

III Creating a City That Values Water Resources

~Creating a city with efficient water circulation~

Geographically lacking a major river and rich water resources, Fukuoka City has struggled with water shortage, experiencing drought with long-term water restrictions in 1978 and 1994. As such, we are working on various plans to make effective use of water resources.

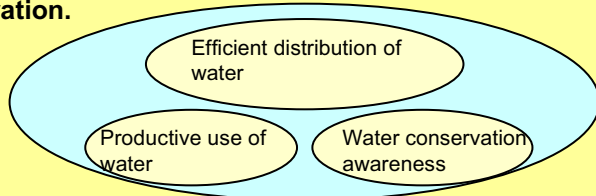
【Training Menu】

○Creating a city with efficient water circulation

Rain water is constantly in natural circulation – it is retained in soil, and eventually evaporates and returned to the atmosphere. Here, lectures are given on Fukuoka City’s efforts to create a city with efficient water circulation, with the government, the public, and businesses working in unison.

○Creating a city that conserves water

Lectures will be given on productive use of water, efficient distribution of water and raising awareness about water conservation.



【Details of the Visit】

- ① Water management center (central control room and long-distance monitoring equipment)
- ② Water treatment plant (Tatara water treatment plant)
- ③ Umino-Nakamichi Nata seawater desalination center (Mamizu Pier)

③ Seawater desalination center (Mamizu Pier)

Observe the desalination process at a seawater desalination center with Japan’s largest production capacity of 50,000m³/day and one of the world’s highest freshwater recovery rates (approx. 60%).



An aerial view of the seawater desalination center

① Water management center

The center monitors the ever-changing water consumption level in the city 24 hours a day, and adjusts the water pressure by remotely-controlling an electric valve.



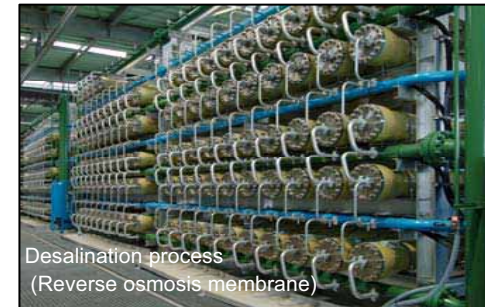
Central control room

② Water treatment plant (Tatara water treatment plant)

This water treatment plant treats 122,000 m³ of water a day through coagulation, sedimentation, rapid filtration and other advanced water treatment techniques (such as ozone treatment and granular activated carbon adsorption treatment).



Ozone generator



Desalination process (Reverse osmosis membrane)

III Creating a City That Values Water Resources

~Creating a pleasant city that values water~

Fukuoka City's sewage system serves 99.5% of its population. We are working on creating an environment-friendly city with efficient water circulation through advanced sewage processing, efficient use of treated water, and flood control measures.

【Training Menu】

You will be briefed on Fukuoka City's sewage administration.

○Sewage treatment

Lectures will be given on the sewage treatment system at Fukuoka City's water treatment center.

○Sewage reclaiming

Lectures will be given on reclaiming sewage water that has been treated with advanced technologies.

○Maintenance and management

Lectures will be given on sewage management and maintenance, and cleaning and repairing techniques of pipes and drains.

○Comprehensive measures against torrential rainfall

Lectures will be given on Fukuoka City's comprehensive, progressive efforts to prepare for torrential rainfall.

○River maintenance

Lectures will be given on Fukuoka City's efforts in river maintenance and disaster relief.

【Details of the Visit】

①Water treatment center (Seibu water treatment center)

②Treated water facility (Chubu water treatment center)

③Flood prevention facilities (San-o balancing reservoir, Hie main rainwater way)

④River maintenance projects (Naka River (Ribon Citio Nakagawa), Kanakuzu River (Medaka no gakkou))

① Water treatment center

Visit our water treatment center, where sewage water from homes and factories is purified and environmental pollution is contained.

The center has an advanced treatment system that reduces phosphorus, which causes eutrophication.

- Seibu water treatment center
- ・Site area: approx. 20ha
- ・Volume of water treated daily: approx. 120,000 m³

② Treated water facility

When waste water is processed so as to render it reusable, it is called "treated water." Fukuoka City uses treated water for toilets and to water roadside trees; it supplies water to an area that stretches as much as 1,304ha across the city. You will visit the facility where the water treatment takes place.

- Chubu Water Treatment Center
- ・Volume of water supplied daily: approx. 7,000m³
- ・Supply area: 1,165ha



③ Flood prevention facility

Torrential rain and consequential flooding in urban areas has caused problems around the world. Fukuoka City is implementing measures against flooding in urban areas. You will visit facilities involved in counter-flooding operations in the city's urban areas.

- San-o balancing reservoir (capacity of approx. 28,000 m³)
- Hie main rainwater way (Reservoir tube)



④ River maintenance project

You will inspect sites that conduct river modification and river-integration with the surrounding landscape and community development. You will also see sites where the development of comfortable waterside spaces is undertaken along with the residents in the area.

- Naka River (Ribon Citio Nakagawa)
- Kanakuzu River (Medaka no gakkou)