Measures to make Horikawa River Limpid

Implemented by Nagoya City

February 25th, 2012

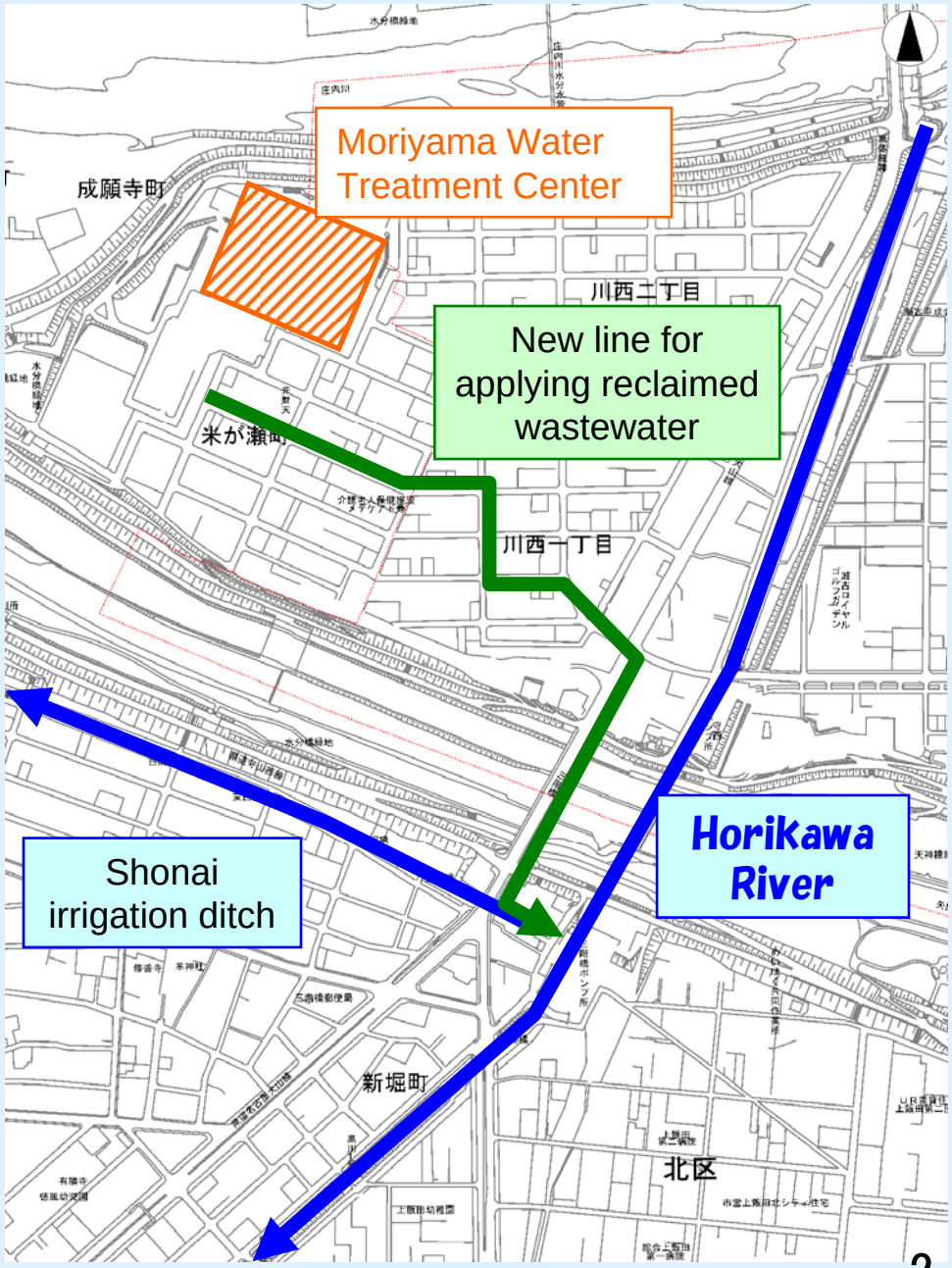
Nagoya City Greenification & Public Works Bureau
Rivers Department　River planning Division

Reserve additional water resource

◆Apply reclaimed wastewater

Conduct 4,000m3 water in a day (maximum) into Horikawa River which is reclaimed from wastewater by membrane filtration at Moriyama Water Treatment Center

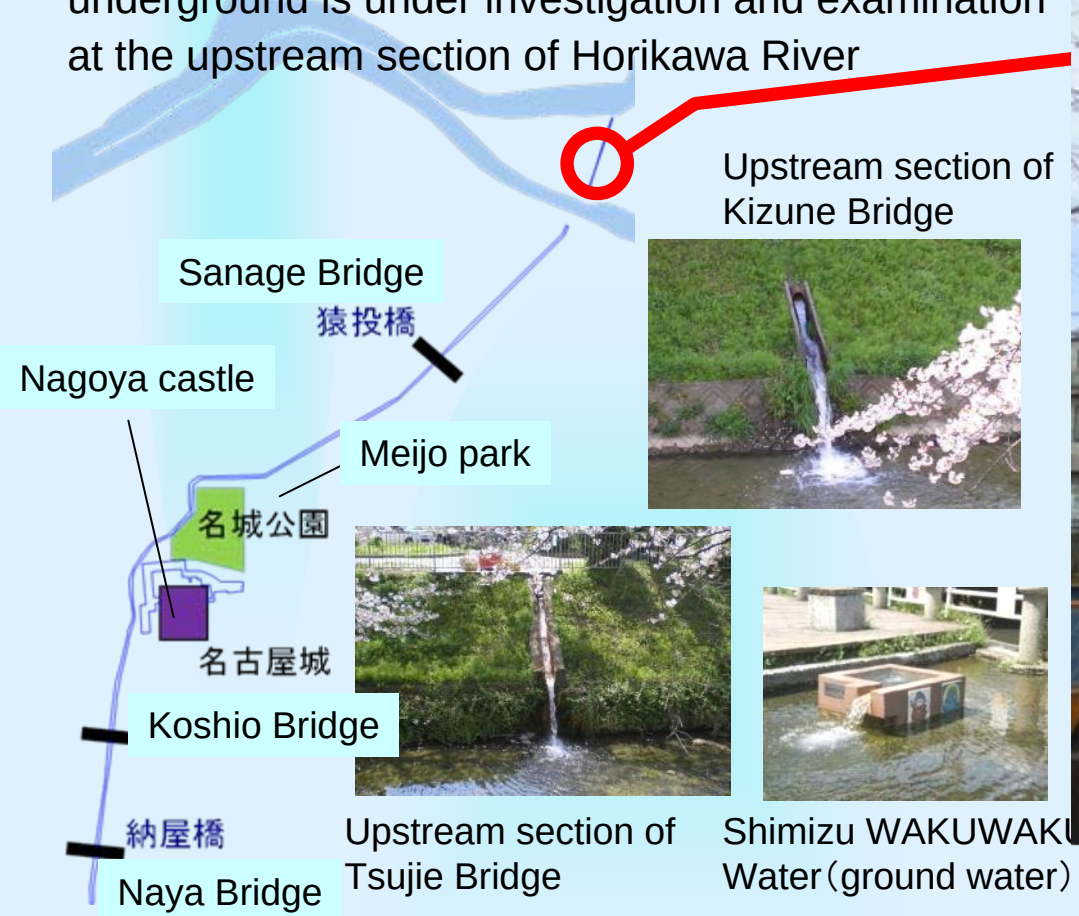
※Reclaimed water applies during irrigation season (April – October)



■Reserve additional headwaters: investigation and examination about use of groundwater

◆The left bank of Horikawa River, Seko in Moriyama ward

Possibility of pumping up water from the shallow underground is under investigation and examination at the upstream section of Horikawa River



Upstream section of Kizune Bridge

Upstream section of Tsujie Bridge

Shimizu WAKUWAKU Water（ground water）

The pump-up test is under going from Feb.2012

Instances of using shallow groundwater

■Making shore scenery: development of promenades (completed in Nov. 2011)

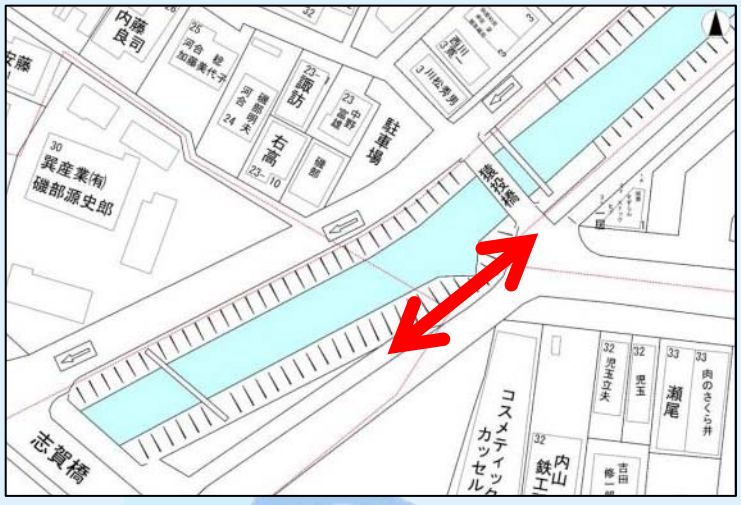
◆The left bank of Horikawa River, upstream of Nakatsuchido Bridge

To make the shore scenery with the sense of river-park unity, promenade and plants are installed.

■Making shore scenery; development of promenades (scheduled to complete in Mar. 2012)

◆The left bank of Horikawa River, between Sanage Bridge and Shiga Bridge

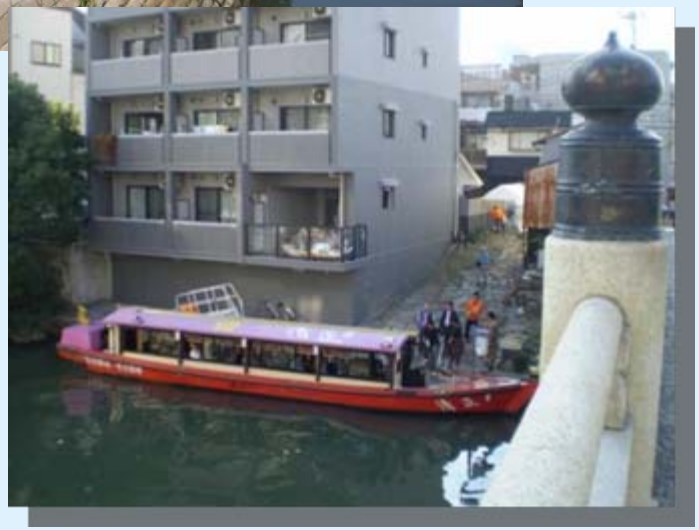
To create continuous useful space between Meoto Bridge and Tabata Bridge (2.2km long), promenade is building at downside of Sanage Bridge.



Activity Support for events

◆Participating in events

Participating in the executive of Horikawa Flower Festival in spring and Horikawa Water Magic Festival in autumn.

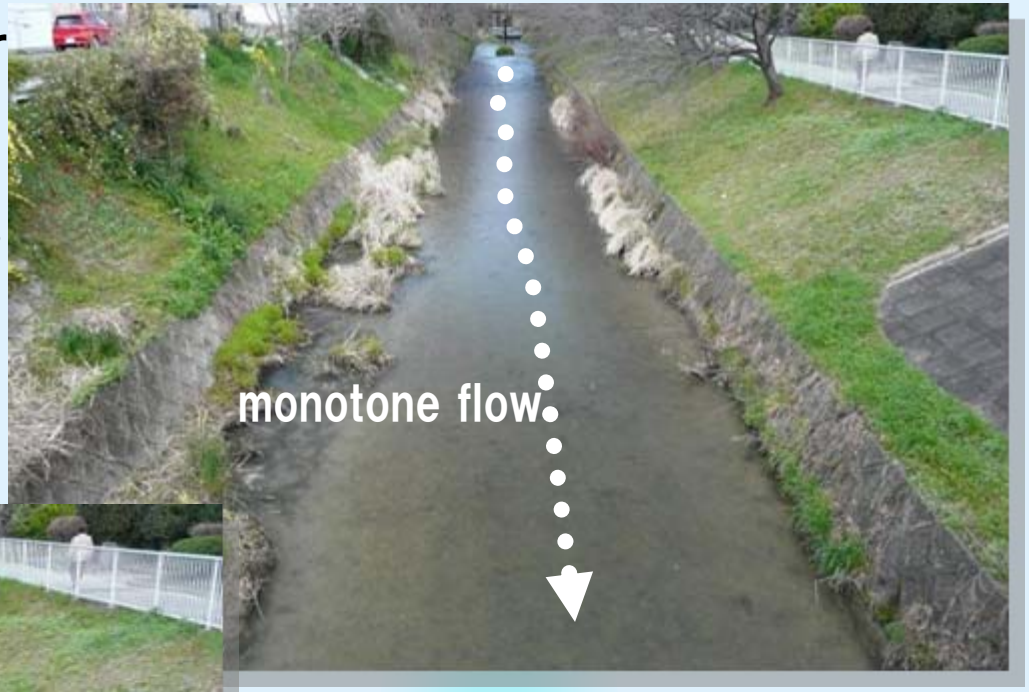


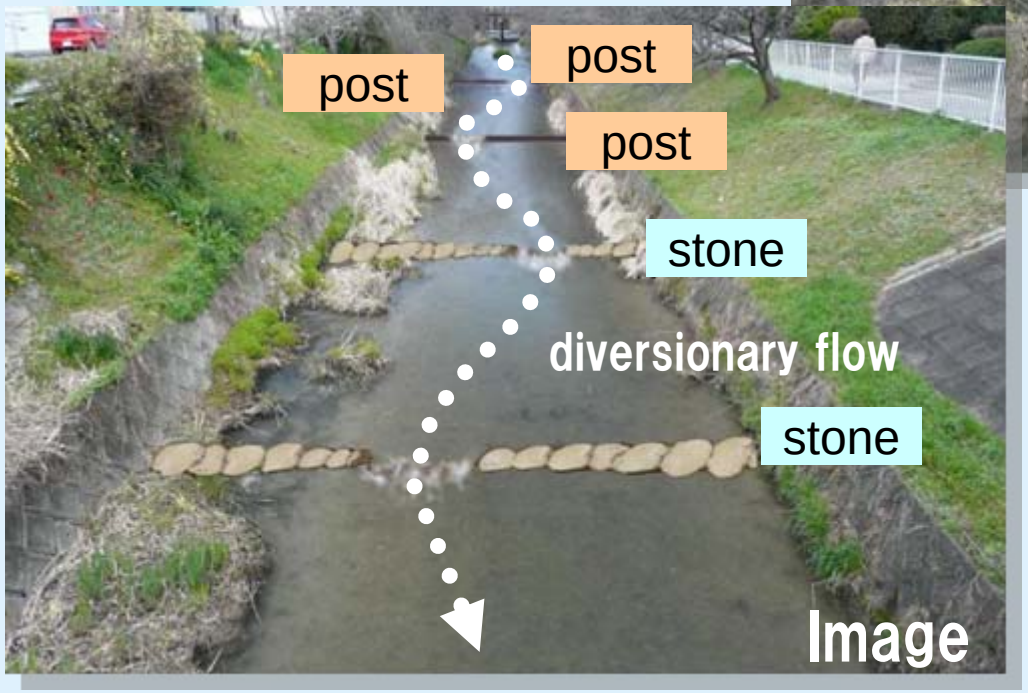
Improvement of the water quality

Making rapid and pool

◆The upper Horikawa River
(unaffected section by the tide)

The monotone flow of the river will be diversified by placing wood posts and stones , self-purification of the river will be improved by making cover .



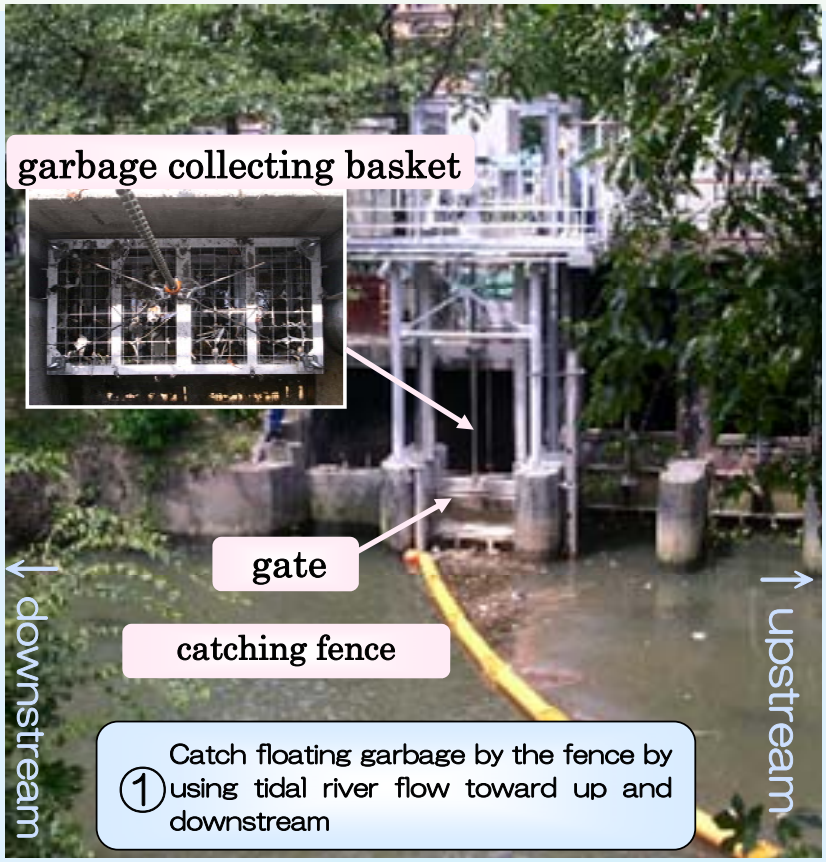


Removal of Water Pollution

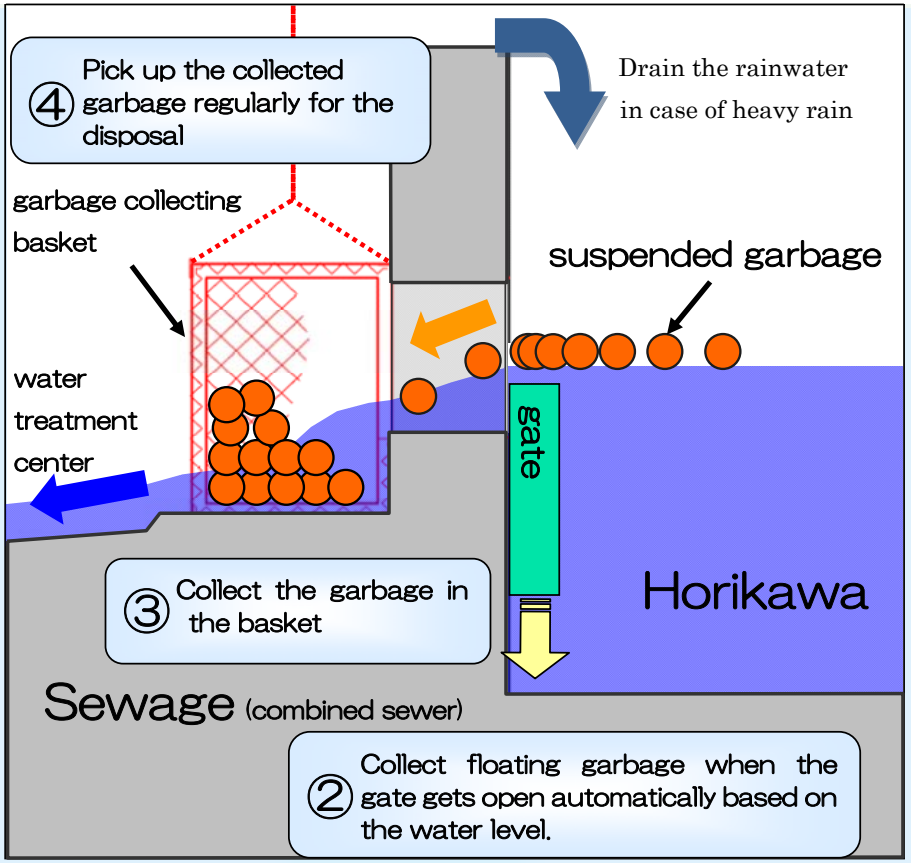
The method of cleaning up suspended garbage

◆Removal of stagnant suspended garbage in the middle-down stream area of the Horikawa River

Install the gate and the garbage collecting basket
by remodeling the storm overflow chamber (sewage weir)



View from the left bank



Cross section (image)

Removal of Water Pollution

Combined Sewer Overflow Control（wet weather）

◆ Reservoir Construction

Rain-water reservoirs for pollution control are constructed for the reduction of sludge generation by controlling outflow of highly polluted first flush, decreasing the fluency of overflow at storm overflow chamber, alleviating rapid deterioration of water quality in wet weather, and decreasing the stagnant pollution load of the river

●Ozone Rain-water Reservoir
(12,000m³ completed in 2006)

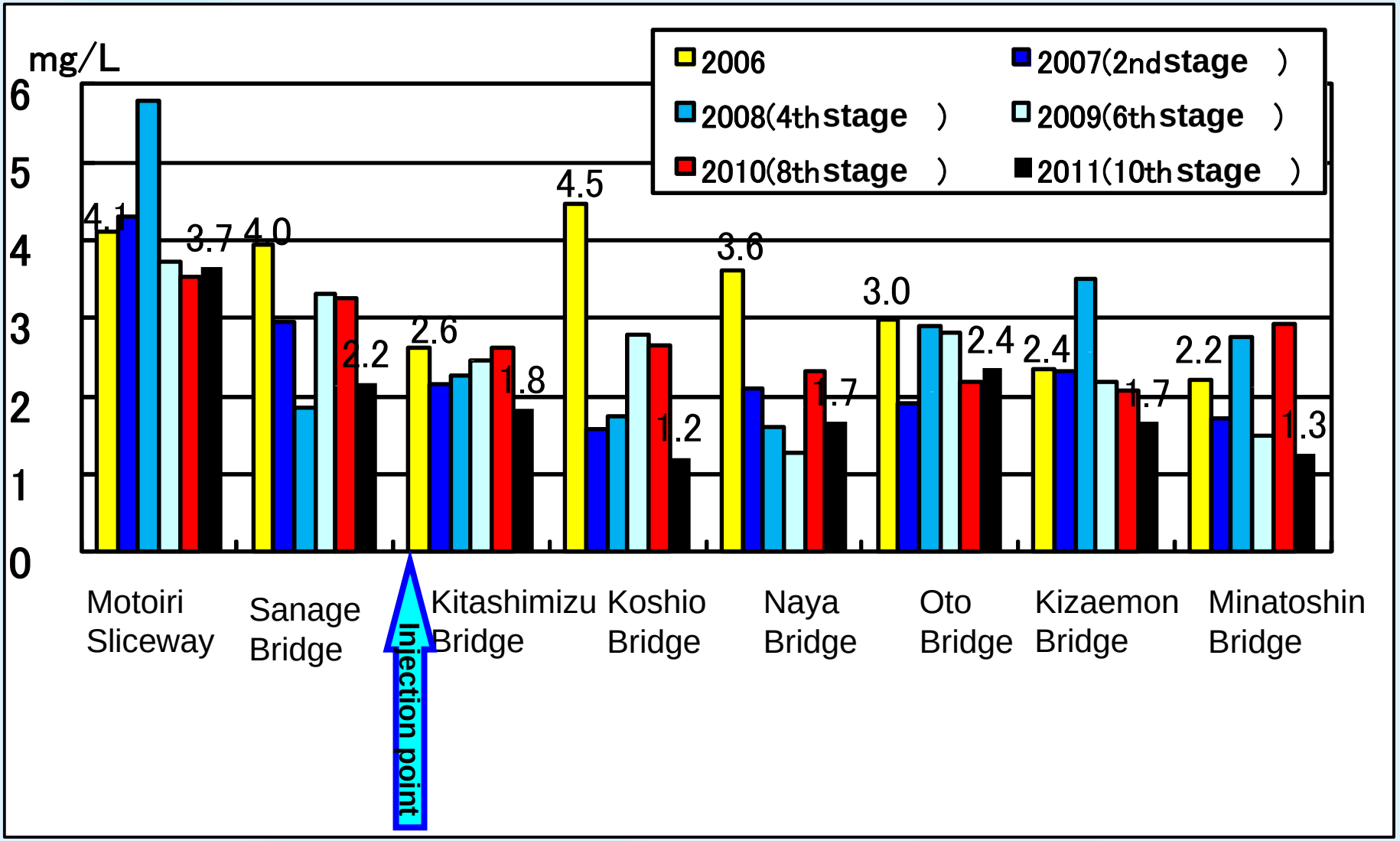
●Horikawa Ugan Rain-water Reservior for pollution control (13,000m³, completed in 2010)

●Horikawa Sagan Rain-water Reservoir for pollution control
(14,000m³ now under construction)

Horikawa River Map

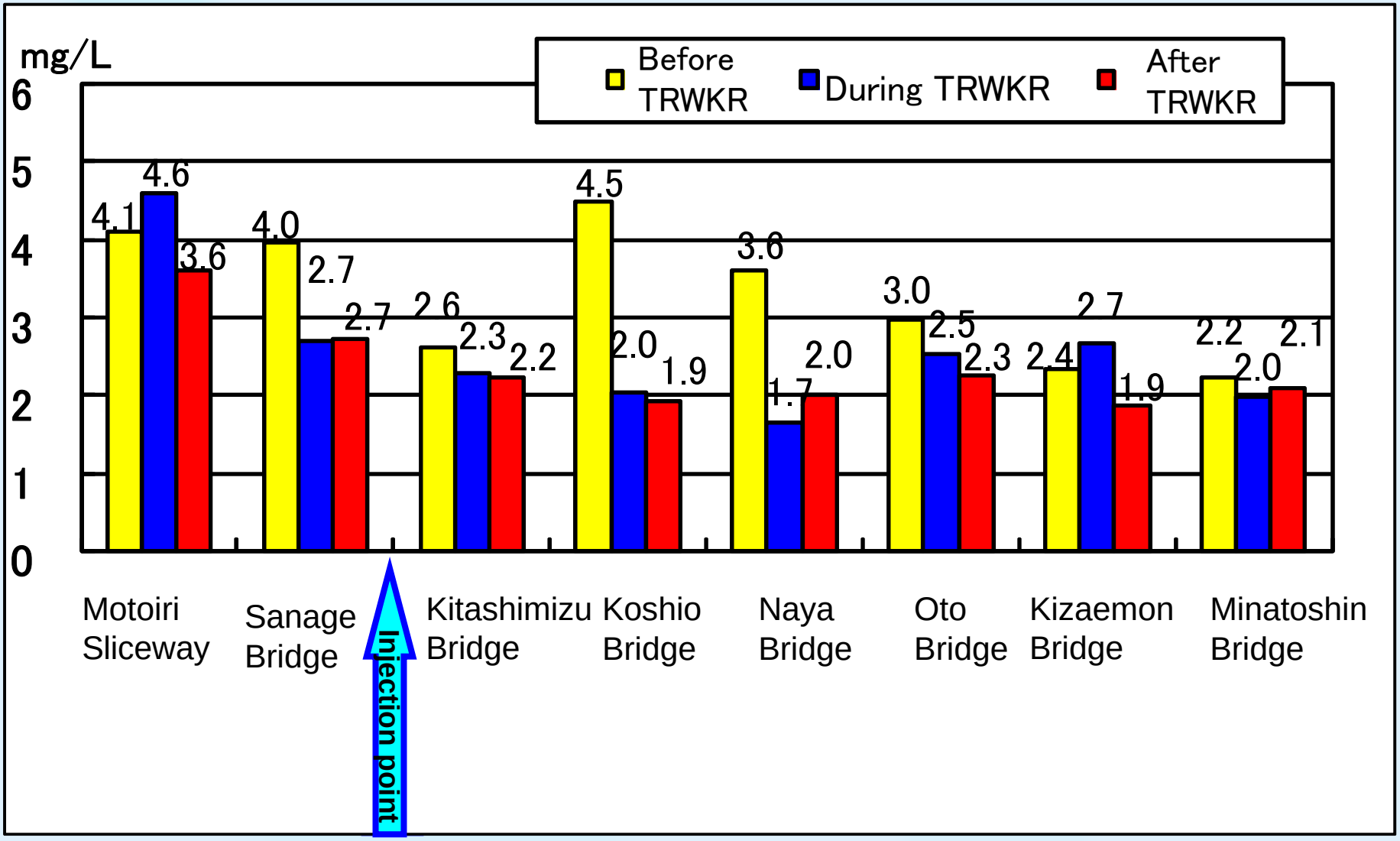
Investigation Point
by the City

Result of the survey of BOD (Biochemical Oxygen Demand) (Average from Sep. to Dec.)



※Every Survey was conducted at the ebb of the neap tide.

Result of the survey of BOD (Biochemical Oxygen Demand) (Average from Sep. to Dec.)



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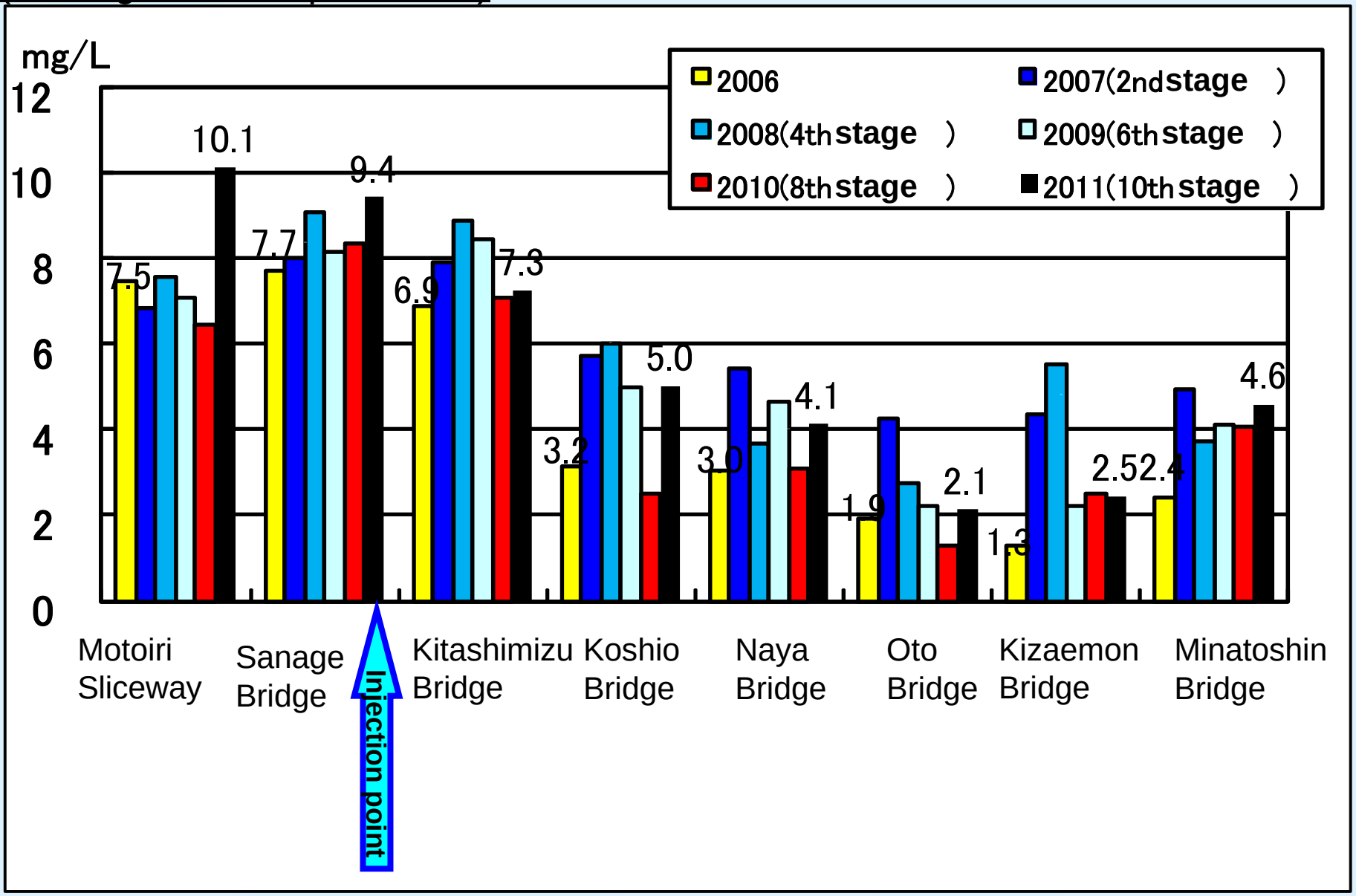
Result of the survey of DO(Dissolved Oxygen)
(Average from Sep. to Dec.)



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Result of the survey of DO(Dissolved Oxygen)
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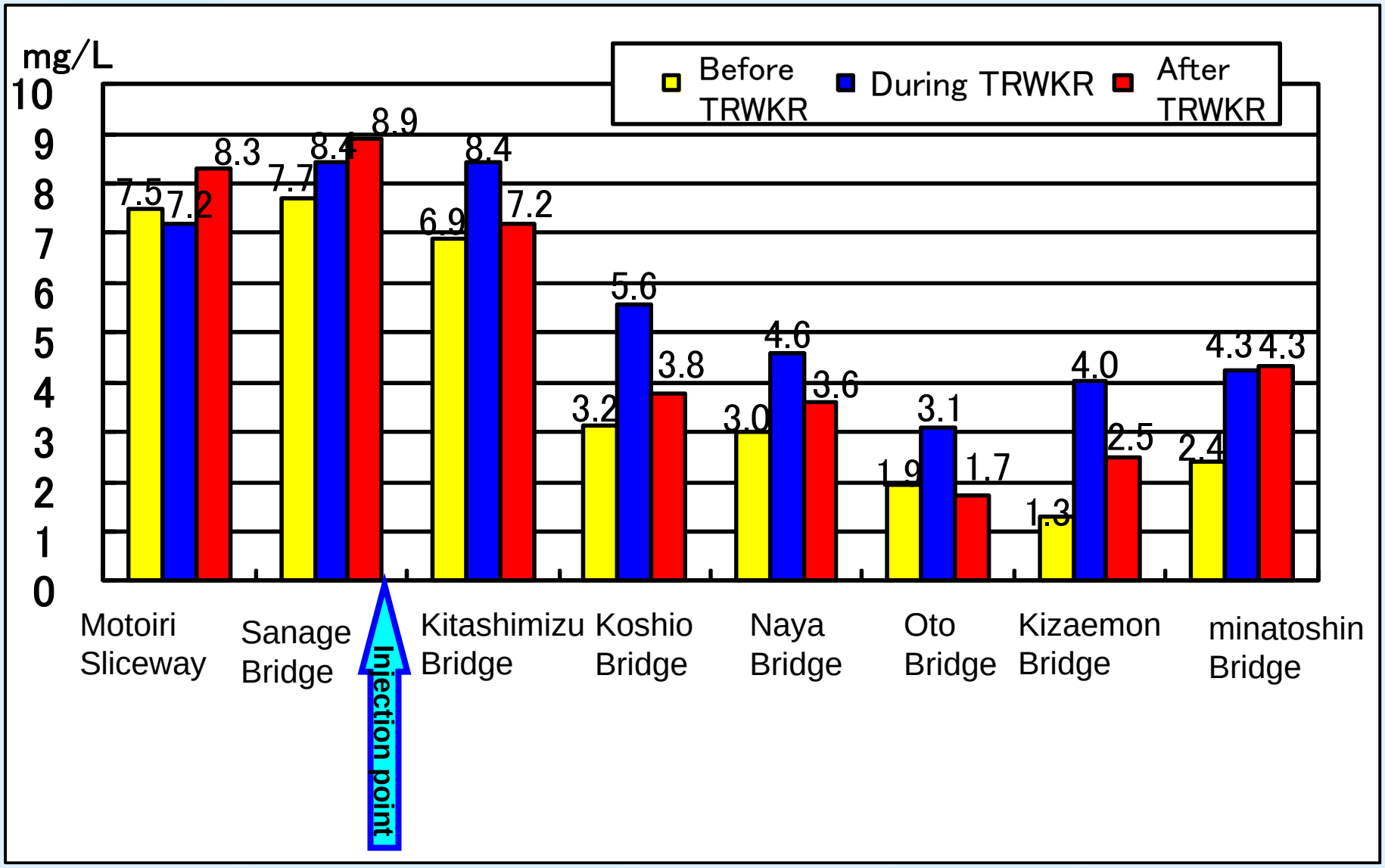

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