

# Master Plan for Potable Water of Qalyoubia Governorate

## Client

Construction Authority for Potable Water and Wastewater

## Scope of Work

**Stage (1):** evaluation and data collection, Geotechnical Information System (GIS), topographic survey, and geotechnical investigations, water quality analysis, flow measurement, review of data and previous plans, civilization and population studies, existing and future water consumption studies, and maximum flow rate specification.

**Stage (2):** analysis, studies, issuance of final report including bases of design.

**Stage (3):** feasibility studies, conceptual designs for water supply systems, and preparation of tender documents using design and build scheme which comprised technical specifications, bill of quantities, drawings, estimate for each tender and construction schedule for high priority projects.

**Stage (4):** preparation of Master Plan final report.

## Location

Qalyoubia, Egypt

## Types of Activities

Civil works

The preparation of Qalyoubia Water Master Plan involved 4 stages. In stage one, a primary report was developed to review the current conditions of existing facilities. Those comprised 57 major surface water treatment plants, 126 water wells, 9 major pump stations, 126 water reservoirs (elevated tanks), 3,500 km of pipeline networks involving pipes with diameters ranging from 200 mm to 1,000 mm.

Stage two included preparation of a final report comprising social, demographic and water demand studies, review and completion of hydraulic studies

for the water distribution system, and preparation of alternatives with respect to service improvements implemented every 5 years.

Identification of high-priority projects to be implemented in the first five years was undertaken in stage 3, whereas stage 4 involved the development of a Master Plan for the period 2037-2007, in addition to the preparation of viable alternatives and annual construction cost projections.

