Water Cycle Policy

- Recent Activities in Japan-

February, 2017

Water Resources Department,
Water and Disaster Management Bureau
Ministry of Land, Infrastructure, Transport and Tourism

New Policy

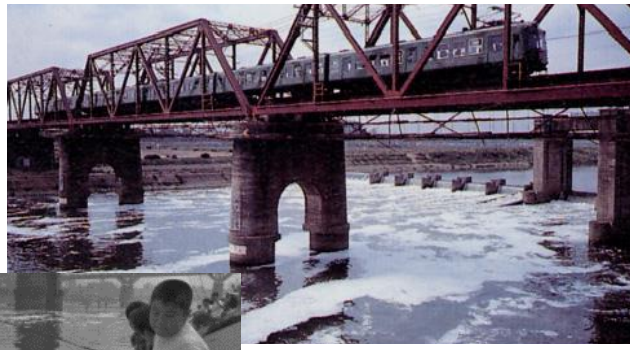
"Integrated Water Resources Management (IWRM)",

"Water Cycle"

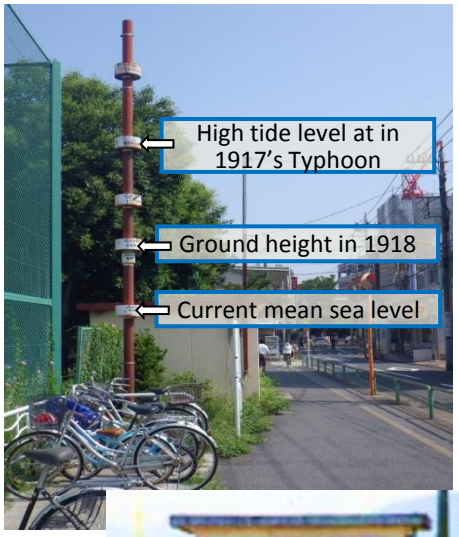
is New policy in Japan
as A Holistic Approach
toward realizing IWRM

Background: Water Issues

Water pollution



Ground Subsidence



Drought

Groundwater depletion

What is “Water cycle” or “’Sound water cycle” ?

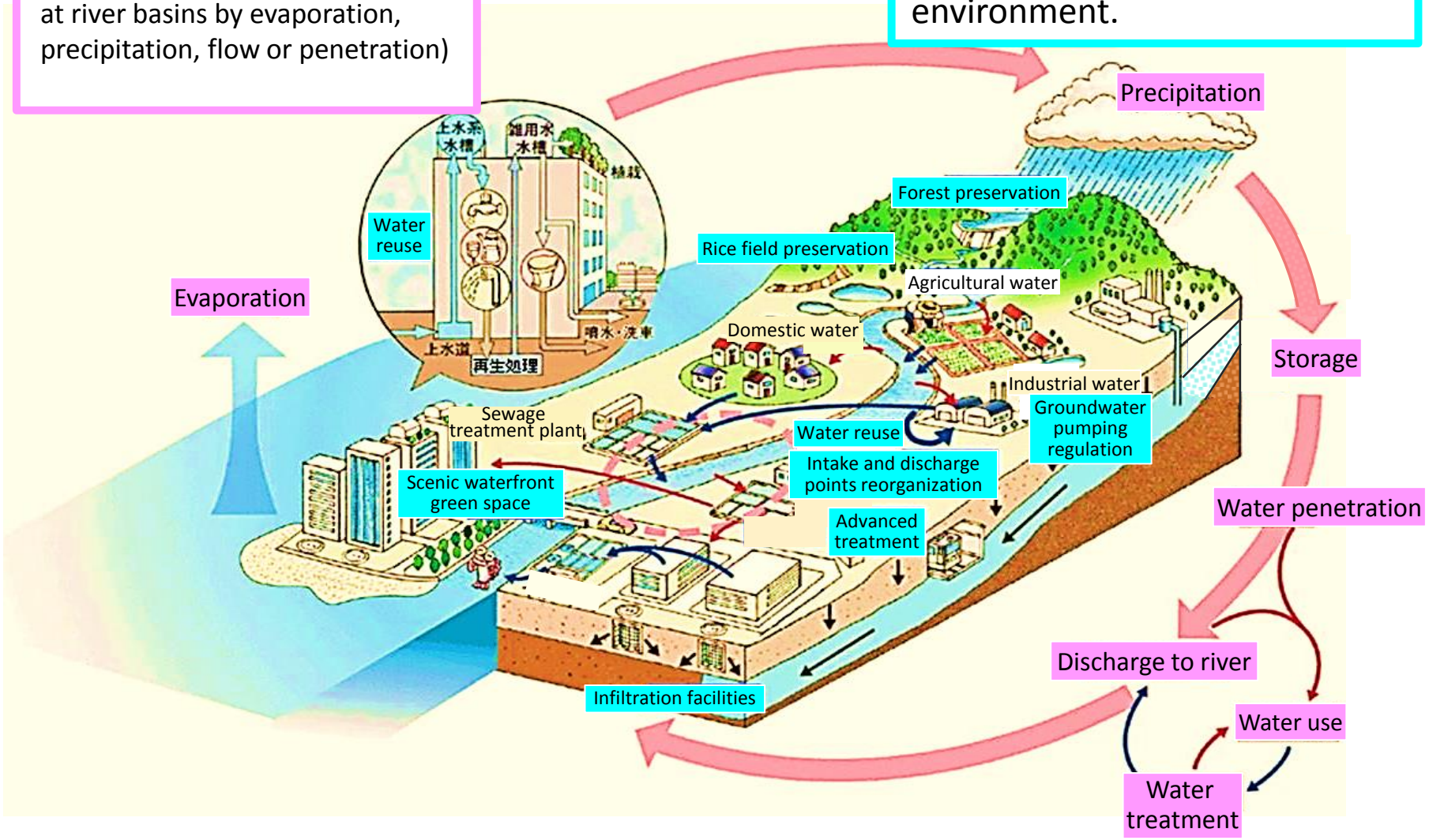
Water cycle

The circulation of water

(in surface or underground mainly at river basins by evaporation, precipitation, flow or penetration)

Sound water cycle

Properly conserved water cycle valued for human activities and environment.



“Basic Act on the Water Cycle” (promulgated 2nd Apr., enforced 1st Jul. 2014)

Key points

1. Establishment of the Headquarters for Water Cycle Policy to promote water cycle policy
2. Clarification of basic principles to implement the water cycle measures
3. Clarification of responsibilities of related sectors
4. Formulation of the ”**Basic Plan on Water Cycle**”
5. Clarification of basic actions to promote the water cycle measures

Prime Minister Abe speaking at the Headquarters of Water Cycle Policy 1st Meeting (18th Jul. 2014)

Key Note by HRH Crown Prince of Japan at the symposium of the Water Day (1st Aug. 2016)

Source: Official Website of the Prime Minister of Japan and His Cabinet (http://japan.kantei.go.jp/96_abe/actions/201407/18article1.html)

“Basic Act on Water Cycle” to “Basic Plan on Water Cycle”

“Basic Act on Water Cycle”

Responsibility of National Government

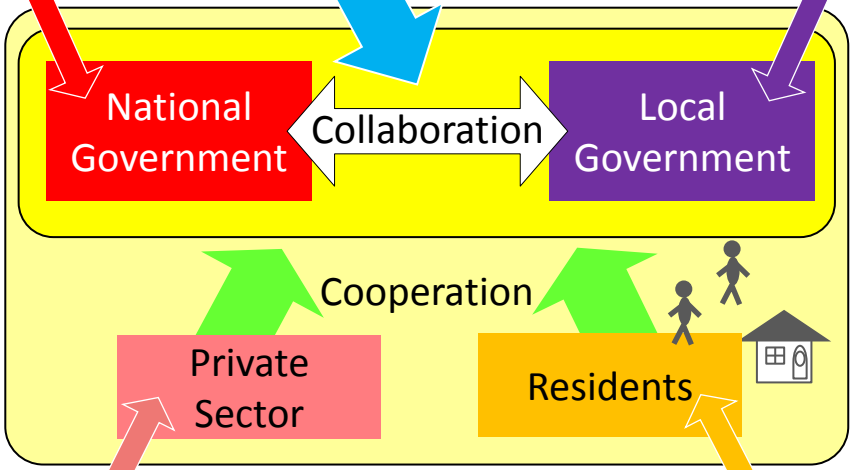
-Comprehensively establish the **“Basic Plan on Water Cycle”** and implement it

meeting for consideration of water cycle

workshop and exhibition of water cycle

Water Day (1st Aug.)

“Basic Plan on Water Cycle”



Responsibility of Local Government

-Collaborate with national government and other local governments

-Shall be responsible to establish the **“River Basin Water Cycle Plan”** reflected the local circumstances and implement it

Responsibility of Private Sector

-On business activities, appropriately use of water and considerate for the water cycle

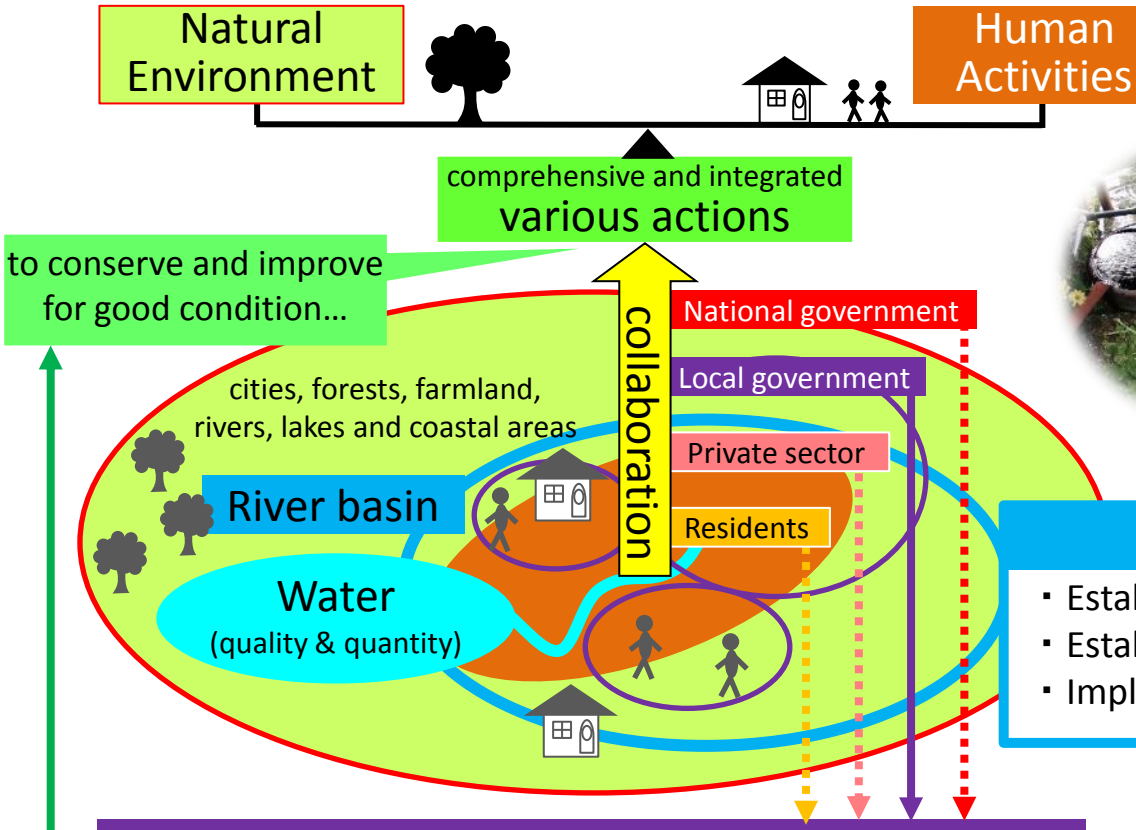
-Shall be responsible to cooperate with water cycle policy

Responsibility of Residents

-On utilizing water, appropriately use and considerate for the water cycle

-Shall be strived to cooperate with water cycle policy

“Basic Plan on Water Cycle” to “River Basin Water Cycle Plan”



River Basin Management

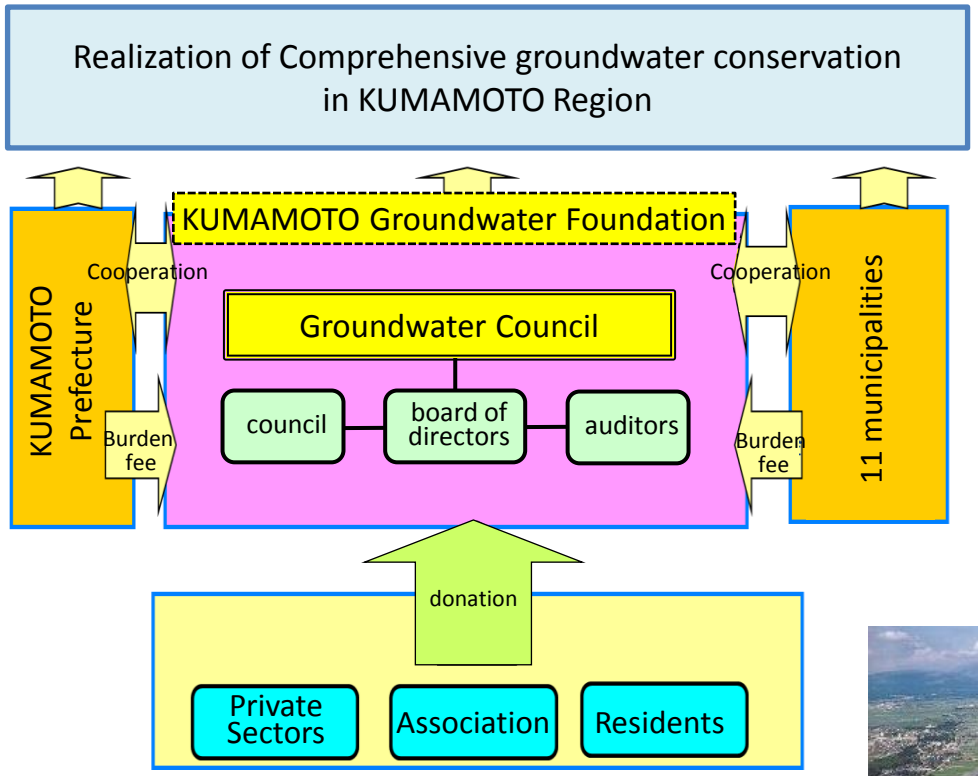
- Establish of “River Basin Water Cycle Council”
- Establish of “River Basin Water Cycle Plan”
- Implement the measures based on the Plan

task of “River Basin Water Cycle Council”

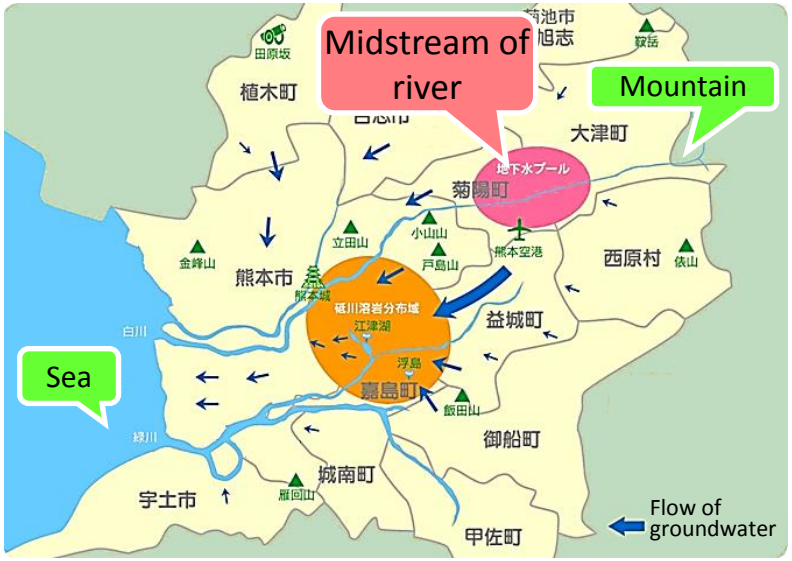
- The “River Basin Water Cycle Council” will be cooperatively established by **local government**, the branch offices of the **national government**, **private sector** and **residents**.
- The council will draw up a comprehensive “River Basin Water Cycle Plan” covered on all sectors.
- The stakeholders will mutually cooperate in a flexible manner to implement measures concerning forests, farmland, rivers, sewage systems and the environment.

Case study 1 : River Basin Management KUMAMOTO Region, Japan

Comprehensive Groundwater Conservation Management Plan in KUMAMOTO Region
Execution Agency : KUMAMOTO Groundwater Foundation
Target Area : KUMAMOTO groundwater basin (involved 11 municipalities)



Action Framework of KUMAMOTO Region



KUMAMOTO Groundwater Basin

Penetration enhancement on non-cultivation period

Products contributing for sustainable groundwater usage appeal to consumer

Case study 2 : River Basin Management of Groundwater

Groundwater management

until now

Intake restriction

Subsidence prevention

restriction is major purpose

Because….

Condition?

level, quality and quantity, flow direction, temperature, etc.

To make common understanding

- investigation
- data share
- Intake volume upper limit clarification

Conservation and wise use?

Balance of conservation and use

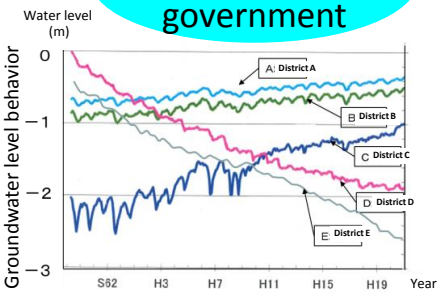
- rules of balance with groundwater conservation and utilization
- cross-sectional consultation and cooperation

for Sustainable groundwater usage and conservation

Environment specialist and consultants

Investigation of spring water

Local and regional government

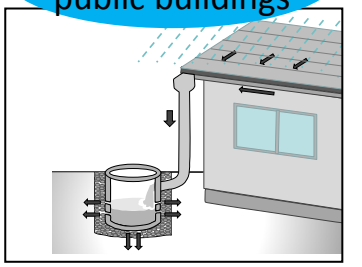


Continual groundwater condition survey

NPOs, volunteers

Water basin forestition

Houses, public buildings

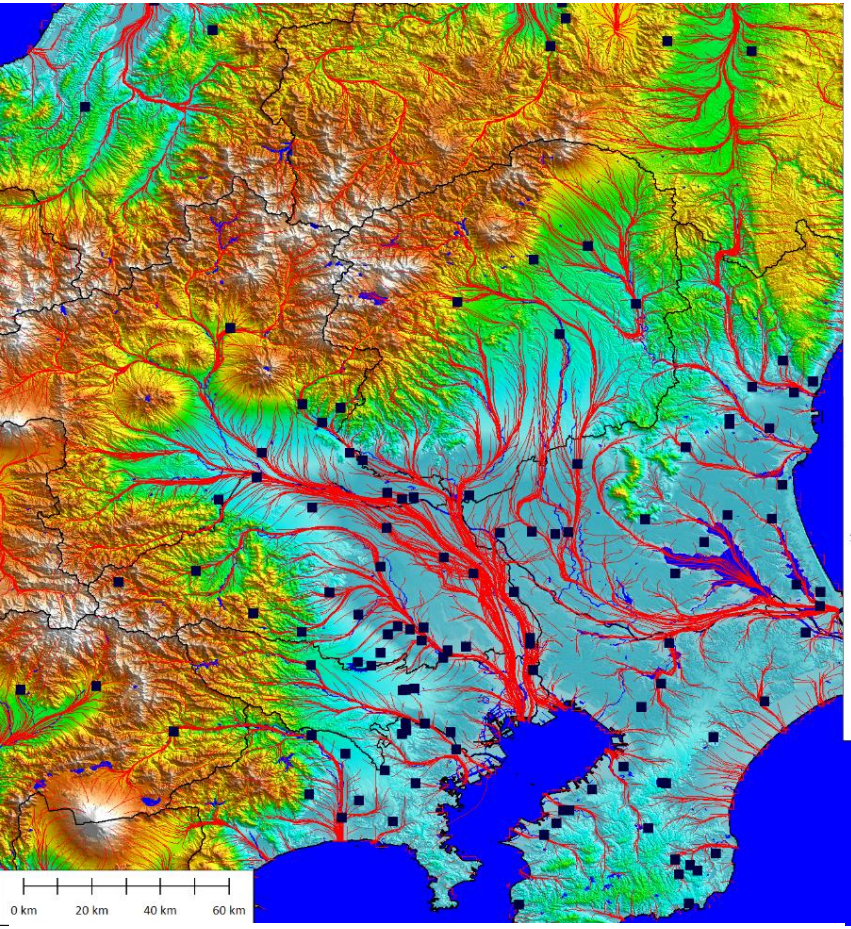


Infiltration facilities

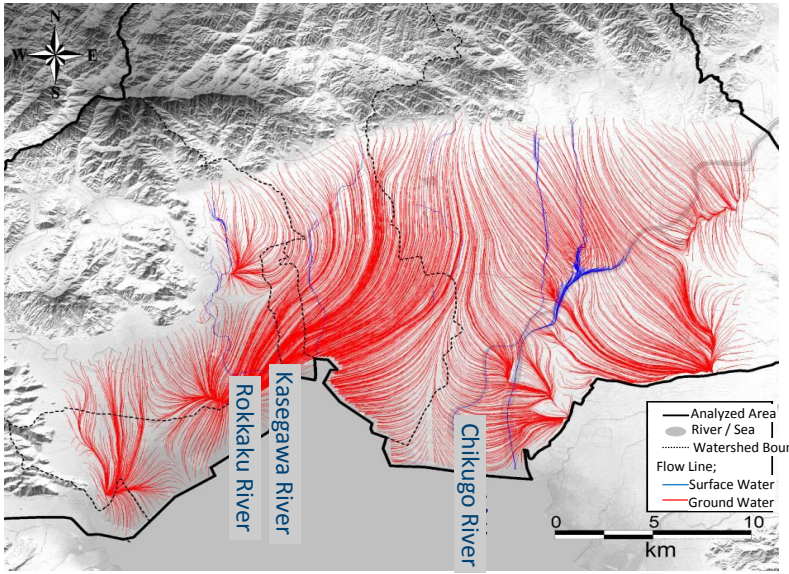
Case study 2’ : Visualization technology of groundwater flow

Simulation results

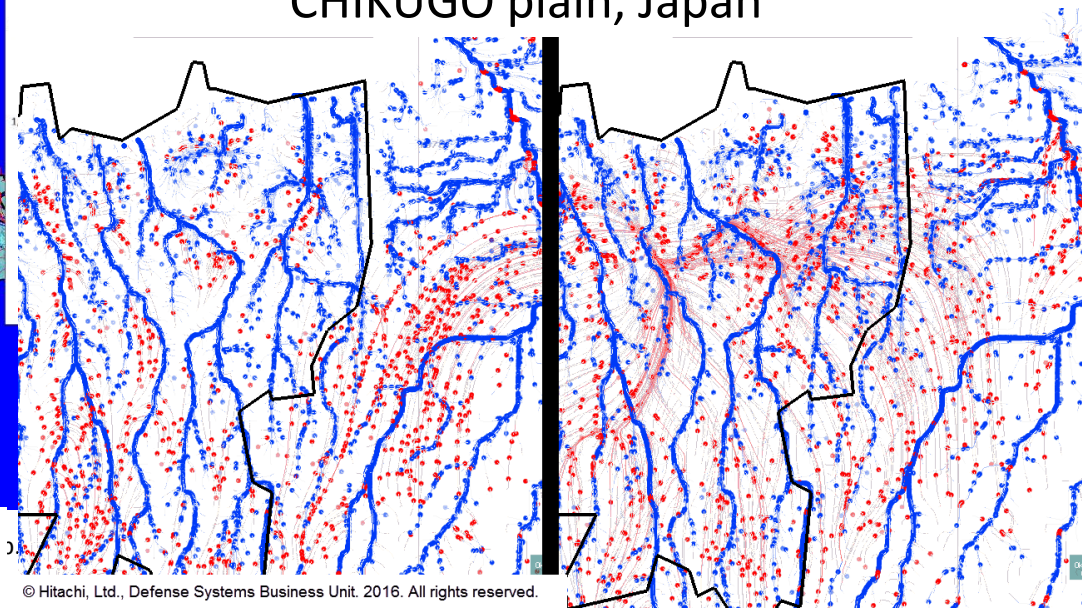
-----Surface Water
-----Ground Water



KANTO plain, Japan



CHIKUGO plain, Japan

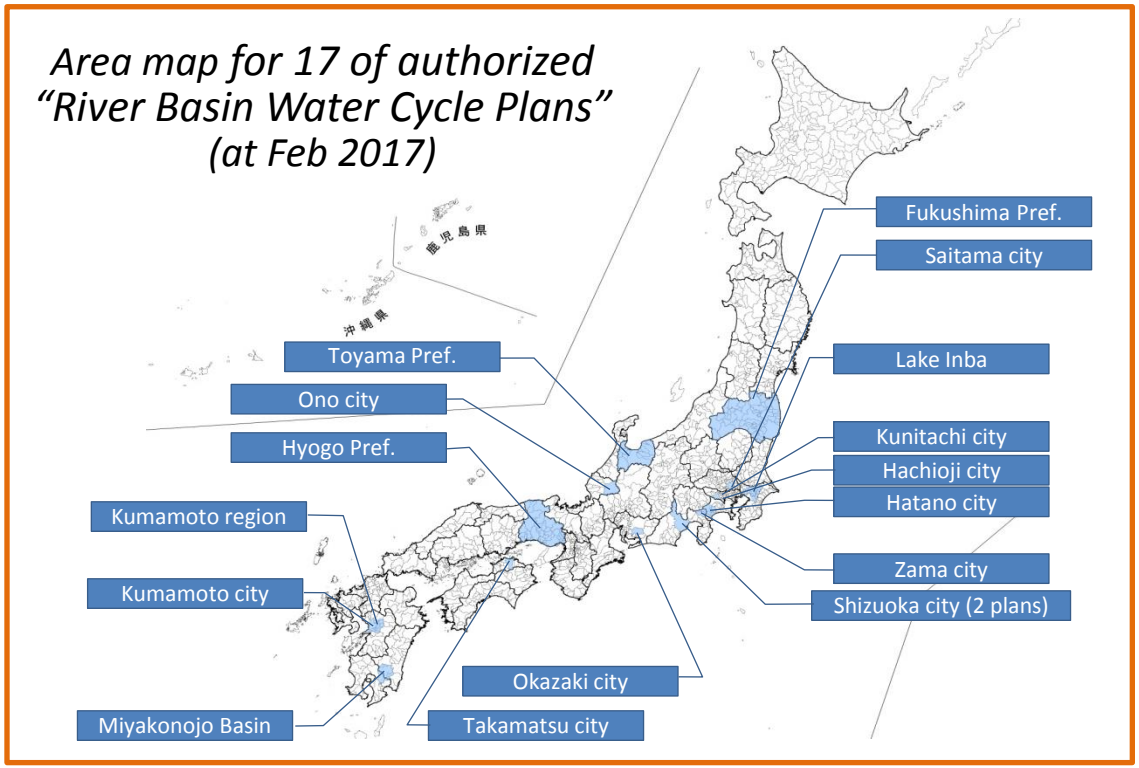


Jakarta area

Promoting the “River Basin Management” by “Headquarters for Water Cycle Policy”

- Published the “**Guideline**” and “**Good Practices**” of “River Basin Water Cycle Plan”
- Set up inquiry desk to support for municipalities
- Official authorization of “River Basin Water Cycle Plan” (now total 17 plans).

“Guideline” and “Good Practices” pamphlet



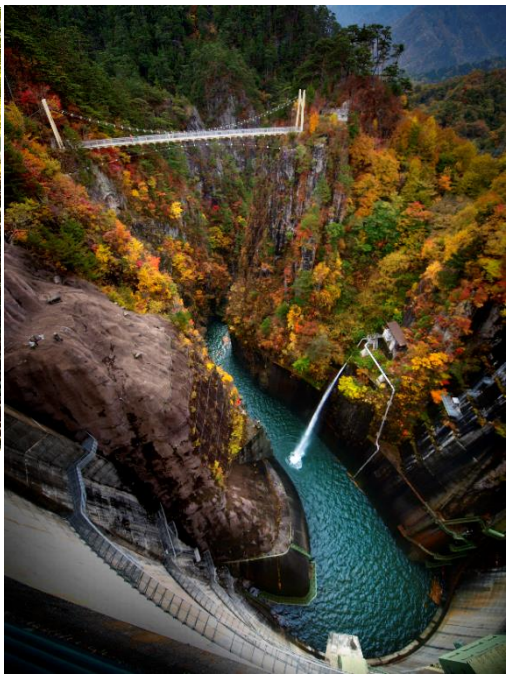
Conclusions

1. In reference with our past life living with water, we have to think how our present life can be improved for fostering to water cycle.
2. We can develop our new life living with water in cooperation with advanced technologies.
3. We have to create our new society living with water, as an accumulation and harmonization with individual life.

In the river, the water that you touch is the last of what has passed and the first of that which comes; so with present time.

- Leonard de Vinci






Thank you for your attention






Mizu tono Fureai Photo Contest（Relationship with Water Photo Contest）