Caspian Sea
Chronology


1900
Construction of 26 oil pipelines (total length 277 km) connected Balakhany industrial area with oil refining factories in Baku is completed.

Azerbaijan had occupied the first place in the world on production of petroleum — 11,500,000 tons per one year.

1901
Fishing in the open Caspian Sea waters has began in Azerbaijan.

Huge fire on Apsheron petroleum deposits lasted five days and night. 96,000 tons of black oil has burned down.

1902
An attempt to introduce flounder (*Platichthys flesus flesus*) in the Caspian Sea was unsuccessful.

1904
Ichthyological laboratory in Astrakhan for studying zooplankton and benthos of the Caspian Sea northern part was founded.

The First is scientific-trade Caspian expedition headed by N. M. Knipovitch.

1905
On wellsites in Balakhany, Azerbaijan, for the first time at their exploitation, use of compressors was begun.

1906
Putting kerosene pipeline Baku-Batumi (length 882 km, diameter of 203 mm, with 16 pump stations) into operation.

1908
On Cheleken, Turkestan, for the first time from depth 140 m petroleum fountain with the daily debit 24.5 tons is received.

1909
Works on drainage of a gulf Bibi-Eibat about Baku with the purpose to prevent flooding of petroleum deposits by waters of the Caspian Sea have begun.

1910
In the gulf Kara Bogaz Gol taking coastal deposits of mirabilite (Glauber’s salt) was began.

1911
Hydrometeorological service of the Caspian Sea consisting of seven hydrometeorological stations and the central station in Petrovsk (Makhachkala) is organised.

A joint-stock company “Astrakhan refrigerator” — one of the largest firms providing storage and transportation of perishable food was established.

The oil production beginning in Kazakhstan on Emba oil field Dossor.

For the first time in Surakhany, Azerbaijan, rotary drilling was applied.

1912—1913
The Second scientific-trade Caspian expedition headed by N. M. Knipovitch.
Baku ichthyological laboratory was established.

1913 The first self-propelled transport refrigerator has begun to serve fish crafts on the Caspian Sea.

1914—1915 Scientific-trade Caspian expedition headed by N. M. Knipovitch continued work. The huge material on hydrology of the Caspian Sea was collected.

1915 On oil well in Ramany about Baku, Azerbaijan, deep pumps were used for the first time.

1918 Committee on study Kara Bogaz Gol headed by academician N. S. Kurnakov was established under VSNH.

1919 The Astrakhan Reserve — the first in USSR is established.

1920 Azerbaijan polytechnical institute — the first in Europe and Asia centre for education of engineers — oil industry workers was established.

1921 The first volume of “Proceedings of the Caspian expedition 1914–1915” and monography of N. M. Knipovitch “Hydrological studies on the Caspian Sea in 1914-1915” were published.

Issuing the books by N. M. Knipovitch “The Caspian Sea and its crafts” in the series “Studies of nature and crafts of Russian seas”.

Scientific expedition headed by N. S. Kurnakov was sent to Kara Bogaz Gol. It has made a number of works on studying hydrology, meteorology and hydrochemistry of gulf with the purposes of finding out natrium sulphate production.

1922 Department of safety navigation on the Caspian Sea has established the Baku sea observatory.

1924 Beginning of realisation on the Caspian Sea seasonal (February, May, August, November) hydrological surveys on standard sections (Baku-Krasnovodsk-Ashurade-Astara-Baku), thus execution of the obligations to the International Council for studying the seas were renewed.

Industrial production of natrium sulphate in many sites of gulf Kara Bogaz Gol coast began.

Experiments on artificial reproduction of kutum on the river Kumbashinka, Azerbaijan, and in Samur piscicultural station, Dagestan were begun.

1925 In the system of Caspian Shipping Company in Baku a special Bureau for studying currents of the Caspian Sea is created under guidance of N. N. Struisky (existed till 1929).

Beginning of experimental works on mastering sea deposits of petroleum on the Caspian Sea. Under the initiative of S. Kirov in Ilyich bay on artificial island the sea well was layed.

Catastrophic frosts (-25°C) in Lenkoran lowland of Azerbaijan. Kirov gulf (nowdays Kyzylagach gulf) has frozen. Death of many water birds (flamingo died in thousand).
Beginning of trade fishery of Caspian sprat.

1926 Maximal in XX century Volga run-off— 390.6 km$^3$ per one year.

1927 Agreement between Iran and Russia about granting to Russia the right on exploitation of fish resources at the southern coast of the Caspian Sea. On the basis of the Agreement the first Soviet-Iranian fishery company “Shilat” was established (existed till 1953).

1928 VSNH of USSR has accepted decision about increasing chisel investigation on Cheleken, which results have confirmed the forecast of academician I. M. Gubkin about presence of petroleum stocks in Turkmenistan.

1929 On the basis of Astrakhan Ichthyological Laboratory the Volga-Caspian Scientific Fishery Station was established. Trust “Karabogazsulphate”, carrying out industrial manufacturing (production and processing of Glauber’s salt and natrium sulphate from surface brains of gulf) was organized.

Kyzylagach Reserve (in the same gulf of the Caspian sea, Azerbaijan Republic) was founded for protection of wintering aquatic and semi-aquatic birds.

1930 Department of United Hydrometeorological Service of Azerbaijan SSR and the Caspian Sea was established. Fishery studies of Caspian herring expedition.

Beginning of works on the resettlement of Black Sea mullets — *Mugil auratus* Risso and *M. saliens* Risso in the Caspian Sea.

Microscopic plankton alga *Rhizosolenia* penetrated into the Caspian Sea. In 1934–1936 it has received so mass development, that any other representative of Caspian aboriginal phytoplankton flora could not be compared with it.

1930-1931 Negative result of attempts to introduce *kalkan* flounder (*Psetta maeotica*) in the Caspian Sea.

1931-1932 All-Caspian scientific fishery expedition worked (till 1934).

1932-1934 Unsuccessful attempt of *hamsa* (*Engraulis ensrasicolus*) and *sultanka* (*Mullus barbatus*) acclimatization in the Caspian Sea.

1933 Session of Acad. Sci. of USSR specially devoted to the problem of Volga-Caspian. It was recognised necessary to carry out developing problem of partial transfer of northern rivers run-off into the basin of Volga and the Caspian Sea. Volume of transfer was determined as 50 km$^3$.

Gasankuli Reserve in Turkmenian SSR was established for protection and studyihg wintering places of aquatic and semi-aquatic birds (includes all
Commission for complex study of the Caspian Sea was established under Acad. Sci. of USSR (CASP). Its task was coordination of all works carried out by academic institutions on studying the Caspian Sea and consulting other organizations on these problems. Commission was headed by N. M. Knipovich.

XVII Congress of CPSU(B) — “Congress of the winners”. Approval of the Second five years' plan. I. V. Stalin has told: “the task is to begin serious work on organising Trans-Volga region irrigation”. After that there was an idea of academician I. G. Alexandrov to isolate gulfs Kara Bogaz Gol and Komsomoletz from the Caspian Sea.

Catching mullets in the Caspian sea was allowed, as it has got industrial importance.

L. S. Berg has come to conclusion, that in all historical period the Caspian Sea level did not rise even by 5 m above the level of 1925 (-26 m).

The first scientific expedition to the ice of the Northern Caspian.

1935

I. M. Gubkin has put forward and has proved an idea of the sea areas investigation for petroleum.

In the area near Artem island, Azerbaijan, the first on the Caspian Sea metal basis for chisel works was build.

Development of large petroleum deposit Izberbash (Dagestan) has begun.

1937

Beginning of the State Hydrological Institute works under supervision of B. D. Zaikov on the studying the Caspian Sea level dynamics.

Minimal in XX century run-off of Volga — 149.6 km³ per one year.

1938

New method of hypophysis injections of sturgeons elaborated in St. Petersburg University by Prof. N. L. Gerbilsky. This method allowed mass reproduction of sturgeons in fish farms.

1939

XVIII Congress of CPSU(B). Approval of the Fird five years' plan (1938–1942). The problem of the causes of the Caspian Sea level fluctuations received special importance. XVIII Congress has decided: “In the third five years to develop plan of complex reconstruction of the rivers: Volga, Don and Dnieper to prepare measures to maintain the Caspian Sea level and to begin constructing Volga-Don connection”.

Beginning of extensive experimental researches under the guidance of Prof. L. A. Zenkevich on studying (acclimatization) Azov and Black Sea
fauna; the group of species for resettlement from the Azov Sea into Caspian was planned, among them on the first place (61,000 individuals) was polychaete worm - *Nereis diversicolor* Muller a perfect forage for sturgeons and other fishes (casually instead of planned for acclimatisation *N. succinea*).

1940 Work on resettlement of 18,000 individuals of mollusc *Abra ovata* Phil. in the Caspian Sea.

1941 Azerbaijan has extracted 23,500,000 tons — record for all history of oil-extracting industry in USSR.

1943 Beginning of Makhachkala petroleum deposit, Dagestan, development.

By instructions of USSR Government B. D. Zaikov has carried out fundamental studies (was begun in 1937) of the Caspian Sea level decrease causes (by 1.75 m) for period 1930–1945.

1946 The first oil pipeline in Turkmenia – Kumdag-Vyshka (length 40 km) was put into operation.

1947 Oil field “Petroleum Stones” was discovered on the Caspian Sea in Azerbaijan.

1948 Decision of Council of Ministers of USSR “About the plan of shelterbelt forests, introduction of grassland crop rotation, construction of ponds and reservoirs for maintenance of high and steady crops in steppe and forest-steppe areas of the European part USSR”, so named “Stalin’s plan of nature transformation”.

Volga-Caspian scientific-fishery station was transformed into the branch of VNIRO.

1949 Decision of Council of Ministers of USSR “About measures intensifying petroleum deposits investigation in Turkmenian SSR”.

1950 The first sea petroleum from the shelf deposit on the Caspian Sea “Petroleum Stones” was received. Beginning readout of the history of sea petroleum production in Azerbaijan Republic.

1951 B. A. Apollon has drawn conclusion that in the past the level of the Caspian Sea stood below the modern and lower levels in general are peculiar to it, than higher.

1952 Opening of the Volgodonsk navigable channel in the name of V. I. Lenin (Length 101 km, 9 sluices, total height of rise — -8 m).

The most powerful registered water flood on the Caspian sea. As a result in some cities at the coast water has risen by 4.5 m, and between mouths of Volga and Ural the sea has move forward into the continent by 30 km (November 11).

1959 Discovery of Okarem petroleum and gas deposit, Turkmenia.
1961  Hydrometeorological service of USSR has accepted decision to give characteristics of the Caspian Sea level by its exceeding above the uniform zero of post, which for Caspian is equal -28 m (average weighted sea level for Pleistocene time) relatively the zero Kronstadt tide-gauge (“the Baltic system of heights”, 1950).

1963  The large petroleum deposit Sangachaly-Duvanny, Azerbaijan is discovered.

1964  Industrial catch of sturgeon in the open (Caspian) sea was prohibited.

1965  Reconstruction of the Volga-Baltic way, connected the Northwest with the central and southern basins (the Caspian Sea), is completed.

1966  The Caspian Fishery Research Institute (KaspNIRH) in Astrakhan is established.

1968  The first tests of airfoil boats on the Caspian Sea. In the West they were named “Caspian Monsters”.

1970  The Ministry of Petroleum Industry of USSR has divided the Soviet part of the Caspian Sea on sectors between Azerbaijan, Kazakhstan and Turkmenistan. In a basis of definition the medial line was taken.

1971  Acceptance “Convention (Ramsarian) about water-marsh lands, having the international importance, mainly as inhabiting places of water birds” (Ramsar, Iran) with the purpose of preservation of the world water-marsh lands (Russian Federation has ratified it in 1975).

1972  For the first time on the Caspian Sea the self-elevating drilling rig was used.

1973  On the Caspian Sea there are 1880 steel islands, and also piers of length more than 300 km.

1974  Kazakhstan has accepted the decision establishing in the northern part of the Caspian Sea reserved zone. Development of mineral resources in coastal zone was forbidden.

1975  Decision of Council of Ministers of USSR about the statement of a reserved zone in the northern part of the Caspian Sea.

Decision of Council of Ministers of USSR “About measures on maintaining performance of Soviet
obligations following from Ramsar Convention”.

Scientific centre “Caspian” and Caspian Biological Station were established in Azerbaijan.

1976 Decision of CC CPSU and the Council of Ministers of USSR “About realisation of complex researches for scientific substantiation of volumes and sequence of works on territorial redistribution of water resources”.

At XXV Congress of CC CPSU the First secretary CC CP of Turkmenistan M. P. Gapurov has raised the question about necessity to regulate the Caspian waters run-off into gulf Kara Bogaz Gol.

1977 The lowest level (-29.03 m) of the Caspian Sea in XX century.

Council of Ministers of USSR has accepted Decision “About additional measures on the protection of the Caspian Sea against pollution”. Complete termination of wastewater dump into the rivers of the Caspian Sea basin to 1985 was provided.

1978 For the Caspian waters economy with the purpose of the sea level maintenance decision about separation of gulf Kara Bogaz Gol was accepted.

The state commission of experts of USSR State Planning Committee has rejected the feasibility report on hydroscheme in strait Kara Bogaz Gol and recommended blocking it with solid dam.

1979 On the Caspian Sea the System of Heights of 1977 year relatively the zero of Kronstadt tide-gauge is entered.

Discovery of the largest in the world Tengiz oil field in Western Kazakhstan at the Caspian Sea coast (taken stocks 781,100,000 tons).

1980 Gulf Kara Bogaz Gol has been blocked with solid dam (level of brine in the gulf by 3.5 m below the Caspian level). Area of the gulf were 9500 km$^2$, volume of surface brine — 20–22 km$^3$, average depth — 2.1 m (here and there 3–3.5 m).

1981 Accident on shelf oil field Bakhar, Azerbaijan.

1982-1983 Decision of Council of Ministers of USSR “About measures on creation of resort base of general importance at the coast of the Caspian Sea”.

1983 “Scheme of complex use and protection of Volga basin water resources” is created. It was based on the concept of transferring part of northern rivers run-off, to 2000 year the putting of canals Volga-Don II (5.5 km$^3$), Oka-Don (1.4 km$^3$) and Volga-Ural (17.3 km$^3$) into full capacity operation was planned. A question on construction of the canal Volga-Chograi simultaneously was put.

1984 The governmental decision is accepted on renewal of sea water drain into gulf Kara Bogaz Gol (volume 2
km³ per year) constructing temporary water releasing constructions (surface brine to this time has dried up completely, and the gulf has turned to the dry saline lake).

Appearance of first signs of miopatia in Volga-Caspian sturgeon fishes — exfoliation of muscles connected to metabolic disease in muscular tissue.

1985

During 14 months the open flowing of oil well No. 37 of Tengiz oil field, Kazakhstan (there were thrown out into atmosphere more than 4,000,000 tones of petroleum, 2,500,000,000 km³ of gas with dangerous concentration of hydrosulfuric compounds).

1986

Decision of CC CPSU and the Council of Ministers of USSR “About stopping work on transferring a part of northern and Siberian rivers run off”.


1987

Disease of Volga-Caspian sturgeons with miopatia has got mass character.

The interdepartmental scientific program “Sturgeon” was accepted.

Dagestan Reserve for studying and protection of Kizlar gulf of the Caspian Sea and unique natural formation Barkhana-Sarikhum is founded.

1989

Organisation of the Research and Coordination Centre “Kaspiy”, Moscow, Russia.

1991

By the Decision of Commission of Council of Ministers of RSFSR on extreme situations, Russian Committee for Water Management together with Acad. Sci. USSR and other organisations were charged to prepare “Technical and Economic Report on protection of economic objects and settlements in the coastal strip within the limits of Dagestan ASSR, Kalmyk ASSR and Astrakhan region against flooding in the connection with the increase of the Caspian Sea level”.

1992

Technicoeconomic report “The Caspian Sea”.

Decree of President of Russian Federation “About measures on protection of sturgeon fishes in the Caspian basin”.

Decree of President of Russian Federation “About state support of revival of the Russian merchant marine fleet on the Caspian Sea” and special Decision of Government of Russian Federation on its performance.

Company “Kazkhstankaspiyshelf” was established.
Decree of President of Russian Federation “About measures on protection of the population and decision of problems connected to the rise of the Caspian Sea level”.

Commission (nongovernmental organization) on water bioresources of the Caspian sea (Azerbaijan, Kazakhstan, Russia) is established.

1993

Decision of Council of Ministers — Government of Russian Federation “About urgent measures in 1993–95 preventing flooding and underflooding of cities, settlements, industrial and non-productive objects, agricultural grounds and other valuable lands located in the coastal strip of the Caspian Sea”.

1994

Decree of Government of Russian Federation about development and realisation of the Special Federal program “Improvement of ecological conditions on the river to Volga and its tributaries, stopping and prevention degradation of natural complexes of Volga basin”, so named program “Revival of Volga”.

The first petroleum contract — “Contract of century” on development of oil fields — Chirag, Azeri, Guneshli was signed.

Interstate Ecological Council of the CIS countries has addressed to the Program UN on environment (UNEP) with the request for rendering assistance in development of the Frame Convention on the protection of sea environment.

1995

The rise of the Caspian Sea level has reached the maximal mark (-26.61 m) at the end of XX century.

Scientific Council on the problem “Complex use and protection of natural-economic resources of the Caspian Sea and its Basin” (Ministry of Science of Russian Federation, Presidium of Russian Acad. Sci., Russian Committee for Water Management) is established.

1996

United mission of experts of the World Bank, UNEP and UNDP in frameworks of “the Caspian initiative” on the Caspian countries with the purpose of preparation of the concept of international Caspian ecological program (CEP) and creation of the legal tool on protection and steady use of the Caspian Sea.

Decision of Government of Russian Federation “About prime measures on 1996–1997 on protection of population and prevention of flooding economic and other objects located at the coast of the Caspian Sea”.

Azerbaijan has signed petroleum developmental contracts on deposits of the Caspian Sea — Shah-Deniz, Danulduzu and Ashrafi.

Between Russia and Islamic Republic of Iran an agreement in the field of fishery was signed.

1997

In the Appendix II of “Convention on international trade by wild species of fauna and flora, to which the disappearance menaces” sturgeon fishes are included.

In the frameworks of Ministry of Foreign Affairs of Russian Federation the working group on the Caspian Sea is created for preparation of offers about position

Azerbaijan has signed petroleum developmental contracts of deposits of the Caspian Sea Lenkoran-Deniz and Talysh-Deniz, Yalama, Apsheron (former Zeinalabdin Tagiev), Nakhichevan (former D-3).
of Russian Federation concerning the status and regime of the Caspian Sea, exploitation of its alive and mineral resources, and also on the problems of the Caspian petroleum transportation.

Publication of the first release from the series “Geoecology of the Caspian Sea”, generalizing long-term results of scientific researches of Geographical Faculty of Moscow State University.

1998

Agreement between Russian Federation and Republic of Kazakhstan about delimitation of the northern part of the Caspian Sea bottom with the purposes of realization of sovereign rights on the bowels management.


Decree of Government of Russian Federation about preparation of the project of special federal program on complex development of territory of Russian Federation, adjoining to the Caspian Sea.

Decision of Government of Russian Federation “About measures on performance of the recommendations of 10th conference of the states which have signed “Convention on international trade by species of wild fauna and flora, being under menace of disappearance” from March 3, 1973 in the relation to the species of sturgeon fishes”.

The final variant of the concept, which is in the basis of the Caspian Ecological Program (CEP) is accepted. Beginning of CEP realization. Organization in of the Caspian regional thematic centres (CRTC) the Caspian countries.

Azerbaijan has signed petroleum developmental contracts on deposits of the Caspian Sea: block Kyurdashi, blocks Gobustan and Hyursangi, Gabogly (by land), Inam, Abikh.

New operational company OKIOK, Kazakhstan, is established. Realisation of chisel works on the Kazakhstan shelf of the Caspian Sea is assigned to it.

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Putting into operation oil pipeline Baku (Azerbaijan) — Supsa (Georgia) for transportation of “early” Azerbaijan petroleum to the external markets.

Drilling of the first oil well on the Kazakh shelf of the Caspian sea (East Kashagan) was began.