

# Muscat drinking water network to be upgraded

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*Extensions in Muscat, Seeb, Bausher, Al Amerat, Reservoir capacity in Bausher, Qurum to increase, Barka-Mawaleh-Bausher system to be upgraded*

MUSCAT -- The Public Authority for Electricity and Water (PAEW) is ramping up water storage and distribution infrastructure in Muscat Governorate with a view to strengthening security of potable water supply in all areas of the capital city. New supply networks, reservoir capacity expansions, and transmission line upgrades are among a host of initiatives envisaged for implementation in key areas of the governorate over the next couple of years. The projects are designed not only to cater for organic growth in existing neighbourhoods, but also new localities springing up in this rapidly expanding city.

According to PAEW officials, around 100 km of new distribution lines will be laid as part of a series of network extensions planned in the wilayats of Seeb, Bausher, Muscat and Al Amerat. These schemes, which also involve the construction of a number of elevated tanks, will cater for water demand growth in these wilayats. Several existing reservoirs are also targeted for expansion at a number of places around the city. Notable is a plan to build new storage capacity at the Bausher elevated reservoir designed to meet projected growth in water demand over the next 25 years. Three new pumping stations and several kms of supply lines will also be built as part of the project in Upper Bausher.

In Qurum, a new 23,000 m3 capacity concrete water tank is proposed at the site of the existing Qurum Elevated Tank complex. Two new concrete reservoirs, of a capacity of 5,700 and 13,100 cubic metres (m3) are under development elsewhere in Qurum. In Wadi Kabir, work is under way on a new 18,200 m3 capacity ground level storage reservoir, while chlorination facilities are envisaged at PAEW's Al Khoudh complex. Also as part of the overhaul of the Muscat water network, the Authority plans to augment supplies of desalinated water from Barka by strengthening the Barka-Mawaleh-Bausher transmission system.

In all, 55 km of new transmission lines ranging in diameter from 1200-1600mm will be laid along this route along with a system of high pressure pumps. A ground-level reservoir of 20,000 m3 capacity is also planned on the Barka-Mawaleh section of the transmission system. The Authority also plans to replace an existing length of the main water transmission line that runs from Al Amerat to Wadi Adai with a new network of transmission lines and pumping facilities. In nearby Wilayat of Qurayat, a new water supply system is under development involving the installation of more than 125 km of transmission and distribution lines, storage tanks, pumping stations, and tanker filling points.

Longer term, PAEW aims to develop a network of emergency water reservoirs at various locations around Muscat Governorate to ensure continuity of supply in the event of a major breakdown. In all, 12 reservoirs will be built at the following strategic sites around the capital: Muscat, Ruwi, Al Wadi al Kabir, Mumtaz, Al Amerat, Qurum, Bausher, New Bausher, Ghala Airport Heights, Seeb, Al Khoudh, Rusayl and Barka. Well-known international consultancy firm, Sogreah, is currently undertaking the detailed design of the emergency water reservoir network for Muscat Governorate. The project will be implemented over a three-year timeframe.