

2026

Infrastructure, Performance,
and Resilience Outlook for
Urban Water Systems

Jeddah Water Intelligence Report

City Water Intelligence

► www.ourfuturewaterintelligence.com



Executive Summary

STRATEGIC CONTEXT

Jeddah operates in an absolute water-scarcity setting and depends on desalination, bulk transmission, storage, urban distribution, wastewater systems, reuse infrastructure, and stormwater assets working as one connected service chain.

Rapid development, network condition, energy dependence, intense rainfall, and limited city-specific performance disclosure create a complex resilience agenda. The central decision challenge is to align capital delivery with operating capability and transparent city-level evidence.

22 projects

Latest city water and environmental programme

300,000 m³/d

Jeddah Airport 2 operating design capacity

137.8 mm

Highest single-day Saudi rainfall event recorded in Jeddah in 2025

Key intelligence finding

Jeddah's water security depends on coordinating the complete urban water cycle. New supply and treatment capacity are essential, but durable resilience also requires targeted network rehabilitation, dependable reuse markets, integrated digital operations, drainage readiness, clear institutional interfaces, and city-specific performance reporting.

Signals decision-makers should track

- **Network performance.** Track verified city-level water balances, service continuity, recurring failures, pressure stability, and the durability of rehabilitation outcomes.
- **Integrated operations.** Monitor whether utility distribution systems, municipal stormwater platforms, customer evidence, and emergency workflows develop trusted data-sharing and decision protocols.
- **Circular resilience.** Watch the growth of dependable treated-effluent demand, drainage readiness, energy continuity, and transparent environmental compliance across the urban water cycle.

What this Report Covers

01

Demand and Consumption

Assesses demographic, residential, commercial, industrial and conservation pressures shaping Jeddah's future water demand.

02

Infrastructure and Supply

Examines desalination, transmission, distribution, wastewater, reuse, stormwater and major capital-project dependencies.

03

Utility Performance

Reviews tariffs, affordability, network losses, reliability, customer service, finance and investment requirements.

04

Governance and Digital Systems

Evaluates institutional roles, regulation, smart metering, digital twins, data governance and public transparency.

05

Climate and Strategic Resilience

Connects heat, flooding, circularity, energy-water dependencies, adaptation investment and priority actions.

Government and regulators

Strengthen city-level disclosure, clarify inter-agency operating protocols, and align investment oversight with measurable service, environmental and resilience outcomes.

Utilities and municipalities

Sequence network rehabilitation, wastewater and reuse expansion, drainage readiness, customer systems, and integrated digital operations around verified local risks.

Investors and delivery partners

Connect project finance and technology deployment with operating ownership, data quality, environmental safeguards, customer demand, and whole-life performance requirements.

About the full report

The full City Intelligence Report provides a structured assessment of Jeddah's demand, desalination-dependent supply, water and wastewater infrastructure, utility performance, governance, digital transformation, climate resilience, investment priorities, and signals to monitor.

Full report: USD 799

<https://ourfuturewaterintelligence.com/products/jeddah-water-intelligence-report>

About the analyst

Robert C. Brears is the founder of Our Future Water Intelligence. His work focuses on water security, climate resilience, infrastructure governance, and the financial and institutional choices that shape durable water outcomes.



Connect Jeddah's infrastructure expansion with accountable, citywide resilience.