

A dynamic splash of clear blue water, with a large, curved droplet on the left and a spray of smaller droplets extending to the right. The water is set against a white background with a subtle blue gradient at the top and bottom of the page.

# **Water Research Fund for Water Utilities**

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# Step.1 Background and Necessity

Focus on commercialization technology development

Limited execution of practical research tasks

Study of water treatment in progress

Inefficiency, e.g., redundant research tasks



- ▶ Necessity for research to investigate **current problems** and to lead **revision of water act**
- ▶ **Joint operation system** required for using **accumulated technology** of each utility
- ▶ Necessity for **objective, continuous and practical** result

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# Step.2 Effect of Project

Maximized synergy effect

Practical water charges

Competitive water supply business

Improved institution and reducing budget



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# Step.3 Joint Research Association

- Fund Raising Members : 11 authorities

Seven special metropolitan city facilities



One special island government



Three public institutions



# Step.3 Joint Research Association

- Annual budget : 500 million won (US\$ 0.5 million)  
proportionally revenue water ratio

Project discovery and selection : discover projects by collecting opinions of participants in the Association.



# Step.3 Joint Research Association

## ○ Function of Each Authority



# Step.4 Current Research Tasks

○ Among 22 tasks, 9 manuals created, 8 related policy proposal in progress

Category	Tasks (including redundant tasks)	Remarks
Post on homepage and distribution	17	Homepage of KWWA
Report	17	-
Manual	9	-
Policy proposal and application	8	Act, notice, water facility design standard (revised in 2017) (including those in progress )
Seminars, and programs	2	Develop programs for assessing performance of water supply pipe network

## Step.5 Research Task List

- Among 22 tasks, 17 tasks completed and 5 in progress

(unit : USD)

Category	Research Tasks	Cost
2013	Create master plan for improving water supply facilities and manual for improving water supply pipeline.	177,000
	Create manual for washing water supply pipeline and manual for managing cleaning water.	89,000
	Study method for evaluating activated carbon and creation of manual.	45,000
	Study drinking water quality appropriate for Korea.	18,000
2014	Study socio-economic effect of executing emission trading system in water supply sector.	59,000
	Study method for removing dissolved ozone in advanced water treatment.	25,400
	Create manual for inspecting water supply facilities.	42,000
	Study guideline for building uninterrupted water supply system.	83,400

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## Step.5 Research Task List

- Among 22 tasks, 17 tasks completed and 5 in progress

(unit : USD)

Category	Research Tasks	Cost
2015	Study method for creating guideline for direct connection of water distribution system, and improving regulations.	79,550
	Study guideline for disposing unused water supply pipe, and political direction.	42,000
	Study regulations, design, operation and management guideline for optimized management of effluent treatment facility in wastewater treatment plants.	86,600
	Study creation of manual for maintaining valves for water supply.	83,100
2016	Study creation of manual for basic investigation of pipeline and guidelines for old pipe rehabilitation technique.	167,850
	Study method for calculating and managing economic quantity of water flow.	67,200
	Study creation of manual for coping with droughts, e.g., water supply adjusted in each step for minimum quantity of water supply in emergency.	58,800
	Study method for maintaining efficient block system.	75,600
	Study method for improving polluter-pay-principle system.	42,000
	Study method for securing human resources specialized in water supply.	42,000

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## Step.5 Research Task List

- Among 22 tasks, 17 tasks completed and 5 in progress

(unit : thousand, USD)

Category	Research Tasks	Cost
2017	Study method for efficient management by improving total cost in local water supply facility.	84,000
	Develop WSP appropriate for Korea to propagate water safety management technique, and study method for national regulations.	88,300
	Water treatment system to comply with allowed discharge guideline in effluent treatment facilities. Study method for creating management guideline.	86,600
	Improve regulations and develop technology for equalizing dissolved chlorine in indoor pipes for customers.	155,800

# Thank you