

Improvement of water environment in reservoirs, lakes and rivers

The water environment (water quality) of some rivers streaming through cities has not been improved for various reasons, including the drainage processing situation within the stream basin, such as sewage and effluent load from factories and cultivated fields. For such cases, there are various measures including those directly dealing with the rivers and those dealing with the rivers before they flow into the main stream.

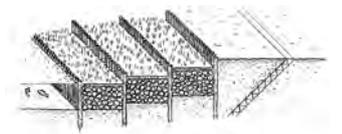
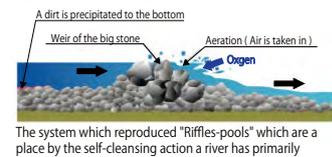
The two photos on the right show examples of these measures. The photo on the left shows the system to decompose organic matter in the river water by actively taking oxygen from the air in the river channel and activating microbes present in the river water.

The photo on the right shows a purification facility which was constructed by filling the river bank with gravel. As microbes sticking to the surface of the gravel decompose organic matter in the river water when it goes through the gravel, contamination substances with relatively large particle diameter are settled and removed.

Meanwhile, for the case where purification is not anticipated with only the above-mentioned natural purification function along river channels, aeration facilities, etc. are sometimes installed in the river channel, as shown below center.

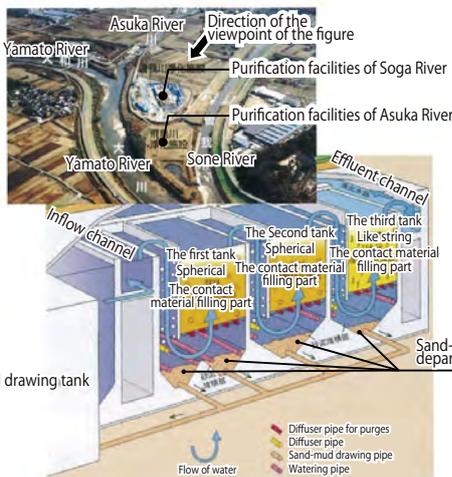
If measures in the river channel are difficult to take, purification may be conducted by constructing purification facilities on the river bed, as shown below left.

Furthermore, bypass pipes may be installed to prevent contaminated river water from flowing into closed water areas such as dam reservoirs, as shown below right.



Purge by riffles-pools (Yamato River)

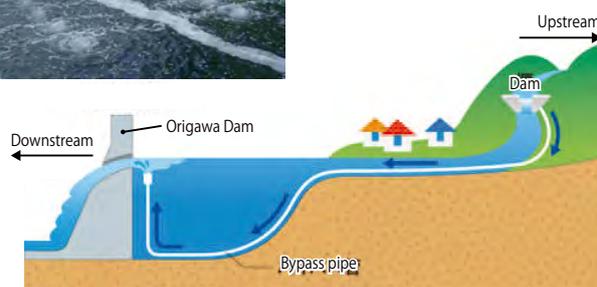
Purge by the catalytic oxidation method between the stone (Yamato River)



Purification Facilities of Yamato River-Soga River (Our design)



River in the Matsuzaka city, Mie pref., (Effect of the purge is grasped)



River dam - Bypass pipe (Our design)

Source : Chubu Regional Development Bureau, Shounai-gawa river office.

Studies may be conducted for the purpose of improving the water environment and its scenic view by establishing networks of water and green in addition to the city and regional planning works in the Asian region including the People's Republic of China and Vietnam. In such cases, wet lowland purification, etc. are planned to make it possible for a variety of creatures to live there by using the purification function of nature as much as possible.

Plans are being made in consideration of not only the improvement of the water environment but also the impact on the ecosystem.

