2.1 Conservation Coordinator

Applicability

The designation of a conservation coordinator is required by House Bill 1648, effective September 1, 2017, for all retail public water utilities with 3,300 service connections or more. This best management practice (BMP) outlines suggested duties and details for utilities regarding conservation coordinators.

Smaller utilities with less than 3,300 service connections may choose to share costs with other similar-sized utilities by jointly contracting with a conservation coordinator. Wholesale water suppliers may hire or contract with a conservation coordinator to serve their customer retail water utilities if these retailers fall below the service connection threshold that triggers the utility-specific requirement.

Why this is a Strategic BMP

The Texas Water Code §11.002 states that BMPs are voluntary efficiency measures that save "a quantifiable amount of water, either directly or indirectly...". BMPs that are useful in implementing other measures but for which quantifiable savings cannot be identified are described as Strategic BMPs.

Description

The conservation coordinator coordinates water utility staff, data from various departments, and other resources as necessary for the purpose of developing, implementing, and evaluating the effectiveness of the utility's water conservation plan. The designated conservation coordinator may have other duties and/or titles within the utility regardless of size. Other duties may include responsibility for drought contingency plans or preparation and submittal of annual conservation status reports to utility management and the Texas Water Development Board. Additionally, the conservation coordinator will prepare the annual conservation budget and promote the value of water conservation programs both within the utility and throughout the utility's service area. The conservation coordinator often becomes the utility spokesperson on conservation-related issues and, therefore, might be assigned to participate in regional water planning conservation and drought-period initiatives. When appropriate, the conservation coordinator will manage other conservation-related staff, consultants, and contractors.

Implementation

Implementation should consist of designating a conservation coordinator and support staff (when needed), whose duties can include the following:

 Select and manage the implementation of conservation BMPs as part of the utility's conservation program;

- 2) Document water conservation BMP and program implementation status in relation to state requirements;
- 3) Communicate and promote water conservation to utility management;
- 4) Coordinate conservation BMPs with utility operations and planning staff;
- 5) Prepare annual conservation program budget;
- 6) Manage consultants and contractors assisting in various aspects of the water conservation program;
- 7) Develop public outreach and marketing strategies for water conservation support and uptake;
- 8) Participate in regional water conservation planning and drought planning initiatives; and
- 9) Conduct regular conservation BMP and program evaluations to determine water savings, benefits of savings as compared to program implementation costs, etc. and need for adjustments.

Scope and Schedule

For water utilities with 3,300 service connections or more, the name of the conservation coordinator shall be reported, in writing, to the Executive Administrator of the Texas Water Development Board to maintain compliance with HB 1648. Reporting can be accomplished online when the utility submits its Water Conservation Plan or Conservation Annual Report.

Measuring Implementation and Determining Water Savings

To track this BMP and compliance with HB 1648, the utility should gather the following documentation:

- 1) Description of the conservation coordinator position,
- 2) The date the conservation coordinator was appointed or hired, and
- 3) The utility water conservation plan, for submission to the Executive Administrator of the TWDB at required frequencies.

Water savings are not quantified for having a conservation coordinator. The conservation coordinator, required of utilities with 3,300 service connections or more, is considered an essential or foundational BMP for smaller utilities that will benefit from having the coordinator in place to manage the utility's conservation program. The coordinator leads and/or assists in the implementation of other water conservation BMPs, and this additional effort can be as essential to water savings accrued by the implementation of the BMPs that are offered by the utility.

Cost-Effectiveness Considerations

As noted above, it will be difficult to do a true cost-effectiveness analysis for assigning the role of conservation coordinator. The coordinator, however, is essential to the successful implementation of other BMPs that the utility chooses to undertake. There will be nonfinancial benefits as a result of having a conservation coordinator, such as an enhanced public image

developed through increased outreach and visibility when emphasizing the entire conservation program. The salary and overhead expenses associated with the coordinator could be the primary costs that would be incurred by implementing the Conservation Coordinator BMP unless an existing staff person with other responsibilities assumes this new role. Other costs incurred that are associated with developing, implementing, and evaluating individual conservation BMPs can be compared to the value assigned to water savings in the short term and other factors related to long-term savings (e.g., delaying or downsizing future capital projects that expand system capacity as a result of successful demand management). Depending on the size and scope of the water conservation program, the coordinator position can be full-time, part-time, shared with others, or contracted out.

References for Additional Information

Alliance for Water Efficiency, Water Conservation Tracking Tool¹.

http://www.allianceforwaterefficiency.org/Tracking-Tool.aspx

Alliance for Water Efficiency, AWE Resource Library, Water Conservation Programs.

http://www.allianceforwaterefficiency.org/Water Conservation Programs Library Content Listing.aspx

- Handbook of Water Use and Conservation by Amy Vickers, 2001. Amherst, MA: WaterPlow Press. ISBN1-931579-07-5
- American Water Works Association (2006). Manual of Water Supply Practices M-52: Water Conservation Programs A Planning Manual.
- Memorandum of Understanding Regarding Urban Water Conservation in California. Council, 1999 (last amended in 2014).

http://www.cuwcc.org/Portals/0/Document%20Library/About%20Us/MOU/MOU 09-17-14.pdf

- Groundwater Conservation Plan, Edwards Aquifer Authority (as adopted in 2014).
 - http://www.edwardsaquifer.org/permits/groundwater-conservation-plan
- Texas Water Development, Water Conservation Resources & Planning Tool.

http://www.twdb.texas.gov/conservation/municipal/plans/index.asp

¹ The tool can help the conservation coordinator plan for implementing the most appropriate conservation programs for their utility.

APPENDIX A: SAMPLE JOB DESCRIPTIONS

Sample Job Description #1:

Water Conservation Coordinator - Senior

General Overview

At a senior level, provides expert counsel and information regarding water conservation. Develops and implements water conservation programs. Fosters water conservation awareness among relevant stakeholders and the general public. Acts as water conservation advocate at regulatory meetings and functions. Represents the organization at public speaking engagements and through written outreach. Collaborates with other organizations and entities on water conservation programs. Provides input on policies, rules, and strategic planning related to conservation. Utilizes in-depth knowledge of best practices and experience in discipline to provide and improve services. Takes a new perspective to solve complex problems. Works independently under minimal guidance. Acts as a resource for colleagues with less experience. May direct the work of other staff members.

- Reviews and provides technical assistance to raw water customers with planning and implementation of their water conservation and drought contingency plans.
- Develops, designs, and implements water conservation programs.
- Provides conservation presentations to homeowners and the public. Writes articles related to landscapes and landscape irrigation. Develops and delivers presentations on various water conservation topics to internal and external stakeholders.
- Researches and provides input into organizational policy, rules, and strategic planning related to long range water conservation and reuse.
- Serves as a representative of the organization promoting water conservation to communities, neighborhoods, educational institutions, and public entities. Participates in outreach events in the community, including staffing booths and giving presentations on water conservation topics. Travels independently or with other staff to various locations as necessary.
- Applies state and local government laws and abides by regulatory and legislative practice.

This general overview only includes essential functions of the job and does not imply that these are the only duties to be performed by the employee occupying this position. Employees will be required to follow any other job-related instruction and to perform any other job-related duties requested by supervisor or management.

Minimum Qualifications

A degree(s) in business, planning, social science, environmental management, or relevant field may be substituted per organizational guidelines for years of experience.

Sample Job Description #2:

Director - Conservation

JOB SUMMARY

The Director - Conservation is a senior management-level professional responsible for strategic policy and program initiatives that achieve short- and long-term water conservation goals. S/he leads all aspects of conservation planning and project development from initial planning and conceptual development through project implementation. In addition, s/he leads the system in all aspects of drought management and enforcement and serves as the principal spokesperson for the system on conservation and drought-related issues. The Director-Conservation reports to the Vice President-Strategic Resources & Business Planning.

ESSENTIAL FUNCTIONS

- Develops and recommends policies and programs to meet conservation goals and obtain the best value for conservation funds.
- Develops, recommends, and implements departmental policies and procedures to maximize use of physical, fiscal, and personnel resources.
- Supervises, selects, develops, trains, determines compensation, and evaluates personnel.
- Prepares and makes presentations to the Board of Trustees, Executive Management, elected officials, and to the public via newspaper, radio, and television.
- Develops and evaluates various water conservation policies and technologies.
- Develops and maintains diverse stakeholder partnerships with community groups, industry and government, and the system's principal public advisory group on conservation, the Community Conservation Committee.
- Obtains and interprets public input to evaluate conservation programs through a variety of mechanisms to include survey, evaluation of conservation events and programs, and public presentations.
- Demonstrates continuous improvement of conservation through analysis conservation of current demand and program impact utilizing accounting, statistical, and cost benefit analysis.
- Develops, negotiates, and monitors contracts.
- Develops and participates in conceptual long-term planning to meet goals in water supply plan.
- Forecasts, allocates, and monitors the human, physical, and financial resources for the assigned area as well as manages the use of conservation revenue.
- Coordinates and communicates department activities with other internal departments and groups.
- Keeps abreast of scientific, political, and legal issues relating to implementation of conservation programs, drought management, and new technology.

DECISION MAKING

- The Director Conservation works under limited supervision.
- Supervises: 20 25 employees.

MINIMUM REQUIREMENTS

- Bachelor's Degree in Urban Planning, Public Administration, Engineering, Environmental Science, Business Administration, Geology, or other related field from an institution accredited by a nationally recognized accrediting agency.
- Eight years progressive experience in budgeting, management, supervision, design, operations, and construction of water infrastructure-type projects including five years of supervising personnel, project development, budgeting, and strategic planning.
- Able to use word processing, spreadsheet, database, and presentation software.
- Valid Class "C" Texas Driver's License consistent with the organization's driving policy.

PREFERRED QUALIFICATIONS

- Master's Degree in appropriate field.
- Experience working with a variety of media to include radio, television, and print.

JOB DIMENSIONS

- Contact with internal and external customers, media, consultants, stakeholders, and elected officials.
- Communicates effectively, verbally and in writing.

PHYSICAL DEMANDS AND WORKING CONDITIONS

Working conditions are primarily in an office environment.

May be required to work hours other than regular schedule including nights and weekends with occasional travel.

Sample Job Description #3:

Conservation Program Coordinator

Purpose:

Works under minimal direction, responsible for coordinating energy, water, or natural resource conservation programs, projects, and plans

Duties, Functions, and Responsibilities:

Essential duties and functions, pursuant to the Americans with Disabilities Act, may include the below. Other related duties may be assigned.

- 1. Designs, develops, implements, and evaluates educational or outreach programs that promote energy, water, or natural resource conservation awareness and initiatives.
- 2. Coordinates and manages educational or outreach events, small projects, contracts, marketing, and on-line literature content to promote energy, water, or natural resource conservation awareness and initiatives.
- 3. Analyzes energy, water, or natural resource conservation-related research findings to inform or make recommendations on program structure or program delivery to city leadership and other stakeholders.
- 4. Develops, establishes, and manages service agreements with other programs, departments, and agencies.
- 5. Researches energy, water, or natural resource conservation policies, best practices, and legislation to recommend changes to conservation initiatives.
- 6. Prepares studies, reports, memoranda, briefs, or other written materials on energy, water, or natural resource conservation to inform customers, city leadership, and other stakeholders.
- 7. Provides analytical support for policy briefs and program development related to energy, water, or natural resource conservation.
- 8. Prepares grant applications to obtain funding for programs related to energy, water, or natural resource conservation.
- 9. Reviews permit or plan revisions with project engineers and contractors.
- 10. Reviews, evaluates, and recommends changes to technical reports, studies, and other departmental written materials. Provides technical advice to conservation program personnel.

Responsibilities - Supervisor and/or Leadership Exercised:

May provide leadership; lead cross-functional and departmental conservation project teams; work assignments; evaluation; training; and guidance to others.

Knowledge, Skills, and Abilities:

Must possess required knowledge, skills, abilities, and experience and be able to explain and demonstrate, with or without reasonable accommodations, that the essential functions of the job can be performed.

Knowledge of energy or water efficiency technologies, practices, programs and rebate requirements.

Knowledge of applicable building codes, and of energy or water retrofit requirements and specifications.

Knowledge of safety practices and procedures.

Knowledge of department energy or water resource initiatives and targets.

Knowledge of construction materials, practices, and procedures.

Knowledge of federal, state and local laws.

Knowledge of city practices, policies, and procedures.

Skill in oral and written communication.

Skill in using computers and related software.

Skill in handling multiple tasks and prioritizing.

Skill in data analysis and problem solving.

Skill in planning and organizing.

Ability to negotiate.

Ability to determine quality of materials, workmanship, and compliance with specifications.

Ability to handle conflict and uncertain situations.

Ability to lead cross-functional and departmental project teams.

Ability to operate and maintain testing and diagnostic equipment.

Ability to use graphic instructions, such as blue prints, schematic drawings, plans, maps, or other visual aids.

Ability to work with frequent interruptions and changes in priorities.

Ability to establish and maintain good working relationships with city employees and the public.

Minimum Qualifications:

Graduation with a Bachelor's degree from an accredited college or university with major coursework in Architecture, Business, Environmental Studies, Natural Science, Planning, and Resource Management or in a field related to the job, plus five (5) years of related experience.

Masters Degree may substitute for experience up to two (2) years.

Experience may substitute for education up to the maximum of four (4) years.

Licenses and Certifications Required:

None.

This description is intended to indicate the kinds of tasks and levels of work difficulty required of the position given this title and shall not be construed as declaring what the specific duties and responsibilities of any particular position shall be. It is not intended to limit or in any way modify the right of management to assign, direct, and control the work of employees under supervision. The listing of duties and responsibilities shall not be held to exclude other duties not mentioned that are of similar kind or level of difficulty.

Sample Job Description #4:

Environmental Conservation Program Manager

Purpose:

Under minimal supervision, plan and direct environmental and/or conservation program strategies to ensure compliance with federal, state, and local regulations. Develop and implement program policies, procedures, and systems to maintain and enhance the organization's adherence and responsiveness to environmental and conservation issues.

Duties, Functions and Responsibilities:

Essential duties and functions, pursuant to the Americans with Disabilities Act, may include those described below. Other related duties may be assigned.

- 1. Negotiate regulatory compliance issues with state and federal environmental agencies
- 2. Manage and review programs/projects
- 3. Administer programs
- 4. Market programs
- 5. Develop, monitor, and evaluate program and resource budgets
- 6. Develop, manage, and administer contracts
- 7. Develop training for internal and external customers
- 8. Develop and maintain program policies and standard operating procedures
- 9. Develop, review, interpret, and rewrite ordinances, codes, and regulations
- 10. Perform public relations functions
- 11. Participate in short and long-range planning activities
- 12. Develop and manage quality control initiatives
- 13. Develop and conduct audits
- 14. Assist with evaluating bid proposals
- 15. Perform supervisory duties i.e., hiring, promoting, disciplinary actions, performance evaluations, etc.

Responsibilities - Supervisor and/or Leadership Exercised:

May be responsible for full range of supervisory activities including section training, evaluation, counseling, and recommendation for dismissal.

Knowledge, Skills, and Abilities:

Must possess required knowledge, skills, abilities and experience and be able to explain and demonstrate, with or without reasonable accommodations, that the essential functions of the job can be performed.

- Knowledge of supervisory and managerial techniques and principles.
- Knowledge of applicable processes, techniques, and methods.
- Knowledge of city practices, policies, and procedures.

- Knowledge of supervisory and managerial techniques and principles.
- Skill in handling conflict and uncertain situations.
- Skill in handling multiple tasks and prioritizing.
- Skill in using computers and related software applications.
- Skill in data analysis and problem solving.
- Ability to establish and maintain effective communication and working relationships with city employees and the public.
- Ability to work with frequent interruptions and changes in priorities.
- Ability to train others.

Minimum Qualifications:

- Graduation with a Bachelor's degree from an accredited college or university with major course work in a field related to Environmental Science, Life Science, Biology, Chemistry, Engineering, Landscape Architecture, Public Administration, Business Administration, Planning, plus six (6) years of experience in a related field, three (3) years of which was in a lead or supervisory capacity.
- Master's degree may substitute for experience up to two (2) years.

Licenses and Certifications Required:

• As required in a related area.

This description is intended to indicate the kinds of tasks and levels of work difficulty required of the position given this title and shall not be construed as declaring what the specific duties and responsibilities of any particular position shall be. It is not intended to limit or in any way modify the right of management to assign, direct and control the work of employees under supervision. The listing of duties and responsibilities shall not be held to exclude other duties not mentioned that are of similar kind or level of difficulty.