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Solving the Border Issues of the USA and Canada in the Field of Joint Use of Water Resources

Abstract. The relevance of the research topic is justified by the fact that the USA and Canada have significant fresh water reserves, but they also experience a shortage of this resource, despite the fact that they are among the top five countries with the richest water resources in the world. In order to ensure the water security of the region and preserve the Great Lakes in a favorable condition, the United States and Canada have worked closely together for many years and share the fresh water resources of the Great Lakes, which is an example for other countries of the world. Based on relevance, the main goal of the article is the analysis of urgent border issues of the USA and Canada in the field of joint use of water resources. It is shown that the USA and Canada have adopted 21 legally binding documents, which recognize that these countries have a responsibility to all people currently living on our planet and to future generations to ensure the safety of this water source in the interests of all mankind, and that a balanced ecosystem approach is used in these countries as part of the climate change adaptation measures. It has been found that since the 1980s, concern has arisen in both countries that the diversion of Great Lakes water outside the basin area may impose negative consequences for the ecosystem and limit the possibilities of using these water reserves in the future. It has been proven that the effectiveness of the Boundary Waters Treaty of 1909 and the Great Lakes Water Quality Agreement has decreased in the conditions of increasing competition for water resources in North America. The fact is substantiated that the current management and control system of the Great Lakes waters under the 1909 Treaty is the best of all existing systems, although it requires improvement. On the one hand, the USA and Canada become increasingly aware of the value of their wealth called the "Great Lakes", but on the other hand, many trends indicate that the goal of states becomes joint cooperation for the purpose of preserving and enriching water resources as well as privatization and ensuring control over territories, including water, to meet their own needs. Besides the irrational use of water, which is observed both in water-poor regions of the United States and in water-rich regions of Canada, both sides of the border lack of vision for a unified water pricing policy. The article has practical significance for Ukraine, since the experience of the USA and Canada can be useful as an example of solving urgent problems in the field of providing our country with fresh water and preserving water resources

Keywords: cooperation, irrational use of water, Great Lakes Water Quality Agreement, border issues, environmental problems, international agreements

Introduction

Water is the most important life support resource on Earth. The economic development of both individual countries and regions depends on its availability. The uneven distribution of fresh water reserves on the continents often became the cause of political, economic and social conflicts.

The main problematic issues include the fact that interstate water relations were previously limited to the shipping and trade matters. As from the middle of the 19th century, the aspects of water quality, water intake, transboundary impact of pollution and other issues requiring legal regulation become relevant. Since then and as of now, the situation regarding the water quality of the Great Lakes basin has been continuously monitored.

The article is primarily aimed at the analysis of pressing border issues of the USA and Canada in the field of joint use of water resources.

The topic of border issues of the USA and Canada in the field of joint use of water resources requires more attention of researchers and is not sufficiently researched. The authors who stand out among those investigating problematic issues in the field of joint use of water resources in the USA and Canada include the scientific works of P. Gleick "Global freshwater resources: Soft-Path solutions for the 21th century" [8], J. Linton and N. Hall "The Great Lakes: A model of trans-boundary cooperation" [12], S. Harry "Water in Canada: Myths and realities" [6] and

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A. Kataeva "Interaction between the USA and Canada regarding the exploitation of the Great Lakes water resources" [13], etc.

Today, due to the population growth and the increase in the water needs of industry and agriculture, the problem of water supply and preservation of water reserves is becoming more acute. As of now, countries with different political and economic development levels are vulnerable to the scarcity of such a resource as fresh water. The USA and Canada experience a shortage of this resource, despite the fact that they are among the top five countries with the richest water resources in the world [1]. The USA and Canada have been working together for many years to ensure the region's water security and preserve the Great Lakes in proper condition.

Various water consumption organizations in the USA and Canada explain that the issues related to the prevention of pollution of water resources are caused by intensity of consumption, depletion and reproduction of water resources. Massive consumption of fresh water in Canada is primarily related to energy production and industry, while the main consumers in the USA are industry and agriculture. In this context, not only the lack of drinking water is noted, but also its pollution. Indigenous communities in Canada have struggled for decades with poor and unsafe water, affecting tens of thousands of people. Despite government promises to improve water treatment facilities, dozens of local reserves across Canada still lack clean drinking water. In December 2021, the Canadian government allocated 8 billion Canadian dollars (5.6 billion euros) after several First Nations communities filed class action lawsuits seeking damages for decades of poor water quality. The Canadian government is also trying to replace existing water laws to create more equitable management of the country's drinking water systems [2]. In general, the causes of issues related to drinking water can be both economic and political in nature. The expansion of production requires actions aimed at preserving water resources, but most often it occurs without implementing systems for further conservation and limiting water consumption.

The Great Lakes Basin of North America is one of the largest water reservoirs in the world containing 21% of the world's fresh water reserves [3]. The Great Lakes are home to US metropolitan areas: Chicago, Milwaukee, Buffalo, Cleveland, Detroit. This region is also home to Toronto, Canada's second largest city. The Great Lakes are connected to the Mississippi River basins by a system of navigable canals that begins at Lake Erie (Chicago area) and runs through the Hudson River. More than 150 rivers and lakes, including the Great Lakes, are located along the common border between the USA and Canada.

Problems and Prospects of Cooperation in the Field of Protection and Maintenance of Water Quality

For the most effective cooperation in the field of protection and maintenance of water quality, the Framework Boundary Waters Treaty was signed between the USA and Great Britain in 1909, since Canada remained a British dominion at that time [4]. The most important factor in the signing of the treaty was the diversion of the Chicago River made by the Americans. It was aimed at preventing sewage from the city of Chicago, which could not be treated at that time, from entering Lake Michigan, which was the source of drinking water for this city. In 1990, the construction of a new canal was completed, thanks to which the Chicago River began to flow in the opposite direction: from Lake Michigan through the Chicago and Illinois rivers to the Mississippi River and further south to the Gulf of Mexico. On the one hand, this made it possible to reduce the epidemic threat in Chicago, where 90 thousand people, which was almost 10% of the city's population, died of cholera in 1885 due to the fact that water intake was carried out from the same source where untreated sewage was discharged. On the other hand, as a result of the diversion of the Chicago River, the level of Lake Michigan decreased by almost 15 cm, which led to the deterioration of water supply to settlements along the shores of the Great Lakes, including those in Canada [5].

Many controversial situations have arisen over time, which cannot be resolved solely by this document. To resolve disputes, the International Joint Commission (IJC) was created, which is empowered to resolve conflicts. This body has the right to make decisions regardless of the state's position. States are obliged to implement the decisions made by the Commission. The 1944 Treaty states that "boundary waters are an invaluable resource belonging to the peoples of Canada and the United States" and that the governments of both countries "are responsible for managing these resources and ensuring a safe and abundant supply of clean water" [6].

The US economy began to develop especially intensively after the Second World War, when an unprecedented growth of industry was observed. Industrial, household and other sewage flowed into water bodies without any treatment. The oxygen content in the lakes decreased significantly, fish began to die [7]. The concentration of mercury, pesticides and other pollutants many times exceeded the permissible norm. The use and discharge of toxic chlorine-containing compounds (DDT, PCBs) and synthetic fertilizers into water systems led to their introduction into food chains.

In the late 1960s, 40% of the US water system could not be used for fishing or swimming due to water pollution. At the same time, large volumes of pollutants were discharged into the Great Lakes. In particular, in the early 1970s, Lake Erie became practically "dead" due to intense pollution. Until the beginning of 1970, the lakes were polluted with harmful substances due to insufficient treatment of industrial wastewater as well as fertilizer and waste present in surface runoff. Thus, during this period, the waters of Lake Erie had excess phosphorus, algae blooms and decreased fish population. Local aquatic species were particularly affected [7].

Adopted in 1909, the Treaty provides for a system of joint management of divided waters, in which one cannot obtain a unilateral advantage, since decisions are made by voting of the Specially Authorized Parties to the Treaty, which are represented in the IJC on a parity basis. Actions that may cause adverse consequences are blocked by the voting mechanism, which is the indisputable advantage

of decisions of the IJC over federal court decisions [8]. The Commission intensified its consideration of environmental protection issues after World War II, as public concern grew in both countries about the Great Lakes water quality. In 1964, the governments of the USA and Canada addressed the Commission with a request on this issue. The 1970 IJC final report prepared in response to a request contained a comprehensive assessment of pollution in Lakes Erie and Ontario as well as specific recommendations for achieving "water quality improvement goals" [9].

In 1972, the Agreement on the quality of waters in the Great Lakes and joint actions for their improvement was signed [10]. The USA and Canada decided to conduct joint work on treating the Great Lakes, which resulted not only in water quality improvement, but also sharply reduced the discharge of pollutants. In 1978, amendments were introduced to the Agreement, which requires applying an ecosystem approach in the implementation of environmental protection measures and fight against persistent chemical pollutants. The Protocol to the 1987 Agreement [11] defines that the priorities of the environmental protection policy include the reduction of phosphate load, pollution coming from the air and from land, as well as the prevention of bottom pollution in order to prevent secondary pollution of groundwater. The planned measures resulted in a reduction in the discharge of toxic chemicals into the lake. At the end of the 1980s, the content of toxic substances in water was reduced by 82%. But in 1990, the situation worsened again. Acid rain has been recognized as a factor that constantly negatively affects the quality of water in the Great Lakes. It was found out that up to 96% of chlorine enters the water from the atmosphere. According to Noah Hall, the relevance of transboundary water cooperation between the USA and Canada is obvious. The Agreement should be preserved and revised, as the Commission does not have sufficient leverage to resolve disputes in this area between states [12].

In the early 1990s, the USA and Canada, continuing their cooperation to preserve the water resources of the Great Lakes, formed the Great Lakes Binational Toxics Strategy. This project envisages the implementation of joint measures to replace highly toxic chemicals in industrial cycles with low-toxic ones, with the gradual abandonment of substances dangerous to human health and the environment. Many experts highly appreciate the cooperation between the USA and Canada on the issue of preserving the Great Lakes, however, despite a number of joint measures aimed at implementing plans to prevent pollution and depletion of water resources, there are still serious differences in the process of implementing the joint Strategy. The main reason for such disagreements is the different interests of the states. The issue of water export and import is acute. Canada is the owner of territories where problems with water supply are minimal, while the USA is interested in ensuring that water is constantly supplied to arid areas, such as the west and southwest of the country [13].

In September 2012, the USA and Canada agreed to introduce further amendments to the bilateral 1978 Great Lakes Water Quality Agreement [14]; previous amendments to this Agreement were adopted in 1983 and 1987. On the one hand, the adoption of such amendments meant a significant change in the environmental dimension of US foreign policy. After all, for the first time an agreement of this kind included a requirement to correlate the water management measures with the goals and objectives of international cooperation on the climate change issue. Before the administration of B. Obama came to power, the USA refused to include theses on climate change in international agreements on environmental protection issues. However, just as in previous editions of the Agreement, the new edition does not contain specific obligations of the parties to reduce water pollution, such as norms for the maximum content of mercury in water. As a result, as stated by J. Bruce and K. Wood, the quality of water in the Great Lakes continues to decrease [15].

In 2004, the International Law Association (Water Resources Committee) summarized the international experience on the use of transboundary water bodies in a new document called the "Berlin Rules on Water Resources" [16]. Most of its provisions can be applied to both surface and underground waters, with the exception of sea waters. These rules express both the legal norms currently in force and the trends of their development. They indicate that "Basin states shall cooperate in good faith in the management of waters of the international drainage basin for mutual benefit" [17, p. 11], "states within their territory manage the waters of the international drainage basin in a fair and reasonable manner, with due consideration of the obligation not to cause significant harm to other basin states" [16, p. 12]. The list of factors that are taken into account when determining the fair and reasonable use of a watercourse [16, p. 13] was supplemented by the sustainability of planned or existing uses and minimization of damage to the environment.

Modern international water relations law is based on the common interests of the states of the transboundary water body. When using it, the basin approach should be applied, i.e. the water system is considered as a whole for the neighboring (coastal) states, while preserving their national sovereignty. Any interaction between states that share water resources should be peaceful and should be carried out on the principles of reciprocity, recognition of the integrity of the basin of the transboundary water body and the most rational use of water resources for the common good of these states. States should exchange relevant information, notify each other of planned activities capable of causing significant damage, and resolve disputes peacefully. Neighboring states conclude agreements in the field of water cooperation, develop and implement measures aimed at using and protecting transboundary water bodies (according to the basin principle) [18].

Solving Urgent Issues of Conserving the Great Lakes Water Reserves

In the context of the restrictive policies of the International Joint Commission governing the Great Lakes of the United States and Canada, there were two important transboundary studies on adaptation to climate change. These are the "Great Lakes St. Lawrence River basin sustainable water resources agreement (1999-2005)" [19] and the "International Upper Great Lakes study (2007-2012)" [20]. Both comprehensive studies were carried out by an independent binational

Scientific Research Council with the participation of the Advisory Group comprising interested public representatives and technical support groups, each of which included about 200 scientists, engineers, ecologists and economists.

Both studies were aimed at improving the rules of regulation and rational use of lake resources in the interests of more effective execution of the tasks established in the 1909 Treaty (ensuring navigation, generation of hydroelectric power, municipal water supply and irrigation). In addition, it was envisaged to improve the functioning of the ecosystem, the movement of recreational vessels and recreation, the reduction of erosion and damage caused by natural disasters. This requires improving management, taking into account historical data on the water level in the lakes and inflows of water into them, developing climate change scenarios. Specific tasks are set in the prescriptions of the Scientific and Research Council concerning both studies: to ensure the maximum economic and ecological sustainability of the system, to improve its socially significant characteristics and to develop different measures for fair distribution of benefits (the benefits of one sector should not be achieved at the expense of another sector). In particular, it was established that all recommended solutions had to be effective under several climate change scenarios, and the proposed management solutions should include adaptation mechanisms capable of responding to short-term unexpected situations and being flexible in order to quickly adapt to changing water and climate regimes [21].

The proposed solutions made it possible to improve key indicators of the state of the ecosystem, expand the possibilities of recreational shipping (a multibillion-dollar business) and reduce coast damage caused by floods. Tangible results were achieved thanks to the use of flexible rules for the operational regulation of water resources in combination with a comprehensive adaptive plan, the central elements of which included measures aimed at regulating the situation on land, such as new floodplain zoning rules, flood warning mechanisms and a number of other management measures on the level of local authorities [21].

Finally, long-term adaptation plans were developed that take into account the consequences of unforeseen climate changes, which cannot be eliminated by water level regulation alone and in connection with which the participation of authorities at other levels is required in the implementation of adaptation options related to land infrastructure (land use regulations , land zoning criteria, rules for conducting construction works on flooded lands, evacuation plans in case of emergency situations, etc.). Each of the mentioned plans was approved and adopted by the International Joint Commission that manages the Great Lakes water resources, as well as the governments of Canada and the USA [21].

Since the 1980s, concern has arisen in both countries that the diversion of Great Lakes water beyond their basin territory may have negative consequences for the ecosystem and limit the possibilities of using the corresponding water in the future [18]. An urgent border issue in the relations between the USA and Canada has become the fact that the large-scale use of water resources in the USA and the inhabited part of Canada has led to serious environmental and socio-economic problems, primarily the pollution of surface and underground waters. There are discussions about the possibility of transferring water resources from the Great Lakes to the Mississippi River to meet the needs during the hot period of the year in the USA. At the same time, the intensification of agriculture and the growth of urban settlements and the population in general have led to a large-scale increase in diffused pollution as a result of stormwater runoff from urban areas, the washing off excess fertilizers, pesticides and herbicides and other chemical from agricultural fields, pastures and livestock complexes. According to experts, this type of diffused pollution has become a new challenge in the last two decades for the North American continent [19].

In the period between 2001 and 2005, eight US states within the Great Lakes basin negotiated and signed an innovative document – Great Lakes St. Lawrence River Basin Sustainable Water Resources Agreement. According to it, the possibilities of water diversion outside the Great Lakes basin are significantly limited. Even smaller communities located in the area between the Great Lakes and other river drainage basins are required to adhere to high standards of water protection in order to access water sources that are located only a few kilometers from the territory of the respective communities [19]. The important factors during these negotiations included climate change, which the Agreement proponents used to justify their proposal to limit the range of users of the basin waters, which contain one fifth of all the world's fresh water resources, only to users within this basin. Agreement proponents have used the support of a binational body (the International Joint Commission (IJC)) created on the basis of the 1909 Boundary Waters Treaty between the USA and Canada to advocate for a balanced, ecosystem-based water management approach. Based on requests from the governments of the countries participating in the Agreement, the IJC is empowered to conduct investigations and make recommendations on cross-border issues. To prepare relevant recommendations, the IJC appoints an expert council with an equal number of participants from each country participating in the Agreement. In 1999, the governments of the USA and Canada agreed to the development of an arbitration decision of the IJC on the issue of water withdrawal from the Great Lakes basin. In the 2000 IJC report on the said appeal, experts concluded that the Lakes are “highly sensitive to climate variability” and, referring to global climate change, recommended a restrictive, weighted approach to water withdrawal from the Lakes basin [23].

The Treaty on the Columbia River, the length of which is approximately 2,000 km, turned out to be important; the height difference between the source of the river in Lake Columbia and its mouth is 820 meters. The rivers mainly flow from Canada to the USA. However, the Kootenay River first flows south to the United States, then returns to the territory of Canada and flows into the main channel of the Columbia River. The main channel of the Columbia River system and the Kootenay River system account for less than 15% of the total area of the Columbia River basin. However, these rivers account for approximately

35% of the total water flow in the Portland area, which becomes up to 50% during flood periods. The waters of the Canadian part of this basin directly flow into Roosevelt Lake, a reservoir near the Grand Coulee Dam, and decisively influence electricity generation at the large power plant of the same name. The upper Columbia River system and the Kootenay River system have a high variability of seasonal water flow: in the period of maximum water level (in June), water flow is more than 40 times greater than the volume of flow during the low water season (in January). The annual runoff volume is subject to significant (up to fourfold) changes [21]. The Columbia River Treaty (negotiations for its conclusion continued from 1961 to 1964) focused on flood control, power generation in the Canadian part of the Columbia River basin and four "treaty dams" managed on the basis of intra-basin decisions. According to the said Treaty, Canada provides reservoir capacity of 15.5 million acre feet, and the United States paid Canada 64.4 million dollars for half the previous flood damage avoided over 60 years (until 2024) under "guaranteed annual flood action plans". It is envisaged that the USA may request Canada to take additional urgent flood control measures with the payment of additional compensation to Canada for the relevant services, but no such requests have been received so far [22].

The USA and Canada share the benefits of the implementation of estimated energy opportunities in the USA on an equal basis, which are associated with flow regulation at the projects located in Canada that are covered by the Columbia River Treaty. Benefits in the form of increased electricity generation are calculated based on forecasts of optimal, not actual, electricity generation. Therefore, regardless of how the USA decides to actually operate its dams, Canada will receive 50% of the projected agreed electricity and reservoir volumes. The USA has undertaken to annually provide Canada with half of the electricity, which, according to calculations, can be conducted by using the capacity of the reservoir provided for by the Treaty on the territory of Canada; the value of such supplies currently amounts to approximately $250-350 million per year [22].

According to the Treaty, the USA was allowed to build the Libby Dam, which was constructed in 1973 and the reservoir of which (Koocanoosa) extends 67 km into the territory of the British Columbia province in Canada. No direct compensation has been provided to Canada, but it benefits from the regulated flow of water from the Libby Dam, which feeds Canadian HPPs along the Kootenay River in British Columbia and helps control flooding of the Kootenay and Columbia Rivers [22].

Conclusions

Thus, the Great Lakes are one of the largest sources of fresh water in the world, supplying millions of people and accounting for half of the trade between the USA and Canada. Therefore, there is a threat of conflicts provoked by the water issue between the two countries. In particular, new hydroelectric plants in the James Bay that were designed to supply water to the northeastern part of the United States create an environmental threat to the population of Canada. Large amounts of sulfur and nitrogen still enter Canada's fresh waters and soils from the American industrial centers. Although emissions of pollutants have decreased over time, the waters of the Lakes still contain large amounts of harmful substances and may continue to have an oxidizing effect. The surrounding soil becomes unsuitable for the growth of forests due to the high alkali level, which, in turn, inhibits the process of water purification from oxidation.

In 2006, the United States organized an armed guard of the Great Lakes, justifying its actions by the fact that water is a resource of the future and that further lowering of the water level in the Great Lakes threatens the national security of the United States. Canada condemns such unilateral actions because existing treaties provide for joint solutions to any issues related to the Great Lakes security. The governors of several northern US states ignored the IJC principles, which controls the water quality of the Great Lakes, by adopting an amendment to the agreement on the diversion of water for new US settlements.

The effectiveness of the 1909 Treaty and the Great Lakes Water Quality Agreement is declining under conditions of competition for water resources in North America. Against this background, it must be recognized that the Great Lakes water management and control system of 1909 is the best of all known joint projects, although it requires improvement. The current demands create a need to develop new programs and review policy priorities to improve water quality. The establishment of numerous institutions, organizations and communities that govern the Great Lakes adversely affect the implementation of the agreed principles. Even members of the US Congress and the Canadian Parliament hesitate to answer the question of what is the difference in the competence of these or other organizations operating in the field of exploitation and conservation of water resources of the Great Lakes?

Therefore, the USA and Canada are becoming increasingly aware of the value of their common wealth called the "Great Lakes", and there are a number of trends that indicate that the goal of the states is cooperation aimed at preserving and enriching water resources, while privatization and ensuring control over territories, in particular, water ones, have to satisfy their own, separate needs at the same time. The problem of irrational water use is observed both in the water-poor regions of the USA and in the water-rich regions of Canada. Both sides of the border lack of vision for a unified water pricing policy. At the current stage, consideration of the issue of improving the joint water use regime in the region has been delayed. After the 2015 Canada elections and 2016 USA elections, the following rounds of negotiations on the water issue did not take place. Canada's environmental policy has maintained its focus on energy imperatives since the Liberal administration came to power. The US Republican administration of D. Trump and the activities of his Environmental Protection Agency did not provide positive signals in the field of environmental protection and natural resources depletion prevention. The current progress on the important issue of shared use of water resources is associated with the position of the J. Biden administration, which is expected to take active actions in this area.

The main directions for further development include studying the conflict of interests of countries that own transboundary water resources. In this context, the USA and Canada created and support the mechanism of the Boundary Waters Treaty, which, subject to the necessary periodic updates, quite effectively allows settling the economic and political contradictions of these states in modern conditions based on the coinciding ecological interests of both parties. In the future, the militarization of the Great Lakes region may become one of the factors complicating the relations between the two countries on water resources issues.

References

[1] Top 10 Countries with Freshwater Resources. (2022). Retrieved from https://www.jagranjosh.com/general-knowledge/top-10-countries-with-freshwater-resources-1537440475-1.

[2] Young, P. (2022). *Dozens of indigenous communities in Canada still lack clean water: "People are going thirsty"*. Retrieved from https://observers.france24.com/en/americas/20220201-canada-indigenous-first-nations-water-quality-tiktok.

[3] Facts and figures about the Great Lakes. (2022). Retrieved from https://www.epa.gov/greatlakes/facts-and-figures-about-great-lakes.

[4] Treaty between the United States and Great Britain relating to boundary waters, and questions arising between the United States and Canada. (n.d.). Retrieved from https://legacyfiles.ijc.org/tinymce/uploaded/Boundary%20Waters%20Treaty%20of%201909_3.pdf.

[5] Lanko, D. (2013). Management of transboundary water resources: A comparative analysis of Russian and American experience. *Baltic Region*, 1(15), 27-37.

[6] Harry, S. (2019). *Water in Canada: Myths and realities.* Nova Scotia: Centre for Global Studies, University of Victoria.

[7] Rysbekov, Yu.Kh. (2009). *Transboundary cooperation on international rivers: Problems, experience, lessons, expert forecasts*. Tashkent: SIC ICWC.

[8] Gleick, P.H. (2003). Global freshwater resources: Soft-Path solutions for the 21th century. *Science*, 302, 1524-1528.

[9] Pollution of Lake Erie, Lake Ontario and the international section of the St. Lawrence River. (1970). Retrieved from http://scholar.uwindsor.ca/ijcarchive/12.

[10] Great Lakes Water Quality Agreement (GLWQA). (n.d.). Retrieved from https://www.epa.gov/glwqa.

[11] Protocol on Great Lakes Water Quality, as amended on October 16, 1987. Amending the 1978 agreement between the United States of America and Canada, November 18, 1987. (1987). Retrieved from https://www.ijc.org/sites/default/files/GLWQA_e.pdf.

[12] Linton, J., & Hall, N. (2013). The Great Lakes: A model of trans-boundary cooperation. In E. Norman, A. Cohen., K. Bakker (Eds.), *Water without borders?* (pp. 221-243). Canada: University of Toronto Press.

[13] Kataeva, A.A. (2017). Cooperation between the USA and Canada in the exploitation of water resources in the Great Lakes. *Azimuth of Scientific Research: Economics and Management*, 1(18), 240-243.

[14] Protocol amending the Agreement between Canada and the United States of America on Great Lakes Water Quality, 1978, as amended on October 16, 1983 and on November 18, 1987. (1987). Retrieved from https://www.canada.ca/en/environment-climate-change/services/great-lakes-protection/2012-water-quality-agreement.html.

[15] Canada-U.S. Great Lakes water quality: One step forward, two steps back. (2012). Retrieved from https://www.thestar.com/opinion/editorialopinion/2012/09/16/canadaus_great_lakes_water_quality_one_step_forward_two_steps_back.html.

[16] Berlin Rules on Water Resources. (2004). Retrieved from http://www.cawater-info.net/bk/water_law/9_4.htm.

[17] Gleick, P.H. (2003). Global freshwater resources: Soft-Path solutions for the 21th century. *Science*, 302, 1524-1528.

[18] Shatalova, K.Yu. (2015). Principles of distributing water resources of transboundary water bodies. *Environmental Engineering*, 4, 77-80.

[19] Great Lakes, St. Lawrence River basin sustainable water resources agreement. (2021). Retrieved from https://www.ontario.ca/page/great-lakes-st-lawrence-river-basin-sustainable-water-resources-agreement.

[20] International Upper Great Lakes study. (n.d.). Retrieved from https://www.watershedcouncil.org/international-upper-great-lakes-study.html.

[21] Lake superior regulation: Addressing uncertainty in upper Great Lakes water levels. (2012). Retrieved from https://publications.gc.ca/collections/collection_2012/ijc/E95-2-15-2012-eng.pdf.

[22] In depth case study of the Columbia river basin. (n.d.). Retrieved from http://www.internationalwatersgovernance.com/uploads/1/3/5/2/13524076/columbia-river-case-study.pdf.

[23] Protecting the waters of the Great Lakes: Final report to the governments of Canada and the United States. (n.d.). Retrieved from http://www.ijc.org/en_/Reports_and_Publications.

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Вирішення прикордонних проблем США і Канади в сфері спільного використання водних ресурсів

Анотація. Показано, що такі, країни як США і Канада забезпечені значними запасами прісної води, однак і вони відчувають дефіцит цього ресурсу, незважаючи на те, що вони входять в першу п'ятірку найбагатших водними ресурсами країн світу. З метою забезпечення водної безпеки регіону, збереження Великих озер в сприятливому стані США і Канада тісно співпрацюють протягом багатьох років. Запасами прісної води Великих озер Канада і США користуються спільно. У цих двох країнах прийняті юридично обов'язкові 21 документи, в яких визнається, що на цих країнах лежить відповідальність перед усіма людьми, що нині живуть на нашій планеті і перед майбутніми поколіннями за забезпечення схоронності цього джерела води в інтересах всього людства, і в цих країнах в рамках заходів адаптації до зміни клімату застосовується зважений екосистемний підхід. Починаючи з 1980-х рр. в обох країнах виникла стурбованість з приводу того, що відведення води Великих озер за межі території басейну цих озер може мати негативні наслідки для екосистеми і обмежити можливості використання відповідних вод в майбутньому. Доведено, що, в умовах конкуренції, що загострюється за водні ресурси в Північній Америці ефективність Договору 1909 р. і Угоди з якості вод Великих озер знижується. На цьому тлі необхідно визнати той факт, що на сьогоднішній день система управління і контролювання вод Великих Озер 1909 р. є найкращою з усіх діючих, хоча і потребує вдосконалення. З одного боку, сьогодні США і Канада все більше усвідомлюють цінність свого багатства під назвою «Великі озера», з іншого боку, багато тенденцій говорять про те, що метою держав стає спільне співробітництво з метою збереження і збагачення водних ресурсів, а приватизація та забезпечення контролю над територіями, в тому числі водними, для задоволення власних потреб. Крім нераціонального використання води, яке спостерігається як в бідних водою регіонах США, так і в забезпечених водними ресурсами регіонах Канади, по обидва боки кордону констатується відсутність бачення єдиної політики ціноутворення на воду

Ключові слова: США, Канада, водні ресурси, проблеми прикордоння, екологічні проблеми, міжнародні договори