

Jurisdictional Class: Competitive  
EEO Category: Officials and Administrators  
Revised: 06/29/2020

**PRINCIPAL ENGINEER**  
**(WATER BOARD)**

**DISTINGUISHING FEATURES OF THE CLASS:** This position exists at the Upper Mohawk Valley Regional Water Board, and consists of extremely difficult professional and administrative engineering work, involving the responsible charge of the technical and administrative operation and maintenance of a municipal water supply and distribution system. The incumbent has responsibility for coordinating water supply and distribution systems and for devising and directing complex engineering projects. The incumbent of this position reports directly to the agency's Executive Director, and the work is performed subject to administrative approval, permitting the employee considerable leeway for the exercise of independent judgement in planning, initiating and directing projects and activities. Supervision is exercised over the work of professional, sub-professional, maintenance, clerical and other employees. Does related work as required.

**TYPICAL WORK ACTIVITIES:** (Illustrative Only)

Provides administrative management over Engineering and Maintenance departments;  
Directs the operation and maintenance of water distribution system components, including but not limited to, transmission lines, gate houses, pumping stations, treatment facilities, water storage tanks, and related properties;  
Directs the maintenance and repair of local water mains, valves, fire hydrants, service lines, and other smaller fixtures and equipment;  
Designs specifications and plans for water system extensions and improvements, and performs hydraulic analyses and calculations as necessary to ensure that appropriate water pressure and flow capacities are maintained;  
Directs the compilation of water consumption, water loss, hydraulic data, and other records and reports such information to outside regulatory agencies as required for compliance;  
Oversees the plotting and maintenance of maps and records for all water system properties;  
Conducts departmental staff meetings to evaluate operations and procedures, and directs work assignments and the maintenance of employee activity records;  
Directs the development of long-range capital improvement programs and projects;  
Prepares tentative budget estimates and directs departmental and project budget control;  
Coordinates with outside professional consultants and engages in contract administration;  
Directs special engineering studies, prepare reports, and performs a variety of other high level administrative and professional engineering and duties and related correspondence;  
Prepares and presents a variety of public presentations for board of directors, public officials, public meetings, media, and other stakeholder audiences;  
Conducts other correspondence and coordination with local towns and villages, code officers, plumbers, excavation companies, developers, regulators, customers and others.

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**FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:** Comprehensive knowledge of the principles and practices of hydraulic engineering, as it relates to the design, construction, operation and maintenance of a public water supply and distribution system; thorough knowledge of structural engineering as it applies to the operation, construction, and maintenance of transmission lines, mains, pumping stations, reservoirs, storage tanks, and other fixtures and equipment used in the operation and maintenance of a water supply system; a general understanding of the principles and procedures of water filtration and purification; ability to design and direct large-scale engineering projects; thorough knowledge of construction techniques, practices, and cost structures; general knowledge of construction and operational safety practices and equipment; ability to coordinate and direct the technical operation of a public water supply and distribution system; ability to prepare and analyze complex hydraulic engineering records and reports; ability to understand and carry out complex oral and written directions with a high degree of accuracy and completeness; ability to exercise sound professional judgement, conduct, and courtesy; excellent oral and written communication skills.

**MINIMUM QUALIFICATIONS:** Either:

- (A) Graduation from a regionally accredited or New York State registered college or university with a Master's Degree in civil, environmental or sanitary engineering, or a closely related field **AND** five (5) years of closely related engineering experience; **OR**
- (B) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree in civil, environmental or sanitary engineering, or a closely related field **AND** six (6) years of closely related engineering experience.

**SPECIAL REQUIREMENT:** Must possess a Professional Engineer's License issued by the State of New York within 6 months of appointment. License must be maintained throughout appointment.

Revised: 05/28/1997; 06/29/2020