

# Efficient water allocation plan of domestic and industrial water in the Han River basin

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## Abstracts

**The contract volume in 2019 is about 90% of the supply capacity of domestic and industrial water in the Han River downstream dam.**

**To expect water supply flexibility and efficiency, it should be changed to the water supply system by basin basis and the water allocation standard of the wide-area waterworks.**

### (a) Purpose of study or research hypothesis

**Formulation an efficient water allocation plan by strengthening the connection of water resources and water supply facilities in the Han River downstream.**

### (b) Key issue(s) or problem(s) addressed

**In terms of facility capacity, the dam reservoir capacity is designed to secure annual need based on the average daily usage, and the water supply capacity is designed based on the maximum daily usage.**

**In terms of water supply, the contract volume is about 90% in 2019 compared to the domestic and industry water supply capacity in the Han River downstream dam but the water intake**

### (c) Methodology or approach used

**Operation status analysis of the whole and each water supply area in the Han River downstream, time series analysis.**

**Water supply and demand outlook in the Han River downstream, regression analysis.**

### (d) Results or conclusions derived from the project

**Produce of water supply and demand patterns and the mass curve of water consumption in the Han River downstream.**

**To strengthen connectivity of water resources and water supply facility, water supply system should be changed to basin basis.**

**By allocation of local government by wide-area waterworks should be changed to daily average usage and the remaining volume needs to set common reserves in the basin, flexibility and efficiency of water supply in the basin is secured.**

### (e) Implications of the project relevant to congress themes

**Need to legal and equitable water allocation between regions by considering demand and supply capacity in basin.**

**Prevent unnecessary investment and secure economic feasibility by optimal connection of water resources and water supply facilities.**

**Keywords** : water allocation, efficient wate allocation plan, basi basis, Han River, Han River downstream