# 3. COD

Chemical Oxygen Demand. COD describes the level of water pollution by organic compounds in marine and lake water. It is the amount of oxygen required to react (oxidize) an organic compound in water. The higher COD value means the higher level of pollution.









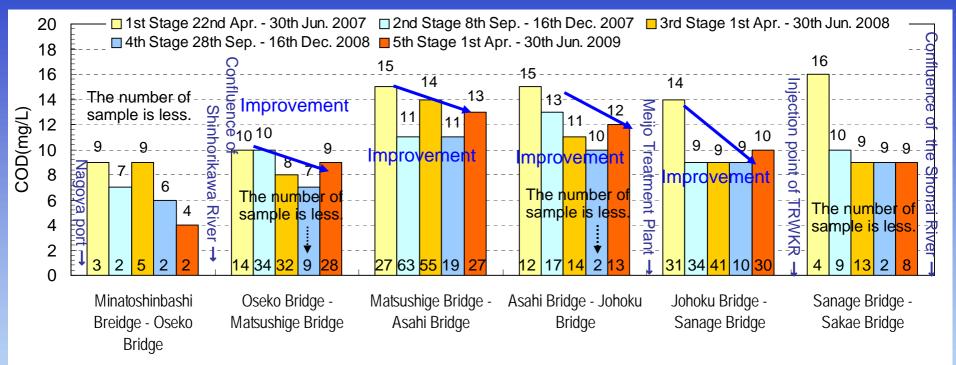
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## 3.1. Longitudinal change of COD

#### (Span average: with TRWKR, no rain)



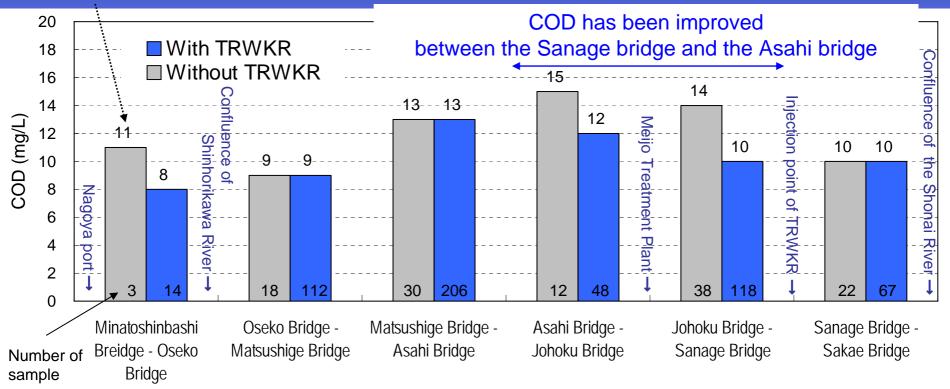
#### How has longitudinal COD changed?

- •COD between Sanage bridge and Oseko bridge in 5<sup>th</sup> stage has got lower (=improved) than that of 1<sup>st</sup> stage (right after TRWKR).
- •COD between the Sanage Bridge and the Johoku Bridge was 10mg/L. It got higher as down the stream
- •COD in 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> stage (from spring to early summer) was 8mg/L 15mg/L. That in 2<sup>nd</sup> and 4<sup>th</sup> stage (from fall to winter) was 7mg/L 13mg/L.
- → COD at downstream of Sanage bridge from spring to early summer has been higher than that from fall to winter (except the result between Oseko bridge and Minato-shin bridge which has scarce data).

### 3.2. Effect of TRWKR

The number of sample is less.

(1st stage - 5th stage, No rain)



- Comparing COD values "with TRWKR" to "without TRWKR", is there any difference?
- → COD value has been improved between Sanage bridge and Asahi bridge by TRWKR.





#### Column - COD -

COD describes the level of water pollution by organic compounds. The higher COD value means the higher level of pollution.

We, HSC organized change of COD to catch up point-by-point or stage-by-stage. (ref. 3.1.) As a result, we found that COD between the Sanage Bridge and the Oseko Bridge in the 1<sup>st</sup> stage (right after TRWKR) has got lower than 5<sup>th</sup> stage and that COD from spring to early summer was higher than from fall to winter.

This trend is same as transparency and correlate with an impression about water pollution. It means that COD backs up change of sensuous impressions about water pollution.

Then we organized COD data classified according to whether TRWKR was run. (ref. 3.2) As a result, COD between the Sanage Bridge and the Asahi Bridge "with TRWKR" has been lower than that "without TRWKR".