



# Travel Leisurely in Taipei Clean & Refreshing Water



The primary water source for the Taipei Water Department (TWD) is the upstream Xindian River, specifically the Nanshi River and Beishi River. Water is usually drawn from the natural flow of Nanshi River. When the natural flow of Nanshi River is insufficient, water is released from the Feitsui Reservoir to supplement it. Thanks to the comprehensive protection of the upstream catchment area, the water quality remains pristine and uncontaminated.



## Water Source Patrol and Maintenance

- For the clean and safe of water sources in Taipei, the Taipei Water Department takes the following actions:
1. Assign responsible staff to patrol the water source protection areas including the Xindian River, Daking River and Shuangxi River. In 2023, a total of 808 inspections of upstream water sources was conducted.
  2. Engage in the joint patrol of Xindian River upstream areas in collaboration with the competent authorities (Taipei Water Management Branch, WRA, MOEA) of water source special zones.
  3. In cooperation with another competent authorities (Environmental Protection Department, New Taipei City Government, EPD) in line with the Water Pollution Control Act, the Department also conducts joint audits of the hot spring and catering industry in the Wulai area.
  4. Organize periodic cross-entity communication conferences to maintain water source safety together.



▲ Waters patrol



▲ Water quality sampling

## Multiple barriers strategy

To ensure the safety of water quality, the Taipei Water Department implements the "Multiple barriers" strategy in water purification using internal control standards stricter than the national "Standard for drinking water quality". Through 95 water quality monitoring stations formed with EPA-accredited water quality laboratory and online monitoring systems, we implement 24-hour continuous water quality monitoring from water sources, treatment plants, pump stations, to taps (end-users).

### Improve water treatment ability Multiple barriers strategy

<b>Gel barrier</b> Turbidity of sedimentation water $\leq 2.0$ NTU	<b>Filtration barrier</b> Turbidity of filtration water $\leq 0.3$ NTU	<b>Disinfection barrier</b> Residual chlorine in outflow water 0.5-0.7ppm
--	--	---

- The treated water from the treatment plant has an average turbidity of 0.02 NTU.
- This is significantly better than the drinking water quality standard of 2 NTU.

### Comprehensive performance evaluation of water treatment plants

Comprehensive performance evaluation has been conducted on three major aspects: operation, design, and management.

**Ensuring Water Intake Quantity and Reducing Operational Risks**

Replacement of rake equipment  
Key water intake facilities, like rake machines and Qingtan Weir gates, are periodically updated and improved.

**Enhancing Efficiency Stabilizing Unit Operation**

Mud Scraper installed  
Mud Scraper installed in Changxing site, chemical dosing equipment and on-site water pumps have been replaced with newer and better models

**Reducing Equipment Energy Consumption**

Enhancing Supervisory Control & Data Acquisition (SCADA) and Controller Upgrades  
SCADA and controller devices upgraded at all treatment plants, reinforcing overall information security.

## Comprehensive Water Quality Management

To ensure the water quality of the entire supply chain from the water source to the user's faucet, continuous monitoring and management are rigorously enforced. In 2023, 6,783 planned sampling inspections were conducted within the water supply area.

TWD has been recognized by ERA as a **Laboratory Excellence** and lab accreditation by the Environmental Protection Administration

**Water Quality Compliance Rate 100%**



Protecting water resources through proactive and frequent inspections

**Water sources**



Real-time water quality information inquiries

**Treatment plant**

**Pump Station**

Active guidance to users on water usage and recommendations for reputable water tank cleaning companies

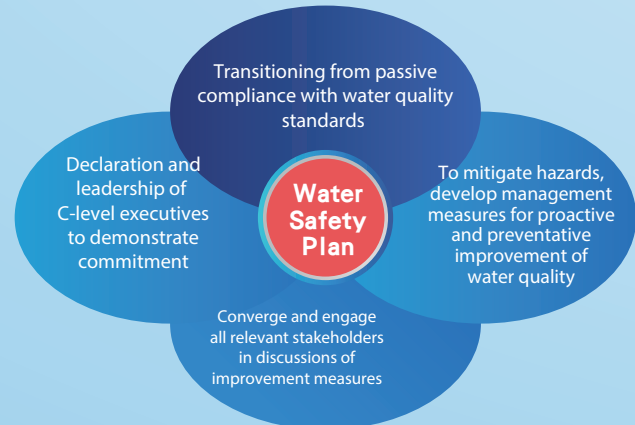
**End-user tap**



# Water Safety Plan

The TWD has been promoting the Water Safety Plan(WSP) since 2014, achieving 40 control measures by 2023 and with effectiveness verified. Notable measures include the "Prevention Mechanism for Water Quality Contamination During water supply interruption/restoration" which, through rigorous control measures, operational management, and post-event feedback, effectively prevents water quality abnormalities. Additionally, the "Manganese-Containing Raw Water Emergency Treatment" enables treatment plants to monitor and respond effectively to sudden manganese rise, reducing the impact on water supply to the public.

## Water Safety Plan Implementation Steps



# Water Quality Assurance

Taipei's tap water is renowned for its purity and excellence. End-to-end water quality inspections are conducted by accredited by the Ministry of Environment. The inspections cover 141 items, significantly more than the 68 items mandated by the national "Drinking Water Quality Standards," with 73 additional items of concern. These include pathogens, pesticides, heavy metals, trihalomethanes, and emerging contaminants such as environmental hormones and plasticizers, which are either undetected or far below international and national drinking water quality standards. The quality of Taipei's tap water fully meets the drinking water quality standards of Taiwan, the World Health Organization, and other developed countries.

ND=Not Detected

Item	Test results
Heavy Metals	ND or far below Taiwan's "Standard for Drinking Water Quality"
Pesticides	ND
Disinfection by-products	Total Trihalomethanes 6.8 $\mu\text{g/L}$ (far below the standard at 80 $\mu\text{g/L}$ )
	Haloacetic acids 5.8 $\mu\text{g/L}$ (far below the standard at 60 $\mu\text{g/L}$ )
	N-Nitrosodimethylamine, NDMA ND
Emerging contaminants	Di(2-ethylhexyl) phthalate, DEHP ND
	Nonylphenol ND
	Bisphenol A ND
	Microcystin ND
	Cryptosporidium 0/100L
	Giardia 0/100L
	Perfluorooctanoic acid, PFOA ND
Perfluorooctanesulfonic acid, PFOS ND	

# Drinking Fountains Service

To promote plastic reduction and energy-saving policies, the TWD encourages citizens to drink tap water instead of buying bottled water. The TWD has prioritized the installation of direct drinking fountains in large parks, popular hiking trailheads, and recreational tourist spots and crowded outdoor public areas where water access is limited. By the end of 2023, a total of 675 direct drinking fountains had been installed. In coordination with major events organized by the Taipei City Government, the TWD sets up mobile drinking fountains to encourage people to consume Taipei's quality water from taps.

## Taipei Drinking Water Map

To improve access to drinking water, the TWD has launched an online map that seamlessly integrates with Google Maps for navigation (also available through the Taipei Pass app). This tool helps residents easily find nearby drinking water locations using their mobile devices.



## QR Code Real-time Water Quality Inquiries

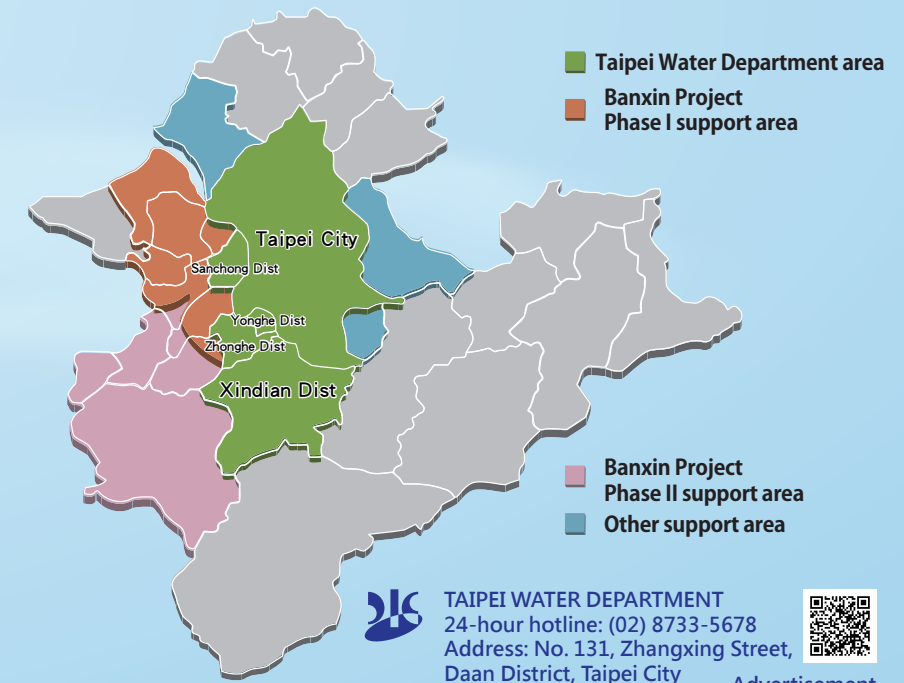
By scanning a dedicated QR code on each drinking fountain, citizens can instantly view up-to-date water quality details. This includes real-time data from nearby water quality monitoring stations, E coli test results for the specific fountain, and information of on-line water quality sensors in the surrounding pipeline network. This initiative aims to ensure that water quality information is transparent and accessible, enabling citizens to use tap water safely.



# Water Allocation to Northern Taiwan

To ensure stable water supply in Metropolitan Taipei, the Taipei Water Department implements the Banqiao and Xinzhuang Districts Water Supply Improvement Plan(Banxin Project) in coordination with the Water Resources Agency. Between 2005 and 2023, water supply for New Taipei City has increased from 37% to 52%, Taipei and New Taipei shared quality water supply.

Supply Volume (10,000 CMD)	2005	2023
Distribution volume within Taipei Water Department supply area	230	173
Taipei City	157	117
New Taipei City	73	56
Support volume for Taiwan Water Corporation	19	71
Taipei City: New Taipei City water supply ratio	63 : 37	48 : 52



TAIPEI WATER DEPARTMENT  
24-hour hotline: (02) 8733-5678  
Address: No. 131, Zhangxing Street, Daan District, Taipei City



Advertisement  
Printed in 2024