

## **Ecologo-Geological and Economic Principles of Selecting Objects for Geoenvironmental Monitoring and Placing of Observation Networks**

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The technological scheme of geoenvironmental monitoring includes the following cyclically repeated phases:

- Selection of objects to be monitored and ecologo-geological evaluation of territory;
- Creation and further improvement of an observation network.

The goal of the first phase is to determine the geological structure and geomorphological features, and hydrogeological and engineering-geological processes of a territory. Economic principles of the given phase are based on adequacy of ecologo-geological situations determined to internal mechanisms of formation of hydrogeological and engineering-geological processes.

The goal of the second phase is to improve the observation network taking into account the spatial position and geometric parameters of natural geological objects under study in natural and anthropogenically disturbed conditions. The economic principles of this phase are based on optimization of an observation network, perfection of technical equipping and automatization of the network, computerization of data collection, processing and transferring processes, improvement of methods for assessment and prediction of the geoenvironmental state.

Totally, economic principles imply the efficiency of decisions taken on rational use of natural resources, control of adverse consequences, adequacy of an observation network and observation program to a geoenvironmental structure.