Restoration of Tsurumi River

Tsurumi River basin was quite activated from the late 1960s with rapid city development, but it also came to have various problems such as flood control, environment, and disaster prevention. Given the situation that flood control safety level was hard to maintain, a committee of academic experts, basin local government, and river administrator was set to find a basin-wide solution for integration of river development and flood control measures. This is a pioneer of total flood control efforts in Japan. Beyond the basin measures such as rain runoff control, the local government's urbanization plan and development projects were involved.

Key to Restoration

Tsurumi River basin water master plan

(flood water management, normal water management, natural environment management, earthquake and fire management, and waterfront partnership management)

➤ Water quality improvement

Overview of the River

Tsurumi River, a class A river originating in Machida City in Tokyo, flows through Aoba Ward, Midori Ward, Tsuzuki Ward, Kouhoku Ward, and Tsurumi Ward (Yokohama City), and Saiwai Ward (Kawasaki City). It flows into Tokyo Bay from Tsurumi Ward. Its total length is 42.5 km and the basin dimension is 235 km2.

Though activated from 1960s with rapid city development, it had various problems such as flood control, environment, and disaster prevention. Basin local government and people work together in establishing "Tsurumi River basin water master plan," which serves as the total guideline for water cycle revival including rain runoff control.



Project Efforts for Restoration

Tsurumi River basin water master plan includes:

[Flood water management]

Water control measures are taken basin-wide to secure Tsurumi River basin against flood and to minimize flooded buildings and houses due to abnormal downpour.

[Normal water management]

Normal water management covers securing abundant flow, water quality improvement at normal time and rain time, and a shift to water-saving society.

[Natural environment management]

From the view to conserve and restore the basin landscape skeleton structure as urban natural environment, flat bogs, green ridges, and riverside farms are connected with rivers and lines to form a ecological network. Also biotope such as waterfront is arranged in urban area to promote conservation of basin-wide biodiversity.

[Earthquake and fire management]

Tsurumi River's positioning in the current area-disaster-prevention plan, as well as an optimum use of its water and space for water supply and evacuation, is promoted in order to enhance basin-wide disaster prevention, coordinating with the city.

[Waterfront partnership management]

Rules for adjusting river use and natural environment conservation is promoted. Also promoted is the management operation system by various players; and basin-conscious lifestyle's penetration and education.

[Water quality improvement]

Though the water quality has improved with sewage system development, aquatic life inhabitation and reproduction and waterfront partnership requires further water quality improvement with a renewed target quality.



Source: Document "Toward human-nature symbiotic basin for urban restoration" Katsuhide Yoshikawa, National Land Technology Policy Research Institute