

Utilization of Reclaimed Water in Kobe

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Now that the sewered population of Kobe has reached 98%, Kobe City's sewerage system is expected to assume new tasks, such as maintaining optimal water quality in public-use water areas, and preserving an optimal water environment and sound water circulation system.

The quality of discharged wastewater has been improved so much by the introduction of advanced treatment methods that treated wastewater, which is a water source peculiar to cities, can now be applied to a broad range of uses by introducing treatment methods appropriate to each specific purpose of re-use.

Kobe City treats nearly 550,000 m³ of wastewater a day. Of this, nearly 22%, or 120,000 m³, undergoes advanced treatment, and 7%, or 40,000 m³, undergoes sand filtration, for re-use. Nearly 80% of the advanced treated water is used in-plant as facility cooling water and the like, but Kobe City is also applying advanced treated water to outside uses, such as landscape stream water, as outlined below.

1. Port Island Central Green Belt Stream

(Sand filtration method)

Port Island is a man-made island in the bay, and treated wastewater is used there as the source of stream water for creating relaxing waterfront sites.

Volume of supplied water: 7,000 m³/day

Stream: 300 m long; pond: 4,000 m²

2. Tarumi Treatment Plant Waterfront Facility

(Reverse osmosis method)

Water is fed to a waterfront facility on a public square built above the treatment plant; also used for washing cars.

3. Water Recycling Business

(Ozonation method)

Water is recycled for use as toilet flushing water etc. in office buildings in two places in the city, Rokko Island and Port Island.

4. Biotopes

(Sand filtration method)

Staffs at various treatment plants create biotopes to provide the general public with another restful spot.

5. Matsumoto Area Stream & River Maintenance Water

(Ozonation method)

Treated wastewater (total volume: 16,000 m³/day) from the Suzurandai Treatment Plant, where advanced treatment is being introduced, will be supplied as stream water that may also be used as water for fighting fires in the downstream urbanized areas or for maintaining the water level of rivers that tend to dry up.