

Specifics of the Conservation Area in the Northern Part of the Caspian Sea

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Abstract: The article describes environmental protection sites. It reveals features of conservation area in the northern part of the Caspian Sea in detail; specifically, its certain territorial complexes as unified ecological systems with their unique characteristics. Uniqueness of flora and fauna of the Caspian Sea has been described by various scientists and proven through various projects. However, development of infrastructure in the Caspian region, in particular of mining industry on land and at sea, has led to loss and possibly extinction of a large number of various birds and animals. Marine environment is one of fragile natural objects. The main sources of pollution of the marine environment in the Caspian Sea are untreated runoffs from agricultural lands and industrial and municipal welfare facilities in cities and nearby villages, river run-off, sea and river navigation, operation of oil and gas wells, both onshore and offshore, oil transportation by sea, pollution in undersea operations and transport of hazardous substances both by air and waterways. It was concluded that there is lack of due attention on the state level to ensure safety of the conservation area of the Caspian Sea.

Key words: Environmental protection % Caspian Sea % Pollution % Hazardous substances

INTRODUCTION

The Caspian Sea is an enclosed body of water, roughly 700 miles from north to south and 250 miles across, lying directly between the states of Central Asia and the Transcaucasus. Its management is of particular concern to the five littoral states: Azerbaijan, Russia, Kazakhstan, Turkmenistan and Iran and also to the various oil companies wishing to invest in the region's resources. Large proven reserves lie off the coast of Azerbaijan and recent exploration suggests possible reserves in part of the Pricaspian shield covering the north-east of the Caspian, off the coast of Kazakhstan [1].

The growing interest in developing offshore oil and gas resources has focused attention on the issue of territorial jurisdiction over the maritime area. The offshore oil resources of Azerbaijan have attracted particular interest from Western oil companies, a primary player being a consortium led by British Petroleum [2]. On 20 September 1994, following almost three years of negotiations, the Government of Azerbaijan and the BP- led consortium signed an agreement at Baku to develop two major proven offshore oil-and gas-fields in the Caspian Sea, the Azeri and Chirag fields and the deep

water section of a third, the Gunashli field, in conjunction with Azerbaijan State Oil Company ('SOCAR') and the Russian oil company Lukoil. These fields extend over 70 miles off the coast of Azerbaijan east of Baku and the combined reserves are reported to exceed 500 million tonnes [3]. The consortium is due to carry out a six-month feasibility study on the best way of transporting the oil from Azerbaijan to international oil markets once the agreement has been ratified by the Azerbaijan Parliament. [4].

The Main Part: At the present time all states claim to exercise sovereignty, subject to treaty obligations and rules on general international law, over a belt of sea adjacent to their coastlines. On its outer edge this belt is bounded by the high seas and it is founded on a baseline, related to the low-water mark and, in certain conditions, to other phenomena, which serves to divide the territorial sea from the interior or national waters comprised in rivers, bays, gulfs, harbours and other water lying on the landward side of the baseline. The term of art now generally accepted is 'territorial sea' and it is employed in the most recent Conventions. Other terms employed to denote the same concept include 'the maritime belt', 'marginal sea' and 'territorial waters' [5].

The normal baseline from which the breadth of the territorial sea is measured is the low-water line along the coast. This follows from the concepts of maritime belt and appurtenance and corresponds with state practice [6].

It has always been assumed that the baselines for the delimitation of both contiguous zones and the territorial sea are identical. State practice and the terms of Article 24 of the Convention on the Territorial Sea of 1958 and Article 33 of the Convention of 1982 confirm the assumption. The question is dealt with by Article 24 of the Convention on the Territorial Sea, which established a 12-mile limit for all purposes [7].

The unique qualities of the Caspian Sea preclude its ready classification as a sea or a lake. As a land-locked body of water, lying some 27 meters below the ocean level, without any direct outlet to the ocean, [8] the Caspian is not *stricto sensu* a sea, i.e., a part of the world ocean. It also fails to meet the definition of an enclosed or semi-enclosed sea under Article 122 of UNCLOS. [9] Obviously, international law of the sea does not automatically apply to this water body.

On the other hand, the size and geophysical features of the Caspian distinguish it from a typical lake [10]. One expert from the Intergovernmental Oceanographic Commission of the United Nations Educational Scientific and Cultural Organization has asserted that from an oceanographic point of view (composition of water, fauna, flora) the Caspian Sea should be considered as a sea. In fact, the Caspian Sea is a relict marine basin [11]. Some authorities, recognizing the difficulties in defining the Caspian as either a sea or a lake, have called it an "inland sea", a definition *sui generis* [12]. This approach, however attractive, does little to clarify the legal regime applicable to the Caspian [13]. The sea/lake dichotomy permits a symbiotic approach to the problem, under which two sets of identifiable rules of international law could be appealed to by the littoral states in their regulation of the Caspian.

Environmental protection sites include both nature as a whole and its constituent resources separately (land, mineral resources, water, forests, wildlife, etc.) and certain territorial complexes thereof, as unified ecological systems with their unique features. The basin of the largest landlocked body of water in the world—the Caspian Sea, which also covers, apart from the Caspian depression (Caspian Sea) a geologically enormous bailing area and seaboard territories, is an ecologically interconnected unified natural complex [14, p. 287].

However, as analysis of international law and national legislation of coastal states and of environmental activity practices in this region demonstrates, the Caspian Sea basin as a unified object of legal protection. Framework Convention for Protection of Marine Environment of the Caspian Sea.

The Convention applies to the marine environment of the Caspian Sea in view of its level of fluctuation and pollution from land-based sources. The purpose of the Convention is to protect marine environment of the Caspian Sea from pollution, including protection, conservation, restoration and sustainable and rational use of its biological resources [15].

However, the Convention does not provide for the issues related to protection of the environment in general.

Uniqueness of flora and fauna of the Caspian Sea has been described by various scientists and proven through various projects. However, development of infrastructure in the Caspian region, in particular of mining industry on land and at sea, has led to loss and possibly extinction of a large number of various birds and animals [16, p. 71-72].

The law "On protection, reproduction and utilization of wildlife" regulates social relations in the field of protection, reproduction and use of animal life and is aimed at ensuring conditions for conservation of wildlife and biological diversity, sustainable utilization of wildlife objects in order to meet environmental, economic, aesthetic and other human needs with regard to the interests of present and future generations [17].

There is a conservation area in the northern part of the Caspian Sea, which is regulated by the Law "On specially protected natural sites" and other laws and regulations. This law regulates social relations in creation, expansion, protection, restoration and sustainable use and management of specially protected areas and objects of public nature reserve fund that are of special ecological, scientific, historical, cultural and recreational value and are a component of the national, regional and global environmental network [18].

As is known, the territory of the North Caspian Sea (waters and coastal part) by the Decree of the Council of Ministers of the Kazakh SSR as of April 30, 1974 m 252. From that time to the present day the territory of the North Caspian Sea remains to be a conservation area. This decision was motivated by the uniqueness of this part of the sea in terms of reproduction and conservation of its biological diversity. It is home to over 190 species of animals, 20 of which are listed in the Red Book. This same area is the habitat of the Caspian seal, growth and nursing of sturgeons fry and nesting of rare migrating birds [19].

In 1999, the Resolution of the Government of the Republic of Kazakhstan "On approval of special environmental requirements in the state conservation area in the northern part of the Caspian Sea", which provided for special requirements for a full range of offshore explorations, including requirements for design and construction of wellhead platforms, facilities and maritime infrastructure, drilling, testing, suspension or abandonment of wells and wellhead platforms, logistical support, transportation and waste management, design, construction, operation and decommissioning of onshore infrastructure. It also regulated issues related to organization and performance of operations, waste management, movement within the conservation area in all transport modes, special measures for protection of biological resources, environmental monitoring, environmental impact assessment and public participation, control and responsibility, measures and guarantees in the event of hydrocarbon spills [20].

Today, a special mode in the use of natural objects in this part of the Caspian Sea has been established in Chapter 38 of the Environmental Code of Kazakhstan. This chapter covers such provisions that regulate both the establishment of the border of the state protected area in the northern part of the Caspian Sea; restrictions in the mode of use; protection of coastal waters in the northern part of the Caspian Sea in water consumption areas by population, environmental monitoring of the state conservation area in the northern part of the Caspian Sea

Environmental requirements for economic and other activities:

- C In water conservation zones;
- C In safety zone;
- C Within the storm surge zone of influence.

General environmental requirements for economic and other activities in the state conservation area in the northern part of the Caspian Sea.

Environmental requirements:

- C For geophysical operations
- C For offshore exploration and production
- C For design and construction of oil and gas pipelines
- C For onshore supply bases and coastal infrastructure facilities
- C For navigation
- C For suspension and abandonment of petroleum operations facilities [21].

However, a number of environmental requirements established by the EC of RK are of a formal nature, since they are practically unfeasible given the specific nature and peculiarities of subsoil use technological process. Thus, for example, Article 257 of the EC of RK states that in order to preserve the Caspian seals population, petroleum operations from October to May must be carried out at a distance of 1852 meters (1 nautical mile) from the places of their concentration. If we keep in mind that petroleum operations imply offshore exploration and production, it becomes clear that these operations cannot be stopped, let alone moved to another location due to continuity of technological process. It is no coincidence that in the legislation on subsoil and subsoil use such environmental requirements are not available, due to their unfeasibility [22, p. 97].

Marine environment is one of the vulnerable objects of nature. Primary sources of pollution of the marine environment of the Caspian Sea are untreated runoffs from agricultural lands and industrial and municipal facilities of cities and nearby villages, river run-off, sea and river navigation, operation of oil and gas wells, both onshore and offshore, oil transportation by sea, pollution in undersea operations and transport of hazardous substances both by air and waterways.

Pollution of marine waters and coastal land by products of economic activity, particularly in oil and gas sector, discharge of untreated industrial and municipal wastewater into the river network and directly into the sea has become the most harmful for the sea and its inhabitants.

Environmental Code provides for certain issues regulating environmental requirements related to marine operations, but generally, the issues related to legal protection of water resources are provided for by the Water Code of RK.

The danger of oil transportation by sea is in oil spills in the sea in different cases.

Spills can also occur in production and exploration, such as in the Gulf of Mexico.

Oil spills had occurred:

- C In 2001 and 2003 in "Southwest Tazhigali", "Pribrezhnoe" flooded oil wells;
- C In 2001 and 2002, during loading operations on "Islam Safari", "Victor Kibenok", " Ganuf Mammadov" tankers;
- C In 2002 *Mercury-2* ferrycraft sank near Baku with 18 tanks on board; 45 people died and the area of the spill was 15 km²;

C During test of "Western Kashagan-1", "Eastern Kashagan-3", "Kalamkas -1" wells [23, p.71-72].

In addition to aquatic habitat, pollution also affects mineral resources, which represent a legally protected natural object and are a part of natural environment. They cover the depth of the earth's surface and the surface of the earth, if it contains mineral deposits.

Ecological function of subsoil is expressed in the fact that it serves as a natural foundation of the earth's surface, affecting natural environment. Economic value of subsoil is determined by the presence of mineral resources, energy resources, ground waters, the possibility of their use for placing facilities, discharge of sewage waters, disposal of hazardous substances, etc. In addition, subsoil contains reserves of mineral and medicinal waters and other substances used to treat humans, as well as monuments of nature, history and culture. These are its cultural and recreational functions.

Mineral resources are the primary wealth of subsoil. In XX century their consumption has increased manyfold, which accelerates the process of depletion of mineral resources and calls for stronger regulation of efficient use and protection thereof.

In recent years, the value of mineral resources has been increasing for construction of underground facilities, storage facilities and underground utilities, for discharge of waste waters, for disposal of radioactive and toxic substances. Along with the growth of exploration of natural resources, their role increases in enhancing human health, tourism, cultural and moral education of people and as an object of research.

Due to the growing importance of mineral resources in the modern society, various countries began to develop legal regulation of efficient use and protection of subsoil. The legislation of most of the above countries declares mineral reserves to be national asset and protected regardless of whether there was nationalization of the country's subsoil taking place in the country. This allows for a unified domestic policy for protection and efficient use of mineral resources.

Diversity and national economic significance of mineral resources also defines plurality of courses in protection thereof.

The first course in conservation of resources is to prevent depletion of mineral resources based on their efficient use in the process of exploration and development, preventing poor management of resources.

The second course in conservation of resources is expressed in prevention of contamination thereof, including groundwater, mineral springs, mineral deposits, by untreated waste water and hazardous waste, etc.

The third course in protection of mineral resources is to prevent their harmful effects on individual components of natural environment and the quality of the environment in general, which may occur as a result of violations and pollution of top fertile soil layers in open cast mining of minerals, violation of hydrological balance of groundwater, etc.

Fourth course in conservation of resources can be defined as conservation of unique subsoil objects, natural and cultural monuments, places used by people for treatment and recreation and tourism. [24, p. 187-190].

As we know, a hydrocarbons field is one or more deposits, geographically confined to one area and associated with a favorable tectonic structure. Deposit is understood to be hydrocarbons accumulation in natural hydrogasdynamic reservoir, confined to one collector layer, two or three or more interconnected collector layers of deposits' section, in geological section of deposit may correspond to the number of producing layers, or may be less than that [25].

Compliance with environmental requirements at all stages of subsoil use, including forecasting, planning and designing, is also an important element of mineral resources legal protection measures. Although qualifying stages of forecasting, planning and designing of subsoil use operations is disputable, since these activities are more intellectual and theoretical, rather than industrial or technological. Typically, these types of preliminary operations are carried out by a competent or authorized body in the field of mining and by a subsoil user in office or laboratory environment.

As a result of sea level rise, a large part of coastal areas went underwater, including those under intensive development. On the low Kazakhstan part of the North Caspian, the sea came ashore as a 25-30 km wide strip and even farther on coastal transverse shallows. A particularly difficult situation occurs as a result of flooding of areas used by oil and gas sector and agriculture facilities. The situation occasionally escalates by surges further increasing coastal areas flooded with sea water, especially in autumn and spring. In recent years, because of rising sea levels, these surges have become more frequent, dictating their environmental setting.

As we can see, legal protection measures primarily include protection of an individual natural resource through regulatory acts, which implies monitoring, cadastre and liability issues.

To carry out oil and gas production operations in the northern part of the Caspian sea it is important to mention that the latter is a conservation area pursuant to the Resolution of the Council of Ministers of the RF #. 78 dated 31.01.75. The Federal Law "On specially protected natural sites" (#. 11-FZ dated 14.03.95) regulates relations in the area of management, protection and use of specially protected natural sites for the purpose of preservation of unique and typical natural complexes and features, objects of flora and fauna, their genetic heritage, study of natural processes in biosphere and control over its changes. Subject to this law specially protected natural sites are considered to be the land plots, water surface and airspace over them, natural complexes and objects possessing special environmental, scientific, cultural, aesthetic, recreation and rehabilitation significance, they were withdrawn from economic use by public authorities in full or in part and put under special regime of protection [26, p. 59].

The following classes of sites are stipulated by the federal law taking into account specifics of the regime for specially protected natural sites and environmental institutions located there:

- C Public conservation areas including biosphere sites;
- C National parks;
- C Natural parks;
- C Public wildlife reserves;
- C Natural monuments;
- C Dendrological parks and botanic gardens;
- C Medical rehabilitation sites and health resorts.

The protective zones or districts with regulated economic activity may be arranged for the purpose of protection of specially protected natural sites from adverse anthropogenic impact of adjoining land plots and water spaces.

"Conservation area" is not included in the list of specially protected natural sites stipulated by the law. However, the law provides that the Government of Russian Federation, executive authorities of entities of Russian Federation, agencies of local self-government may specify other classes of specially protected natural sites (except aforementioned). Similar norms are provided in the Water Code (*specially protected natural water

bodies+), Federal Law *În fauna+ (*protected zones of sites and water areas+), Federal Law *În exclusive economic zone+ (*special areas+).

Thus, in the context of the laws of the RF formation of the conservation area in the northern part of the Caspian sea and defining the regime of its special protection are considered to be a fully legitimate act (though its legitimacy may be contested from the point of international agreements of Russian Federation, see below).

In accordance with the Regulations on conservation area in the northern part of the Caspian Sea approved by the Resolution of the Council of Ministers of the RF No. 78 dated 31.01.75 the following is prohibited:

- C Discharge of raw industrial waste, household sewage, drainage and other waste waters, ballast, fuel, sanitary waste water from watercrafts into the sea, rivers and other water reservoirs;
- C Pollution and clogging of the seas, rivers and other water reservoirs, banks and bottom lands by industrial, household and other wastes and disposals;
- C Exploration and seismic survey operations applying explosive elastic wave source and development of mineral resources, oil and gas well drilling and their operation, carrying out other works changing natural biological, hydrological regimes of water reservoirs;
- C Arranging waste dumps and deposits, except earth piling;
- C Water withdrawal from water reservoirs by operating enterprises and other farms, consumers without effective actions on prevention of fish flow in water intake structures and protection of water resources against pollution, clogging and depletion approved by authorities on regulation of water use and conservancy, fish conservation;
- C Siting new enterprises and extension of existing ones and other industrial facilities related to water intake and discharge into water reservoirs of the conservation area.

One of the main requirements for waste and hazardous materials management is a prohibition to "discharge household, industrial waste and reservoir waters, all kinds of production and consumer wastes, except wastes from dematerialize systems." Unfortunately, the requirement contains terms of the laws in the area of production and consumer waste management; whereas water emissions are regulated by water or marine

laws providing other meaning for definition of wastes (see above). Thereby this prohibition specified in special requirements is out of due legal feasibility, moreover, the prohibition for discharge of waste and reservoir waters shall be defined more exactly, as it is unclear whether it is effective for purifies effluents or not.

All difficulties for legal reasoning of environmental protection in case of oil and gas exploration operations in the northern part of the Caspian sea are not limited to the controversial and imprecise definitions of legislative and normative legal acts of the RF. Absence of agreement between Caspian bordering states on legal status of the sea is a real hindrance. At that, labeling of the Caspian Sea according to any kind of international legal classification of water reservoirs is not as important as definition of sovereign rights of Caspian bordering states for natural resources and identification of the borders of water area falling within their national jurisdiction.

CONCLUSION

Thus, having analyzed all of the above facts, we conclude that the Caspian bordering countries are not giving due attention on the government level to ensure preservation of the conservation area in the northern part of the Caspian Sea.

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4. BBC Summary of World Broadcasts, 23 September 1994, Azerbaijani president's news conference on Caspian oil deal.
5. The term *territorial waters+ is perhaps confusing as it is used on occasion in national legislation to describe internal waters, or internal waters and territorial sea combined. Cf.also the Fisheries case, ICJ Reports, 1951. 116 at 125. Constitutions, legislation and treaties often refer to the maritime frontier.
6. Conv. on the Territorial Sea and Contiguous Zone 1958. Art.3: Law of the Sea Conv. (1982), Art.5; McDougal and Burke, The public Order of the Oceans, pp: 305.
7. Para. 3 of the article provides for the case where the coasts of two states are opposite or adjacent to each other. Cf. Art. 12 of the Conv. The provision in Art. 24 does not provide for exceptions 'by reason of historic title or other special circumstances', contrasting thus with the provision on the territorial sea.
8. The only connection is the Volga River which flows entirely through Russian territory and is linked by a system of canals and other rivers with the Black and Baltic Seas.
9. See Vinogradov and Wouters, supra note 1, at 611-613; see also, e.g., L. Caflisch, Regles Generales du Droit des Cours d'Eau [internationaux, 219 HR 113-225 (1989-VII); and P. Pondaven, Les Lacs•Frontiere 12 (1972). Butler acknowledges this fact: "Soviet jurists regard the Caspian as a large lake which historically has been called a sea. General norms of international law relative to the high seas, to vessels and their crews sailing on the high seas do not extend to the Caspian, whose regime is governed by Soviet-Iranian treaties and agreements". See W.E. Butler, the Soviet Union and the Continental Shelf, 63 AJIL 106 (1969).
10. The Caspian is five times larger than the world's second largest lake, Lake Superior and bigger than the Persian Gulf and the Oman Sea together; see Dabiri, supra note 1, at 33. Notably, however, the Caspian Sea is included in the list of 'Major Lakes of the World' (Table B.I0), in P.H. Gleick (Ed.), Water in Crisis 161 (1993).
11. Minutes of the Meeting on Cooperation of UN Organizations in the Caspian Sea Initiative, 17 January 1995, Geneva, at 5.
12. The definition of the Caspian as an inland sea is contained, for example, in II The New Encyclopedia Britannica, Micropaedia, at 612, 15th ed. The FAO's Systematic Index also qualifies the Caspian sea as an "inland sea". See Systematic Index of International Water Resources Treaties, Declarations, Acts and Cases by Basin, II Legislative Study, No. 34, at 287 (1984).
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