

## **Research about prediction method of reservoir sedimentation**

### **[ Point ]**

It has been required to analyze dam sedimentation amount including particle size composition, as information source for knowing flow-down sediment volume, amid increased need for sediment management around watershed. In addition, more accurate approximation process of reservoir sedimentation form has been required for the more appropriate reservoir sedimentation project. In this study, prediction method of average yearly sedimentation volume based on the past sedimentation of neighborhood similar dam and assessment method of yearly sedimentation volume fluctuation were presented, analysis was conducted based on actual measurement regarding microscopic particles capture rate that could not be recognized by past sedimentation, and approximation process was shown. Furthermore, property of particle size composition of sedimentation and porosity was verified based on boring exploration. In order to reproduce classification process as well as sedimentation process inside reservoir, one-dimensional unsteady calculation model was created by both finite volume method and Mac Cormack method, and prototype of plane two-dimensional model was created for reconstructing groundwater vein. The year 2002 was the final year, and the above studies were continuously conducted and summarized.

**Keywords:** reservoir, sedimentation, capture rate, particle size distribution, river-bed evolution calculation