

# The Social Experiment for the Horikawa River Clarification

- Achievement of the Raw Water Transmission
- Survey results by Nagoya city
- Presentation report (World City Water Forum)

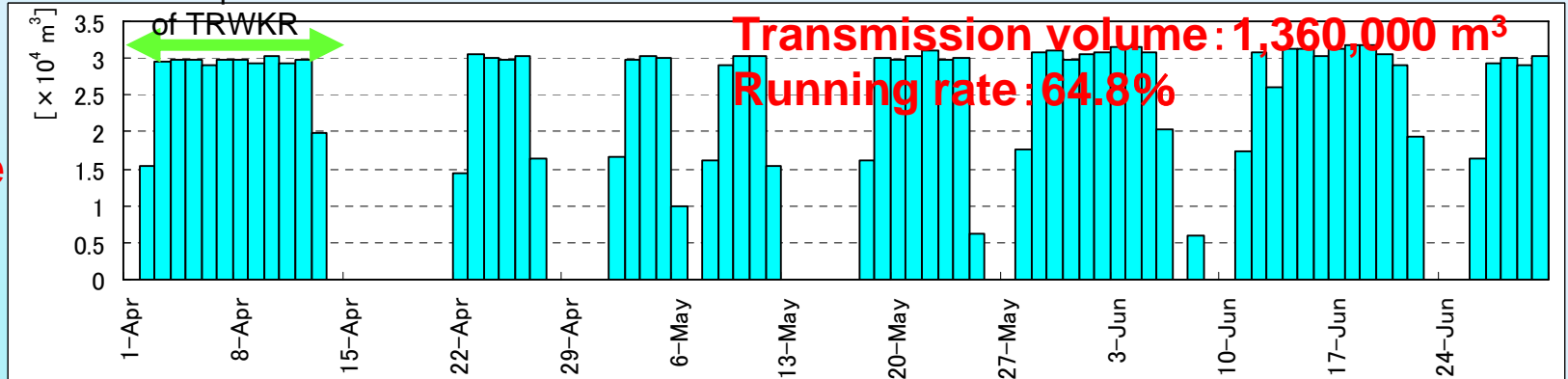
# Results of the Raw Water Transmission from the Kiso River

(As the end of August 2009)

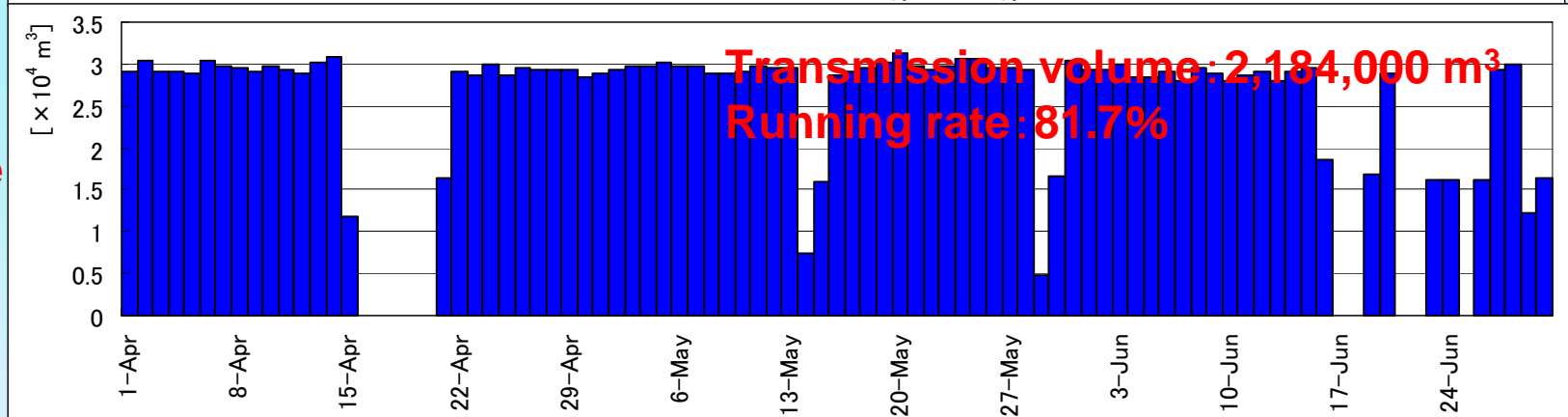
	2007		2008		H20.12.17 ~H21.3.31	2009	Total
	22nd. Apr. - 30th. Jun. 1st Stage	8th. Sep. - 16th. Dec. 2nd Stage	1st. Apr. - 30th. Jun. 3rd Stage	28th. Sep. - 16th. Dec. 4th Stage		1st. Apr. - 30th. Jun. 5th Stage	
Running Hours (hr)	1,081.3	1,807.3	1,784.4	1,135.0	800.5	1,835.0	7,643.0
Down Hours (hr)	586.7	592.8	399.4	785.0	303.5	349.0	2,712.9
Drought (hr)	302.1	0.0	67.0	0.0	151.5	42.0	411.1
Heavy Rain (hr)	284.6	342.3	142.8	0.0	22.0	307.0	1,076.7
Others (hr)	0.0	250.5	189.6	785.0	130.0	0.0	1,225.1
Total Available Hours (hr)	1,668.0	2,400.0	2,183.0	1,920.0	1,104.0	2,184.0	10,355.0
Running Rate (%)	64.8	75.3	81.7	59.1	72.5	84.0	364.9
Volume of Transmitted	1,360,300	2,201,200	2,184,000	1,372,200	989,700	2,240,100	9,357,800.0
Running Days	45.1	75.3	74.4	47.3	33.4	76.5	318.6
Down Days	24.4	24.7	16.6	32.7	12.6	14.5	112.9
Drought	12.6	0.0	2.8	0.0	6.3	1.7	17.1
Heavy Rain	11.8	14.3	6.0	0.0	0.9	12.8	44.9
Others	0.0	10.4	7.9	32.7	5.4	0.0	51.0
Total Available Days	69.5	100.0	91.0	80.0	46.0	91.0	431.5

# Volume of the Raw Water Transmission from the Kiso River

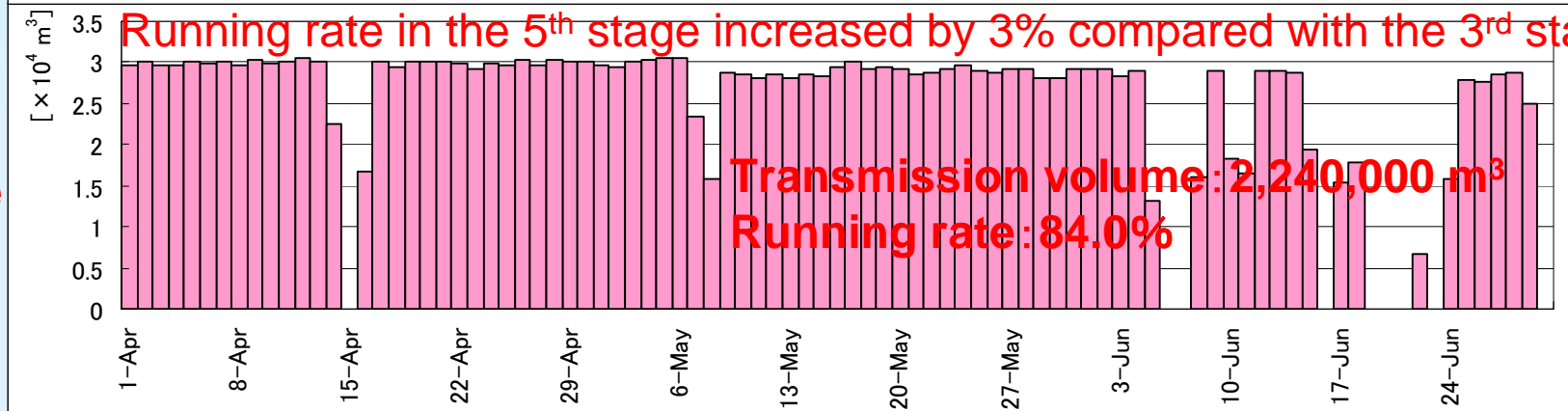
Test period



**1<sup>st</sup> stage  
(2007)**

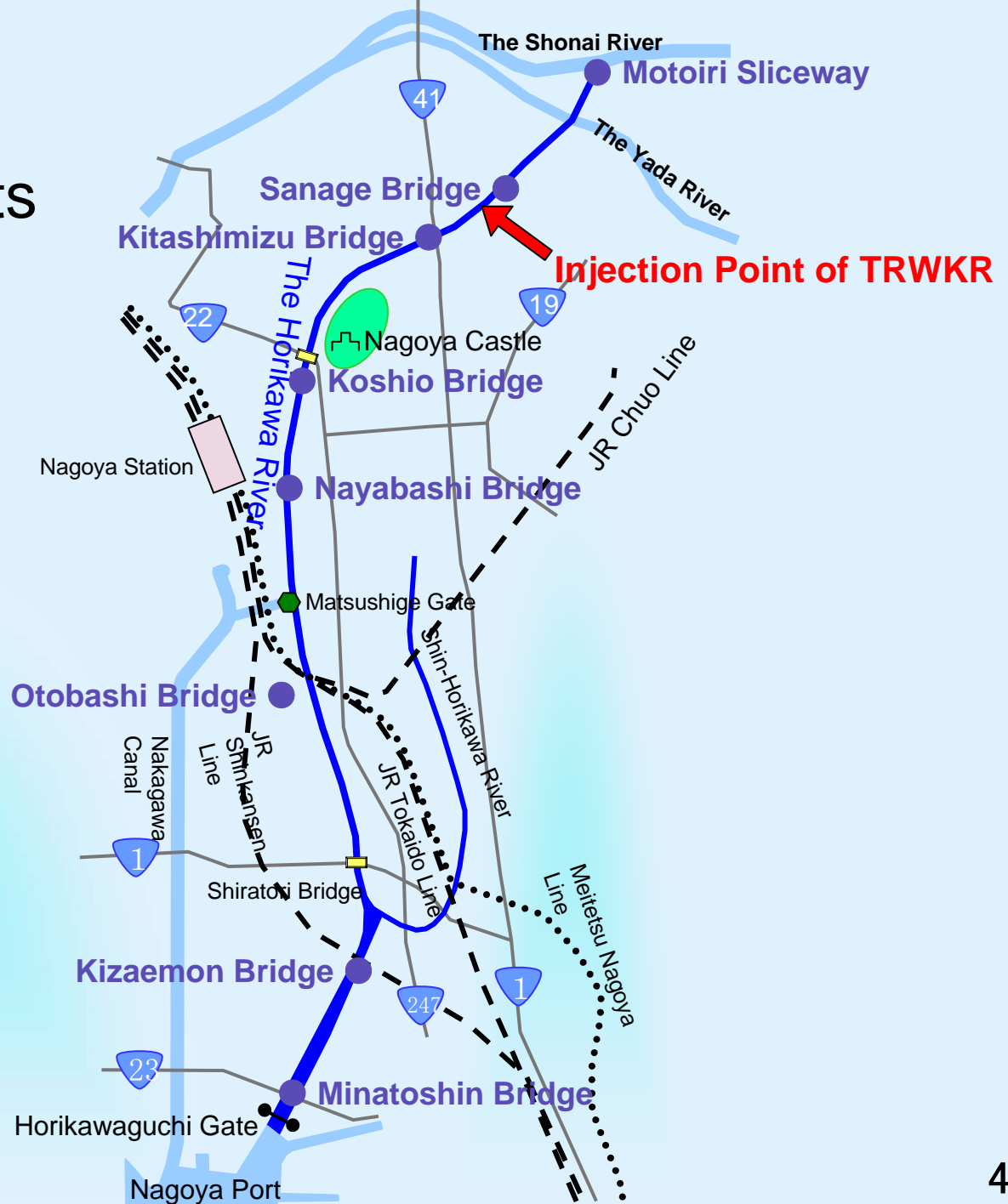


**3<sup>rd</sup> stage  
(2008)**



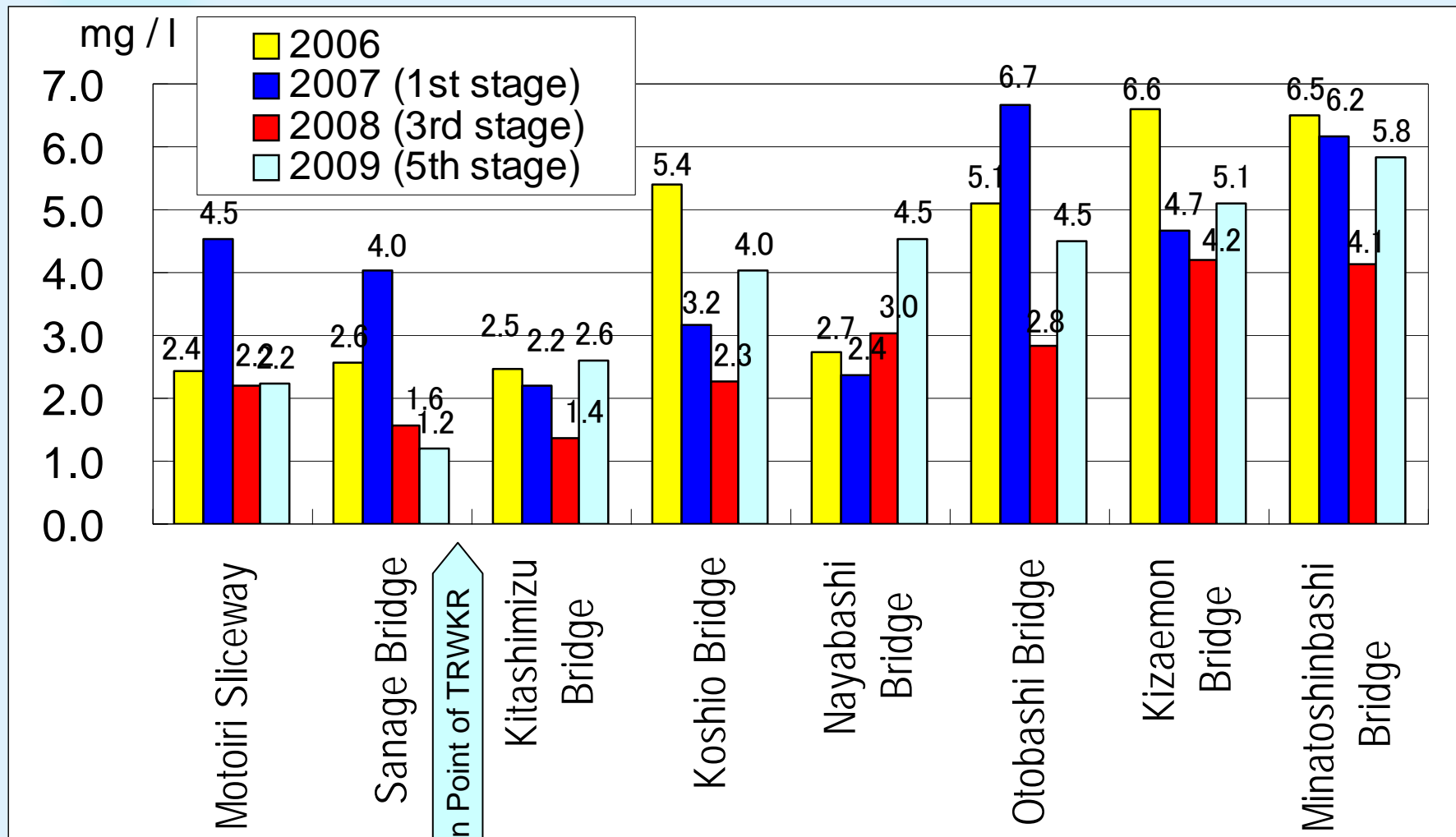
**5<sup>th</sup> stage  
(2009)**

# The Key Investigation Spots of Administration Survey



# Administration Survey

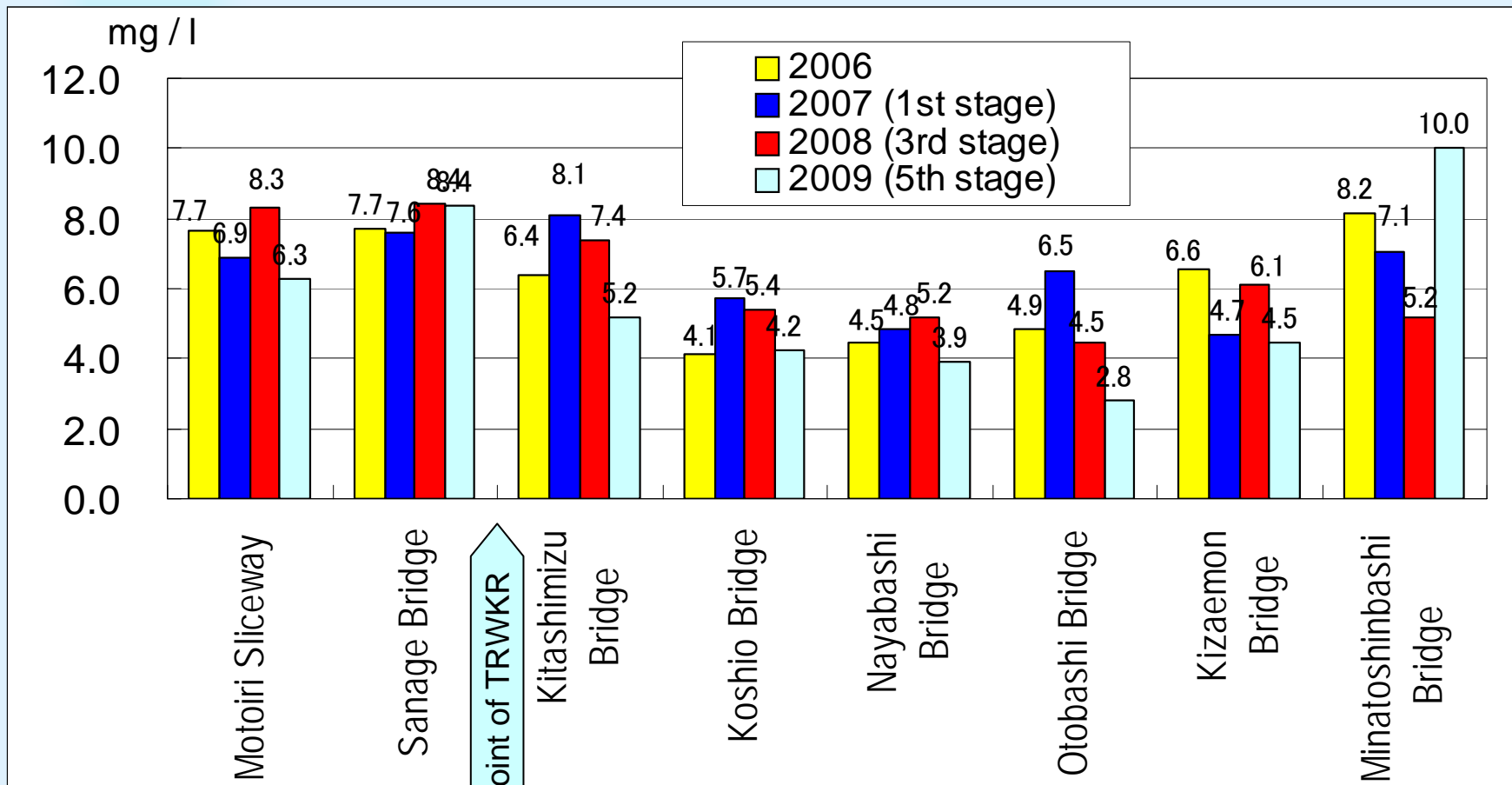
BOD (Average from Apr. to Jun.)



※ The water quality survey was carried out at falling tide during neap tide period.

# Administration Survey

DO (Average from Apr. to Jun. )

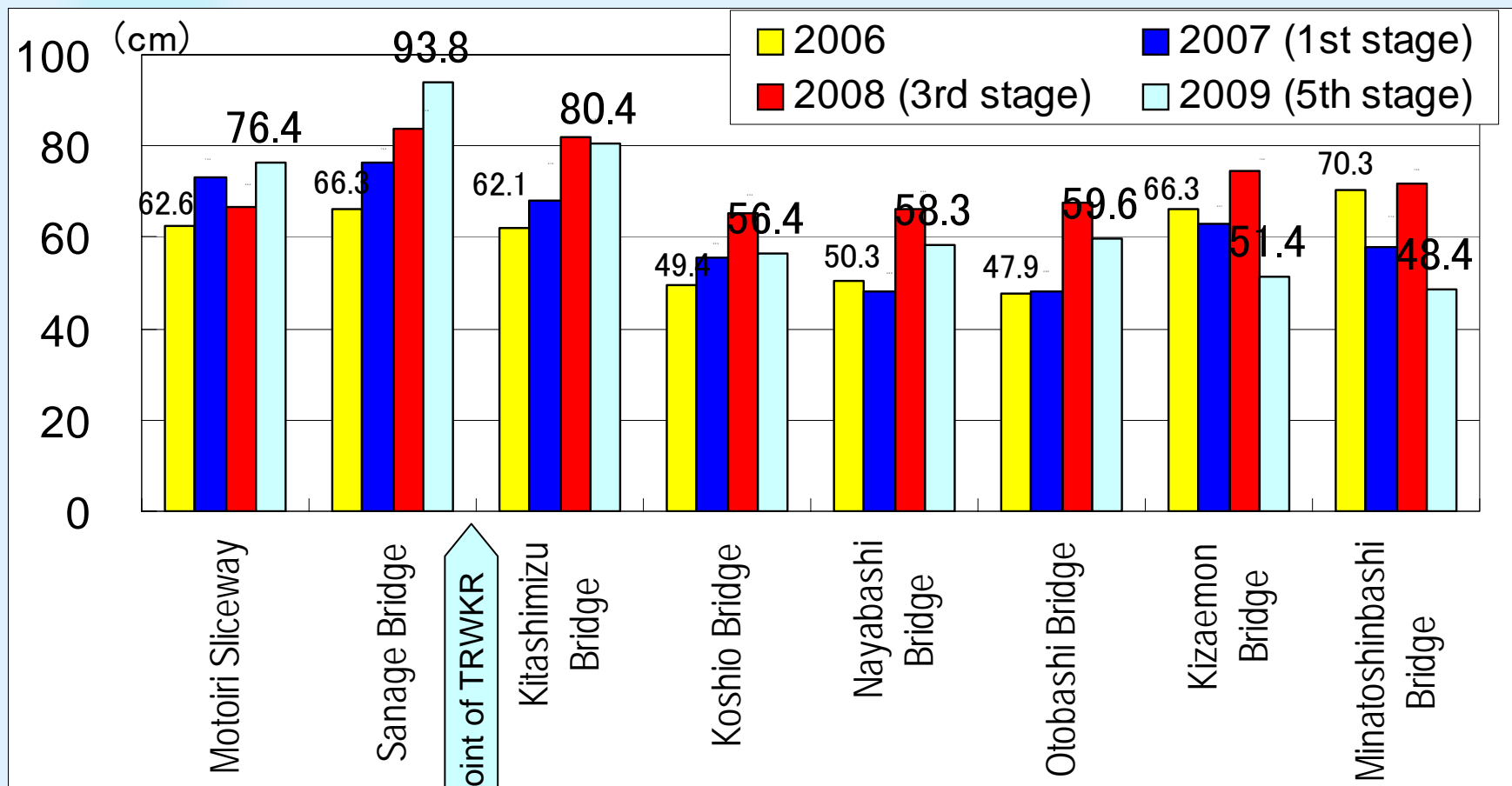


Injection Point of TRWKR

※ The water quality survey was carried out at falling tide during neap tide period.

# Administration Survey

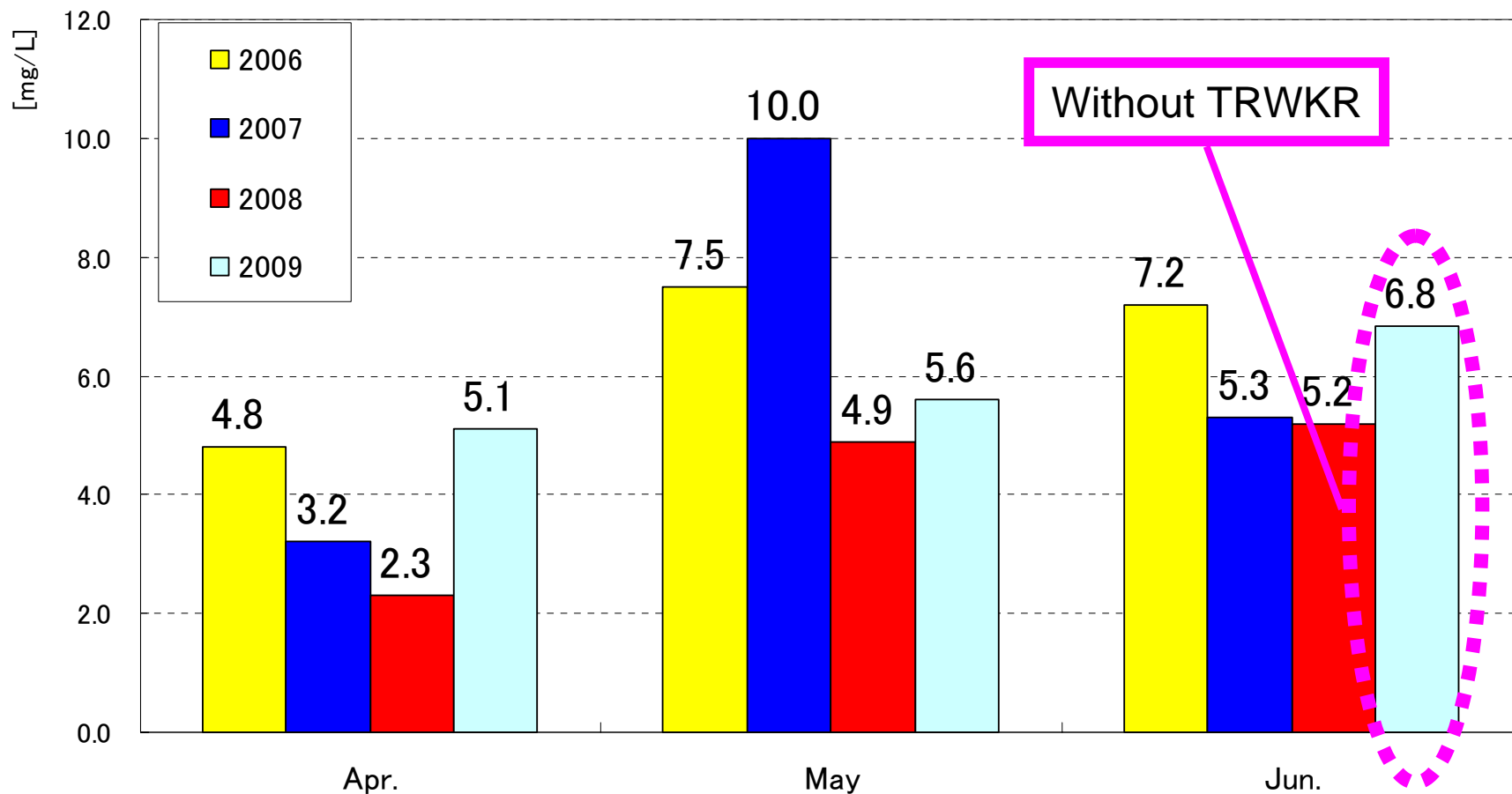
Transparency (Average from Apr. to Jun. )



※ The water quality survey was carried out at falling tide during neap tide period.

# Administration Survey

## BOD at the Koshio Bridge

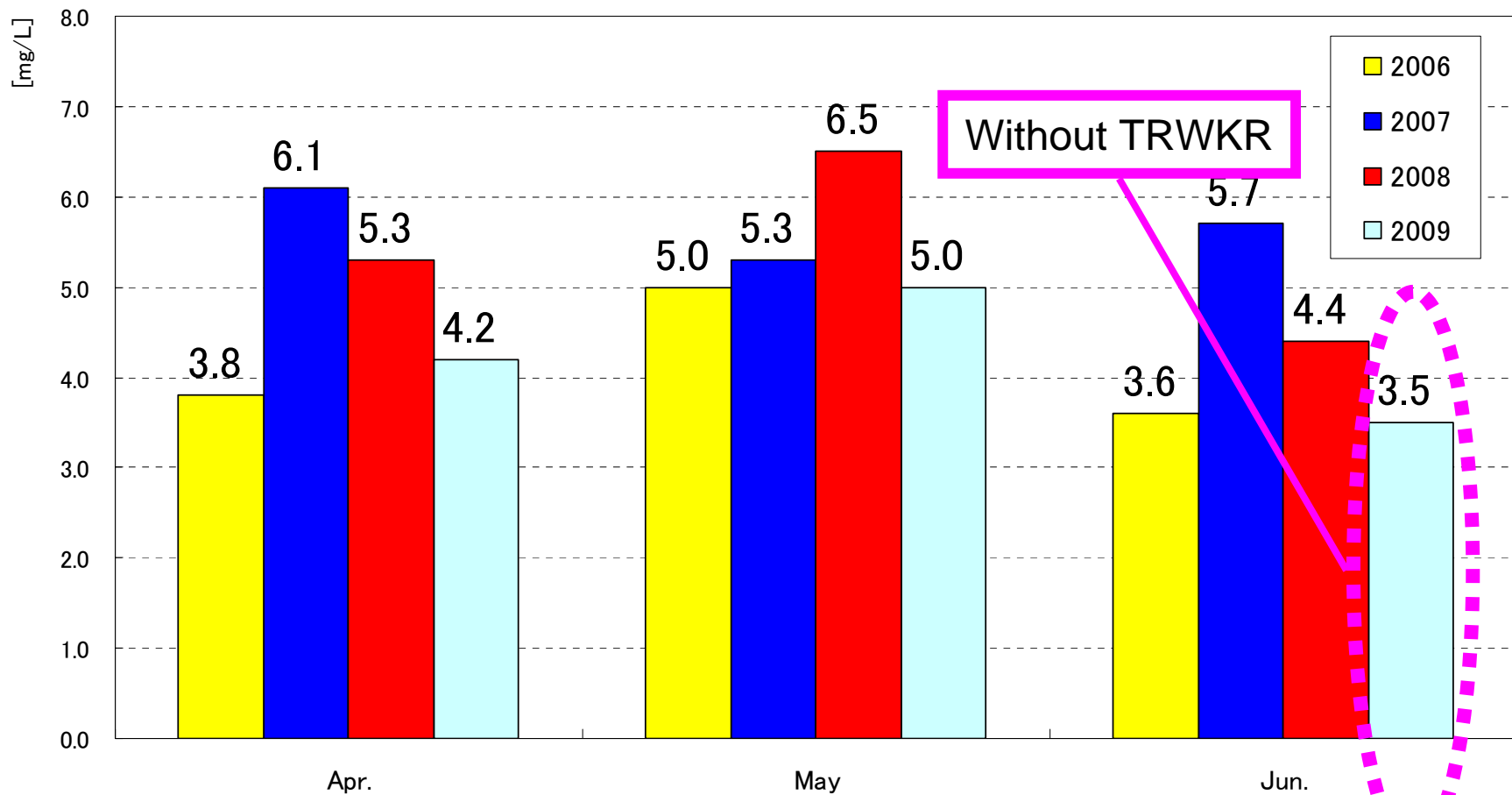


※The water quality survey was carried out at falling tide during neap tide period.



# Administration Survey

## DO at Koshio Bridge



※ The water quality survey was carried out at falling tide during neap tide period.

# Outline of World City Water Forum

## Date

Aug. 18<sup>th</sup> (Thu) ~ Aug. 21<sup>st</sup> (Fri) 2009

## Place

South Korea    Incheon City  
Songdo Convention Center

## Theme

Innovation and Harmony  
of Water and City



## Participants

Professionals and researchers of Water  
About 50 countries in the world, 5000 people

# Outline of World City Water Forum

## Title: Horikawa-Sennin Chosatai (Horikawa River Thousand-Citizen Survey Network 2010)

### Session 3 Cases Studies of Urban River Rehabilitation

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<i>Iwao ARASEKI</i>	
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TC-F3-3 Trend in Urban Stream Restoration in Asia and Development of International Network .....	618
for Knowledge and Technical Information Exchange	
<i>Sayumi NUMATA, Junzo SAGO, Masafumi ITO, Michiya TANNAI, Akira WADA, Kazumasa ITO</i>	
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<i>Hyo Seop WOO, Han Tae KIM, Sang Jun CHUNG</i>	

# Glossary

## BOD (Biochemical Oxygen Demand)

BOD describes the amount of oxygen consumed when microbes degrade organic compounds in water. It is determined by the amount of organic compounds in drainage water flowing in the river measured by activity of microbes. It is commonly used to show the level of organic pollution in the river.

## DO (Dissolved Oxygen)

DO means dissolved oxygen in water. It is necessary for water creatures to live and is also necessary for self-purification of the river and lakes. When drainage water flow in and pollute the water, DO is consumed to degrade organic compounds and is decreased. On the other hand, photosynthesis by algae increase DO. If it shows less than 3mg/L, fishes hardly survive.