

17TH A-1 HRD

THEME 1: "HUMAN RESOURCE DEVELOPMENT IN ORDER TO ACHIEVE COMPATIBILITY OF ENVIRONMENTAL CONSERVATION AND SOUND BUSINESS MANAGEMENT"

WATER UTILITY, ENVIRONMENTAL CONSERVATION, AND ENVIRONMENTAL INITIATIVES

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PRESENTATION CONTENT

Water Utility, Environmental Conservation, and Environmental Initiatives

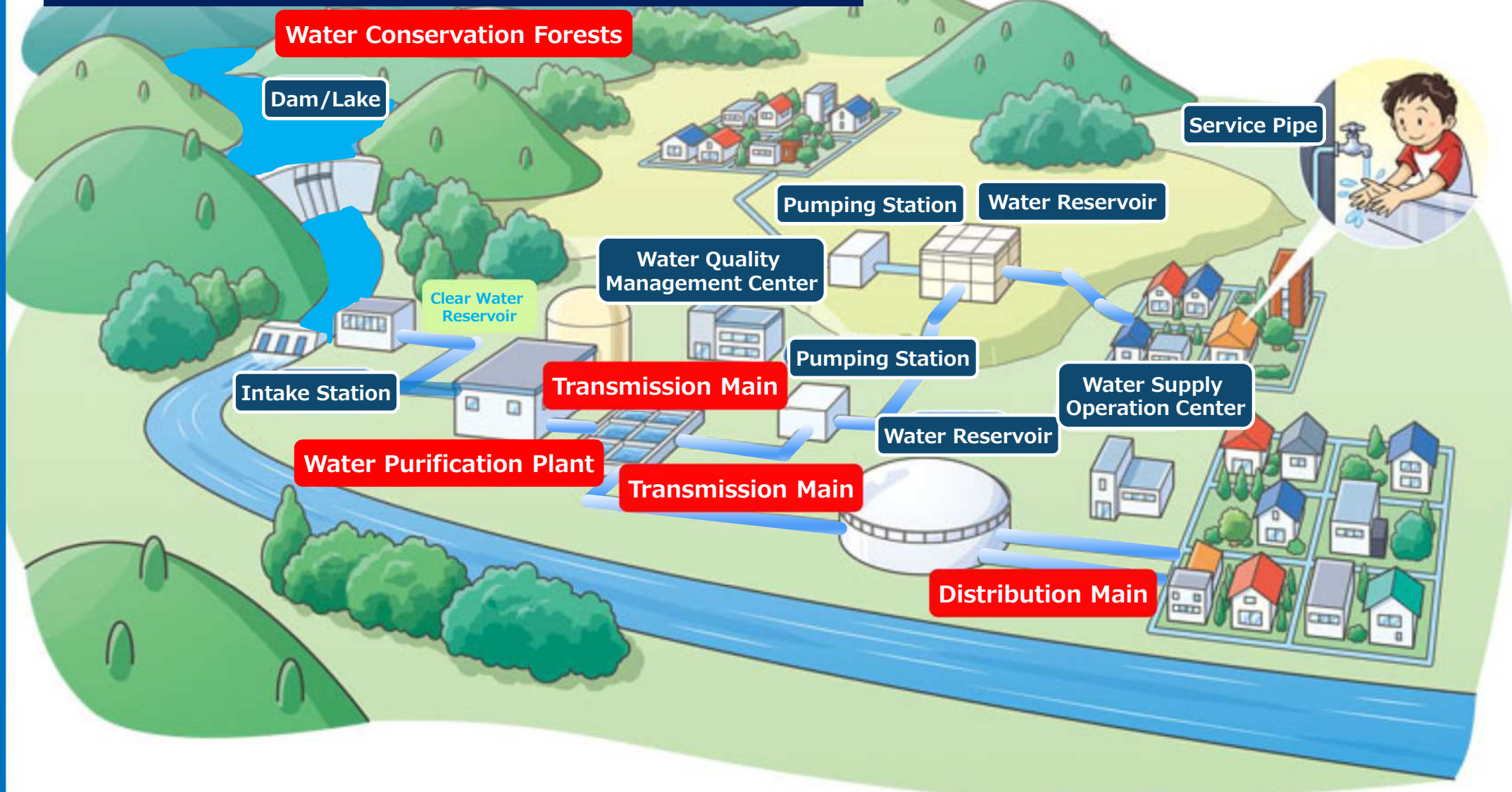
Case 1: Protection of Tokyo's Water Conservation Forests

Case 2: Preservation of the Tamagawajosui Headrace

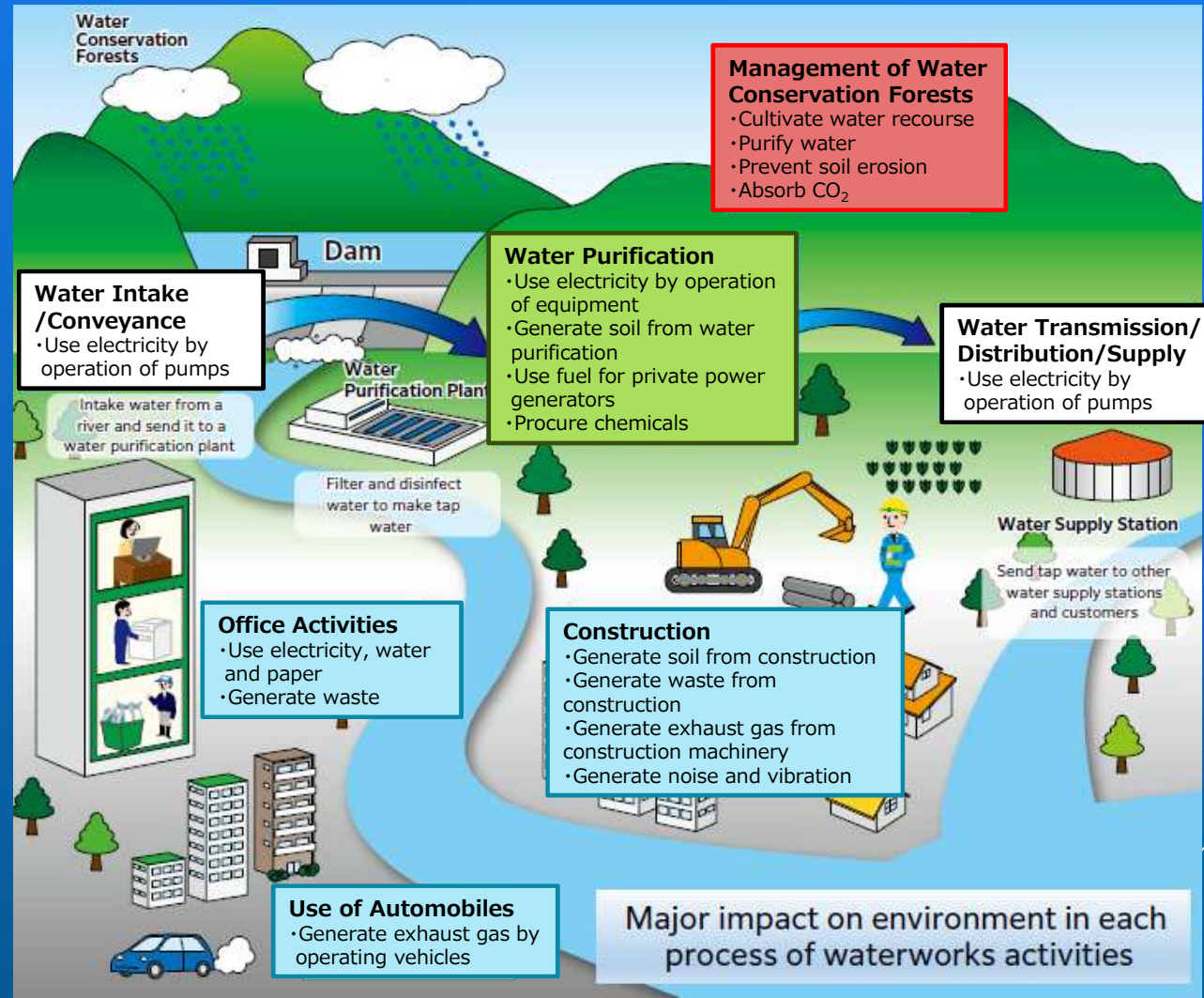
**Case 3: Environmental Initiatives
at the Higashimurayama Water Purification Plant**

Three white diagonal lines of varying lengths and thicknesses are positioned on the right side of the slide, extending from the middle section down towards the bottom right corner.

From a water resource to a tap



The relation between Water Business and Environmental Protection



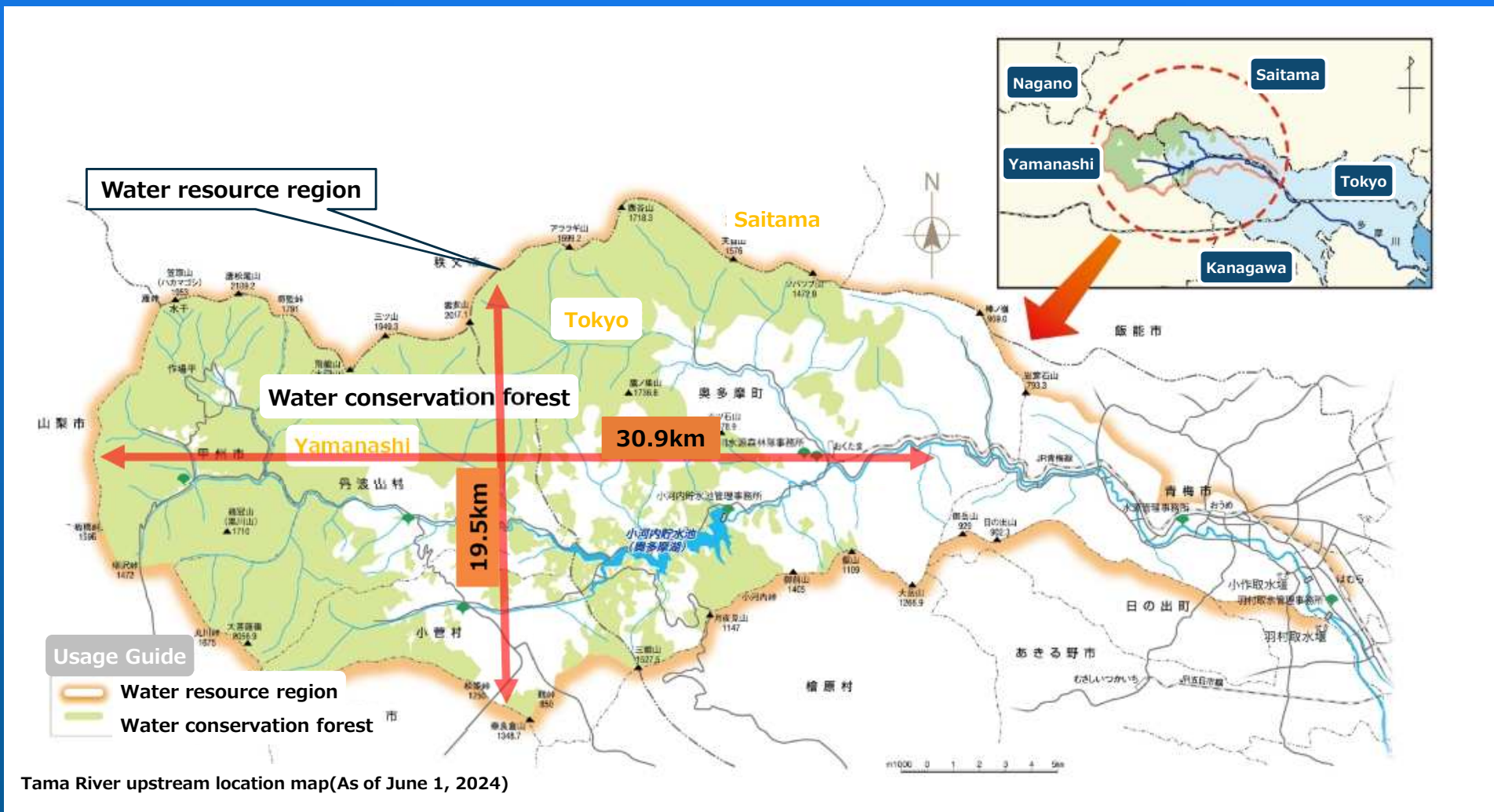
Case1

Water Conservation Forest Protection



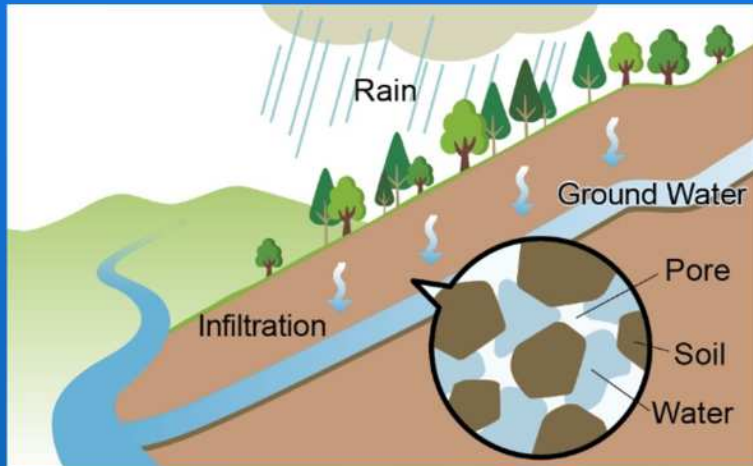
Ogouchi Dam in Tokyo

Expansion of The Water Conservation Forest

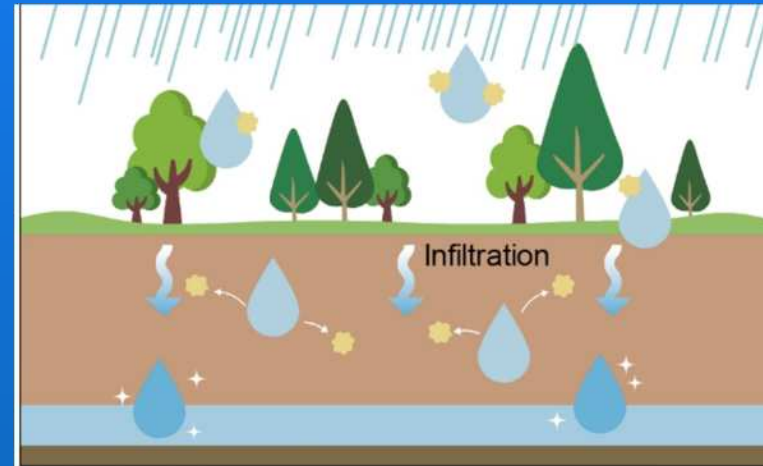


The Various Functions of Water Conservation Forests

a. Groundwater Recharge Function



c. Water Purification Function



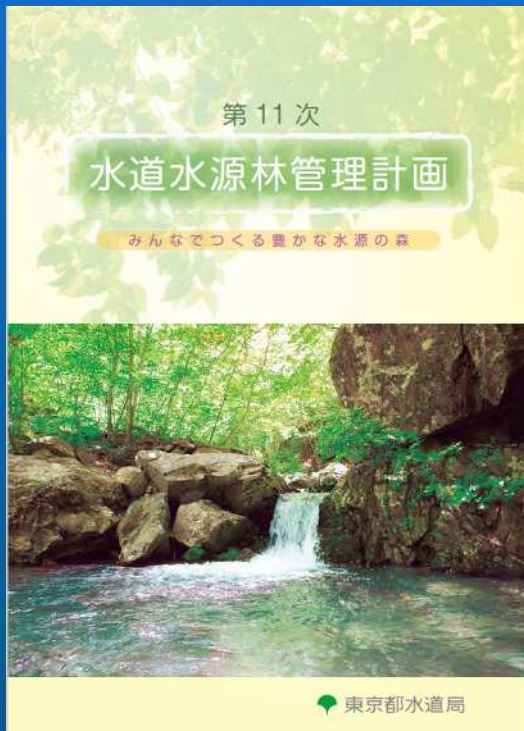
b. Soil Erosion Prevention Function



Management of Water Conservation Forests

Water Conservation Forest Management Plan

- Formulate “Water Forest Management Plan”
- Revise and reestablish plan **every ten years**



Objectives:

- **Proper management** of water conservation forests
 - Secure **a stable amount of river flow**
 - **Preserve** the Ogouchi **Reservoir**
- Pass on a rich natural environment **to future generations**
- Make Tokyo's water conservation forests **popular with the public.**

Specific Initiative, Example (1)

Measures Against Wildlife and Insect Damage

- **Minimize** the impact of **wildlife** and **insect damage**
- **Maintain healthy** water conservation **forests**

Deer damage control

Prevent deer from eating the bark, causing trees to wither and the grass to be eaten away
⇒ Install **deer-proof fences** and **wrapping planted trees** with single-tree nets.



Predation damage by deer



Deer intrusion prevention fence and single tree net

Specific Initiative, Example (2)

Disaster Prevention and Restoration in Mountainous Areas

- Enhance groundwater recharge functions
- Prevent sediment from flowing into reservoirs

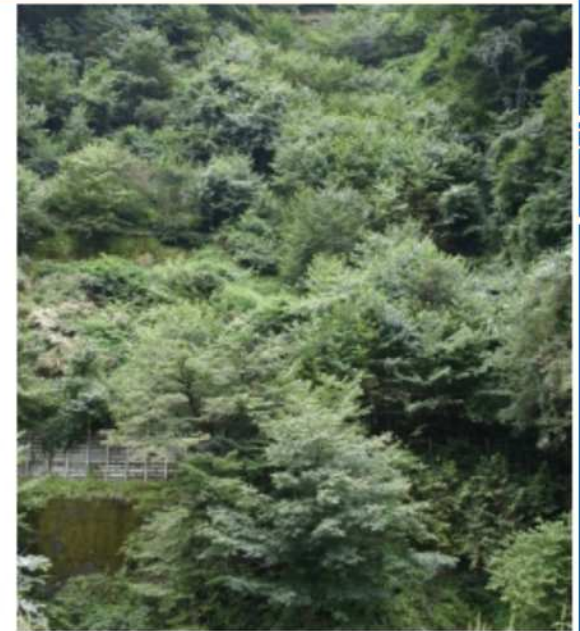
⇒ Install protective structures such as rock fall protection fences and embankments



Before construction



Immediately after construction



10 years after construction

Communication with Diverse Organizations ①

The Tama River Water Resources Forest Team (2002~)

Engage in forest conservation activities in collaboration with volunteers



Forest thinning work by volunteers



Communication with Diverse Organizations②

Collaborative Forest Conservation with Companies

"Corporate Sponsorship System"

- Financial contribution for the conservation of water resource areas

"Tokyo Waterworks—Corporate Forests (Naming Rights)"

- Approx. \$ 3,500 per hectare per year
- Jointly promoting forest conservation with companies that have signed agreements
- Allow employees to participate in forest conservation activities



Supporting corporate activities



Thinning work experience

Case 2

Preservation of the Tamagawajosui Headrace

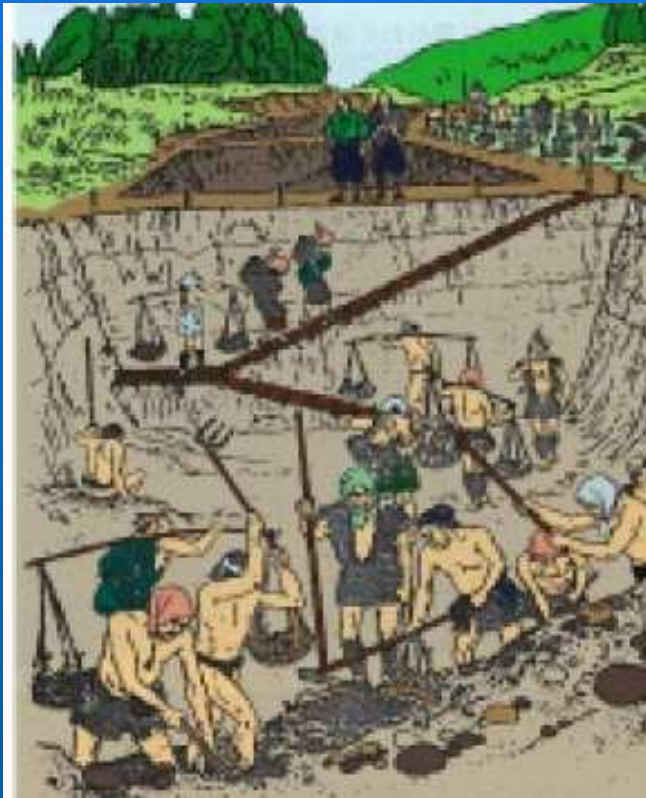


Illustration of the Tamagawajosui
Construction 400 Years Ago



Near Koganei in the Meiji era (1868-1912)

Maintenance and Management of the Tamagawajosui Headrace



Upper stream section:
Approx. 12 km
(Raw water conveyance section)

Mid stream Section:
Approx. 18 km
(Clean Stream Revival Section)

Down stream Section:
Approx. 13 km
(Drainage Section)

Total Length: Approx. 43 km (from Hamura to Yotsuya Okido)

Impact of Typhoons and Fallen Trees

© Examples of Fallen Trees Due to Typhoons



Fallen trees leaning on power lines, causing power outages



Fallen trees damaging fences on private property

Examples of Slope Reinforcement Projects

◆Ogawa Bridge Downstream Right Bank (South Side) / Kodaira City

【Before the work】



【After the work】



【Present Condition】



◆Wakakusa Bridge Downstream Right Bank (South Side) / Mitaka City

【Before the work】



【After the work】



【Present Condition】



Measures Against Pest Infestation (Oak Trees)

Oak trees

- Fungal infections spread by insects
- Leading to an increase in tree mortality

⇒ Need to **prevent the spread of infection** into waterways and nearby parks



【Oak Trees caused by pest infestations】

To **prevent the spread of infection**

⇒ Applying a resin-based chemical to the base of the tree

The goal was to prevent the spread of infections and protect the trees



【Work in progress】

Joint Workshop with Related Departments

- Share information on the challenges and significance of preserving Tamagawajosui with participants.
- Visit Higashimurayama Water Purification Plant, which uses raw water drawn from Tamagawajosui
- ➡ Improve the **motivation** and **quality of the work** done, and foster a sense of unity as a member of the Tokyo Water Group

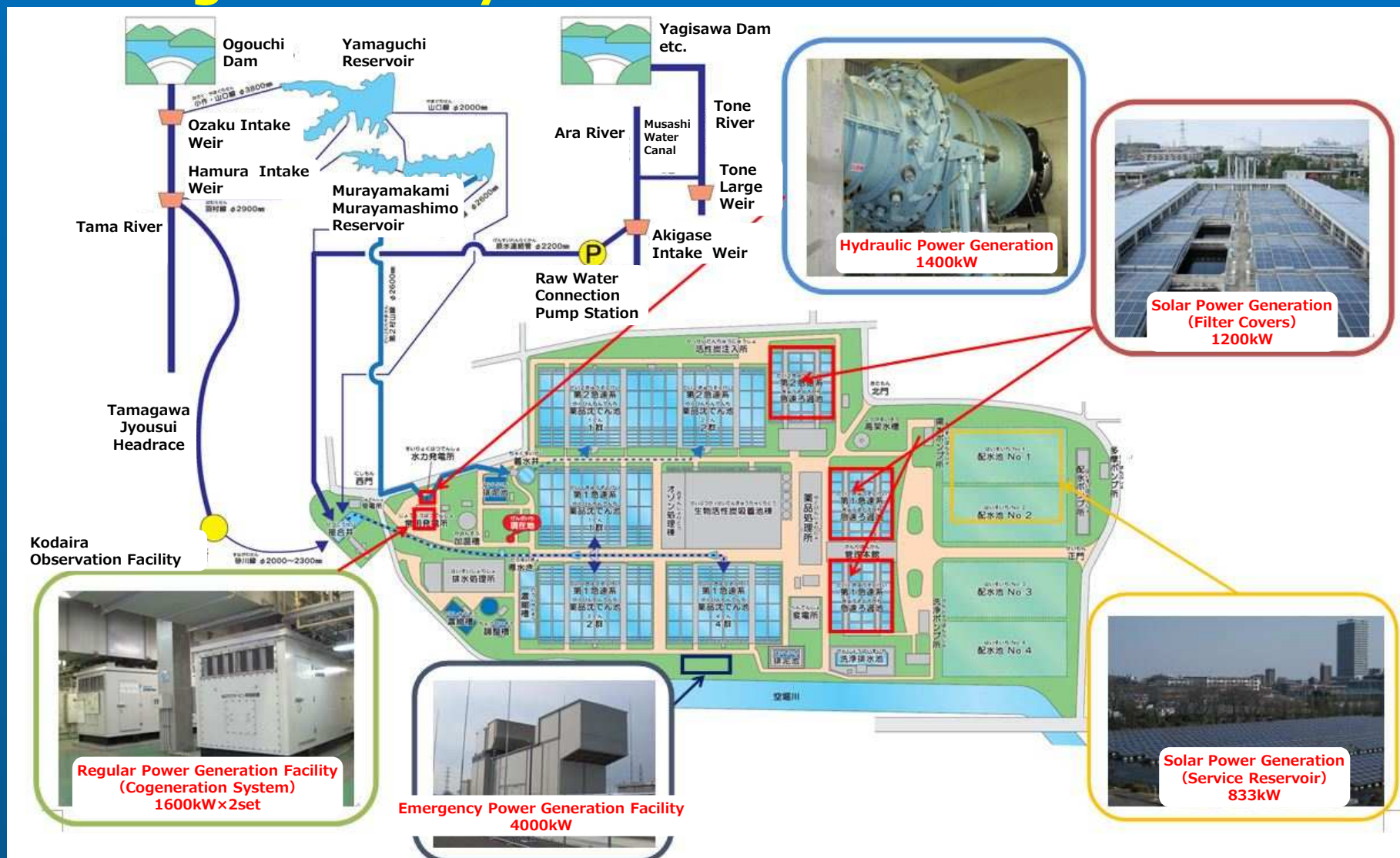
【Presentation at the Workshop】



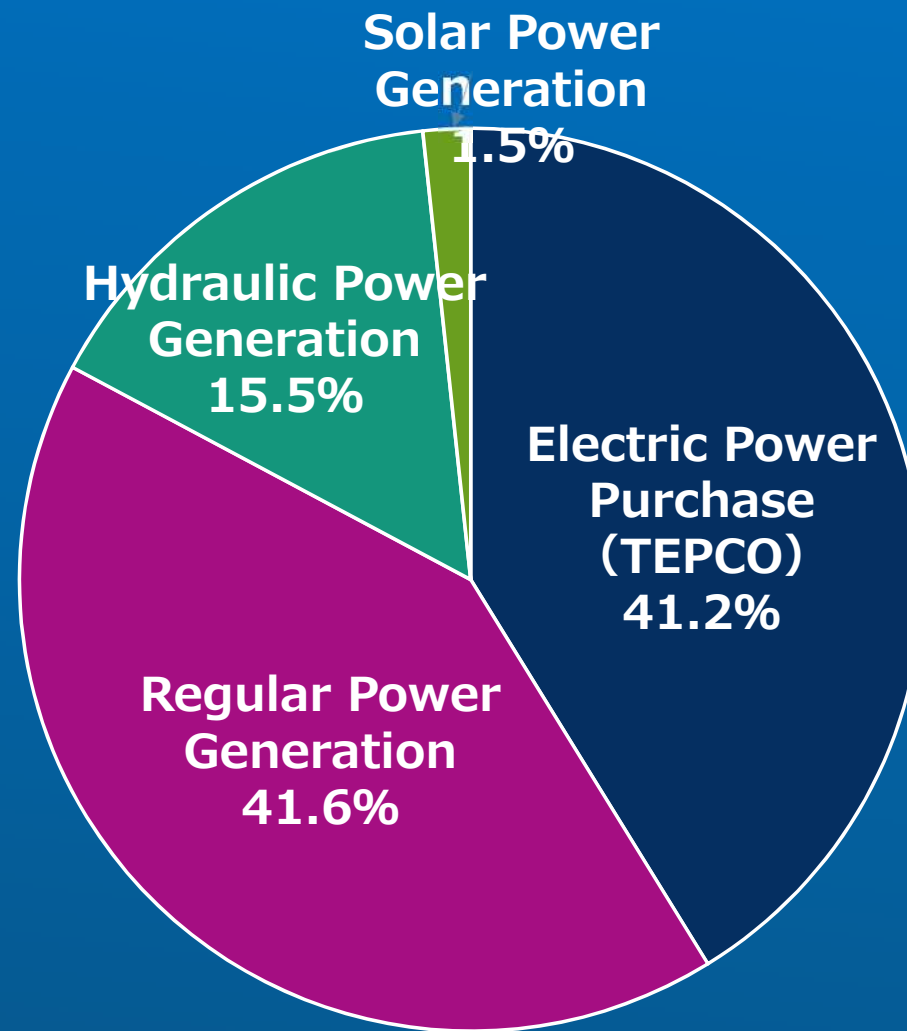
【Site visit】



Case3 Initiatives of Environment and Efficient Energy Use in Higashimurayama Purification Plant



Power Usage Breakdown in Higashimurayama PPP (2021)



Thank you for your attention



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