	Water Utility	Case Study WTP	Summary
1	Chiba Public Enterprises Bureau	Chiba Nogiku-no-Sato WTP	The utility serves 3.0 million people in portions of the Chiba Prefecture. The total capacity of the five water treatment plants amounts to 1.25 million m^3/d, of which 260,000 m^3/d are purchased from a wholesale water supplier. The Chiba Nogiku-no-Sato Water Treatment Plant began operation in October 2007. It's an earthquake-resistant plant designed to replace the old Kogasaki (1940) and Kuriyama (1958) Water Treatment Plants. Upon its completion in 2007, the Kogasaki was demolished. The Kuriyama will also be out of service in 2023, when the Chiba Nogiku-no-Sato will have completed an ongoing construction of a new water treatment facility that will fully replace the capacity of the Kuriyama.
2	Public Enterprises Agency Kanagawa Prefectural Government	Samukawa WTP (Rapid filtration) Tanigahara WTP (Slow and Rapid filtration) Oyama WTP (Membrane filtration) Midono Water Source (UV treatment) Kissawa Water Source (Chlorination)	The utility supplies 2.8 million residents in portions of the Kanagawa Prefecture. The total capacity is 1.69 million m^3/d, of which 670,000 m^3/d are purchased from a wholesale water supplier. Their water sources are diverse consisted of surface water, subsoil water, spring water and ground water. Depending on the type of water source, different water treatment processes are applied, including rapid filtration, slow filtration, membrane filtration and UV treatment.
3	Osaka Water Supply Authority	Murano WTP	The utility is a wholesale water supplier that provides water to all the 42 municipalities (6.1 million residents) in the Osaka Prefecture except for the prefectural capital Osaka City. The raw water is abstracted from the Yodo River. The three water treatment plants have a total capacity of 2.3 million m^3/d but approximately 80% of its water is produced at the Murano Water Treatment Plant. It is one of the largest water treatment plants in Japan in terms of capacity as well as one of the first ones that adopted an ozone and granular activated carbon treatment. The plant has a very rare, multi-story water treatment facility in which equipment for the water treatment process are located on multiple stories of two connected buildings.
4	Water and Sewer Bureau of the City of Kitakyushu	Ano WTP Upward Biological Contact Filtration (U-BCF)	The utility serves a million residents in the Kitakyushu City. The total capacity is 730,000 m3/d. Two of their five water treatment plants have an upward biological contact filtration system (U-BCF). The U-BCF is a water treatment system developed by the utility that enables aquatic microorganisms to decompose micro-pollutants efficiently as same as natural environment like a riverbed. Because of its low operational cost and high treatment efficiency, a Vietnamese water utility adopted the U-BCF for the first time outside of Japan in 2013.

5	Bureau of Waterworks Tokyo Metropolitan Government	Asaka WTP	The utility supplies tap water to 13.74 million residents in the 23 wards and 26 municipalities in the Tama area. At the Asaka Water Treatment Plant, following the Kanamachi Water Treatment Plant and the Misato Water Treatment Plant, advanced water treatment using ozone and biological activated carbon was introduced in November 2004, and together with the second-phase facility completed in March 2014, currently, advanced water treatment is being used for Asaka's entire 1.7 million cubic meters per day. As a result, the utility now treats the entire amount of water taken from the Tone River system with advanced water treatment.

※The service area of Asaka WTP is based on the official website of the Bureau of Waterworks Tokyo Metropolitan Government "Water Resources and Service Areas by water treatment plants in Tokyo"（https://www.waterworks.metro.tokyo.lg.jp/suigen/map.html）