

# COORDINATION COMMITTEE ON HYDROMETEOROLOGY OF THE CASPIAN SEA (CASPCOM)

## Information bulletin on the state of the Caspian Sea level No. 27 15 May 2024

*The Bulletin on the state of the Caspian Sea level is issued twice a year in accordance with the recommendations of CASPCOM and is a joint product of hydrometeorological services of the five Caspian littoral states.*

According to the data received from the National Hydrometeorological Organizations of the Caspian littoral states, the mean level of the Caspian Sea decreased by about 30 cm in 2023 compared with 2022 (-28.70 m abs.) and amounted to -28.99 m abs.<sup>1</sup> (Fig. 1). Thus, in 2023, the intensity of the sea level fall was similar to that of 2022. The main reason for the continuing decrease in the sea level was the low runoff of the Volga River third year in the line. The Volga runoff reached 207.5 cubic km at the top of its delta in 2023, that was significantly lower than the normal one (238 cubic km) and lower than the water volume in 2022 (212 cubic km). Low Volga runoff resulted in rather low seasonal rise of the sea level, which was typical for the spring flood season in the Volga River and normally was about 40-45 cm high.

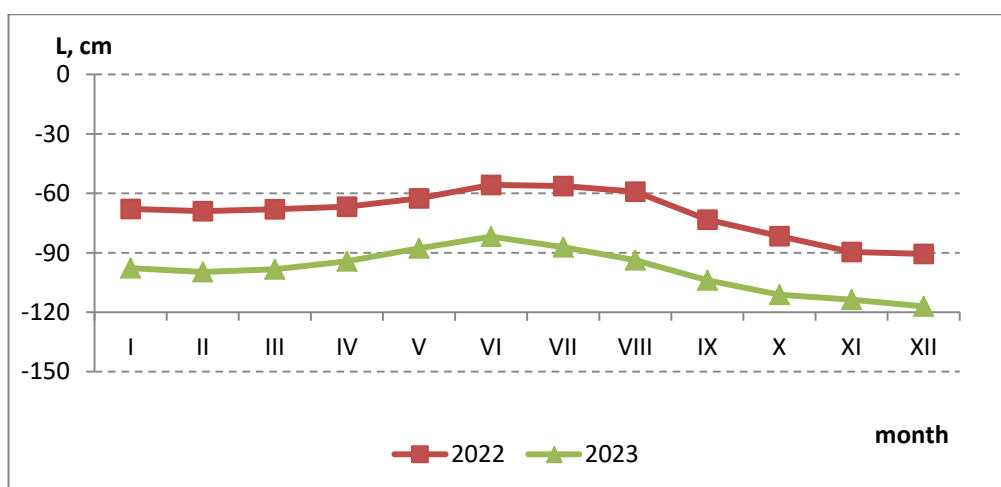


Fig. 1 Seasonal run of the mean Caspian Sea level in 2023 compared to 2022

In January 2024, the mean sea level was about 25 centimeters lower than in January 2023 (Fig. 2).

For the first four months of 2024, the Volga River runoff was similar to that of the same period in 2023 and 2022 (Fig. 3). Spring flood season started earlier this year as in the

<sup>1</sup> To calculate the mean value of the sea level for the whole sea we have used observations data at the "century" posts: Baku, Neft Dashlary (Oil Rocks), Makhachkala, Fort-Shevchenko, Guvlymayak (Kuuli-Mayak), Turkmenbashi (Krasnovodsk), Garabogaz (Kara-Bogaz-Gol).

previous one. The peak of the flood was also observed in the last decade of April, and higher water discharge has been observed only for several days due to the low water intake in the Volga basin as well. The discharge goes down from 29 April on. Therefore, 2024 has all chances to continue the trend of low water period, which started in 2021.

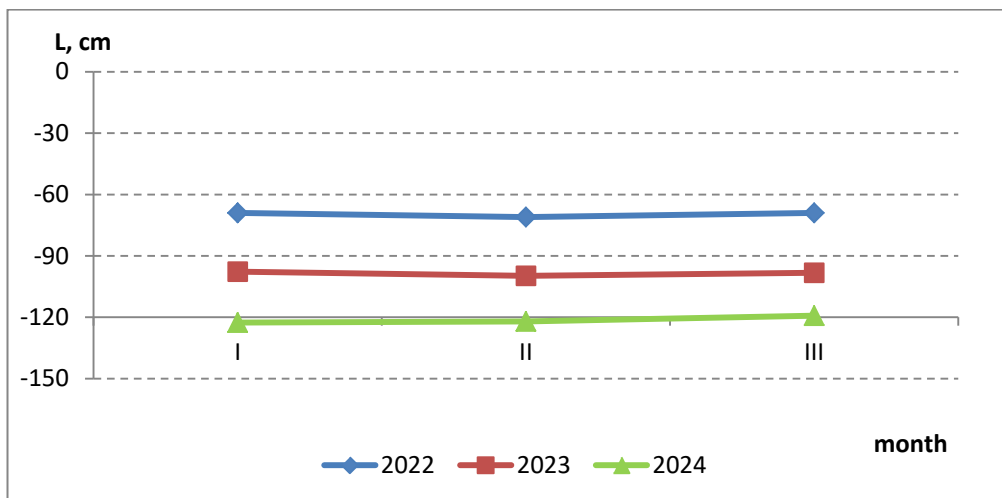


Fig. 2 Seasonal run of the mean Caspian Sea level in early 2024 compared to early 2023 and 2022

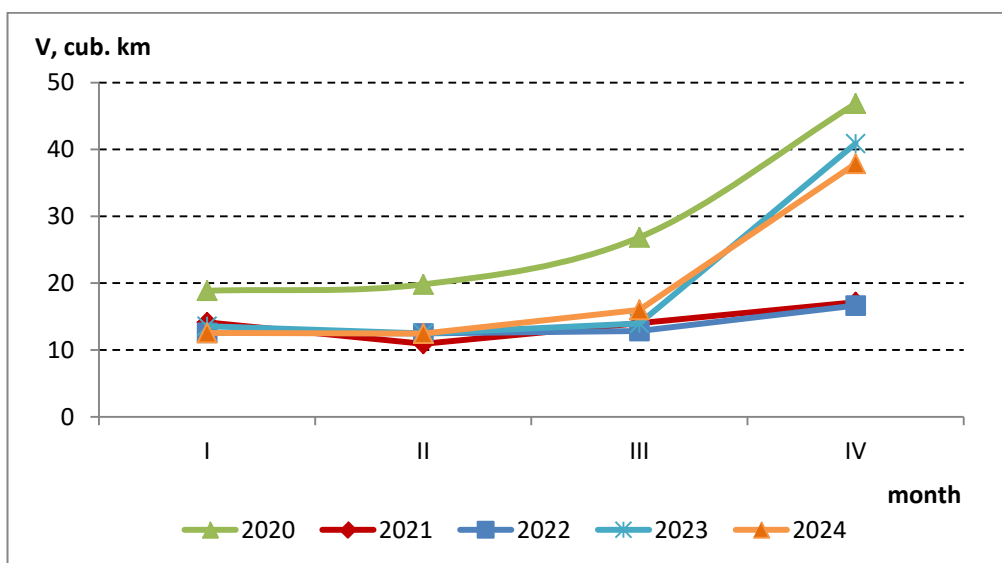


Fig. 3 Monthly discharge of the Volga River in early 2024 compared to early 2023, 2022, 2021 and 2020

It is expected that the mean annual level of the Caspian Sea continues falling down due to the projected low water flow of the Volga River in 2024. In accordance with the Caspian Sea level forecast published in the bulletin No. 36 (dated 19.04.2024) by the Hydrometeorological Center of Russia, the mean sea level will decrease by 15 cm this year compared to the last year. Graphs of the annual run of the level in 2024 and early 2025 compared to 2023 are shown in Fig. 4.

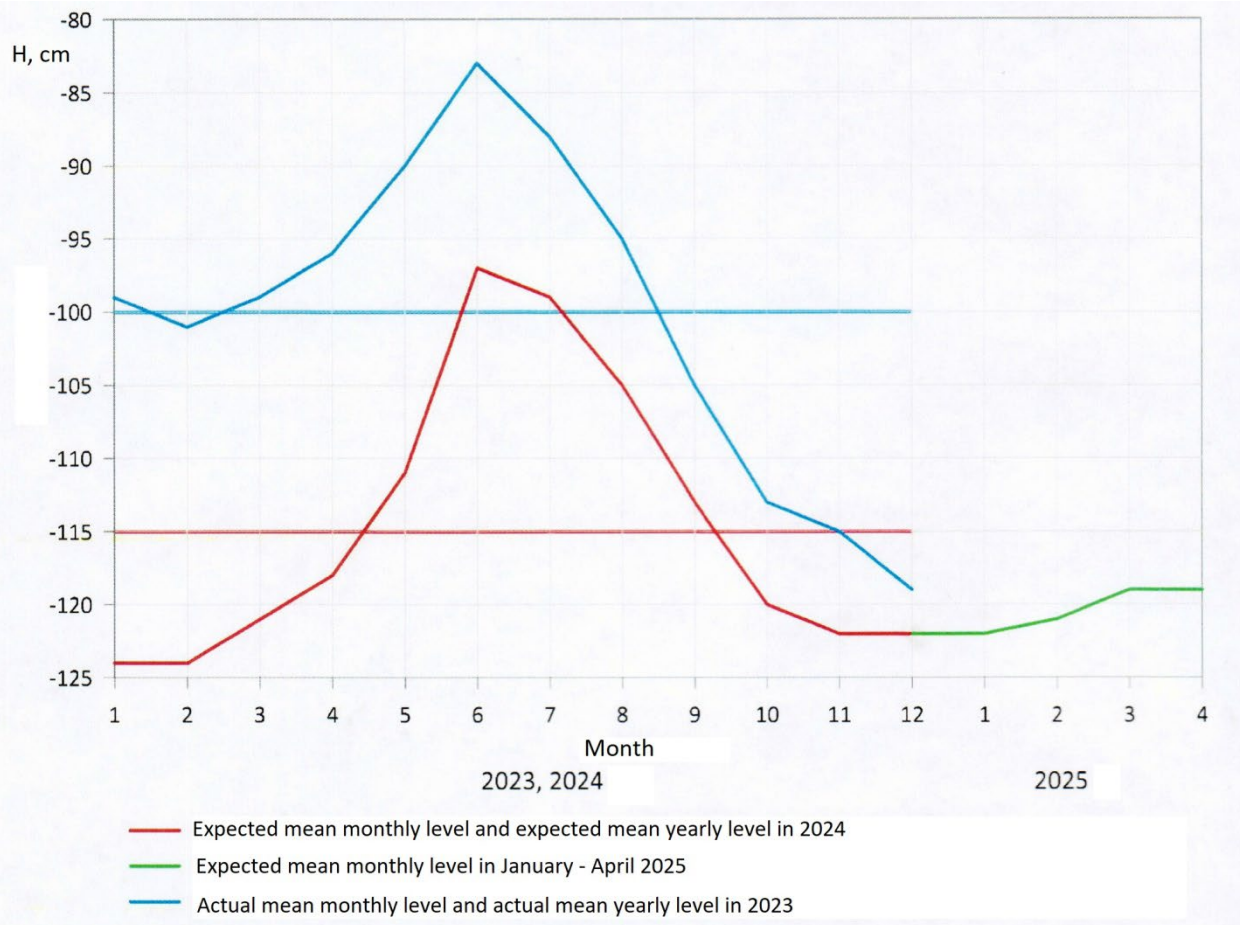


Fig.4 Actual mean monthly levels of the Caspian Sea in 2023 and projected sea levels in 2024 and first quarter of 2025 (according to the Russian Hydrometeorological Center)

*This bulletin is intended for the authorities, enterprises, organizations and coastal communities as well as for all whose activities are connected with the Caspian Sea. Its preparation became possible only due to the cooperation of hydrometeorological organizations of the Caspian littoral states. The data of the General Catalogue of the Caspian Sea level elaborated under CASPCOM umbrella were used to compile the bulletin*