

Chronology of water facilities

Year	Month	Matters relating to waterworks facilities	Water supply capacity
1892	August	Waterworks construction project started	
1893	July	Water distribution reservoir at Osaka Castle completed	
1895	November	Waterworks construction project completed, birth of Sakuranomiya water resource	51,240 m ³ /day
1897		Commencement of first waterworks expansion project	
1908	January	Commencement of second waterworks expansion project and meter installation project	
1910	March	Meter installation project completed	
1912		First waterworks expansion project completed	67,200-91,650 m ³ /day
1914	March	Second waterworks expansion project completed, birth of Kunijima water resource	219,000 m ³ /day
1915	September	Suspension of operations at Sakuranomiya water resource	
1918	June	Commencement of Kunijima water resource equipment supplementation project	
1919	March	Kunijima water resource equipment supplementation project completed	243,000 m ³ /day
	September	Commencement of third waterworks expansion project	
1920	December	Abolition of Sakuranomiya water resource	
1922	March	Third waterworks expansion project completed	379,000 m ³ /day
1925	August	Commencement of fourth waterworks expansion project	
1926	November	Commencement of water distribution pipe construction project	
1928	March	Water distribution pipe construction project completed	
1929	April	Commencement of highland water distribution equipment improvement project	
1930	February	Fourth waterworks expansion project completed	577,000 m ³ /day
	October	Commencement of water distribution pipe expansion project	
1931	May	Highland water distribution equipment improvement project completed	
1932	March	Water distribution pipe expansion project completed	
1933	November	Commencement of fifth waterworks expansion project	
1935	November	Waterworks office building completed (operation launched on December 1)	
1939	May	Commencement of water supply equipment expansion and improvement project	
1940	April	Commencement of sixth waterworks expansion project	
	June	Fifth waterworks expansion project completed	862,000 m ³ /day
1946	March	Water supply equipment expansion and improvement project suspended	
	March	Sixth waterworks expansion project suspended	
1948	September	Water supply equipment expansion and improvement project restarted	
1949	April	Water quality testing laboratory constructed	
1953	April	Commencement of water distribution pipe improvement project	
	June	Sixth waterworks expansion project restarted	
1954	August	Water supply equipment expansion and improvement project completed	982,000 m ³ /day
1957	November	Birth of Niwakubo Water Purification Plant (sixth expansion project), partial passing water initiated (120,000 m ³ /day)	1,102,000 m ³ /day
1958	July	Niwakubo Water Purification Plant completed (sixth expansion project) Full passing water transmission of 240,000 m ³ /day Commencement of seventh waterworks expansion project	1,222,000 m ³ /day
1960	March	Sixth waterworks expansion project completed	
1961	April	Separation and independence of industrial waterworks operations from waterworks operations	
	July	Partial passing water from Niwakubo Water Purification Plant (seventh expansion project) (120,000 m ³ /day)	1,342,000 m ³ /day
1962	April	Commencement of eighth waterworks expansion project	
	July	Niwakubo Water Purification Plant completed (seventh expansion project) Full passing water of 240,000 m ³ /day	1,462,000 m ³ /day
1964	March	Seventh waterworks expansion project completed	1,562,000 m ³ /day
	July	Niwakubo Water Purification Plant expanded (eighth expansion project), partial passing water launched (100,000 m ³ /day)	

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1965	April	Commencement of 5-year plan water distribution construction project (Phase 1)	1,662,000 m ³ /day
	July	Niwakubo Water Purification Plant expanded (eighth expansion project), partial passing water launched (100,000 m ³ /day)	1,782,000 m ³ /day
1966	July	Niwakubo Water Purification Plant expansion (eighth expansion project) completed (120,000 m ³ /day) Full passing water of 320,000 m ³ /day	1,982,000 m ³ /day
1968	July	Toyono Water Purification Plant expanded (eighth expansion project), partial passing water launched (200,000 m ³ /day)	2,182,000 m ³ /day
1969	September	Toyono Water Purification Plant (eighth expansion project) completed (200,000m ³ /day) Full passing water of 400,000 m ³ /day	
	September	Commencement of ninth waterworks expansion project	
1970	July	Toyono Water Purification Plant (ninth development project) partially completed (50,000 m ³ /day)	2,232,000 m ³ /day
1972	April	Phase 2 water distribution construction project implemented	
	July	Kunijima Water Purification Plant (ninth expansion project) completed (Fourth System, 108,000 m ³ /day)	2,340,000 m ³ /day
1973	July	Kunijima Water Purification Plant (ninth expansion project) completed (Third System 3, 90,800 m ³ /day)	2,430,000 m ³ /day
1975	August	Ninth waterworks expansion project suspended Implementation continued as special construction project for remaining work	
1979	March	Special construction project completed	
	April	Phase 1 water purification facilities construction project implemented	
1982	April	Phase 3 water distribution pipe construction project implemented	
1990	April	Phase 4 water distribution pipe construction project implemented	
1992	April	Phase 2 water purification facilities construction project implemented Advanced water purification facilities construction project implemented	
1995	November	100th anniversary of passing water (construction of waterworks memorial hall etc.)	
1997	April	Phase 3 water purification facilities construction project implemented Phase 5 water distribution pipe construction project implemented	
1998	March	Kunijima Water Purification Plant lower system advanced water purification passing water	
1999	March	Niwakubo Water Purification Plant advanced water purification passing water	
2000	March	Kunijima Water Purification Plant upper system advanced water purification passing water Toyono Water Purification Plant advanced water purification passing water	
2006	November	International water quality control standards for all water purification plants ISO9001 accreditation acquired	
2007	April	Phase 4 water purification facilities construction project implemented Phase 6 water distribution pipe construction project implemented	
2008	December	International foodstuffs safety control standard ISO22000 accreditation acquired	
2018	April	Urgent 10-year Plan for Improving Earthquake Resistance of Pipelines implemented Water Purification and Distribution Facilities Enhancement Plan implemented	

Chronology of industrial water facilities

Year	Month	Matters relating to waterworks facilities	Water supply capacity
1951	March	Commencement of industrial waterworks construction project (Planned water supply volume: 52,500 m ³ /day, construction of Fukushima Water Purification Plant, supply district: the whole of Konohana-ku and part of Fukushima-ku)	
1954	June	Start of partial supply water from the industrial waterworks construction project (Fukushima Purification Plant sedimentation water used)	52,500 m ³ /day
	July	Ceremony to mark water transmission from the industrial waterworks construction project	
1955	July	Commencement of full volume water supply from the industrial waterworks construction project (Fukushima Water Purification Plant system: 52,500 m ³ /day, filtration water used) Ceremony to mark completion of the industrial waterworks construction project	
	August	Mikuni waterproof waterworks used for industrial waterworks and water supply initiated (Planned water supply volume: 3,000 m ³ /day, new Mikuni Water Distribution Plant constructed, water supply area: the whole of Higashi Yodogawa-ku)	55,500 m ³ /day
1956	June	Industrial Water Law enacted	
1957	November	Commencement of first industrial waterworks expansion project (Planned water supply volume: 40,000 m ³ /day, Fukushima Water Purification Plant expanded to 17,000 m ³ /day, Mikuni Water Distribution Plant expanded to 23,000 m ³ /day, water supply area: the whole of Nishi Yodogawa-ku and Yodogawa-ku)	
1958	October	Industrial Waterworks Project Law enacted	
1959	April	Commencement of second industrial waterworks expansion project (Planned water supply volume: 160,000 m ³ /day, construction of new Konohana Water Purification Plant: 67,000 m ³ /day, construction of Higashi Yodogawa Water Purification Plant: 93,000 m ³ /day, supply area: the whole of Fukushima-ku, Konohana-ku, Nishi Yodogawa-ku and Yodogawa-ku)	
1959	May	Commencement of partial water supply from the first industrial waterworks project (Mikuni Water Distribution Plant system increased by 23,000 m ³ /day)	78,500 m ³ /day
	June	Ceremony to mark partial water transmission from the first industrial waterworks expansion project	
	November	Commencement of full water supply from the first industrial waterworks expansion project (Fukushima Water Purification Plant system increased by 17,000 m ³ /day)	95,500 m ³ /day
1960	February	First industrial waterworks expansion project completed	
1961	April	Separation and independence of industrial waterworks operations from waterworks operations	
	September	Partial water supply initiated from the second industrial waterworks expansion project (Konohana Water Purification Plant system: 67,000 m ³ /day)	162,500 m ³ /day
1962	April	Commencement of third industrial waterworks expansion project (Planned water supply volume: 225,000 m ³ /day, construction of Joto Water Purification Plant: 153,000 m ³ /day, Higashi Yodogawa Water Purification Plant increased by 58,000m ³ /day, Fukushima Water Purification Plant increased by 14,000m ³ /day, water supply area: the whole of Fukushima-ku, Higashinari-ku, Asahi-ku, Tsurumi-ku and Joto-ku and part of Kita-ku and Higashi Yodogawa-ku)	
1963	April	Commencement of full water supply from the second industrial waterworks expansion project (Higashi Yodogawa Water Purification Plant system: 93,000 m ³ /day)	255,500 m ³ /day
	April	Commencement of the fourth industrial waterworks expansion project (Planned water supply volume: 95,000 m ³ /day, construction of Nishinari Water Purification Plant: 60,000 m ³ /day, Fukushima Water Purification Plant increased by 12,500 m ³ /day, Konohana Water Purification Plant increased by 22,500 m ³ /day, water supply area: in addition to the first specified area, the whole of Minato-ku, Taisho-ku, Naniwa-ku and Nishinari-ku and part of Ikuno-ku, Suminoe-ku, Hirano-ku and Higashi Sumiyoshi-ku)	
1964	November	Second industrial waterworks expansion project completed	
	October	Commencement of partial water supply from the third industrial waterworks expansion project	313,500 m ³ /day

Year	Month	Matters relating to waterworks facilities	Water supply capacity
1965		(Higashi Yodogawa Water Purification Plant system increased by 58,000 m ³ /day)	
	April	Commencement of the fifth industrial waterworks expansion project	
	October	Commencement of partial water supply from the fourth industrial waterworks expansion project (Nishinari Water Purification Plant system: 60,000 m ³ /day, by divided supply from Osaka Coastal Industrial Waterworks Union)	20/ 373,500 m ³ /day
1966	March	Commencement of partial water supply from the third industrial waterworks expansion project (Water conveyed from the Joto Water Purification Plant system and Fukushima Water Purification Plant, Fukushima Water Purification Plant system increased by 14,000 m ³ /day)	387,500 m ³ /day
1967	February	Completion of the third industrial waterworks expansion project and commencement of full water supply from the third industrial waterworks expansion project (Joto Water Purification Plant system: 153,000 m ³ /day)	540,500 m ³ /day
	December	Commencement of full water supply from the fourth industrial waterworks expansion project (Fukushima Water Purification Plant system increased by 12,500 m ³ /day, Konohana Water Purification Plant system increased by 22,500 m ³ /day, water supply area: part of Ikuno-ku, Hirano-ku and Higashi Sumiyoshi-ku)	575,500 m ³ /day
1968	February	Fourth industrial waterworks expansion project completed (Nishinari Water Purification Plant system: 60,000 m ³ /day)	
	November	Fifth industrial waterworks expansion project suspended	
1976	May	Operations suspended at Mikuni Water Distribution Station (26,000 m ³ /day) and Kunijima Water Transmission Pumping Station abolished (26,000 m ³ /day)	549,500 m ³ /day
1977	April	Mikuni Water Distribution Station abolished (26,000 m ³ /day)	
1979	March	Operations at Fukushima Water Purification Plant suspended (96,000 m ³ /day)	453,500 m ³ /day
1980	March	Operations at Nishinari Water Purification Plant suspended and gratuitous transfer of jurisdiction to the sewage bureau effected (60,000 m ³ /day)	423,500 m ³ /day
	April	Installation of in-house industrial water at Osaka Coastal Industrial Waterworks Business Group and 30,000 m ³ /day sub-distributed to Nishinari system for Osaka City	
1983	March	Fukushima Water Purification Plant abolished (96,000m ³ /day)	
1984	March	Osaka Coastal Industrial Waterworks Business Group in-house industrial water expanded (Nishinari system: 30,000 m ³ /day ⇒ 40,000 m ³ /day)	433,500 m ³ /day
	September	Operations at Konohana Water Purification Plant suspended (89,500 m ³ /day) and moved as a water distribution station	344,000 m ³ /day
1992	April	Konohana Water Purification Plant (89,500 m ³ /day) and Kunijima Water Transmission Pumping Station (26,000 m ³ /day) abolished and capacities of Joto Water Purification Plant and Nishinari system changed (Joto system: 153,000 m ³ /day ⇒ 109,000 m ³ /day)	300,000 m ³ /day
1993	April	Commencement of industrial waterworks reconstruction project	
2000	April	Commencement of industrial waterworks reconstruction project (Phase 2)	
2004	March	Dissolution of the Osaka Coastal Industrial Waterworks Business Group	
	April	Commencement of the industrial waterworks area expansion project	
2007	March	Provisional launch of operations at Tsumori Water Purification Plant (Higashi Yodogawa Water Purification Plant system: 151,000 m ³ /day ⇒ 146,000 m ³ /day, Nishinari system: 40,000 m ³ /day ⇒ 45,000 m ³ /day)	
	April	Industrial waterworks area expansion project completed	
2009	March	Tsumori Water Purification Plant abolished (Nishinari system: 45,000 m ³ /day)	
2013	February	Higashi Yodogawa Water Purification Plant service area expanded to include Nishinari system and Nanko area (Higashi Yodogawa Water Purification Plant system: 146,000m ³ /day ⇒ 151,000 m ³ /day)	260,000 m ³ /day
2018	April	Industrial waterworks reconstruction project (Phase 2) completed Joto Purification Plant suspended (109,000 m ³ /day) Joto Purification Plant abolished (Renamed Tsurumi Distribution Plant)	151,000 m ³ /day

Note 1) The operating water supply capacity shown in this paper indicates the actual operation capacity on those days, so it does not correspond with the capacity reported in the notification of business.

Note 2) The Nishinari Water Purification Plant has never been in operation. However, since the Nishinari system received water as raw water for the business group Tsumori Water Purification Plant, calculations are shown based on its water receiving capacity.