(11) Development of river channel management technology that satisfies both flood control and environmental sustainability

Research Summary

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Water system such as rivers and lakes is an important foundation of biodiversity and its loss has continued. In the future we need to set the management objectives of the specific river environment. The urgent tasks are recovery of biodiversity from the losses and maintenance of good conditions. On the other hand, a huge increase of risks resulting from water disasters are also expected. So, it is necessary to promote the river management by taking disaster prevention/mitigation and the natural environment as an integral part while clarifying management objectives.

This research consists of the following three segments for the purpose of development of planning, design, maintenance technology for river channels based on a set of conservation/ formation area of the river environment.

(1) Development of space management technology with a

focus on the river landscape, biological growth and habitat.

- (2) Development of response/prediction techniques for vegetation and fish towards for human alteration such as a river channel excavation
- (3) Development of river channel excavation technology that satisfies flood control and environment as well as maintenance technology

Through these, we aim to satisfy both flood control and environment and propose river channel planning/design for easy maintenance and maintenance/management techniques to maintain the river environment in good condition. Research results will be reflected in basic guidelines and technical standards to disseminated to the sites.