

# The Summary of the 3rd Stage



## 1. Water Quality

■ The water quality in the Horikawa river on the 3rd stage was improved better than that on the 1st stage after transmission of the raw water from the Kiso river (TRWKR).

The water quality, transparency, bubbling, smell on the 3rd was worse than 2nd stage in some survey section.

However, there are many good results of water quality on the 3rd stage than 1st stage (from April to June).

Horikawa Sen-nin Chosatai think the reasons of the improvement are follows:

- The effect of TRWKR
- The improved water quality around the upper stream above the Sanage Bridge (including the effect of the transmission of raw water).
- The improved attitude of the citizen.

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## 2. Water Color

- We have understand about the present situation and changing of color of the Horikawa River.

The water color that we could look many times was “pale gray”, “yellowish green”, “gray yellowish green”, and “gray green”.

The number of places which color was pale gray yellowish green, and gray yellowish green color increased on this 3rd stage.

There was a report that the water color was dirty gray on this 3rd stage. At the same time there was sludge rising to the surface. When a survey group saw it, they felt unpleasant.

We have understood from survey reports that the variation of the water color was effected complexly by changing sunshine, spring after rain, rising sludge to the surface, and “ebb and flow”.

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## 3. Garbage

- The garbage decreased in the river.

The garbage of the plastic, can, bottle in the river decreased on this 3rd stage than 1st stage. The garbage on the road also decreased.

It is thought that the movement of cleaning the Horikawa is spreading gradually by the consensus that the citizens who would like to clean up there.

The clean up activity and experience learning etc. are improving the citizen's consciousness to clean up the Horikawa.

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## 4. Living Things

■ Waterweeds are glowing in the river.

We were able to see waterweeds were glowing at the Sujikai Bridge in this season. There were many dragonflies, fish, birds, tortoises and living things, where waterweeds were glowing. There were the food chain where was waterweeds, and it made the ecological system.

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## 4. Living Things

■ We have understood that the living things live and make use of the Horikawa river for the habitat, the growing field, and the process of migration.

### 【Aquatic life】

We could confirm many fresh water fish (mainly carp and reedy), migratory fish around down the river from the Sanage bridge. The aquatic life like a fish live and make use of this down river for the habitat, the growing field and the process of migration. And these aquatic life can not go up over the level.

The aquatic life in the upstream of the Sanage Bridge is mainly the type of the fresh water. We can see many flying dragonfly, carp and crucian.

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## 4. Living Things

### 【The birds】

There are some groups of the wagtail, egret, duck at the water's edge. We could see some groups of bulbul, gray starling, rufous turtledove on the tree near the river.

The trees along the Horikawa River and the plants at the water's edge give the habitat, the growing field and the process of migration to birds.