GENERAL PURPOSE

Under direction, performs responsible, professional analysis in support of the operations and maintenance of District water and recycled water system facilities; plans, manages, implements administrative and operational system improvement projects, evaluations, and special studies; participates in the development of work plans for the formulation of policies and procedures involving operations, systems, and capital improvement projects; contributes to Branch fiscal and technical management; and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

Operations Analyst is a unique, single position class in the operations job family. The incumbent performs a wide range of project-oriented research and analysis, including statistical analysis, policy development, procedural evaluation, hydraulic analysis, system performance evaluation, facilities improvement alternatives analysis, capital improvement program development and the coordination of operations and maintenance projects and activities with other District departments. Assignments are received in the form of general instructions and objectives to be achieved.

An Operations Analyst is expected to exercise initiative and independent judgment in developing relevant information and resources, coordinating work activities with other departments and functions and selecting analytical methods and techniques appropriate to the issues under study. The incumbent may supervise a small support group.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the class.

Works with District staff to develop and improve operational practices in support of the District’s mission, strategic plans and values.

FLSA DETERMINATION: Meets administrative exemption from overtime.
Plans, organizes and conducts research and analyses regarding District policies, project proposals, operational procedures, facilities performance, system capabilities and system supply and demand characteristics; identifies weaknesses or shortfalls; develops guidelines for systems operations; formulates recommendations for facilities improvements, system operational changes and operating procedures; produces and maintains operational plans to document findings and recommendations.

Utilizes appropriate data and analytical resources where they exist, including but not limited to, site visits, financial records, customer billing records, geographical information systems, hydraulic modeling studies, supervisory control and data acquisition records, facility performance data, historical maintenance and work order records, engineering construction records, topographical maps, and engineering standards.

Develops data resources as needed to support analysis where existing sources are not available including supporting formats, quality assurance, procedures for collection and maintenance, and accessibility with consideration for relevance to other work groups or applications; directs and instructs staff members on data collection methods; coordinates the development of database maintenance procedures.

Performs or participates in engineering analyses on existing pumping stations, wells, water tanks, control valves, and related distribution facilities and systems; defines operating characteristics; determines and recommends upgrades to improve operational and control efficiency.

Leads or participates in the preparation of a variety of interagency and interdepartmental analytical reports, commentaries and correspondence; reviews and prepares comments on draft reports developed for District and outside agency review; coordinates with other departments as needed; creates graphs, tables, slides and other visual aids to illustrate technical studies and assist in project presentations.

Coordinates and performs field surveys to document facility layouts, operating conditions and system operational procedures and concerns; consults with field staff to obtain input regarding facilities, equipment or procedural changes to improve operating efficiency.

Leads or participates in all aspects of operations and maintenance special project implementation, including alternative analysis, cost benefit evaluation, water quality considerations, scope definition, funding procurement, interdepartmental coordination, customer coordination, writing and procuring agreements, coordination with vendors and contractors, and documentation in District records and databases.

**FLSA DETERMINATION:** Meets administrative exemption from overtime.
Using databases and other methods of tracking system status and performance, monitors and analyzes system operating characteristics including local demand centers, peak demand conditions, facility flow histories and seasonal supply/demand variations.

Participates in the evaluation of key departmental performance indicators; develops and assists in the maintenance of departmental performance monitoring methods (i.e. dashboards).

Participates in and leads the identification, evaluation and prioritization of capital improvement program requests; develops cost estimates, cost benefit analyses and project/program schedules; generates project data for inclusion in the District five-year capital improvement program; monitors status of approved projects.

Participates in development of District and department budget proposals.

Provides background summaries for groundwater acquisition and utilization; researches and summarizes contractual limitations on the development and usage of water supply sources.

Reviews, revises and comments on financial and technical reports, environmental documents, project proposals and facilities cost analyses.

Participates on assigned interdepartmental committees and work groups established to evaluate special applications and programs, information systems, data, and reporting requirements procedures, systems, projects and alternatives.

May review and provide comment on construction drawings.

Performs related duties as assigned.

**DESIRED MINIMUM QUALIFICATIONS**

**Knowledge of:**
Principles and practices of civil and hydraulic engineering design and construction applicable to the operational analysis of water and reclaimed water systems; modern concepts and methods of structural and construction design; principles and practices of water and sewer system operation and maintenance; local, state and federal laws and regulations governing the operations of a water and reclaimed water utility; trends, approaches and problem-solving techniques used in waterworks engineering, operations analysis and regulatory compliance; demographic evaluation and market analyses techniques; methods, practices and techniques of project management; principles and practices of sound business communication; computer hydraulic modeling techniques; basic principles and practices of database development and maintenance; CAD and GIS element properties, layer development and program applications; principles and practices of employee supervision and training.

Ability to:

Research, analyze, summarize, develop conclusions and make sound independent recommendations regarding engineering, operational and financial data both manually and using computer modeling and analysis software; interpret engineering drawings, maps, site and building plans and specifications, graphs and statistical data; analyze technical design and construction engineering problems, evaluate alternatives and recommend effective solutions; perform and provide staff leadership in conducting operational analyses; prepare clear visual displays, such as maps, graphs and illustrations; communicate effectively orally and in writing; prepare clear and concise technical documents, reports, correspondence and other written materials; plan, organize, schedule, lay out and supervise the work of assigned personnel; establish and maintain effective working relationships with those contacted in the course of work; follow and apply written and oral work instructions; make sound independent judgments within established guidelines.

Training and Experience:

A typical way of obtaining the knowledge, skills, and abilities outlined above is graduation from an accredited college or university with a bachelor’s degree in civil engineering or a closely related field; and five years of progressively responsible professional engineering experience; or an equivalent combination of training and experience.

Licenses; Certificates; Special Requirements:

FLSA DETERMINATION: Meets administrative exemption from overtime.
A valid California driver’s license and the ability to maintain insurability under the District's Vehicle Insurance Policy.

Possession of a valid Engineer-in-Training Certificate issued by the State of California is desired.

PHYSICAL AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Physical Demands

While performing the duties of this class, the employee is regularly required to stand, walk and sit; talk and hear, both in person and by telephone; use hands to finger, handle, feel or operate standard office equipment or controls; and reach with hands and arms.

Specific vision abilities required by this job include close vision, color vision, depth perception and the ability to adjust focus.

Mental Demands

While performing the duties of this class, the employee is regularly required to use written and oral communication skills; read and interpret data, information and documents; analyze and solve complex problems; use math and mathematical reasoning; perform highly detailed work on multiple concurrent tasks with intensive deadlines; work with frequent interruptions; and interact with District managers, staff, representatives of outside agencies and others encountered in the course of work.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

The employee normally works under typical office conditions where the noise level is usually quiet. Some assignments require the employee to work under outside weather conditions with exposure to wet, hot or cold conditions where the noise level may be loud.

FLSA DETERMINATION: Meets administrative exemption from overtime.