

# About the final thematic workshop on water allocation and water rights

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## Introduction ~ General Info

- Venue: Saitama, Japan
- 4<sup>th</sup> host organization:  
Head Quarter, Japan Water Agency (JWA)
- Date: 23<sup>rd</sup> – 26<sup>th</sup>, January, 2007
- Sessions for 2.5 days, Field trips for 1.5 days

# Introduction ~ What is the thematic workshop?

- Focused and specific theme
- Small scale & profound discussion
- Improvement from the pragmatic and practical viewpoint
- Simple style
- Series of workshops (4 times)

# Summary of the former workshops & discussions

- 1<sup>st</sup> workshop : Stage of grasping issues
- 2<sup>nd</sup> workshop : Stage of causal analysis & proposal
- 3<sup>rd</sup> workshop : Stage of review

# About Sessions

- Session 2 on Day 2 (Morning) and Day 4
- We mean to focus on the presentation on the final action program.
- Presentation time will be 30 minutes; Q&A and discussion time will be 30 minutes
- After that, session for revision (Session 3) will be held (on Day 4) for about 1 hour

# About Lecture

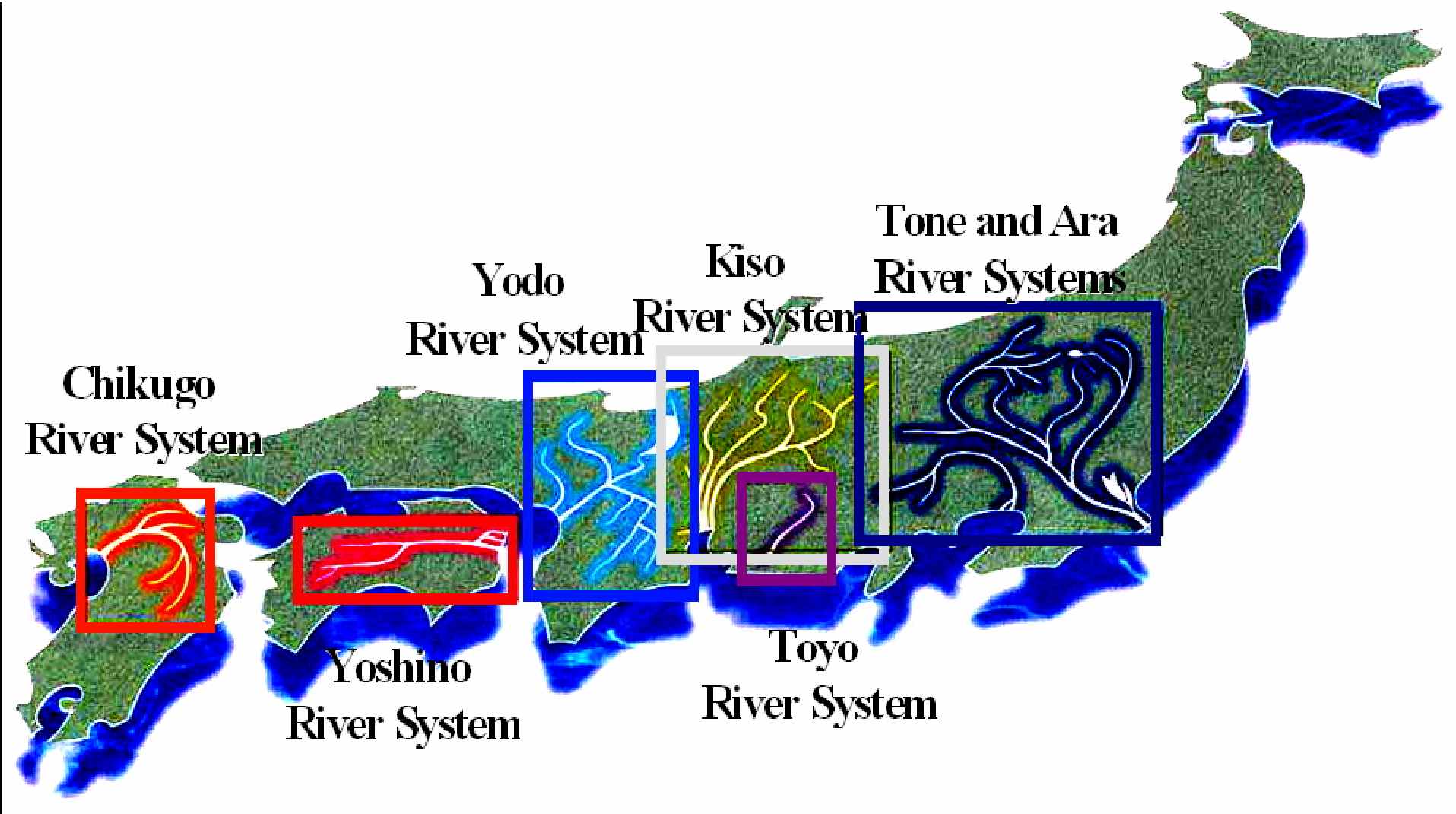
- Given by Professor Tsuneaki Yoshida, University of Tokyo
- Date: 23<sup>rd</sup> Jan, PM
- Venue: Ministry of Land, Infrastructure and Transport (MLIT)
- Theme: Case Study on Improving Water Issues in Japan, Taking Aichi Canal as an Example

# About Field Trips

- 24<sup>th</sup> Jan (Wed) – PM, Tone Canal
- 25<sup>th</sup> Jan (Thu) – AM, Kasumigaura Lake  
PM, Chiba Canal



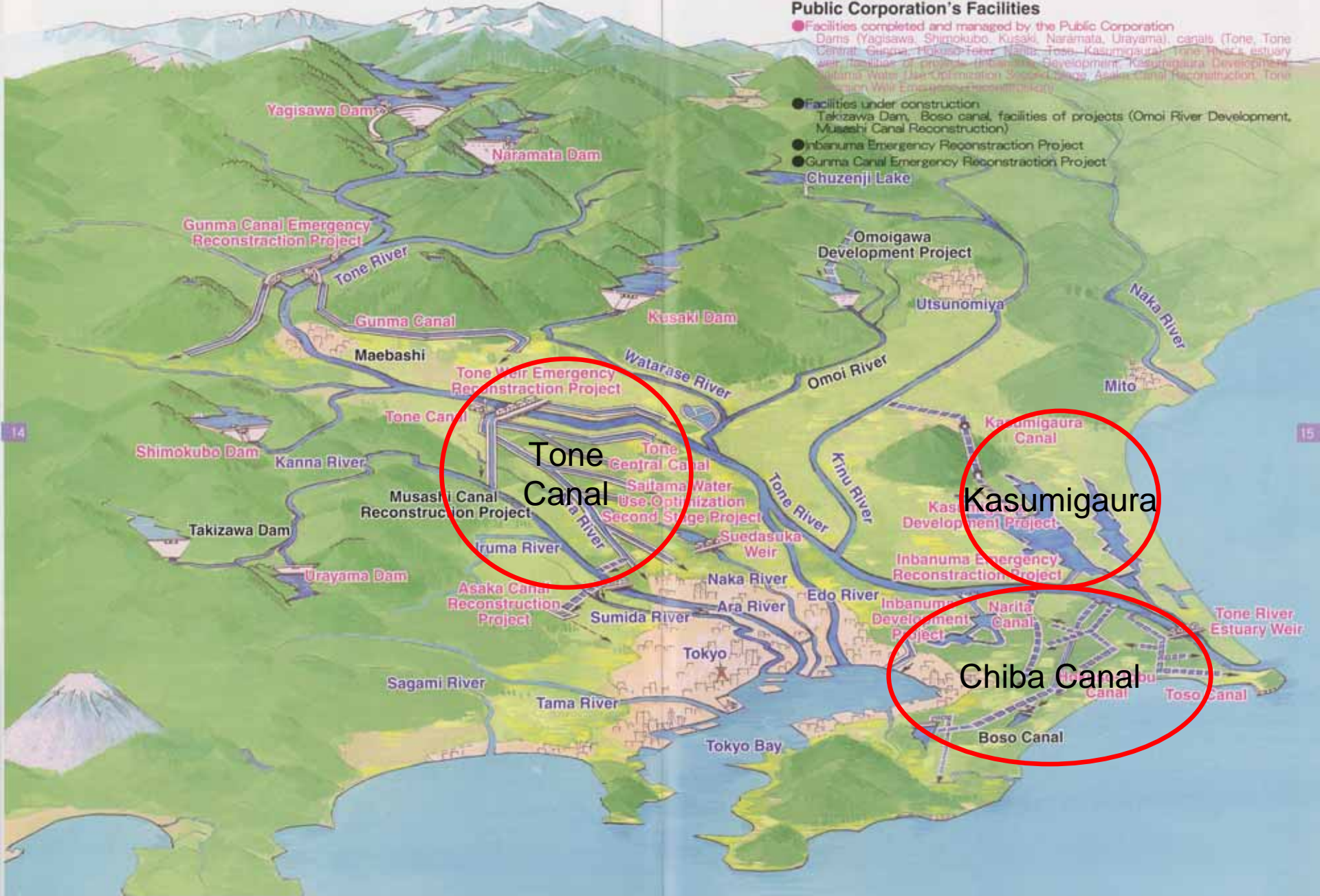
# Field Trips



### Outline of Development

#### Public Corporation's Facilities

- Facilities completed and managed by the Public Corporation  
Dams (Yagisawa, Shimokubo, Kusaki, Narāmata, Urayama), canals (Tone, Tone Central, Gunma, Hoko, Tone, Naka, Toso, Kasumigaura), Tone River's estuary weir, facilities of projects (Inbanuma Development, Kasumigaura Development, Saitama Water Use Optimization Second Stage, Asaka Canal Reconstruction, Tone Estuary Weir Emergency Reconstruction Project)
  - Facilities under construction  
Takizawa Dam, Boso canal, facilities of projects (Omoi River Development, Musashi Canal Reconstruction)
  - Inbanuma Emergency Reconstruction Project
  - Gunma Canal Emergency Reconstruction Project
- Chuzenji Lake



Tone Canal

Kasumigaura

Chiba Canal

# Field Trips – Tone Canal

- Representative canal project for water-utilization in Japan, constructed in 1963-1968 (around when holding Tokyo Olympic), and have been managed from 1968 by JWA.
- Comprehensive project for water-utilization (for multiple water usage)
- Making great contribution to supplying municipal water in metro Tokyo and Saitama as well as irrigation water
- This project includes water re-allocation (transfer from irrigation water to drinking water).
- As of December 2005, a cumulative total of 70 million cubic meters of water had been obtained from Tone River.

# Field Trips – Tone Canal

- The purpose of the project
  - 1) To provide drinking and industrial water for Tokyo and Saitama Prefectures
  - 2) To provide irrigation water to 29,000 ha land situated in the middle reaches of the Tone River system
  - 3) To provide water for purging the Sumida River temporarily

# Field Trips – Kasumigaura Lake

- Second biggest lake in Japan
- Located in Ibaraki Prefecture, Kanto District
- Lake development project had been carried out by the Ministry of Construction (MOC) and the Water Resources Development Public Corporation (WARDEC) (1968-1996)
- The construction works includes lakeshore bank construction, inflow river works, and pipeline installation between the Lake and the Tone River.

# Field Trips – Kasumigaura Lake

Lake		
Lake area	approx. 220km <sup>2</sup>	Nishiura 172km <sup>2</sup> , Kitaura 36km <sup>2</sup> Hitachi-Tone River, etc 12km <sup>2</sup>
Lake coast line	approx. 252km	Nishiura 122km, Kitaura 75km Hitachi-Tone River, etc 55km
Lake capacity	approx. 850 million m <sup>3</sup>	
Depest point	7m	Avarage depth 4m
Situation of the catchment area		
Catchment Area	2,157km <sup>2</sup>	Accounts for about 1/3 of the total 6,090 km <sup>2</sup> area of the Ibaraki Prefecture
Municipalities in catchment area	24 municipalities	Ibaraki Pref: 17 cities, 4 towns and 1 villege Chiba Pref: 1 city, Tochigi Pref: 1 town
Municipalities around lake	13 municipalities	Ibaraki Pref: 10 cities, 1 towns and 1 villege Chiba Pref: 1 city
Avarage annual precipitation	1,147mm	Avarage precipitation from 1996 to 2005

# Field Trips – Kasumigaura Lake

- The purpose of the project
  1. Flood control
  2. Irrigation water for Ibaraki and Chiba Prefecture
  3. Drinking water for Ibaraki, Chiba, and Tokyo Prefecture
  4. Industrial water for Ibaraki and Chiba Prefecture

# Field Trips – Chiba Canal

- Visit to Inba-pond (part of the Chiba Canal) and its beneficiary areas
- The project contributes to water utilization as well as flood control
- Discussion session will be held with the member of the Inba-pond Land Improvement District (LID)
- Suffering from lack of budget for facility management, so the work office has made some efforts in facility management to deal with the budget lacking.
- Effort for improving pond water quality



# Field Trips – Chiba Canal

- The purpose of the project
  1. Drainage of inner water
  2. Irrigation water for Chiba Prefecture
  3. Drinking water for Chiba Prefecture
  4. Industrial water Chiba Prefecture

# What is Land Improvement District (LID) ?

- LID is a kind of Water User Association (WUA) , which is stipulated by the law (Land Improvement Act).
- LIDs are organizations which are composed of farmers through managing irrigation water in the relevant region.
- LIDs have a function to manage their canal systems to convey irrigation water to each farmer.
- Concerning the JWA's irrigation facilities, LIDs themselves are often main water users.
- Concerning the JWA's irrigation facilities, JWA often manages only main canals and the management of secondary canals often entrusted with LIDs concerned.
- JWA manages its canal systems in collaboration with water users including LIDs.