

CITY OF MADISON
INTER-DEPARTMENTAL
CORRESPONDENCE

DATE: December 26, 2007

TO: Personnel Board

FROM: Larry Oaks, Human Resources

SUBJECT: **Water Supply Manager and Water Quality Manager**

At the request of the Interim Water Utility General Manager, I have conducted an evaluation of the vacant position (#3944) of Engineer 3, in Compensation Group 18, Range 10, and the position (#1779) of Water Quality Manager (occupied by J. Grande) in Compensation Group 18, Range 10.

Water Supply Manager

The current Engineer 3 is responsible for the management of the Water Utility's Water Supply Section. This section, in brief, is staffed by highly skilled electronic technicians and waterworks operators who pump, treat and monitor the distribution of the City's water supply. As initially conceived, this oversight role was performed by a "Water Supply Supervisor" (18/09) within relatively narrowly defined operational parameters. That role was subsequently expanded to encompass engineering considerations when the position was most recently filled by an Engineer 3 (18/10). As the needs of the Water Utility continue to evolve (and are more clearly articulated) this role is now recognized as inherent to the success of the Utility and requires that the incumbent exercise considerable judgment and discretion in both meeting current demands as well as anticipating and addressing future challenges. Further, it is recognized that this managerial role cannot be performed in isolation, but needs a voice in broader utility decisions.

Accordingly, I have drafted a class specification for the new class of "Water Supply Manager" (see attached), which specifies more substantive managerial, administrative and professional responsibilities. I recommend that the new class be established in Compensation Group 18, Range 14. Although many elements of this work parallel that of the Fire Protection Engineer (i.e., programmatic engineering work of similar scope), I believe that Range 14 placement better acknowledges the inter-disciplinary nature of this work in combination with the evolving nature of water supply considerations.

This new position will be filled competitively.

Water Quality Manager

The Water Quality Manager as currently conceived performs responsible managerial and professional work in directing the functions, activities and staff of the Water Utility's Water Quality section. This work involves providing oversight for Water Utility compliance with state and national drinking water quality standards, testing, and reporting; developing programs and master plans to address and mitigate existing and potential water quality issues; responding to and maintaining records of customer complaints and reports about water quality problems; overseeing water quality sampling and testing and recommending effective response to emerging Utility requirements; developing and presenting public information and education programs and responding to media inquiries about water quality; and preparation for a potential

public health response using the incident command system. This work is characterized by considerable independent judgment and initiative. The position serves on the Water Utility management team, participates in formulation and implementation of Department policy and priorities, and provides regular reports to the Water Utility Board. This work is performed under the general supervision of the Water Utility General Manager.

Similar to the Water Supply Manager, this body of work has undergone accelerated growth in response to the emerging long-term challenges associated with water quality. In brief, while the position continues to provide the core functions of water quality (e.g., regulatory compliance), the role has been expanded to address water quality from a more holistic multi-dimensional perspective incorporating a direct voice in the management team of the Utility. I have significantly re-worked the class specification (see attached) to reflect these changes. Consistent with the salary analysis above for "Water Supply Manager" I recommend placement in Compensation Group 18, Range 14. I further recommend the reallocation of the incumbent.

I have prepared the necessary ordinance and resolution to implement these recommendations.

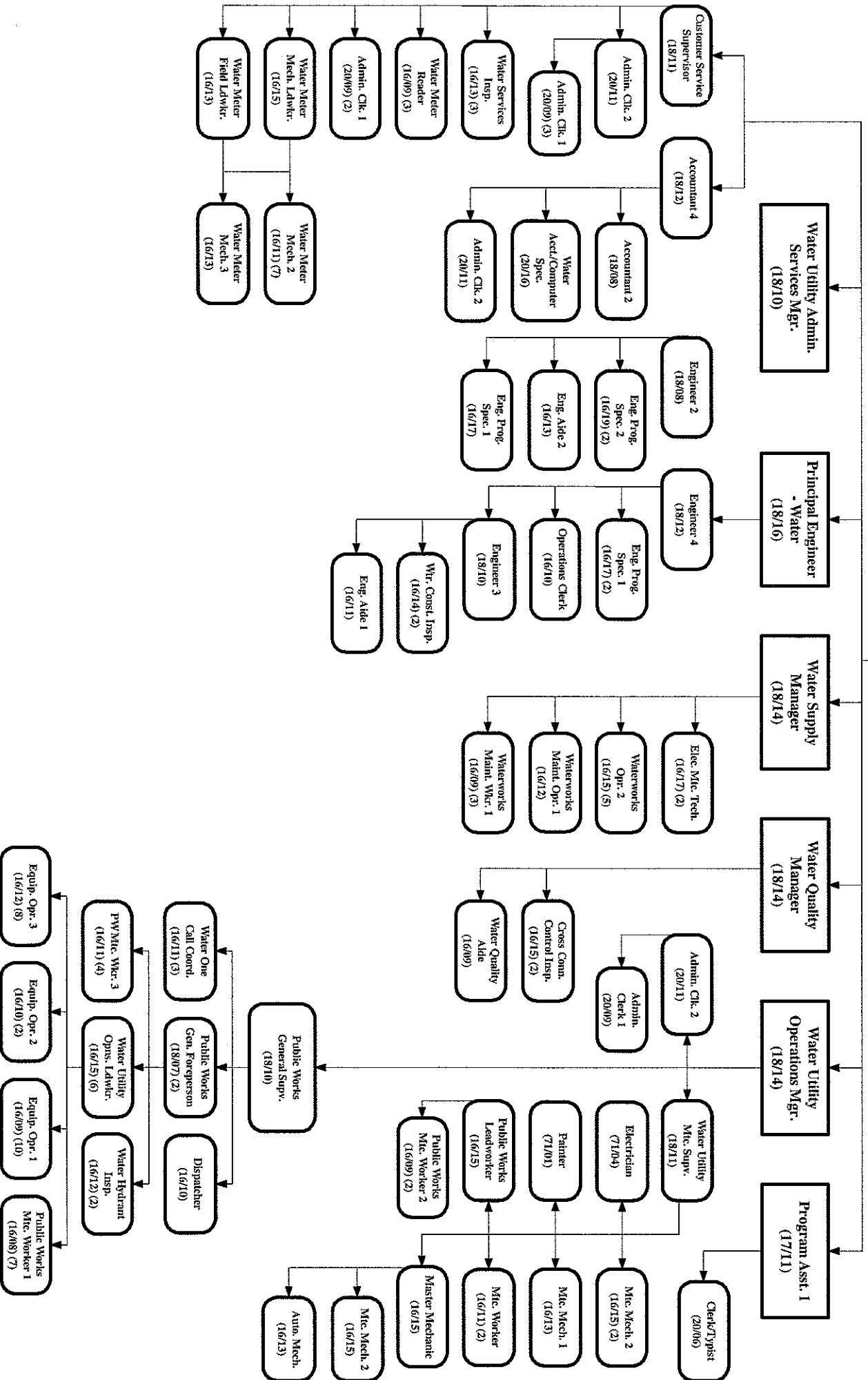
Attachments

cc: Larry Nelson, Water Utility

Compensation Group/Range	2007 Annual Minimum (Step 1)	2007 Annual Maximum (Step 5)	2007 Annual Maximum (w/Longevity)
18/10	53,522	64,323	72,046
18/14	64,323	77,436	86,736

**Water Utility
General Manager
(21/21)**

**Board of Water
Commissioners**



WATER QUALITY MANAGER

CLASS DESCRIPTION

General Responsibilities:

This is responsible managerial and professional work in directing the functions, activities and staff of the Water Utility's Water Quality section. The work involves providing oversight for Water Utility compliance with state and national drinking water quality standards, testing, and reporting; developing programs and master plans to address and mitigate existing and potential water quality issues; responding to and maintaining records of customer complaints and reports about water quality problems; overseeing water quality sampling and testing and recommending effective response to emerging Utility requirements; developing and presenting public information and education programs and responding to media inquiries about water quality; and preparation for a potential public health response using the incident command system. Work is characterized by independent judgment and initiative. The position serves on the Water Utility management team, participates in formulation and implementation of Department policy and priorities, and provides regular reports to the Water Utility Board. Work is performed under the general supervision of the Water Utility General Manager.

Examples of Duties and Responsibilities:

Coordinate and direct water quality monitoring and reporting, including internal record keeping and reporting to city, state, and federal agencies, and to individuals, groups, and neighborhoods. Review monitoring requirements and test results of daily, monthly, and annual sampling to ensure compliance with state and federal regulations, reporting and monitoring requirements, and expectations of the general public. Maintain effective communication and working relationship with regulatory personnel at the Wisconsin Department of Natural Resources (WDNR) and the United States Environmental Protection Agency (USEPA). Plan, organize, coordinate, and direct special studies to investigate distribution system water quality issues. Identify and conduct research, prepare technical reports that include statistical analysis, conclusions, and recommendations, and coordinate contracting for and direct and oversee consultant activities.

Receive and respond to customer concerns, reports, and complaints about water quality; maintain Utility's water quality correspondence database. Investigate causes and recommends corrective action in response to concerns/complaints. Assess internal plumbing for business, industry, and private home systems. Answer technical and general questions from contractors, property owners, elected officials, and the media regarding water quality issues and Utility operations. Develop and conduct comprehensive public information and education programs in the areas of drinking water quality, household water treatment options, water conservation, groundwater management, cross connection control, and well abandonment. Provide water quality data for Annual Drinking Water Quality report, Water Utility web site, and other publications, notices, and informational brochures.

Review wellhead protection plans and implement management strategies for source water protection. Develop, direct, and supervise the well abandonment and cross connection control and elimination programs to limit possibilities for water supply contamination through building design, maintenance problems, and private wells.

Maintain up-to-date knowledge of water quality issues facing the water industry and changing regulatory requirements through trade journals, attendance at technical conferences, and correspondence with personnel at other utilities.

Prepare emergency response plans and procedures for a potential incident impacting the health of the public.

Manage skilled workers and administrative staff in the Water Quality section. Supervise and assign staff in the setting of priorities, establishing schedules and evaluating performance. Identify section goals and communicate priorities to staff. Effectively recommend the hiring, training, promotion, and discipline of employees. Establish and enforce employee work rules, workplace safety, and quality control policies and practices.

Initiate and maintain effective communications with Utility staff, the Mayor's Office, Public Health staff, and members of the Water Utility Board and Common Council. Establish and maintain open channels for internal and external communication. Report water quality issues and data at group meetings, through e-mail and subscriber listservs, and via oral and written correspondences. Issue or supervise the issuance of press releases and respond to media inquiries about water quality and Utility operations.

Develop and implement standard operating procedures for all functions performed by the Water Quality section including, but not limited to, sample collection protocols, fecal coliform detection, chemical (fluoride, chlorine) overfeeds, and distribution system water quality irregularities (color, taste, odor), cross connection control inspections, private well permitting and abandonment, and cross-training opportunities.

Participate in development and/or review of Utility policies and priorities as a member of the Utility's Management Team.

Review proposals, progress reports, and technical reports prepared by consultants in areas such new facility siting, public outreach and communications, hydrogeology, and water chemistry. Work with Utility's Engineering and Water Supply sections to incorporate water quality considerations into system hydraulics, system operations, infrastructure management, and capital projects planning and implementation. Provide data and analysis for long-range water quality planning, infrastructure renewal, and development of comprehensive capital improvement program. Assist in water quality planning for emergency operations and response; assist with updates to the Utility's Emergency Response Plan. Manage special projects as assigned by the Water Utility General Manager.

Perform related work as assigned.

QUALIFICATIONS

Knowledges, Skills and Abilities:

Thorough knowledge of the principles, practices, and methods associated with water quality issues and the operation of a major groundwater utility. Thorough knowledge of ground water management practices, drinking water regulations, and related water chemistry. Working knowledge of distribution system computer models and system hydraulics. Ability to exercise expertise and judgment in the resolution of water quality problems. Ability to perform complicated database and spreadsheet analysis to organize information, evaluate complex datasets and identify trends, and present that information to both technical and non-technical audiences in an understandable manner. Ability to prepare relevant technical reports with recommendations. Ability to clearly and effectively communicate complex water quality data and issues, both orally and in written form, to Utility employees, other City staff, and the general public. Ability to plan, direct, and monitor the work of subordinate employees. Ability to develop and maintain effective working relationships with customers, Water Utility management and staff, and other City staff and governmental agencies. Ability to speak before large groups, answer related technical questions, and support subordinates as needed. Ability to physically access remote facilities. Ability to maintain adequate attendance.

Training and Experience:

Three years of responsible leadership or advanced-level professional experience within a comparable water quality management program which incorporated sampling, analysis, data evaluation, regulatory compliance, public education/community outreach and similar activities, such experience would normally be gained after graduation from an accredited college or university with a degree in environmental chemistry, engineering, public health or a directly related program. Other combinations of training and/or experience which can be demonstrated to result in the possession of the knowledge, skills, and abilities necessary to perform the duties of the this position will also be considered.

Department/Division	Comp. Group	Range
Water Utility	18	

Approved: _____
Brad Wirtz
Human Resources Director

_____ Date

WATER SUPPLY MANAGER

CLASS DESCRIPTION

General Responsibilities:

This is responsible managerial, administrative, and professional work in directing the functions and activities of the Water Utility's Supply Section. The work involves supervising all phases of the water supply section including, but not limited to the operation, maintenance, inspection and 24-hour monitoring of system performance. Work is characterized by a high degree of judgment, discretion and initiative in planning for, coordinating, and implementing assigned programmatic responsibilities. This position serves as a part of the Water Utility's Management Team, participates in the formulation of Division policy and in the identification and resolution of management issues. Work is performed under the general supervision of the Water Utility General Manager.

Examples of Duties and Responsibilities:

Plan, organize, coordinate, direct and monitor the programs, operations and activities of the Water Supply Section to ensure the delivery of an adequate supply of safe drinking water to customers. Areas of program responsibilities include, but are not limited to: water supply facilities and equipment (deep wells, booster pumps, reservoirs, spheres, etc.); SCADA field instrumentation, remote stations, communication and central monitoring station; 24-hour monitoring and operation of water supply considerations; application and verification of appropriate levels of chlorine and fluoride; development and implementation of water supply shortage contingency and emergency response plans; siting of new and replacement wells.

Develop and/or oversee the development of cost-effective monitoring, sampling, preventive maintenance, inspection and rehabilitation plans, production schedules and related work methods, policies and procedures; monitor and evaluate results. Develop, implement and oversee enhancements. Determine section goals and communicate to staff. Evaluate equipment needs in consultation with users. Develop and monitor standards relevant to the selection, maintenance, and operation of deep wells, booster pumps, reservoirs, spheres, motors, pumps, SCADA field instrumentation, remote stations, communication network and central monitoring station, and auxiliary equipment.

Maintain an up-to-date knowledge of current industry issues. Correspond and/or meet with other utilities regarding new technologies and methodologies. Meet with representatives of various suppliers for the purpose of evaluating products. Initiate and/or recommend operational responses as appropriate.

Develop and implement a process to provide for the regular, periodic review and update of the Madison Water Utility's master plan for system water supply and storage development, siting and retirement. Recommend changes and updates to master plan based on analysis of a variety of factors including, but not limited to: supply and storage facilities' rated and functional capacities and recovery times; historical, existing and projected demand

requirements; seasonal fluctuations; fire protection requirements; operational considerations; overall control strategies; energy efficiency and sustainability.

Identify and recommend projects to upgrade and rehabilitate existing supply and storage facilities to provide additional capacity; decrease downtime and maintenance costs; and increase energy efficient operation of such facilities. Identify and recommend improvements, which provide system redundancies in order to protect operational integrity. Assess operational data and identify existing system problems including but not limited to low pressure, low supply, and high-energy use. Recommend solutions to resolve problems.

Oversee implementation of a computerized asset management and work order system for water supply and storage facilities and equipment to tracks and manages assets and resources and provide for effective and cost-efficient operation, maintenance, repair and replacement.

Manage highly skilled, semi-skilled and administrative staff. Participate in hiring and promotional decisions and provide training, work review and evaluation, discipline, resolution of grievances, and other supervisory responsibilities. Participate in labor contract negotiations. Maintain applicable occupational health and safety standards.

Develop and maintain effective operational cost analysis information and record keeping systems. Plan for and determine the cost-effective service and replacement of utility equipment. Evaluate and establish efficient inventory control systems. Prepare and present periodic reports relative to section operations. Prepare budgetary recommendations. Perform Capital Improvement budgeting for the area(s) of responsibility. Determine project priorities and budget estimates and recommend to the General Manager in conjunction with the annual Capital Budget process. Review and monitor project expenditures throughout the year and recommend budget or project adjustments as necessary. Determine staffing levels, supplies and equipment necessary for the section and prepare necessary operating budget submission and justification materials.

Attend various meetings to gather and convey information relevant to the Water Utility Supply Section. Collaborate with the Public Works Team on issues of mutual interest. Participate in related program planning and problem resolution. Oversee program planning activities to provide for the intra-organizational coordination of efforts. Coordinate utility maintenance activities with external public works projects as necessary as and with other public agencies.

Prepare requests for consulting proposals, respond to inquiries, conduct interviews as necessary, and assist in the selection of consultants for particular projects. Develop contracts between the City and the consultant and negotiate and prepare contract amendments. Act as principal contact for the City on projects being designed by consultants. Administer contracts including record keeping, billing review, and payment recommendations. Oversee work performed on utility facilities by outside contractors on special assignments including but not limited to, construction and rehabilitation of unit wells, booster pump stations, and reservoirs; SCADA system, and various professional services.

Participate in the development and/or review of Utility policies and objectives as a member of the Water Utility's Management Team. Develop standard operating procedures for all function performed by Supply Section. Investigate and/or assign complaints involving

Section services. Participate in problem resolution and provide input and consultation as appropriate.

Manage special projects as assigned by Water Utility General Manager.

Perform related work as required.

QUALIFICATIONS

Knowledges, Skills and Abilities:

Thorough knowledge of the operations and maintenance of water supply or wastewater systems to include applicable operation and maintenance processes, procedures, materials, equipment and technologies and/or groundwater hydrology, incorporating related professional engineering standards and considerations. Thorough knowledge of applicable operation and maintenance concepts and terminology. Ability to evaluate system maintenance priorities and recommend long-term maintenance plans. Ability to prepare related contract specifications and review and make recommendations regarding proposals. Ability to exercise considerable judgment and initiative in the identification, analysis, and resolution of related field maintenance problems. Ability to function effectively as a Management Team member in addressing a broad spectrum of policy considerations. Ability to maintain effective working relationships. Ability to communicate effectively both orally and in writing. Ability to maintain adequate attendance.

Training and Experience:

Three years of responsible supervisory (and related technical/engineering) experience in overseeing the maintenance and operations of a water supply/production system. Such experience would normally be gained after completion of a college degree(s) in civil engineering, electrical engineering, mechanical engineering, hydrogeology or a related field. Other combinations of training and/or experience, which can be demonstrated, to result in the possession of the knowledge, skills and abilities necessary to perform the duties of this position will also be considered.

Necessary Special Qualifications:

Possession of, or ability to obtain within 12 months of hire, and ability to maintain Wisconsin Water Supply Certifications applicable to Madison Water Utility's system. Ability to meet the transportation requirements of this position.

Department/Division	Comp. Group	Range
Water Utility	18	14

Approved: _____
Brad Wirtz
Human Resources Director
Date

Amending Section 3.54 (1)(b) of the Madison General Ordinances by deleting the classification of "Water Supply Supervisor" in Compensation Group 18, Range 09, and creating the class of "Water Supply Manager" in Compensation Group 18, Range 09, and creating the class of "Water Supply Manager " in Compensation Group 18, Range 14, and Deleting the position of "Water Quality Manager" in Compensation Group 18, Range 10 and recreating said class in Compensation Group 18, Range 14, Thereof.

Be it resolved that the vacant position (#3944) of Engineer 3 in Compensation Group 18, Range 10 and the position (#1779) of Water Quality Manager, (occupied by J. Grande) in Compensation Group 18, Range 10 in the permanent salary detail of the Water Utility Budget are repealed and recreated as a position of Water Supply Manager in Compensation Group 18, Range 14 and a position of Water Quality Manager in Compensation Group 18, Range 14, thereof.

Be it further resolved that the incumbent shall be reallocated to said position.

Fiscal Note: The cost for the remainder of 1008 is approximately \$13,143 or \$17,980, including benefits is available in the Water Utility budget. The projected annualized cost is \$26,226 or \$35,877, including benefits.

Editor's Note:

Compensation Group/Range	2007 Annual Minimum (Step 1)	2007 Annual Maximum (Step 5)	2007 Annual Maximum w/Longevity
18/10	\$53,522	\$64,323	\$72,046
18/14	\$64,323	\$77,436	\$86,736