

Integrated Water Management of Korea

: Implementation Status & Cases of the SDG Indicator 6.5.1

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Ministry of Environment

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◆ SDG 6 Targets and Indicators

Goals (17)	Targets (8/169)	Indicators (11/241)
 <p>6 CLEAN WATER AND SANITATION</p>	6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Proportion of population using safely managed drinking water services
	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water
	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.1 Proportion of wastewater safely treated 6.3.2 Proportion of bodies of water with good ambient water quality
	6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	6.4.1 Change in water-use efficiency over time 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources
	6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	6.5.1 Degree of integrated water resources management implementation (0-100) 6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation
	6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	6.6.1 Change in the extent of water-related ecosystems over time
	6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies	6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan
	6.b Support and strengthen the participation of local communities in improving water and sanitation management	6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management

◆ Items of SDG indicator 6.5.1 (1/2)

1. Enabling Environment	
1.1 What is the status of policies, laws and plans to support IWRM at the national level ?	a. National water resources policy , or similar
	b. National water resources law(s)
	c. National IWRM plans , or similar
1.2 What is the status of policies, laws and plans to support IWRM at other levels ?	a. Sub-national water resources policies or similar
	b. Basin/aquifer management plans or similar, based on IWRM
	c. Arrangements for transboundary water management
	d. Sub-national water resources regulations (laws, decrees, ordinance or similar)
2. Institutions and Participation	
2.1 What is the status of institutions for IWRM implementation at the national level ?	a. National government authorities for leading IWRM implementation
	b. Coordination between national government authorities representing different sectors on water resources, policy, planning and management
	c. Public participation in water resources, policy, planning and management at national level
	d. Private sector participation in water resources development, management and use
	e. Developing IWRM capacity
2.2 What is the status of institutions for IWRM implementation at other levels ?	a. Basin/aquifer level organizations for leading implementation of IWRM
	b. Public participation in water resources, policy, planning and management at the local level
	c. Participation of vulnerable groups in water resources planning and management
	d. Gender included in laws/plans or similar within water resources management
	e. Organizational framework for transboundary water management
	f. Sub-national authorities for leading IWRM implementation

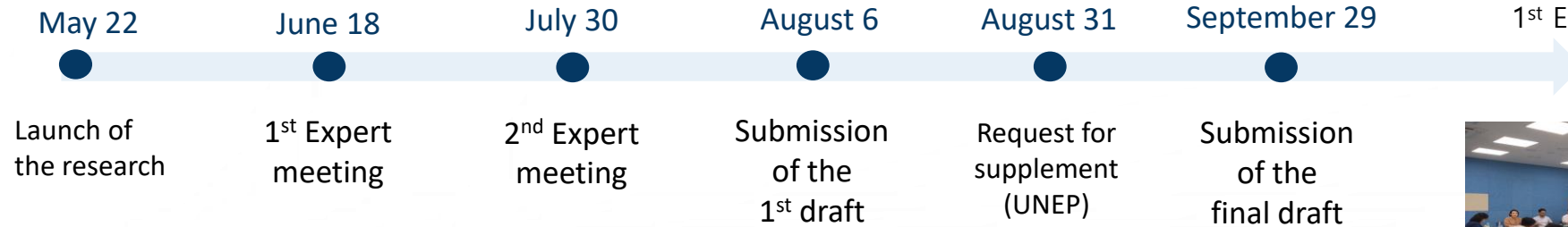
◆ Items of SDG indicator 6.5.1 (2/2)

3. Management Instruments	
3.1 What is the status of management instruments to support IWRM implementation at the national level ?	a. National monitoring of water availability (includes surface and/or groundwater, as relevant to the country)
	b. Sustainable and efficient water use management from the national level (includes surface and/or groundwater, as relevant to the country)
	c. Pollution control from the national level
	d. Management of water-related ecosystems from the national level
	e. Management instruments to reduce impacts of water-related disasters from the national level
3.2 What is the status of management instruments to support IWRM implementation at other levels ?	a. Basin Management instruments
	b. Aquifer management instruments
	c. Data and information sharing <u>within</u> countries at all levels
	d. Transboundary data and information sharing <u>between</u> countries
4. Financing	
4.1 What is the status of financing for water resources development and management at the national level ?	a. National budget for water resources infrastructure (investment and recurrent costs)
	b. National budget for IWRM elements (investments and recurrent costs)
4.2 What is the status of financing for water resources development and management at other levels ?	a. Sub-national or basin budgets for water resources infrastructure (investment and recurrent costs)
	b. Revenues raised for IWRM elements
	c. Financing for transboundary cooperation
	d. Sub-national or basin budgets for IWRM elements (investment and recurrent costs)

◆ Data Collection and Reporting Overview



- **Focal Point** : Water Industry and International Cooperation Division, Ministry of Environment
- **Research organization** : Korea Environment Institute (KEI)
- **Progress made**



1st Expert Meeting



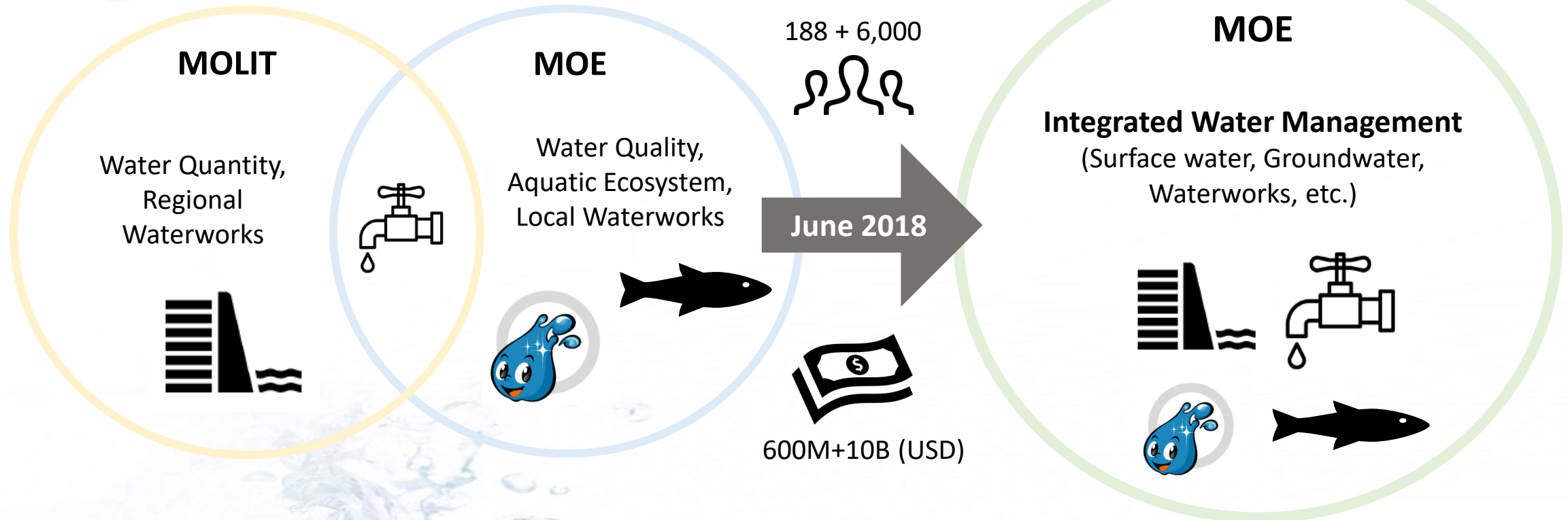
2nd Expert Meeting

- **Data Collection and Reporting Process**
 - ✓ Other institutions/stakeholders involved and consulted in the process
 - Korea Water Resources Corporation (K-water), Korea Environment Corporation (K-eco), Korea Water Forum (KWF), Korea Water Partnership (KWP), Korea Climate & Environment Network, academia
 - ✓ Modes of consultation
 - email exchanges, in-person meetings, expert meetings

◆ Policy Reform for Integrated Water Management



“1st Governmental Reorganization in Water Sector since 1994”



* MOLIT :



, MOE :



◆ [Case 1] The Framework Act on Water Management (enforced in June 2019)



*“The State shall have the responsibilities to **establish a sustainable water management system in accordance with the basic ideology for water management and to formulate and implement a comprehensive plan necessary for improving the quality of life of the people.** (Article 5)”*

Basic Ideology/Principles

- Public nature of water (Article 8)
- Sound water cycle (9)
- Conservation of aquatic ecosystems (10)
- Management by basin (11)
- **Integrated water management (12)**
- Cooperation and coordinated management (13)
- Distribution of water (14)
- Management, etc. of water demand (15)
- Permission, etc. to use water (16)
- Cost bearing (17)
- Response to climate change (18)
- Participation in water management policies (19)

National/Basin Plans

- Items included in the National Plans (27)
 - ✓ Basic objectives and implementation direction of water management policies
 - ✓ Mid- to long-term prospect on **water supply and demand**
 - ✓ Mid- to long-term **future investment** of water management budget
 - ✓ Boosting the growth and strengthening the competency of the **water industry**
 - ✓ Annual assessment on implementation progress of the Master Plans, etc.
- Holding of public hearing (31)

Water Committees

- Establishment, etc. of the National/Basin Water Committees (20)
- Composition, etc. (21, 23)
- Functions (22, 24)
- Term of Office, etc. of Members (25)
- Meetings, etc. (26)



Case 2

◆ [Case 1] The Framework Act on Water Management

	Water Environment	Water Supply and Sewerage	Water Resources	Disaster Prevention	Other
Ministry of Environment	Water Environment Conservation Act	Water Supply and Waterworks Installation Act	Act on the Investigation, Planning and Management of Water Resources		
	Act on the Management and Use of Livestock Excreta	Sewerage Act	Groundwater Act		
	Act on the Improvement of Water Quality and Usage of the Four Major River Basin	Drinking Water Management Act	Act on the Construction of Dams and Assistance, etc. to Their Environs		
		Act on Promotion and Support of Water Reuse	Special Act on the Utilization of Waterfronts		
Other ministries			River Act (Ministry of Land, Infrastructure and Transport)		Act on the Promotion of the Development, Use and Diffusion of New and Renewable Energy (Ministry of Trade, Industry and Energy)
			Agricultural and Fishing Villages Improvement Act (Ministry of Agriculture, Food and Rural Affairs)	Small River Maintenance Act (Ministry of the Interior and Safety)	
			Development and Management of Deep Sea Water Act (Ministry of Oceans and Fisheries)	Reservoir and Dam Safety Control and Disaster Prevention Act (Ministry of the Interior and Safety)	

◆ Section Score

Enabling Environment		
1.1 What is the status of policies, laws and plans to support IWRM at the national level?	a. National water resources policy , or similar	70
	b. National water resources law(s)	100
	c. National IWRM plans , or similar	70
1.2 What is the status of policies, laws and plans to support IWRM at other levels?	a. Sub-national water resources policies or similar	70
	b. Basin/aquifer management plans or similar, based on IWRM	70
	c. Arrangements for transboundary water management	50
	d. Sub-national water resources regulations (laws, decrees, ordinance or similar)	70
Average Scores		71

◆ [Case 2] Presidential/Basin Water Commissions



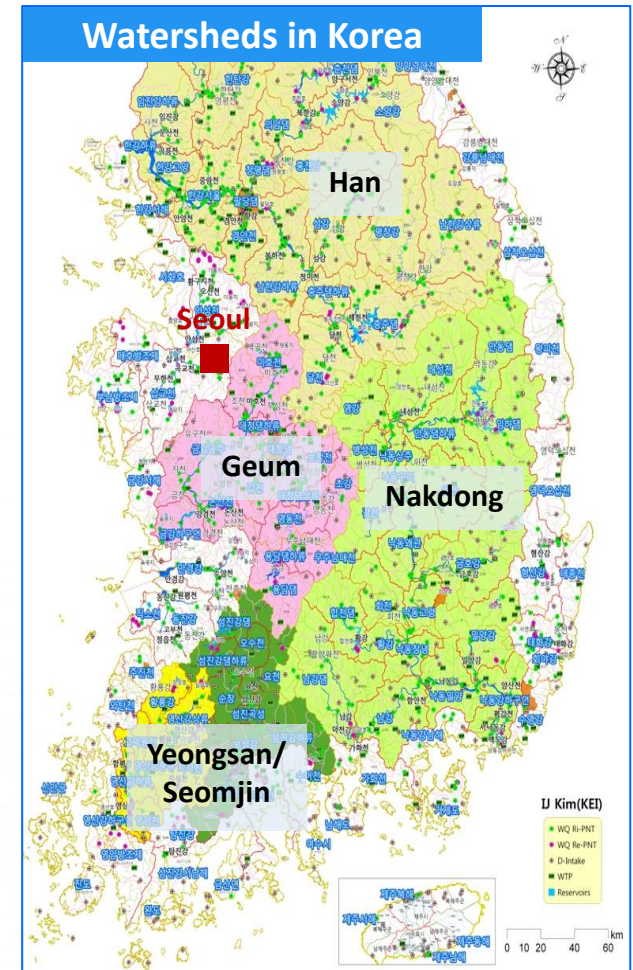
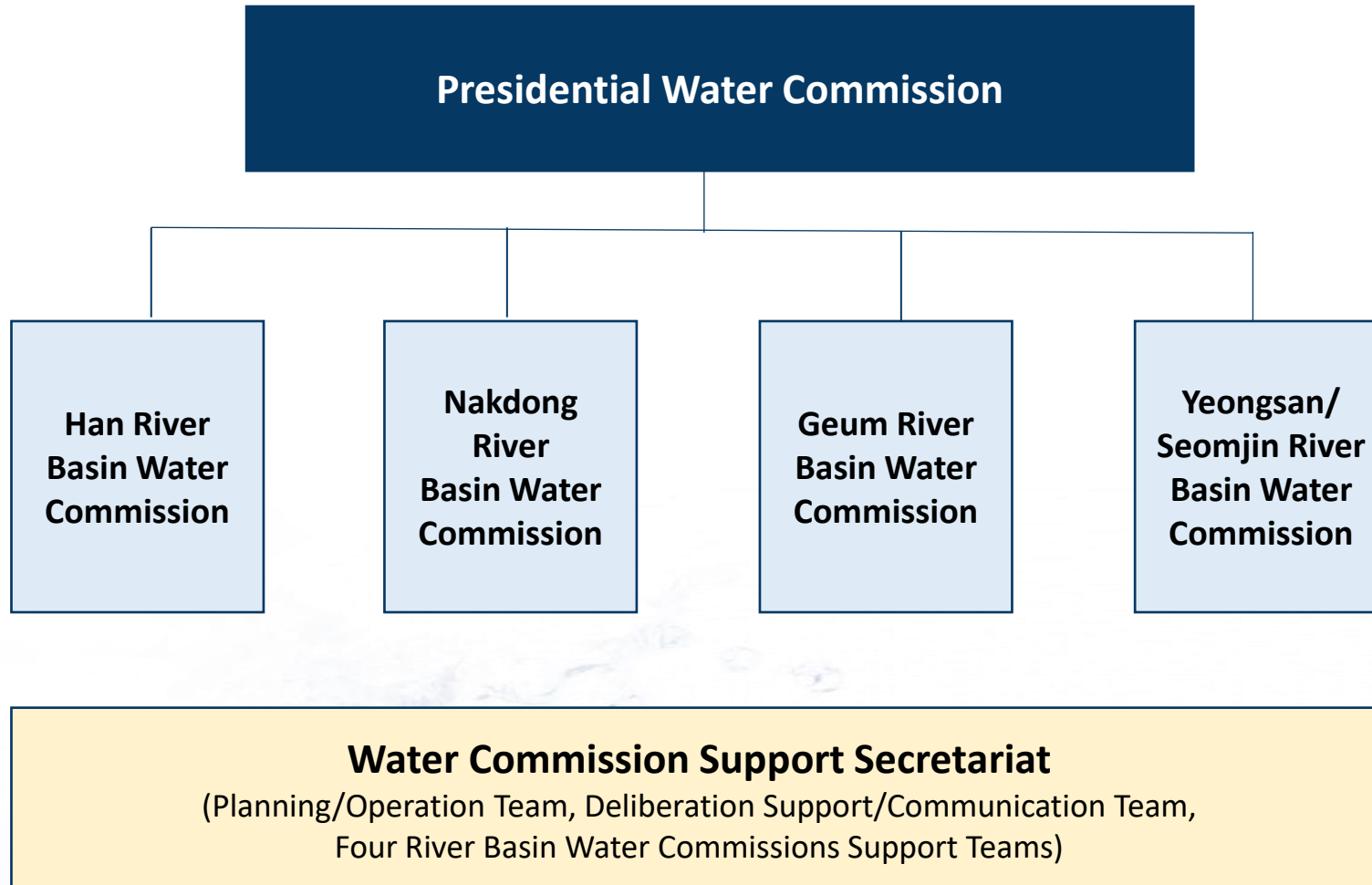
「Framework Act on Water Management」 Article 20

“The National Water Management Committee ... , and Basin Water Management Committees by each basin shall be established ... to deliberate and decide on important matters concerning water management.”

Functions of the National Water Management Committee (Article 22)

- **Formulating and amending the “Master Plans for National Water Management”;**
- Whether the “Comprehensive Basin Water Management Plans” complies with the “Master Plan for National Water Management”;
- Designating the scope of basins by water system;
- Water movement among basins for appropriate water distribution;
- Whether plans related to water management submitted by related administrative agencies comply with the relevant plans for national or basin water management;
- **Mediation of any of the following water disputes:**
 - ✓ A water dispute to which a central administrative agency or metropolitan government is a party;
 - ✓ A water dispute over at least two basins;
 - ✓ Any other water dispute prescribed by Presidential Decree;
- **Evaluating the implementation of the “Master Plan for National Water Management” as well as overall water management;**
- Matters brought to the Committees by the Chairpersons, regarding national or basin water management, etc.

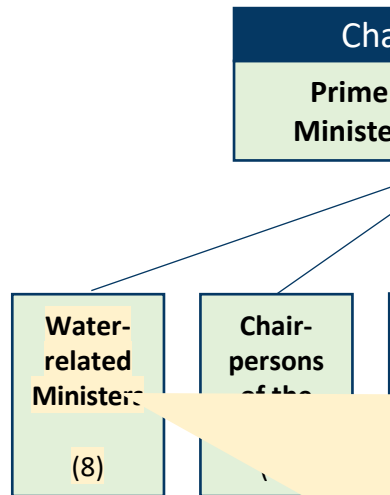
◆ [Case 2] Presidential/Basin Water Commissions



◆ [Case 2] Presidential/Basin Water Commissions

Presidential Water Commission

- Under **the Office of the President**
- Members : 30-50 persons → **39 members in total**
 - Chairpersons(2), Ministers(8),
Chairpersons of BWCs(4), Other officials(6),
Civic commissioned members(10-30)
- **3-year** terms of office (1-time renewal only)



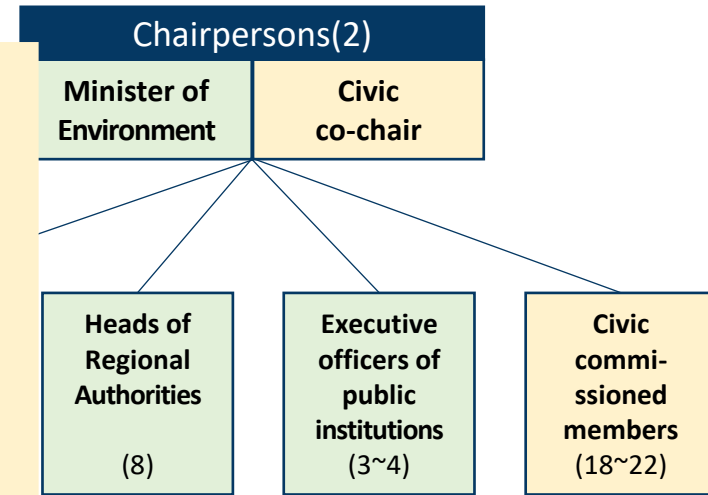
Water-related Ministers

- Minister of Strategy and Finance
- Minister of the Interior and Safety
- Minister of Agriculture, Food and Rural Affairs
- Minister of Trade, Industry and Energy
- **Ministry of Environment**
- Minister of Land, Infrastructure and Transport
- Ministry of Oceans and Fisheries
- Minister of the Office for Government Policy Coordination

By law, the

Basin Water Commissions

- Under **the Presidential Water Commission**
- Members for each BWC : 30-50 persons
 - Chairpersons(2), Mayors and Governors(5-9),
Other officials(11-12), Civic commissioned
members(16~36)
- **3-year** terms of office (1-time renewal only)

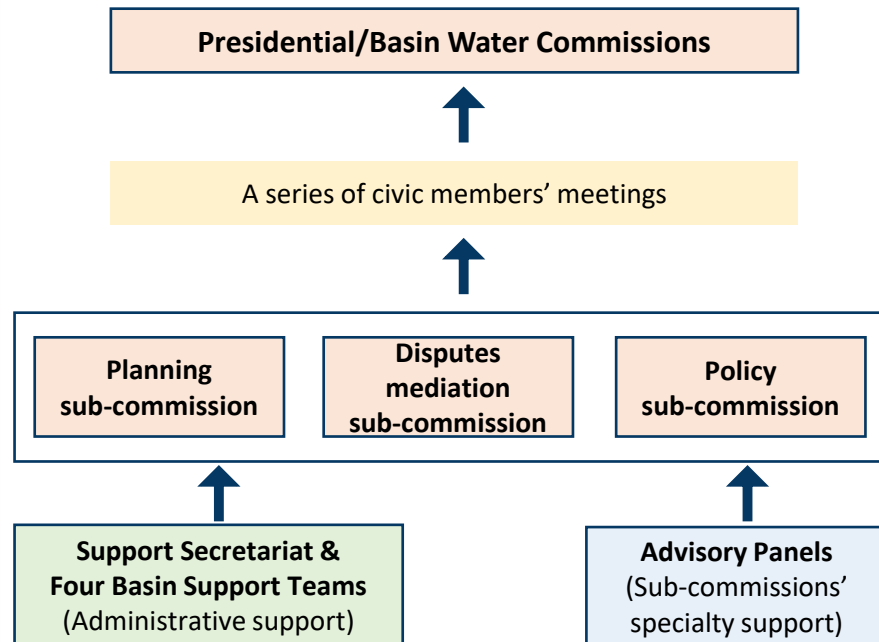


than the ex-officio members.

◆ [Case 2] Presidential/Basin Water Commissions

A number of discussions led by civil committee members
(24 times at the PWC, 22 times at the BWCs)

PWC/BWCs' meeting procedures



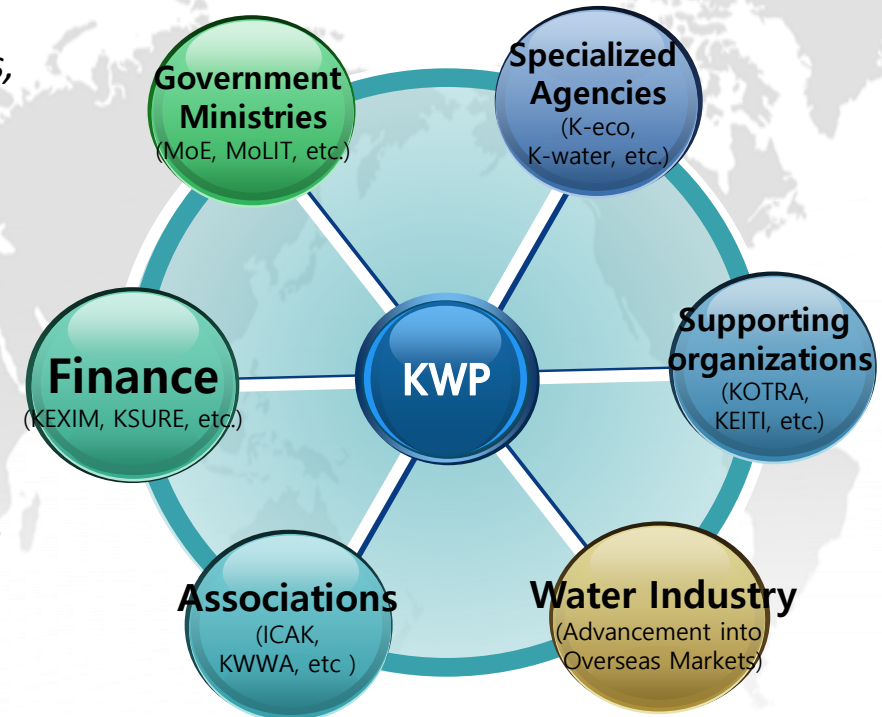
Qualifications of the Civic Members

- A person **who held an associate professorship or higher position**, or other equivalent position in the field of water management **at a university or an authorized research institute** for at least ten years;
- A person **who worked for any water-related organization** or institution for at least ten years;
- A person **who served as a judge, prosecutor, or lawyer** for at least ten years;
- Any other person **who is well respected in society with profound knowledge about and experience** in the field of water management.

◆ Korea Water Partnership (KWP)



- **Foundation** : April 2015
- **Legal basis of the foundation** : 「Act on Development of Water Management Technologies and on Promotion of Water Industry」 Article 22
 - ✓ “Water enterprises, public water utilities, local governments, etc. shall establish Korea Water Partnership to support the expansion into foreign markets of water enterprises and to promote the water industry”
- **Major activities and roles**
 - ✓ Serving as a platform supporting Korean water enterprises’ advancement into overseas markets
 - ✓ Providing full-cycle support from networking, marketing and business cooperation to expansion to overseas markets
 - ✓ Strengthening capacity and reputation of the Korean water industry



◆ Section Score

Institutions and Participation		
2.1 What is the status of institutions for IWRM implementation at the national level?	a. National government authorities for leading IWRM implementation	100
	b. Coordination between national government authorities representing different sectors on water resources, policy, planning and management	100
	c. Public participation in water resources, policy, planning and management at national level	100
	d. Private sector participation in water resources development, management and use	90
	e. Developing IWRM capacity	90
2.2 What is the status of institutions for IWRM implementation at other levels?	a. Basin/aquifer level organizations for leading implementation of IWRM	90
	b. Public participation in water resources, policy, planning and management at the local level	100
	c. Participation of vulnerable groups in water resources planning and management	100
	d. Gender included in laws/plans or similar within water resources management	100
	e. Organizational framework for transboundary water management	0
	f. Sub-national authorities for leading IWRM implementation	90
Average Scores		87

◆ Total Score

Section	Average Scores
1. Enabling Environment	71
2. Institutions and Participation	87
3. Management Instruments	83
4. Financing	63
Indicator 6.5.1 Score (= Degree of IWRM implementation (0-100))	76

◆ Way Forward



Deliberation & resolution over the 1st Master Plans for National Water Management

- Final report on the research project for the establishment of the Master Plans by early December, Introducing the agenda to the Presidential Water Commission by late December
- Research projects on the Comprehensive Plans for each basin will be launched in the 2nd half of 2020.



Setting forth ways to coordinate water-related laws and plans

- Integration/abolition of 84 Acts/laws and 66 plans



Accelerating SDG 6 implementation by utilizing and promoting SDG-PSS home and abroad

- Consolidating, comparing, and analyzing the results of both quantitative and qualitative assessments, and applying them for strengthening capacity for implementing SDG 6

Thank you



Ministry of Environment