Eight Russian scientific organizations have begun the creation of the first national system of monitoring of malicious flowering of algae. The project is coordinated by the Kamchatka State University named after Vitus Bering.

The system will include a network of stationary surveillance stations, satellite monitoring using artificial intelligence and a warning service for environmental threats. The development is based on the research of the Kamchatka Peninsula and the surrounding waters conducted in 2024–2026.

Malicious flowering occurs with an abnormal growth of micro -crossbars or cyanobacteria. Concentration can reach millions of cells per liter of water, which leads to the release of bioxins that are dangerous to humans and marine ecosystems.

The need for the system confirmed the environmental disaster in Kamchatka in the fall of 2020, when the toxic algae Karenia Selliformis caused mass death of marine organisms.

The project involves the FEFU, the institutions of the Russian Academy of Sciences and the relevant scientific centers. Monitoring will include a sampling of water and bottom sediments, DNA analysis to determine species diversity, control of toxins and replenishment of a reference collection of micro-cone.