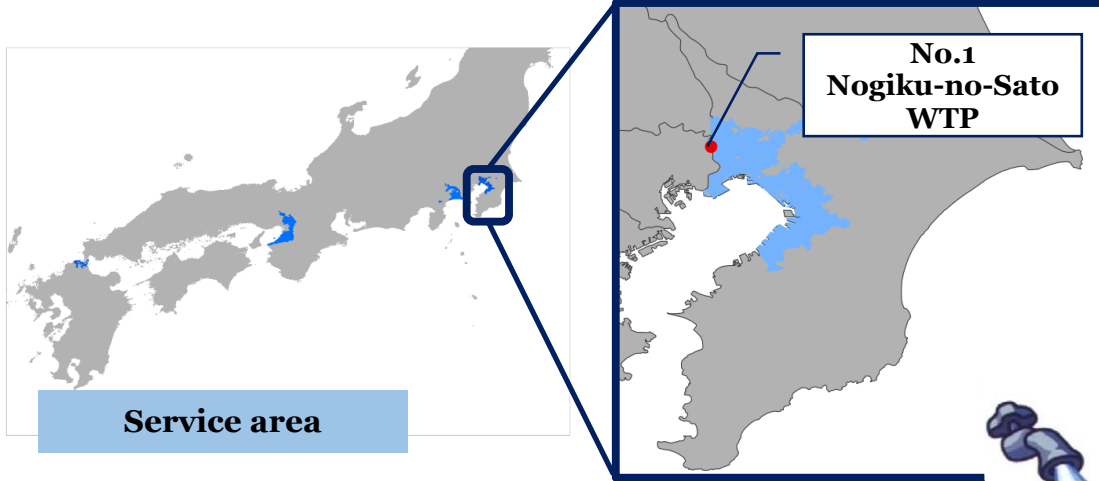


Water Utility Information (FY 2014)

B a s i c s	Name of utility:	Chiba Prefectural Waterworks Bureau	Service type:	Water service provider	
	Administrative population:	3.5 million people	Start of service:	1936	
	Population served:	3 million people	Service area:	566.37 km ²	
	Water supply volume				
	Average daily water supply:	870,000 m ³ /d	Break down	Household use	690,000 m ³ /d
				Commercial and institutional use:	120,000 m ³ /d
				Others:	50,000 m ³ /d
				From wholesale supplier	13,000 m ³ /d
	Average daily water supply per capita:	292 L/per son/d	Service coverage:	96.4 %	
	Effectiveness:	98.7 %	Revenue water:	94.7 %	
	NRW:	5.3 %	Water loss	1.6 %	
	Water rates				
	Water rates for 10m ³ /month:		1,020 yen (including taxes)		
			*Calculation condition: The service pipe has a 13-mm diameter. The fixed charge is 410.10 yen/month. The volumetric charge is 61.56 yen/m ³ up to 10m ³ .		
	Water production cost:	181.85 yen/m ³	Water supply cost:	202.39 yen/m ³	

F a c i l i t i e s	Water Treatment Plant and Facilities (including water from wholesale supplier):	Name	Capacity	Water source	Treatment process
		Kuriyama WTP	186,000 m ³ /d	Surface water (river)	Coagulation/Sedimentation + Rapid filtration + Chlorine disinfection
		Kashiwai WTP (west wing)	360,000 m ³ /d	Surface water (river)	Coagulation/Sedimentation + Rapid filtration + Chlorine disinfection
		Kashiwai WTP (east wing)	170,000 m ³ /d	Surface water (lake)	Coagulation/Sedimentation + Rapid filtration + Ozone + Granular activated carbon + Chlorine disinfection
		Hokuso WTP	126,700 m ³ /d	Surface water (river)	Coagulation/Sedimentation + Rapid filtration + Chlorine disinfection
		Fukumasu WTP	90,000 m ³ /d	Surface water (lake)	Coagulation/Sedimentation + Pre-ozonation + Rapid filtration + Ozone + Biological activated carbon + Chlorine disinfection
		Chiba Nogiku-no-Sato WTP	60,000 m ³ /d	Surface water (river)	Coagulation/Sedimentation + Ozone + Biological activated carbon + Rapid filtration + Chlorine disinfection
		Water for wholesale supply	261,300 m ³ /d	-	-
		Total	1,254,000 m ³ /d		
P i p e s	Pipeline length:	8,970 km	Conveyance: 70 km	Transmission: 170 km	
			Distribution: 8,730 km	Others: - km	
	Type of material:	<ul style="list-style-type: none"> • Cast iron: 8,530 km • Asbest cement: 6.9 km • Steel: 167 km 			
O t h e r s	Other information:	<ul style="list-style-type: none"> • Number of employees: 875 • Seismic reinforcement rate of pumping stations: 79.8% • Seismic reinforcement rate of distribution reservoirs: 56.5% • Maximum daily supply: 1 million m³ • Maximum facility utilization rate: 82.8% (Maximum daily supply/treatment capacity) • Facility utilization rate: 69.2% (Average daily water supply/treatment capacity) 			
	Remarks:	<ul style="list-style-type: none"> • All the information above (except for the length of the lead service pipe) was cited from the Annual Report FY2014 of the Chiba Prefectural Waterworks Bureau. • The length of the lead service pipe was cited from the Annual Report FY2013. 			

Water Utility Information (FY 2014)



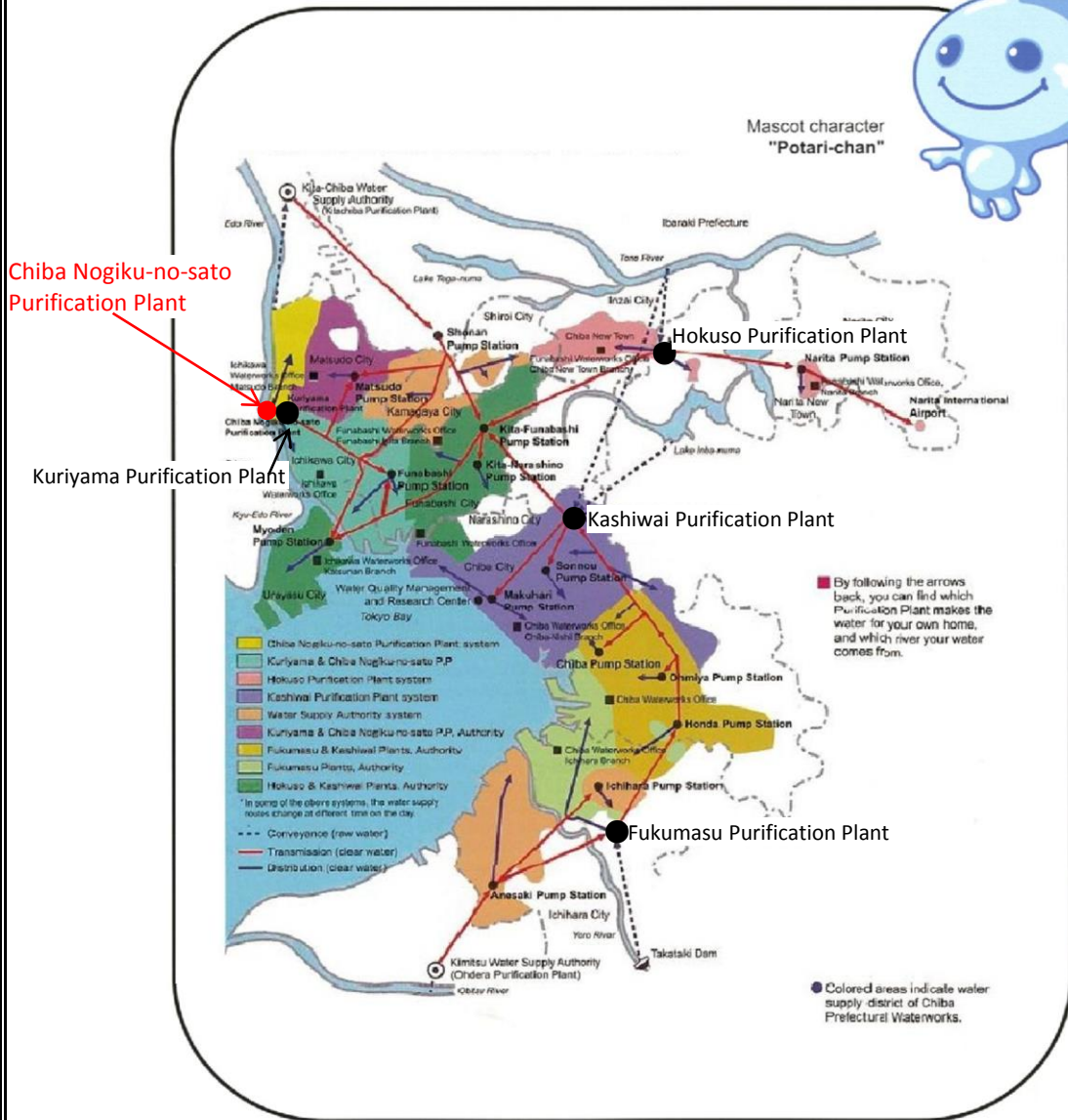
Service area

No.1
Nogiku-no-Sato
WTP

● Case study facility



Mascot character
"Potari-chan"



Case Study Report (Chiba Nogiku-no-Sato Water Treatment Plant)

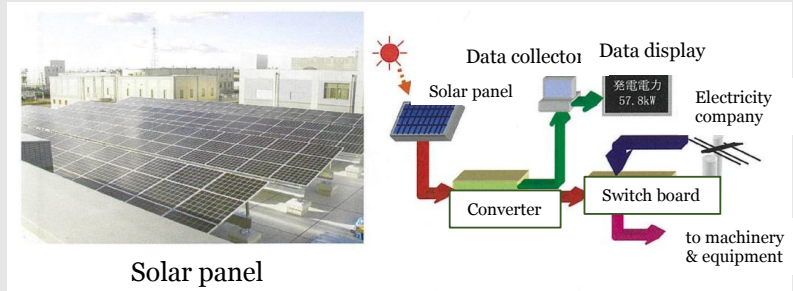
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- Solar Power Generation System for CO2 reduction
- Maximum output: 57.8 kw (daily output varies depending on the weather)
- Installation area: 410 m2 (324 solar power generation modules)
- Usage: supplies power for ventilation fans in the central control building

Other facilities:



Order/contract: PFI (drainage facility)

Other information:

List of references (URL)

- Chiba Prefectural Waterworks Bureau. Annual Report FY2014.
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