3) development of aquaculture in the region, which will allow maintaining the number of commercial species in their natural habitat. This approach is fully consistent with paragraph 15 of the Fundamentals of State Policy of the Russian Federation in the Arctic for the period up to 2035.

1. Creation of transboundary and increasing the number of national SPNAs in the Arctic as a way to ensure rational nature management. Legal prohibitions and restrictions on the implementation of economic and other activities, introduced during the creation of protected areas, are necessary for the sustainable development of the Arctic region from the geo-ecological, socio-economic and geopolitical positions. Minimizing an anthropogenic load on vulnerable Arctic ecosystems as a result of the creation of protected areas or the expansion of their area will lead to a gradual restoration of the natural environment of the Arctic and an increase in environmental sustainability. In the future, new Arctic SPNAs could be nominated for the assignment of the legal status of World Natural Heritage sites as ecosystems of outstanding unique value. There is every opportunity for new Arctic SPNAs to meet at least one of the criteria for their inclusion in the World Heritage List (Article 11 of the 1972 World Cultural and Natural Heritage Convention).

As an example, we will cite the SPNAs created in the Arctic zone of the Russian Federation. First of all, the state nature reserve "Wrangel Island" deserves attention (Resolution by the Council of Ministers of the RSFSR dated 03.23.1976 No. 189 "On the organization of the state reserve "Wrangel Island" of the Glavokhota of the RSFSR (The General Department of the Hunting Facilities and Reserves under the Council of Ministers of the RSFSR) in the Magadan region"). It occupies the most northern position of the protected natural areas of our country, which in 2004 was included in the UNESCO World Heritage List. The scope of permitted activities depends on the category of protected areas and is spelled out in the relevant provisions on their establishment. Educational tourism is one of the permissible types of activities permitted in protected areas, which can be carried out within the framework of rational nature management. So, educational tourism was previously carried out within the boundaries of the state natural reserve "Wrangel Islano": the placement of nature museums, including open-air ones, the organization and arrangement of educational and excursion ecological routes (paragraph 14 of the Regulations on the Federal State Institution "State natural reserve "Ostrov Wrangel", approved by the Ministry of Natural Resources of Russia dated March 12, 2001, became invalid on May 27, 2020) and further development of educational tourism and the corresponding observation infrastructure are planned (paragraphs 9, 11, 14 of the draft Order issued by the Ministry of Natural Resources of the Russian Federation "On Approval of the Regulations on the State Natural Reserve "Wrangel Island" (as of 04.24.2020)).

In turn, the national park "Russian Arctic" (*Order of the Government of the Russian Federation dated 15.06.2009 No. 821-r "On the establishment of the national park "Russian Arctic" in the Arkhangelsk region"*) has a strict target focus on the preservation and restoration of natural complexes and objects of the Arctic (p. 2 of the Regulations on the Russian Arctic National Park approved by order issued by the Ministry of Natural Resources of the Russian Federation dated 04.10.2011 No. 806), for which purpose appropriate restrictions on economic activities have been introduced on its territory. Thus, within the boundaries of the Russian Arctic National Park, it is prohibited, including: (1) any work related to the use of subsoil; (2) changes in the hydrological regime; (3) commercial, amateur and sport hunting; (4) industrial, coastal, recreational and sport fishing; (5) finding with tools for the extraction (catch) of aquatic biological resources, and for hunting, and also with the products of catching animal world objects; (6) other numerous types of activities that can damage natural complexes and objects.

In addition to educational tourism, ships are allowed to enter in the National Park "Russkaya Arktika" within the framework of cruise tourism (in the protection zone for aquatic biological resources). To increase the guarantee for the protection of rare and unique ecosystems, it would be necessary to establish a special responsibility of tour operators and recreationists within the framework of educational tourism and Arctic cruises for violation of the environmental regime (LUNEVA, 2017,  $\rho$ .1907). In addition, it is necessary to create a statutory regulation system for Arctic tourism that would minimize the anthropogenic load on the natural Arctic environment caused by such activities. Let's give just one example. The development of cruise tourism and the expansion of shipping along the Northern Sea Route contribute to increased environmental disturbance, which may lead to the loss of some suitable polar bear habitats. It is necessary, including through the adoption of legal measures, to limit tourism activity as much as possible, primarily in the places of reproduction of this specially protected Arctic species (KUDELKIN, 2020,  $\rho$ .11).

2. Elimination of the accumulated harm to the environment in the Arctic zone to ensure rational use of natural resources. The rules for the elimination of accumulated environmental harm, as a result of compliance with which there is an improvement in the state of disturbed ecosystems, the restoration of components of the natural environment, natural and natural-anthropogenic objects are included in the system of requirements for the legal support of rational environmental management (LUNEVA, 2020, p.14). The Arctic especially needs to eliminate the objects of accumulated harm (IGNATYEVA, 2017, p.108).

The greatest concern is caused by the radiation pollution of the Arctic waters associated with the sinking of nuclear and radiation hazardous objects, which is a significant environmental problem (NYMAN, 2002, p.48; ODENDAHL, 2016, p.288). At the bottom of the Arctic water area there are reactor compartments, nuclear submarine reactors, nuclear submarines, special ships and containers with solid radioactive waste, metal structures and equipment. In total, there are seven sank objects containing nuclear fuel in the Russian part of the Arctic waters, among which five were sunk as planned, and two sank accidentally. The problem of rehabilitating the Arctic waters of the Russian Federation from nuclear waste is reaching the state level. A draft Decree of the President of the Russian Federation "On the rehabilitation of the Arctic zone of the Russian Federation from sank and sunken facilities with spent nuclear fuel and radioactive waste" (as of 05.05.2020) has been developed, giving ROSATOM the authority to implement state policy and legal regulation in the field of rehabilitation of the Arctic zones of the Russian Federation from radioactive waste. The State Corporation "Rosatom" has all the necessary equipment and outfit for the disposal of the corresponding waste.

3. Development of aquaculture in the Arctic zone to ensure rational use of natural resources. On the one hand, the goal of aquaculture is to ensure the production of fish and other products (part 2, article 1 of the Federal Law dated 02.07.2013 No. 148-FZ "On aquaculture (fish farming) and on amendments to certain legislative acts of the Russian Federation"). On the other hand, business entities carry out fishery reclamation (this is an essential condition of the contract for the use of a publicly owned fish breeding site, Article 9 of the Federal Law dated 02.07.2013 No. 148-FZ). The fishery reclamation includes measures to improve the fishery qualities of the reservoir, improve the conditions for natural reproduction and feeding of valuable fish species. Aquaculture production is a promising area for economic development in the Arctic regions, but it is constrained by limited opportunities for support of the industry from local authorities and poor infrastructure development. Aquaculture as a type of activity meets the criteria of rational nature management, since it leads to an increase in the number of corresponding populations of living organisms. However, when choosing a location for aquaculture facilities, it is necessary to comprehensively assess the possible risks of their impact on the state of the natural Arctic environment.

Illustrative in this aspect are the Decision of the Arbitration Court of the Primorsky Territory dated 02/01/2018 in the case No. A51-15778 / 2017 and the Resolution of the Fifth Arbitration Court of Appeal dated 05.15.2018 No.

05AP-1690/2018 in the same case, which declared the agreement between the Far Eastern Marine Biosphere state natural reserve and LLC Zarubinskaya Baza Flota on scientific and technical cooperation on the implementation of the model project "Sustainable use of natural resources in marine areas: experimental mariculture" (research work on the breeding of commercial invertebrates), within which it was planned to introduce innovative methods of rational nature management due to the inadmissibility of the implementation of commercial aquaculture within the SPNA boundaries.

# SUMMARY

As a result of the study, we come to the conclusion that one of the main directions for the development of rational environmental management in the Arctic zone of the Russian Federation are: (1) the creation of transboundary SPNAs and an increase in the number of national ones with the implementation of educational / ecological tourism on their territory, taking into account the minimization of anthropogenic impact from its organization and conduct; (2) systematic work to eliminate the objects of accumulated environmental damage; (3) development of aquaculture as an alternative to increasing the level of production of commercial species included in aquatic biological resources. However, today in the Russian Federation, the system of legal regulation for the implementation of these types of rational environmental management is undergoing improvement and has several gaps and contradictions while fulfilling the mandatory requirement to minimize the negative impact on the state of the unique Arctic natural environment.

# CONCLUSIONS

A balanced ratio of legal measures to ensure the protection of Arctic ecosystems and their permissible economic use in the field of rational nature management can become a factor in the economic development of the Arctic regions of the respective countries, subject to an increase in the volume of work to eliminate the accumulated environmental damage. Only a fair balance of legal opportunities and legal restrictions will make it possible to use the vulnerable ecosystems of the Arctic as efficiently as possible within the assimilation capacity of the natural environment.

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