

Lake Kasumigaura Management Project



The objectives of Lake Kasumigaura Management project are flood control and water supply. The project mitigates the flood disaster around the lake by dikes, pump stations and gates, as well as supplying irrigation, domestic water and industrial water to Ibaraki Prefecture, Tokyo and Chiba

Main Works at Lake Kasumigaura in 2006



Hitagawa Barrage

Integrated Management of Lake

JWA consigns Hitachi Barrage operation, Tone Pump Station operation, dike patrol, water quality survey and hydrological data collection to Ministry of Land, Infrastructure and Transport (MLIT) for the project efficiency.



Dike Patrol



Tone Pump Station

2006 budget: 593 million JPY



survey of water



Shin-Tsukisu Lock Gate and Pump Station

Facility Management of Lake Kasumigaura Development Project

Tonegawa-karyu Integrated Water Resources Management Office engages in the operation and maintenance, and inspection of the facilities, to maintain normal water level of inflowing rivers--Shintone, Yokotone and Yodaura rivers as it was before the project, by operating to prevent impact by changes in the lake water level due to the facility development project.

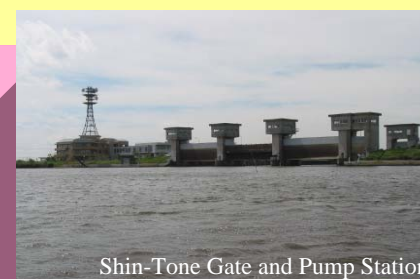
Tonegawa-karyu Integrated Water Resources Management Office is also operating and managing 8 gates installed at each river to avoid backflow from rising water of lake.

Others operation are to dredge



Maintenance dredging

2006 budget: 502 million JPY



Shin-Tone Gate and Pump Station



Periodic inspection



Aquatic animal survey

Hydrological observation and Environmental survey in Lake Kasumigaura

Besides observing meteorology, hydrology to operate of gates and pump stations, as well as monitoring water quality, environmental investigations on wild birds, vegetation around lakeside has been promoting in order to achieve more effective management.



Avian survey



Observation data management center

2006 budget: 120 million JPY



Kamayaoki water quality observation station

Kasumigaura Fureai Land

The Kasumigaura Fureai Land located in Ibaraki Prefecture has facilities including a 60 meter-high tower and the Water Science Museum where visitors can learn the importance of water resources development and water



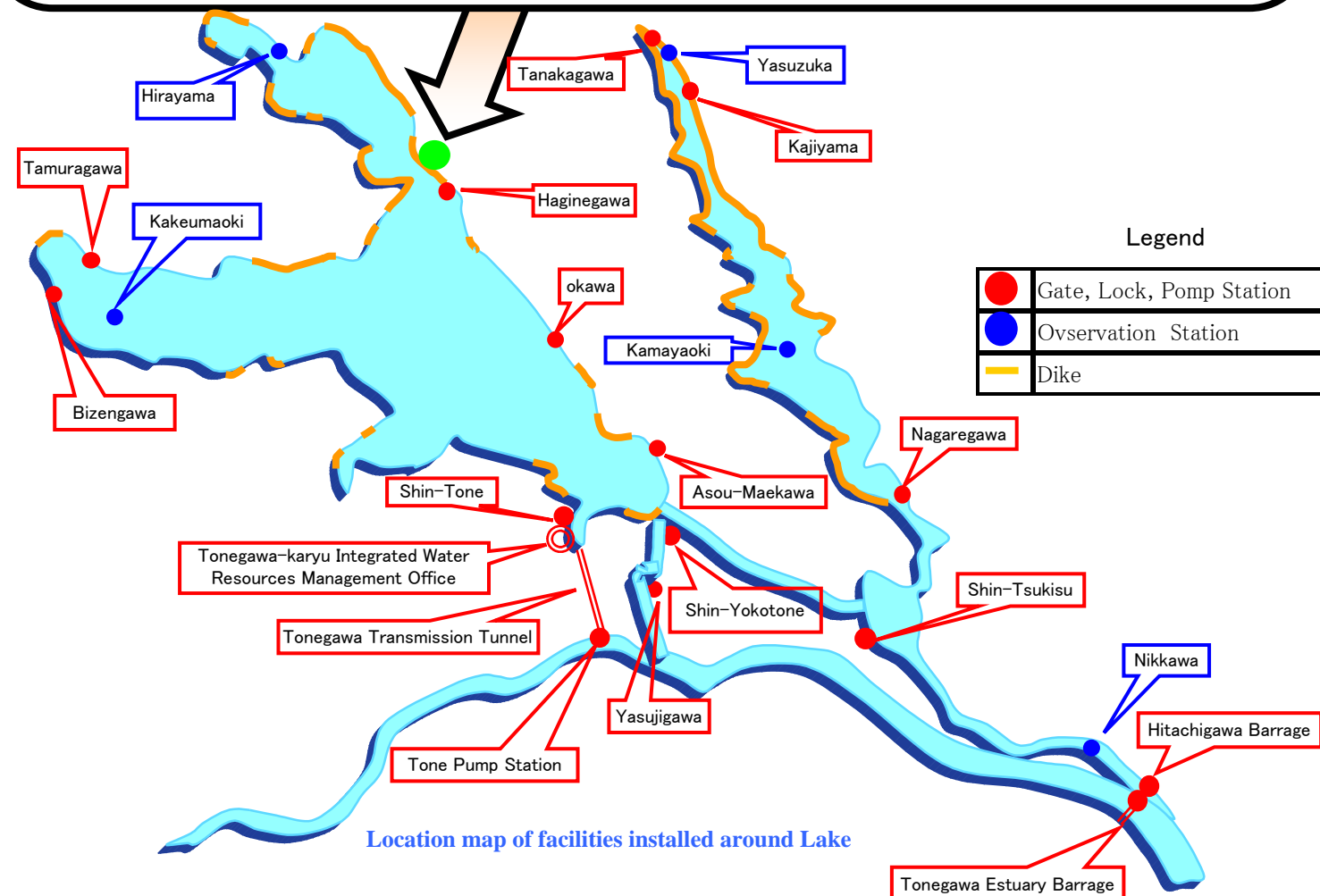
Water Science Museum



Visitors enjoying watching breeding fireflies



Mizumarukun



Preparedness for disasters prevention in Lake Kasumigaura Integrated Water Resources Management Office

1. In case of flood disasters

Disaster prevention measures for rising water level

The warning will be issued when water level exceeds the high water level determined by each areas at the time of typhoon or heavy rain, which are measured at water level observation stations below (Dejima, Shirahama, Yodaura,



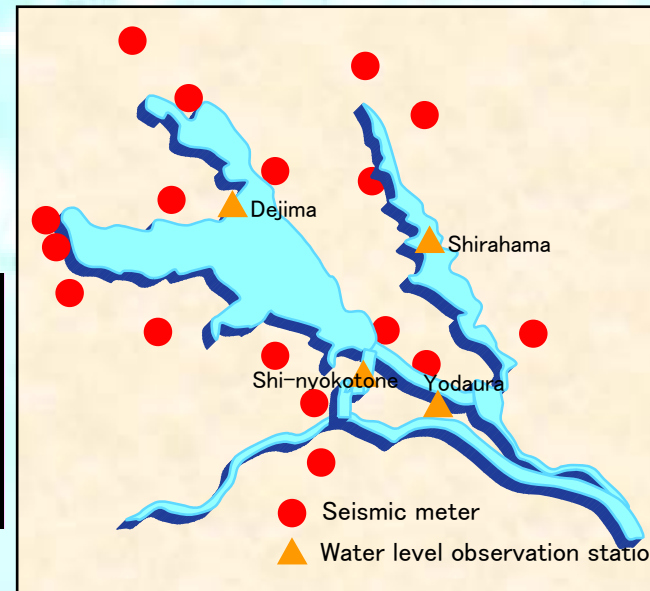
	Dejima observation station	Shirahama observation station	Yodaura observation station	Sinnyokotone observation station	Disaster prevention level	Operation
Advisory water level	Y.P.+1.5m	Y.P.+1.5m	Y.P.+0.8m	Y.P.+1.3m	Watching level	Collect meteorological and hydrological data
Warning water level	Y.P.+2.1m	Y.P.+2.1m	Y.P.+1.0m	Y.P.+1.4m	Warning level	Patrol around lake, operate facilities
Bankful water level	Y.P.+2.50m	Y.P.+2.50m	Y.P.+1.4m	Y.P.+1.5m	Urgent level	Patrol around lake, operate facilities

2. In case of Earthquake

Prevention measures for earthquake

The warning will be issued when greather than 4 on JMA seismic intensity scale is announced by the Japan Meteorological Agency (JMA) with seimograph of each observation station around Lake Kasumigaura.

	Disaster prevention level	Operation
Intensity 4	Warning level	Patrol around lake, inspect facilities
Intensity 5	Urgent level	Patrol around lake, inspect facilities
Intensity 6 or more	Emergency level	Patrol around lake, inspect facilities



Disaster Prevention Activities in 2005

Flood

Data and Time	Cause	Disaster prevention level	Number of staff
26 July 9:30am	Typhoon No. 7	Watching level	2 Persons
25 August 4:50pm	Typhoon No. 11	Watching level	2 Persons

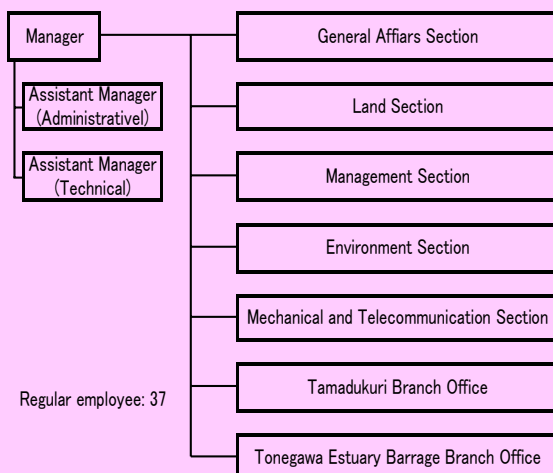
Earthquake

Data and Time	Seismic intensity	Disaster prevention level	Inspection result	Number of staff
11 April 7:22am	5 Lower	Urgent level	Normal	13 Persons
20 June 1:25am	4	Warning level	Normal	4 Persons
23 July 4:35pm	4	Warning level	Normal	12 Persons
16 August 11:46am	4	Warning level	Normal	9 Persons
19 October 8:44pm	5 Lower	Urgent level	Normal	17 Persons

Contact

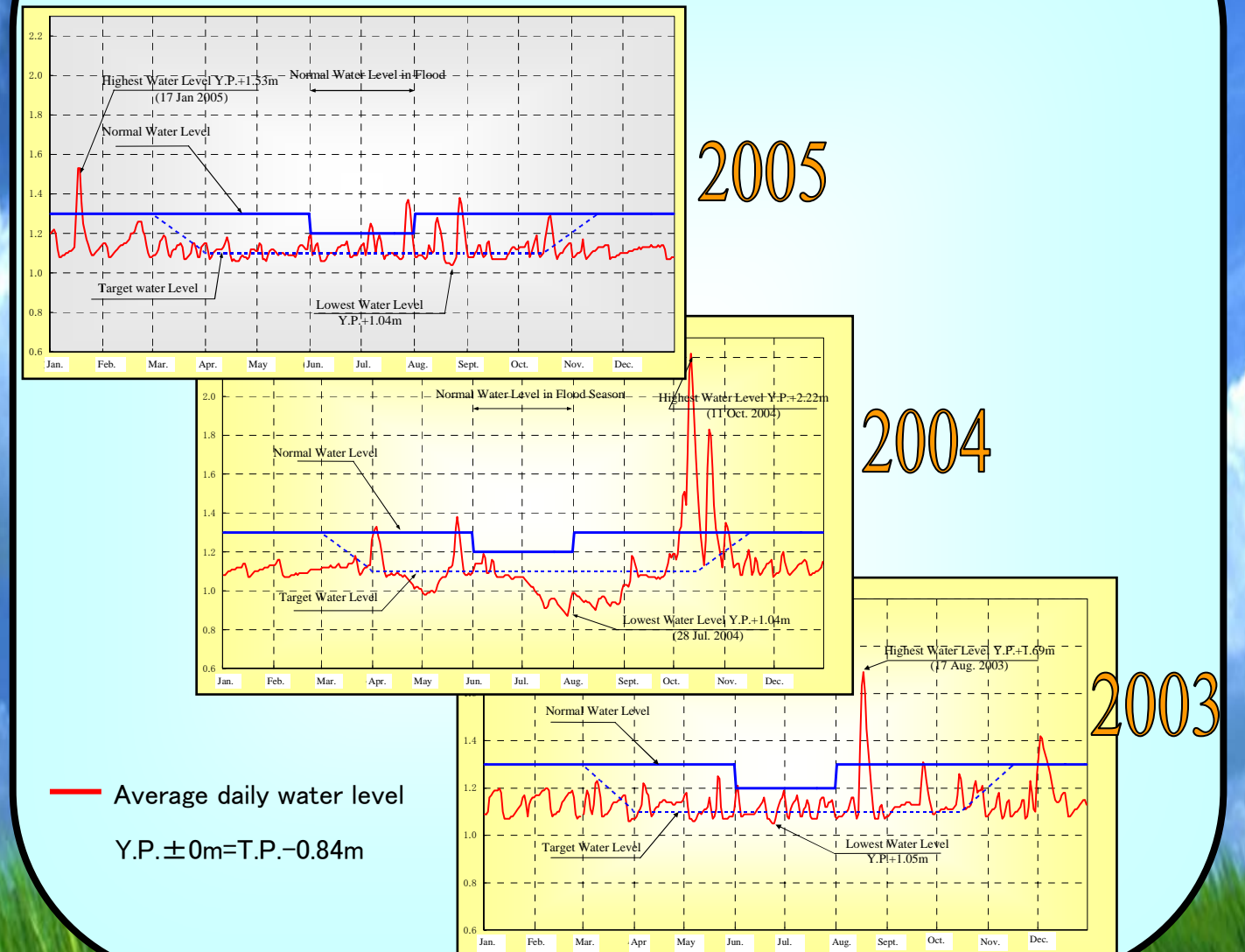
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Organization of Tonegawa-karyu Integrated Water Resources Management Office



Outline of Lake Kasumigaura Management in 2006

Year-Round Water Level in Lake Kasumigaura



Water Supports Wealthy Society



Incorporated Administrative Agency Japan Water Agency

Tonegawa-karyu Integrated Water Resources Management Office