

## Ochiai Summer Festa

We aim to be a water reclamation center loved by the local community. We hold this festival each year during summer vacation.



## Ochiai Chuo Park

Ochiai Chuo Park is the first park in Japan which was built using the upper part of a water treatment plant in 1964. This park is equipped with baseball park, tennis courts, etc. A large number of people visit and enjoy the parks.

Phone 03-3232-7701

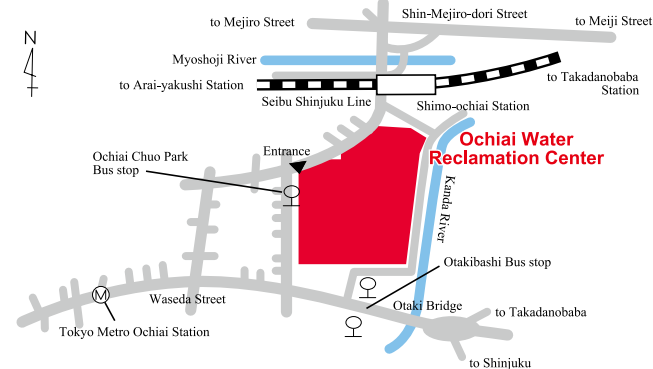


## Seseragi no Sato Public Garden

Seseragi no Sato Public Garden has a children's square with playground equipment, and the treated sewage through membrane filtration process flows in the waterway and the pond, providing the Garden with a comfortable waterside environment.



### Guide map



- **Address** 1-2-40 Kami-ochiai, Shinjuku-ku, Tokyo, Phone: 03-3366-6964
- **Access** 5-minute walk from Shimo-ochiai Station on Seibu Shinjuku Line.



There is a facility to enjoy the experience of learning about the sewerage system, its roles, and the importance of water environment.

- **Business hours:** 9:30 - 16:30
- **Entry Fee:** Free
- **Closed:** Mondays (open on holiday Mondays, closed the next day) and the year-end and New Year holidays  
Open daily throughout the summer (July 16 - August 31)  
Open on Sewerage Day (September 10) and Tokyo Citizens Day (October 1)
- **Address:** 2-3-5 Ariake, Koto-ku Ariake  
Water Reclamation Center Management office (A-tower) 5th floor
- **Telephone:** 03 (5564) 2458
- **Website:** <https://www.nijinogesuidoukan.jp/>

### Beware of crooked dealers who pretend to be related to the Bureau of Sewerage!

The Bureau of Sewerage does not rely on businesses to repair or clean drainage facilities in housing.

### Facility tours of Water Reclamation Centers

Facility tours of water reclamation centers are available except weekends, holidays, and the New Year's season.

Please contact us about reservations and details.

### ● Tokyo Amesh

Tokyo Amesh is the system that shows rainfall in and around Tokyo in real time.

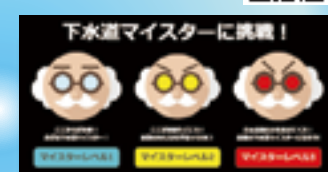
The rainfall is measured by radars and ground rain gauges.

※ Tokyo Amesh is the registered trademark of the Tokyo Metropolitan Government.



### ● Sewer Adventure

Pass the sewer quiz to become a sewer master.



### ● Bureau of Sewerage website

<https://www.gesui.metro.tokyo.lg.jp/>



### «Contact point for arranging facility tours»

**Telephone: 03 (3241) 0944**  
**Hours: 9:00 ~ 17:00 (weekdays only)**



## Water environment cultivated by the district Ochiai Water Reclamation Center



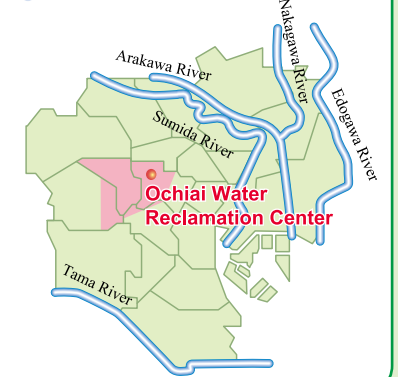
Earth-kun, the mascot of Bureau of Sewerage

Located very close to the subcenter of the Shinjuku area, Ochiai Water Reclamation Center is environment-friendly and thoroughly controlled as a water reclamation center surrounded by residential districts. The treatment area is in the Ochiai Treatment District (3,506 ha). It comprises Nakano Ward, and parts of Shinjuku, Setagaya, Shibuya, Suginami, Toshima and Nerima Ward.

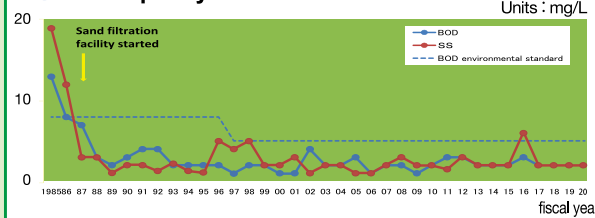
The treated water is discharged to Kanda River, with some part used effectively for toilet water in buildings of Nishi-shinjuku and Nakano-sakaue districts and for restoration of streams in three rivers which nearly dried up in the southern downtown area of Tokyo.

The generated sludge is pumped through pressure pipelines to Tobu sludge plant for treatment.

### ● Treatment area



### ● Water quality of Kanda River



Sweetfish has returned to the stream since 1992. Environmental standard C since FY1997 (BOD5mg/L)

### (As of April 2023)

- **Operation started: March 1964**
- **Site area: 85,143m<sup>2</sup>**
- **Treatment capacity: 450,000 m<sup>3</sup>/day**
- **Wastewater treatment facilities**  
Grit chamber: 8  
Primary sedimentation tank: 10  
Reaction tank: 10  
Secondary sedimentation tank: 12  
High-rate filtration system: 1  
Sand filtration tank: 33
- **Storage tank in wet weather: 13,000m<sup>3</sup>**

### ● Average quality of influent and final effluent

The final effluent from the water reclamation center complies completely with the water quality standards of the Tokyo Metropolitan Environmental Security Ordinance and is sufficiently clean for fish to live in.

Item	Influent		Final effluent	Regional water quality standards
	Extra-low stage	High stage	High stage	
B O D	250	140	2	25 or below
C O D <sub>Min</sub>	120	100	7	—
Total nitrogen	37.8	33.6	13.1	30 or below
Total phosphorus	4.8	3.5	2.1	3 or below

Average values of 24-hour test conducted in FY2021

※The higher values of BOD and COD indicate the higher levels of water contamination. BOD describes the amount of oxygen required by microorganisms to eat organic material in water, and COD describes the amount of oxygen required by oxidizer to decompose organic material in water. The quality levels of discharged water are specified in terms of BOD for rivers and COD for seas. Total nitrogen and total phosphorus are closely related to the generation of red tides.





# Sewerage System

Sewerage system is mainly composed of 3 components\*: sewers, pumping stations and wastewater treatment plants (WWTPs)\*. Sewers collect and carry wastewater. Pumping stations pump wastewater to avoid sewers getting deeper. WWTPs treat and clean wastewater. We perform inspection, cleaning and maintenance every day to keep them working properly.  
\*WWTPs in Tokyo are called "Water Reclamation Centers".

## WWTP

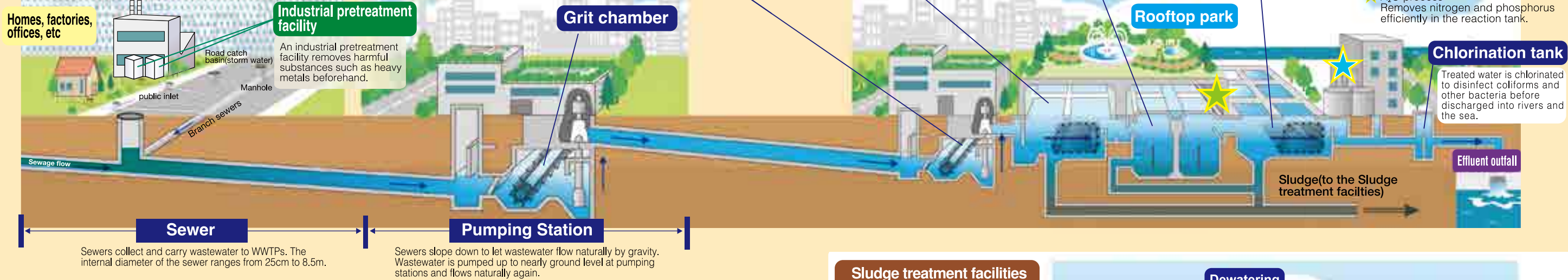
**Grit chamber**  
Wastewater flows into this chamber first. Large objects are removed, then sand and grit are settled out.

**Primary sedimentation tank**  
As wastewater flows in slowly through this tank for 2 to 3 hours, solids sink to the bottom.

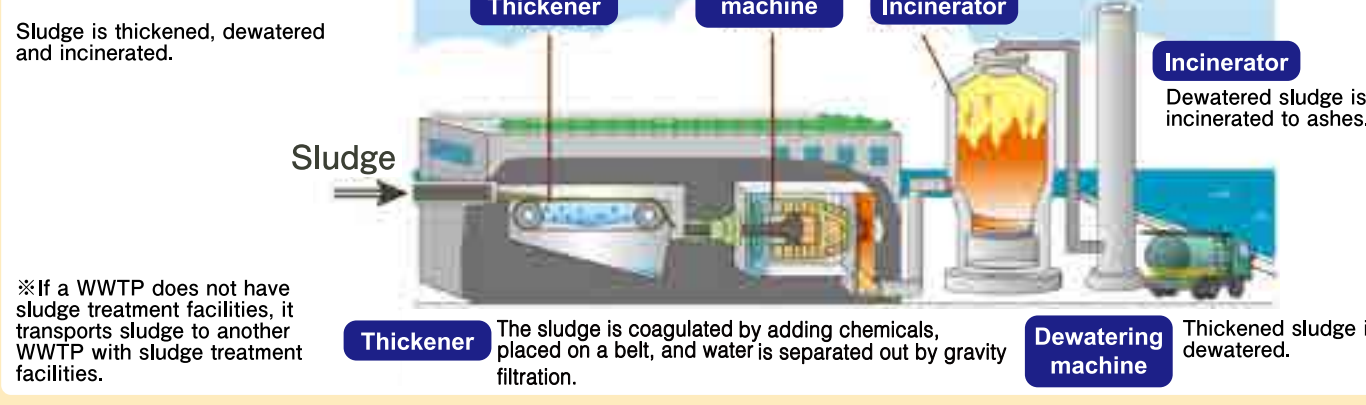
**Reaction tank**  
Organic matter in wastewater is absorbed to activated sludge, where microorganisms break it down. As microorganisms grow, activated sludge becomes easy to settle.

**Secondary sedimentation tank**  
As activated sludge formed in a reaction tank flows slowly in this tank for 3 to 4 hours, it is separated into effluent and sludge.

**Advanced wastewater treatment**  
We introduce following facilities to clean treated water even more.  
★ Sand filter/Biologically active filter  
Removes residual suspended solids that the secondary sedimentation tank cannot remove completely.  
★ A<sub>2</sub>O process  
Removes nitrogen and phosphorus efficiently in the reaction tank.



## Sludge treatment facilities



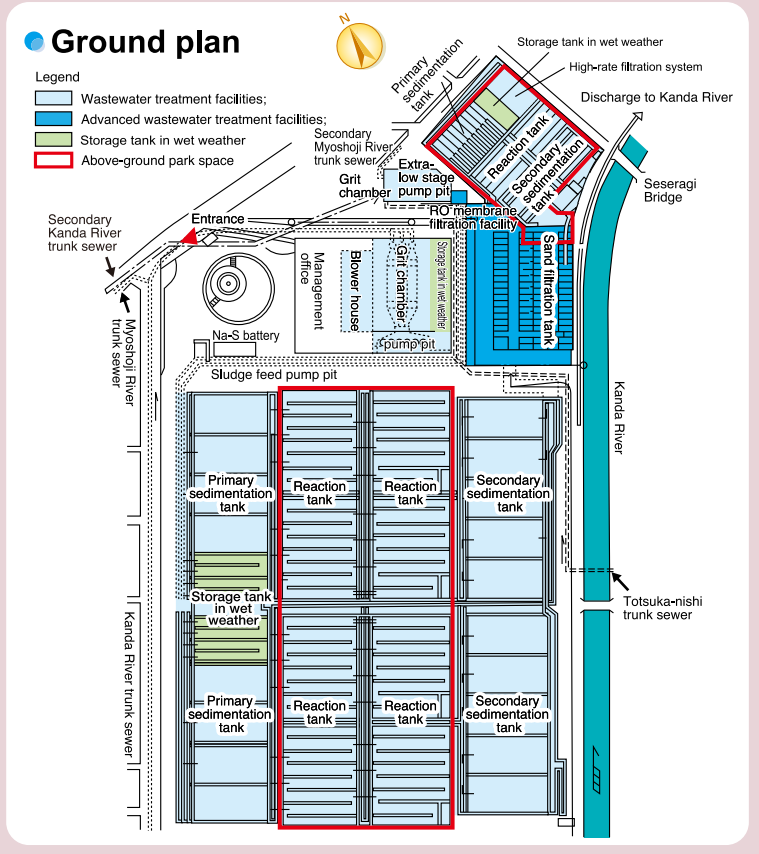
# The Role of Tokyo Sewerage

**Improvement of a Living Environment by Treating Wastewater**  
We treat wastewater from houses and factories and ensure a comfortable living environment.

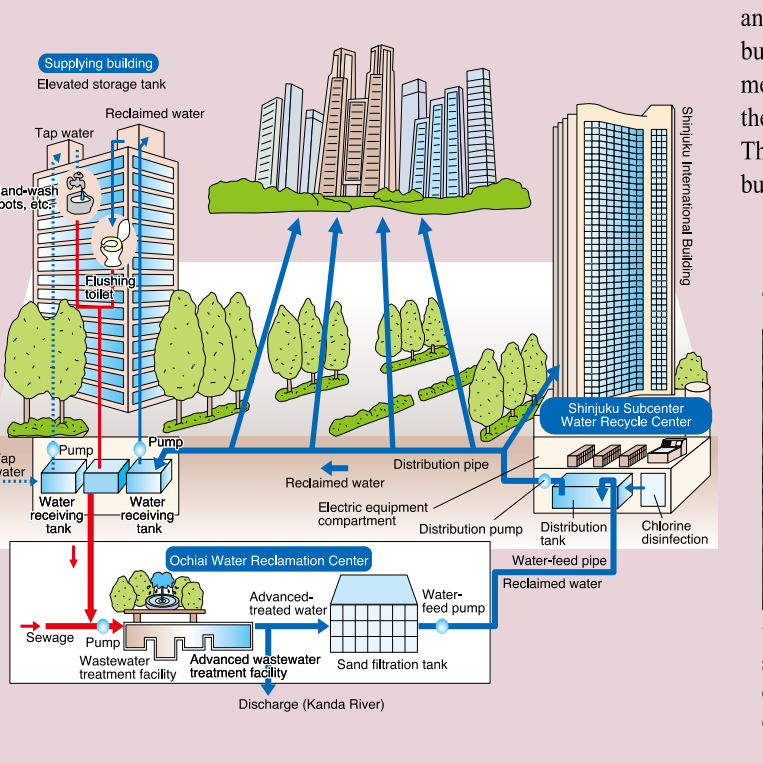
**Flood Prevention by Draining Stormwater**  
We protect the city from flooding by draining stormwater immediately from roads or residential areas.

**Water Quality Control in Rivers and the Sea**  
We improve and control the water quality of rivers and the sea by treating wastewater and returning it to them.

**Our New Role**  
Now we play a new role in creating a good urban environment. We use sewerage resources and energy effectively, for example, reclaimed water and sewerage heat. We also utilize rooftop spaces of our facilities as parks.



## Features of Ochiai Water Reclamation Center Contribution to urban water environment



The treated water is abundant in volume and steady in quality, and can be effectively used as the water for miscellaneous use in buildings. Ochiai Water Reclamation Center uses a sand filtration method for advanced water treatment. It sends reclaimed water to the Shinjuku Subcenter Water Recycle Center in Nishi-Shinjuku. The reclaimed water is effectively used as water flushing toilets in buildings in Nishi-Shinjuku and Nakano-Sakaue districts.

## Restoration of streams in three rivers in the southern downtown area of Tokyo

The reclaimed water after advanced wastewater treatment in Ochiai Water Reclamation Center is fed into the three streams - Shibuya & Furu River, Meguro River and Nomi River, where water was stagnated and stream environment deteriorated in the past. This has contributed to the increase of water volume and recuperation of affluent water environment in the streams.

## RO Membrane Filtration Facility

In Ochiai Water Reclamation Center, the treated wastewater from the secondary sedimentation tank is all subjected to advanced treatment in the sand filtration tank. Further, 50 m<sup>3</sup>/day of advanced-treated water is subjected to Reverse Osmosis membrane filtration to supply hygienic and safe water to "Seseragi no Sato Public Garden" for children to play with the water.

## Distance Monitoring and Control using Optical Fiber Communication Network

The operation control of the wastewater treatment facilities in Nakano Water Reclamation Center about 3 km away is carried out by using the optical fiber communication network installed inside sewer pipes.

**Ochiai Water Reclamation Center**

**Nakano Water Reclamation Center**