

Topics:

- *Common Monitoring Networks*
- *Sharing Data and Information*

ORGANIZATION OF ENVIRONMENTAL MONITORING IN THE CASPIAN SEA AT NATIONAL AND INTERNATIONAL LEVELS

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During the Soviet period, a system for monitoring marine environmental pollution was created at the Caspian Sea, which covered its entire area, except for Iranian coastal waters. Observations (initially, monthly, and later – seasonal) were conducted in the mouths of rivers, areas of the major cities, port harbors, as well as in the open sea, at so-called “centennial” sections.

The disadvantage of this observation system was the limited pollutants coverage including oil products, phenols, and synthetic surfactants. In mid-1980-s, heavy metals and chlorine organic pesticides were added to the list. The advantageous features – combination of both hydrochemical and hydrobiological monitoring, as well as integrated observations from ship vessels and aerial surveys of the water areas.

Already at that time, monitoring was considered as a unified system for observing, evaluation and forecast of environmental status. However, within the framework of pollution monitoring of the Soviet seas, including the Caspian Sea, assessment and forecast systems were not duly developed, once MPC values (as defined for the fisheries water bodies) started to be applied for pollution assessment of marine waters.

In the post-Soviet period, the unified monitoring system of the Caspian Sea disintegrated. Under conditions of socio-economic crisis, pollution monitoring of sea waters declined sharply and it was completely terminated in the open sea. The last revision showed that continuous observation series were sustained only at the Middle Caspian water area, adjacent to the territory of the Russian Federation.

Currently, all Caspian littoral states are creating their own national systems for environmental monitoring of the Caspian Sea, and international cooperation in this field becomes urgent. The Framework Convention for the Protection of Marine Environment concluded by the Caspian states in Tehran (2003) may be considered as a basis for such cooperation.

However, in recent years much has changed in the national systems for environmental monitoring: its functions were divided between different departments and monitoring process evolved from a “thing in itself” (a system oriented on solving internal tasks, - such as pollution assessment) into a “thing for all” (a system aimed at addressing external challenges, such as regulating technogenic impacts and anthropogenic load on the environment).

Currently, three types of environmental monitoring are being conducted at the Caspian Sea water area adjacent to the territory of the Russian Federation. Monitoring of marine environment is conducted by Federal Service for Hydrometeorology, monitoring of aquatic bioresources – by Federal Agency for Fisheries, industrial environmental monitoring – by oil companies licensed for implementing activities at the certain area.

Monitoring of marine environment is restricted to physical/ abiotic parameters, whereas monitoring of aquatic bioresources – to biotic parameters, both types cover the entire area. Industrial environmental monitoring conducted by the oil companies includes control on abiotic and biotic parameters and is restricted to the license sites.

The current scope of observations on the status of marine environment and marine biota is larger than that implemented during the Soviet period. Besides, data obtained are sufficient, in the whole, for assessment of the contemporary status of the sea ecosystem. However, everything is done separately, as each monitoring participant is guided by his own tasks, and the obtained information is not consolidated; hence it is frequently contradictory.

Three proposals are suggested for coordinated work of all monitoring participants: 1. Unified Caspian Sea monitoring programme,
2. Unified information system on the Caspian Sea situation,
3. Agreement between monitoring participants.

As the monitoring participants represent both private and state organizations, their interaction may be considered as state-private partnership.

We believe that coordination of activities between organizations participant in monitoring of the Caspian Sea at the national level (in both Russia, and the other littoral states) is a necessary prerequisite for the establishment and development of international cooperation in this field. The failure of so many initiatives including those undertaken at the highest level, shows that in default of the national coordination, international coordination may not exist at present and is totally impossible in the future.