

Future Projection of flow regime and water quality in Arakawa river basin

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The research project of Core Research for Evolutional Science and Technology (CREST): "Development of well-balanced urban water use systems adapted for climate change" (PI: Hiroaki FURUMAI, Univ. of Tokyo, Research area: Innovative Technology and System for Sustainable Water Use) have been conducted from 2009.

The objectives of this project are 1) to reexamine the current urban water use system, and 2) to propose a new urban water use system adaptive to the future climate change. In the new system, each water resource is properly allocated to each water use by considering the balance between supply potential of various water resources and demand. The information on available amount and detailed quality of water resources should be evaluated.

For the implementation of the project, 5 sub-groups were organized:

- (1) Watershed Water Resources group
- (2) Urban Rainwater Management and Use group
- (3) Urban Groundwater Management and Use group
- (4) Water Quality Assessment group
- (5) Urban Water Use Design group

In this presentation, activities of Watershed Water Resources group (and collaborative work with Urban Groundwater Management and Use group) will be presented.

Keywords: climate change, water resources