(13) Development of water quality management and control techniques for regional water use and aquatic ecosystem conservation

Research Summary

Although various improvement measures for water quality have been implemented, serious issues are still found in water environments, such as infectious diseases that influence social activities, ecological effect of chemical substances derived from products for daily use, and occurrence of algal bloom and musty odor in reservoirs. Therefore, new strategies for evaluation, monitoring and management are required to respond to these issues. In addition, it is important to apply these techniques to the basins in an integrated manner to improve environmental quality.

In this R&D program, in order to respond to these challenges we will promote researches towards achieving the following 3 goals:

1. Development of assessment and monitoring methods to understand the water environments of basins with accuracy and speed.
2. Development of adequate water treatment technology for the mitigation of water quality risks.
3. Development of water quality management focused on the bottom layer environment and the inflow change in stagnant water areas.

We aim to reflect these developments to the planning of the administrative measures and technical standards by the national government towards the improvement of water environmental quality, conservation of regional water use in basins, living environment and the aquatic ecosystem.