



NEED-TO-KNOW CRITERIA FOR THE TRIBAL UTILITY MANAGEMENT CERTIFICATION LEVEL 1

Revised August 2013

The Tribal Utility Management Certification-Level 1 was developed under a sub-award agreement between ITCA and the Rural Community Assistance Corporation (RCAP) as an activity that was funded as part of the EPA / RCAP Training / Technical Assistance to Tribally-Owned Systems Project.

This publication was developed under Assistance Agreement No. X7-83535701-0 awarded by the U.S. Environmental Protection Agency. It has not been formally reviewed by EPA. The views expressed in this document are solely those of ITCA and EPA does not endorse any products or commercial services mentioned in this publication.

ACKNOWLEDGMENT

The Inter Tribal Council of Arizona, Inc. would like to thank the members of the volunteer Tribal subject-matter expert panel for their effort in supporting ITCA's Tribal Utility Management Certification-Level 1 Program. The following is an alphabetical listing of the panel members.

Michael Alvidrez, Santa Ana Pueblo, Santa Ana, New Mexico
Wendy Ferguson, Yavapai Apache Nation, Camp Verde, Arizona
Bernie Garcia, Taos Pueblo, Taos, New Mexico
R. Neal Kie, Laguna Pueblo, Laguna, New Mexico
Steve Laurenzana, Quechan Indian Community, Winterhaven, California
Myrt McIntyre, Tohono O'odham Nation, Sells, Arizona
Rick Miller, Quechan Indian Community, Winterhaven, California
Robert Nulph, Yurok Tribe, Klamath, California
Christopher Ortiz, Los Coyotes Band of Mission Indians, Warner Springs, California
Andrew Padilla, Laguna Pueblo, Laguna, New Mexico
Gregory Pearson, Inter Tribal Council of Arizona, Phoenix, Arizona
Lionel Puhuyesva, Hopi Tribe, Kyotsmovi, Arizona
David Saddler, Tohono O'odham Nation, Sells, Arizona
Stuart Wilson, Salt River Pima-Maricopa Indian Community, Scottsdale, Arizona
Elmer Yazzie, Ramah Navajo Utility Authority, Pine Hill, New Mexico

Special thanks to:

Tiffany Castellvi, Professional Testing Inc.
Rachel Ehrlich, Professional Testing, Inc.
Eric Matson, Phoenix Area Indian Health Service, Phoenix, Arizona
Deborah Patton, Rural Community Assistance Corporation, Phoenix, Arizona

INTRODUCTION

In the 2012-2013 federal fiscal year, the Inter Tribal Council of Arizona, Inc. (ITCA) and the Rural Community Assistance Partnership (RCAP) network partnered to conduct meeting forums and trainings regarding water utility management for Tribes. The purpose of this work is to improve the managerial and financial capacity of Tribal drinking water systems in order to sustainably deliver safe drinking water for their communities. As part of this U.S. EPA grant funded project, and with leveraged funding from the U.S. Department of Health and Human Services and the U.S. Department of Agriculture, the ITCA developed the *Tribal Utility Management Certification-Level 1 (TUMC-1)* professional certification. This new professional certification is intended to create a standardized pathway for Tribal water professionals to advance into and ascend through the field of water utility management. Just like water operator professional certification, utility management professional certification will be based on set eligibility criteria of training, work experience, and written examination.

To ensure the TUMC-1 professional certification is scientifically valid and legally defensible, ITCA enlisted the technical guidance of Ph.D.-level Psychometricians from Professional Testing Inc. to facilitate the development process of the new professional certification. There were several steps involved in the development process that required direct input from experienced Tribal water utility professionals that volunteered as subject-matter experts. These steps included the following events.

- Job-Task Analysis Workshop, January 10-11, 2013, in Phoenix, Arizona
- Job-Task Analysis Validation Survey, January 18-February 3, 2013 via the internet
- Job-Task Analysis Validation Webinar, February 7, 2013
- Exam Question Item Writing Workshop, February 28-March 1, 2013, in Phoenix, AZ
- Exam Question Review Workshop, March 14-15, 2013, in Phoenix, Arizona
- Eligibility & Passing Score Workshop, April 11-12, 2013, in Phoenix, Arizona

HOW THE *NEED-TO-KNOW CRITERIA* WAS DEVELOPED

“Job analysis is the process by which the tasks performed by individuals in a particular job are identified, and the importance of those tasks is determined. Additionally, job analysis helps to establish the knowledge, skills, abilities, and other characteristics necessary for the effective performance of a job incumbent.”

—Tiffany Castellvi, Ph.D., Professional Testing Inc.

On January 10-11, 2013, ITCA convened a panel of 13 Tribal subject matter experts and conducted the Job Task Analysis Workshop that was held at ITCA’s offices in Phoenix, Arizona. The panel identified the following eight (8) domain areas of competency, or overarching work areas of Tribal utility managers, which can hold various job titles depending on the type/size of utility.

Domain Areas of Competency for the TUMC-1 Certification Exam

1. Regulatory Compliance
2. Policy Development
3. Financial Management
4. Workforce Management
5. Operations & Maintenance
6. Infrastructure Master Planning
7. Interact with Other Entities
8. Consumer Education

The panel then identified all the job tasks performed within each overarching domain. Both domains and tasks were written in a structured format, common for job/task analysis. The panel also listed the detailed behavioral steps required to complete each task, as well as the knowledge, skills, and abilities required to perform each task effectively. Finally, the panel reviewed the resulting data and came up with recommended examination weights based on the breadth and depth of content in each of the domain areas and associated tasks. These weights were calculated by a combined rating of both frequency and importance for each task. The weights were then transformed to a recommended number of items assigned to each domain and task area on the 100-question certification exam.

Validation Study

ITCA and Professional Testing, Inc. compiled the results of the Job Task Analysis Workshop and developed a survey for a larger population base of Tribal water utility management personnel for the purpose of validating the results of the Job Task Analysis. The survey used rating scales for job task frequency and job task importance. In addition, the survey included key demographic questions to ensure representativeness and validity. The survey was deployed over a two-week time period (January 18-February 3, 2013) using an internet survey service and was distributed by email to nearly 300 Tribal water utility and environmental program personnel located throughout Indian Country. A total of 59 qualifying individuals participated in the survey, representing tribal utilities of all sizes (very small systems-22%, small systems-37%, medium systems-20%, large systems-14%, and very large systems-2%, with a remainder of 5% as no responses) located in nine (9) states. The recommended weights from the job-task analysis workshop and the survey data were significantly in agreement, providing strong validation. Following the validation study, the panel then finalized the examination blueprint (specifications) based on a weighting in the job analysis results so that they reflect the criticality of tasks performed on the job.

THE TRIBAL UTILITY MANAGEMENT CERTIFICATION-LEVEL 1 EXAM

The Tribal Utility Management Certification-Level 1 exam consists of 100 multiple-choice questions. The exam blueprint, shown in **Table 1** below, lists the percentage of questions on the exam that fall under each domain area of competency, as well as the number of exam questions pertaining to each of the associated job tasks. In addition, the knowledge, skills and abilities associated with the job tasks are provided in the following section.

Table 1: Exam Blueprint for the Tribal Utility Management Certification-Level 1 Professional Certification

Domain Areas of Competency / Job Tasks	Percent of Exam / Number of questions
1. <u>Regulatory Compliance</u>	17 %
Identify Primacy Agency	2 questions
Enforce Rules & Regulations	4 questions
Demonstrate Regulatory Compliance	4 questions
Maintain Compliance Records	4 questions
Establish Utility-Specific Regulations	3 questions
2. <u>Policy Development</u>	18 %
Develop Organizational Flowchart and Policies	2 questions
Establish Boundaries of Authority	2 questions
Evaluate Existing Policies	2 questions
Develop and Update Rules and Regulations	3 questions
Develop Financial Policies	2 questions
Develop Safety Policies	3 questions
Develop Emergency Response Policies	3 questions
Develop Construction Policies	1 question
3. <u>Financial Management</u>	12 %
Acquire Resources	3 questions
Develop a Budget	3 questions
Develop and Maintain Rate Structure	2 questions
Implement Accounting Principles	2 questions
Manage Contracts	2 questions

Table 1: Exam Blueprint for the Tribal Utility Management Certification-Level 1 Professional Certification, continued

Domain Areas of Competency / Job Tasks	Percent of Exam / Number of questions
4. <u>Workforce Management</u>	10 %
Determine Staffing Requirements	2 questions
Identify Workforce Needs	2 questions
Train and Develop Staff	3 questions
Perform Succession Planning	1 question
Implement Human Resources Policies and Procedures	2 questions
5. <u>Operations and Maintenance</u>	16 %
Reporting / Recordkeeping	4 questions
Develop Standard Operating Procedures (SOPs)	3 questions
Develop a Preventative Maintenance (PM) Program	3 questions
Ensure Process Control	3 questions
Evaluate and Maintain Equipment	3 questions
6. <u>Infrastructure Master Planning</u>	9 %
Forecast Water Resource Adequacy	2 questions
Model Community Growth	1 question
Participate in Land Use Plan Development	2 questions
Project Capital Improvement Needs	3 questions
Validate Master Plan	1 question
7. <u>Interacting with Other Entities</u>	8 %
Identify Potential and Existing Partners	3 questions
Collaborate with funding Agencies	3 questions
Establish Inter-Governmental Agreements (IGAs) and Memorandums of Understanding (MOUs)	2 questions
8. <u>Consumer Education</u>	10 %
Provide Education for Council and/or Board Members	3 questions
Prepare Consumer Education Materials	2 questions
Conduct Community Outreach	4 questions
Establish Water Conservation Guidelines	1 question

Description of Core Competencies

1. REGULATORY COMPLIANCE.....17 test questions on the following

Job Tasks & Steps

Identify Primacy Agency (2)

Determine enforcement jurisdiction
Determine if laws are federal, state, county, or tribal
Determine if utility is private or public

Enforce Rules & Regulations (4)

Review existing rules and regulations
Review historic data
Conduct inspections
Request information
Identify required corrective action
Apply corrective action

Demonstrate Regulatory Compliance (4)

Prepare analytical results
Compile/maintain compliance records
Conduct or coordinate facility inspection
Provide records/reports as requested or required
Provide proof of public notice

Maintain Compliance Records (4)

Maintain accurate files
Maintain copies of violation notices/non-compliance
Maintain laboratory reports
Maintain chain-of-custody documentation
Maintain sampling instructions
Maintain daily logs
Maintain as-built drawings

Establish Utility-Specific Rules and Regulations (3)

Delineate lines of responsibility
Identify the need for utility-specific rules/regulations
Identify consumer criteria for service
Establish site sampling plan
Present proposed ordinance to tribal government
Present proposed ordinance to tribal council

Knowledge, Skills & Abilities

Knowledge of:

Federal, state, county and tribal rules and regulations
Safe Drinking Water Act & Clean Water Act
Compliance history
Investigative techniques
Process controls
Continuing education requirements
Maximum contaminant levels
Non-compliance consequences
Regulatory agency requirements
Sampling schedule
Standards
As-built drawings
Basic sampling techniques
Hold times
Monitoring requirements
Recordkeeping/documentation time schedule
Hazards
Public safety and welfare
Uniform Plumbing Code

Skills & Abilities:

Networking skills
Research skills
Investigative skills
Communication skills
Data management
Interpret laboratory data
Organizational skills
Recordkeeping
Technical writing skills
Archive data
Coordination
Data interpretation
Planning
Analytical ability
Identify hazards

Description of Core Competencies, continued

2. POLICY DEVELOPMENT18 test questions on the following

Job Tasks & Steps

<p><u>Develop Organizational Flowchart and Policies</u> (2) Research governmental structure Establish authority (chain-of-command) Identify existing/historic structure Write organizational flowchart and policies Present flowchart and policies to proper authorities</p> <p><u>Establish Boundaries of Authority</u> (2) Identify existing boundaries of authority Identify populations that need to be served Identify water capacity Identify services to be provided Identify need for expansion or shrinkage of boundaries Evaluate risk Establish zones of service for each utility (e.g., sewage)</p> <p><u>Evaluate Existing Policies</u> (2) Identify existing policies Identify need for revisions or updates on existing policies Revise policies when necessary</p> <p><u>Develop and Update Rules and Regulations</u> (3) Identify need for tribe- or utility-specific regulations Evaluate current rules and regulations Draft tribe- or utility-specific regulations as needed Conduct community outreach meetings to discuss regulations or changes Revise rules and regulations as necessary</p> <p><u>Develop Financial Policies</u> (2) Evaluate existing financial policies Develop a system of checks and balances Develop rate structure policies</p>	<p>Draft collection and disconnect policies Develop procurement policies Identify financial management tools</p> <p><u>Develop Safety Policies</u> (3) Review existing safety policies Develop or update safety program Maintain safety records Identify resources for safety training Evaluate applicable safety concerns Connect risk management assessment Establish safety budget line item</p> <p><u>Develop Emergency Response Policies</u> (3) Review existing emergency response policies Conduct a vulnerability assessment Establish climate-related preparedness plan Establish list of emergency responders Establish list of emergency service vendors Draft emergency response plan Establish communication plan for emergency response Establish recovery plan Review and update emergency response plan annually</p> <p><u>Develop Construction Policies</u> (1) Review existing construction policies Establish contracting protocols Draft construction policies as required Maintain construction policy records Identify funding sources</p>
---	---

Knowledge, Skills & Abilities

<p><u>Knowledge of:</u> Flowcharts Governmental structure Basic surveying Chain-of-command Jurisdictions Land ownership Local regulations Mapping Topography Historic records Rules and regulations Accounting Finance Financial management software Funding requirements</p>	<p>Funding responsibility Ethics Venders First Aid OSHA regulations PPE Safety requirements Utility system HAZMAT MSDS Recordkeeping requirements Construction equipment Industry standards Traffic control Uniform Plumbing Code Work zone safety</p>	<p><u>Skills & Abilities:</u> Benchmarking Research skills Communication skills Written communication skills Planning skills Analytic skills Interpretation skills Mathematics Negotiation Environmental safety awareness Investigation skills Safety awareness Project management skills</p>
--	---	--

Description of Core Competencies, continued**3. FINANCIAL MANAGEMENT.....12 test questions on the following*****Job Tasks & Steps*****Acquire Resources (3)**

Research funding sources
 Draft grant proposals
 Complete funding applications
 Identify alternative revenue sources
 Report on funding use as necessary

Product availability
 Analyze customer classifications
 Analyze consumer price index
 Evaluate socioeconomic conditions of customers
 Identify direct
 Identify indirect
 Present rate structure proposal to board or council for approval

Develop a Budget (3)

Identify existing resources
 Identify operating and maintenance expenses
 Calculate indirect
 Forecast future expenses
 Adjust for inflation
 Determine staffing requirements
 Identify workforce benefits
 Review reserves
 Review utility sustainability plan
 Present budget for approval
 Establish appropriate rate structure
 Identify financial management tools

Implement Accounting Principles (2)

Identify chain-of-command
 Apply accounting principles to existing budget
 Ensure accounting principles are adhered to
 Coordinate financial audits with outside vendors as required

Develop and Maintain Rate Structure (2)

Identify financial needs
 Identify operation and maintenance costs
 Research existing rate structures in surrounding communities

Manage Contracts (2)

Interpret technical specifications
 Utilize utility standards
 Determine contracting protocols
 Review construction documents
 Create inspection reports
 Assess preferred vendor qualifications
 Have contract reviewed by appropriate authority

Knowledge, Skills & Abilities**Knowledge of:**

Accounting codes
 Funding requirements
 Funding sources
 Accounting principles
 Asset management
 Benefits
 Depreciation
 Spreadsheets
 Financial management software
 Operating and maintenance expenses
 Utility software
 Inflation
 Meter types
 Political awareness
 Water volume requirements
 Assets and liabilities
 Budgeting
 Checks and balances
 Financial auditing process
 OSHA regulations
 Technical specifications
 Technological advancements

Skills & Abilities:

Budgeting
 Mathematics
 Time management
 Communication skills
 Written communication skills
 Data analysis
 Data management
 Forecasting/projecting expenses
 Forecasting/projecting growth
 Persuasion
 Presentation skills
 Benchmarking
 Calculate Direct & Indirect
 Educational skills
 Contract management
 Critical thinking skills
 Negotiation
 Problem solving skills
 Project management skills

Description of Core Competencies, continued**4. WORKFORCE MANAGEMENT.....10 test questions on the following*****Job Tasks & Steps*****Determine Staffing Requirements (2)**

Evaluate job tasks and responsibilities
 Forecast man hour requirements
 Establish work schedules
 Establish pay scale
 Create work order system
 Determine supervision requirements
 Determine job eligibility requirements (e.g. certifications)

Establish training incentives
 Establish career ladder
 Conduct training as necessary
 Evaluate effectiveness of training
 Acknowledge and prepare staff for technological advances
 Obtain staff development buy-in from decision makers

Identify Workforce Needs (2)

Identify required tasks
 Identify certification requirements
 Identify required tools and equipment
 Identify required training/continued education
 Develop relationships with staff members
 Establish parameters for employees' decision-making
 Identify physical and safety requirements
 Assess employee risk and liabilities

Perform Succession Planning (1)

Develop succession plan
 Forecast future staffing needs
 Identify need for cross-training
 Establish mentoring program
 Document staff capabilities
 Maintain staffing records
 Identify external recruitment requirements
 Transfer institutional knowledge
 Evaluate effectiveness of succession planning
 Obtain succession plan buy-in from decision makers

Train and Develop Staff (3)

Identify required knowledge, skills, and abilities of staff
 Review HR and safety regulations
 Evaluate training and development needs
 Identify training resources
 Appraise existing knowledge, skills, and abilities of staff
 Maintain training records

Implement HR Policies and Procedures (2)

Review existing HR policies and procedures
 Develop HR policies and procedures as necessary
 Ensure compliance with prevailing HR regulations
 Enforce HR policies and procedures

Knowledge, Skills & Abilities**Knowledge of:**

HR regulations
 Industry regulations
 Job classifications
 Job descriptions
 Safety regulations & requirements
 Scheduling software
 Service area
 Task and time requirements
 Industry tools and equipment
 Occupational hazards
 Operation of utility system
 PPE
 Industry standards
 Performance appraisal
 Rules and regulations
 Training methods
 Training resources
 Utility system operations
 Institutional knowledge
 Technological advancements
 HR principles
 Staffing requirements

Skills & Abilities:

Data management
 Employee management
 Recruiting
 Time management
 Communication skills
 Written communication skills
 Listening skills
 Interpersonal skills
 Management skills
 Adaptability
 Conflict resolution
 Motivational skills
 Negotiation skills
 Presentation skills
 Training / educational skills
 Cultural sensitivity
 Recordkeeping skills

Description of Core Competencies, continued**5. OPERATIONS & MAINTENANCE**16 test questions on the following***Job Tasks & Steps***Reporting / Recordkeeping (4)

Develop appropriate reporting formats/templates
 Identify applicable EPA regulations
 Determine recordkeeping/reporting frequencies
 Identify minimum retention time for records
 Establish recordkeeping responsibility
 Train staff on utilizing records
 Capture critical utility data
 Conduct system inventory

Apply SOPs to system maintenance

Establish work order system

Obtain buy-in from staff members

Allocate budget resources for preventative maintenance

Establish PM task schedule according to manufacturer specifications or industry standards

Ensure Process Control (3)

Establish a process control testing program

Evaluate process control test results

Compare test results to historic trends

Adjust system as needed

Review process control logs

Maintain staffing capabilities for process control

Maintain process control logs

Evaluate and Maintain Equipment (3)

Conduct equipment audit

Maintain equipment records

Provide tools and materials necessary for regular maintenance

Establish service contracts

Train staff to conduct regular equipment maintenance

Implement standardization practices

Compare replacement versus repair costs

Develop Standard Operating Procedures (SOPs) (3)

Identify job tasks

Identify materials and equipment

Review existing SOPs

Amend or update existing SOPs as necessary

Create new SOPs as necessary

Review manufacturer specifications

Review safety program

Review man hour requirements

Establish QA/QC plan

Establish SOP placement/availability

Communicate SOPs to staff members

Develop a Preventative Maintenance (PM) Program (3)

Review maintenance records

Identify equipment maintenance requirements

Apply SOPs to equipment maintenance

Knowledge, Skills & AbilitiesKnowledge of:

Accounting codes

Confidentiality requirements

Spreadsheets

Data management software

Industrial materials

Industrial standards

Inventory control

Regulatory agency reporting requirements

Electrical and mechanical equipment

Job classifications

Job descriptions

Manufacturer specifications

Equipment maintenance requirements

Operations and maintenance standards

Presentation software

Safety requirements

Utility system requirements

Equipment warranties

General maintenance

Chemicals

Process controls

Regulatory requirements for process control

Statistics

Economics

Industry tools and equipment

Skills & Abilities:

Archiving

Data formatting

Data management

Communication skills

Written communication skills

Technical writing skills

Resource assessment

Interpret historic data

Interpret laboratory reports

Mathematics

Recordkeeping

Trending

Critical thinking

Observational skills

Training skills

Troubleshooting skills

Description of Core Competencies, continued**6. INFRASTRUCTURE MASTER PLANNING9 test questions on the following*****Job Tasks & Steps*****Forecast Water Resource Adequacy (2)**

Assess current water capacity for production
 Evaluate storage capacity
 Evaluate distribution system capacity
 Evaluate source / pumping capacity
 Perform flow testing (e.g., 24-hour pump test)
 Examine static water levels
 Estimate future consumer population
 Evaluate existing water rights
 Forecast environmental changes impacting service
 Identify water quality constraints
 Participate in regional water planning (Tribal & non-Tribal)

Identify allocation of land ownership
 Identify land use
 Contribute to zoning mapping
 Consider impact to water quality and quantity
 Review historical data
 Identify land use planning stakeholders
 Identify topographical constraints
 Communicate with other entities regarding impacts to utilities

Project Capital Improvement Needs (3)

Assess existing equipment conditions
 Analyze projected community and capacity growth
 Identify all potential funding sources
 Develop asset inventory
 Identify system requirements for future growth
 Communicate with other entities regarding impacts to utilities
 Determine if the capital improvement project is feasible

Model Community Growth (1)

Evaluate growth capacity
 Review population growth trends
 Estimate continued population growth
 Analyze future water needs for projected community growth
 Project economic growth
 Forecast extra-territorial growth
 Project industrial growth

Validate Master Plan (1)

Review development / updates to the master plan
 Verify that system capacities are adequate
 Modify master plan or system as required
 Update master plan according to updates in financial / economic status

Participate in Land Use Plan Development (2)

Identify boundaries and resources within them
 Conduct sanitary surveys

Knowledge, Skills & Abilities**Knowledge of:**

Electrical capacities
 Engineering terminology
 Source water assessment terminology
 Statistics
 Water rights
 Available resources
 Historical data and trends
 Archeological data
 Culturally sensitive areas
 Geographical Information Systems (GIS)
 Topographical constraints
 Emerging pathogens
 Funding sources
 Impending legislation
 Industry tools and equipment
 Rules and regulations
 Regulatory requirements
 Water quality trends
 Master planning
 System capacities

Skills & Abilities:

Communication skills
 Computer skills
 Coordination with other entities
 Hydraulic modeling skills
 Interpret hydrological reports
 Mathematics
 Planning skills
 Recordkeeping
 Trending
 Mapping
 Read technical reports
 Contract management
 Estimating
 Interpretation skills
 Budgeting
 Collaboration
 Critical thinking skills
 Innovative
 Problem solving skills

Description of Core Competencies, continued**7. INTERACTING WITH OTHER ENTITIES.....8 test questions on the following*****Job Tasks & Steps*****Identify Potential and Existing Partners (3)**

Identify stakeholders
 Identify emergency responders
 Identify local health department
 Provide utility contact information to existing and potential partners
 Refer to jurisdictional boundaries
 Develop relationships with potential partners

Establish Inter-Governmental Agreements (IGAs) and Establish Memorandums of Understanding (MOUs) (2)

Review existing IGAs and MOUs
 Review existing policies
 Establish authority for negotiating IGA or MOU
 Determine necessity of entering into IGA or MOU
 Maintain agreement documents

Collaborate with Funding Agencies (3)

Identify all potential funding sources
 Establish communication with potential funding sources
 Obtain funding
 Report to funding sources as necessary
 Comply with terms and conditions of funding agency

Knowledge, Skills & Abilities**Knowledge of:**

Jurisdictions
 Regulatory agencies
 Rules and regulations
 Accounting principles
 Funding cycles
 Grant management
 Chain-of-command
 Inter-Governmental Agreements
 Memorandum of Understanding
 Political process

Skills & Abilities:

Communication skills
 Computer skills
 Data management
 Interpersonal skills
 Articulate
 Collaborate
 Grant writing
 Persuasion
 Time management
 Negotiation
 Read technical reports
 Recordkeeping

Description of Core Competencies, continued**8. CONSUMER EDUCATION.....10 test questions on the following*****Job Tasks & Steps*****Provide Education for Council and/or Board Members (3)**

Conduct educational meetings
 Determine proper personnel to present at board meetings
 Determine target audience
 Instill awareness of industry value
 Review tribe constitution
 Provide opportunities to participate in industry training
 Solicit feedback from board and council members
 Conduct tours of facility or operations

Prepare Consumer Education Materials (2)

Define educational subject matter
 Prepare and deliver presentations
 Prepare annual Consumer Confidence Reports (CCRs)
 Identify target audience
 Identify community advocates
 Budget for consumer education costs
 Draft printable educational materials
 Produce educational media
 Identify existing educational resources

Conduct Community Outreach (4)

Determine target audience
 Identify public relations representative
 Determine appropriate outreach communication methods
 Determine message / goal of outreach
 Participate in community events
 Coordinate utility information activities
 Create visual displays

Establish Water Conservation Guidelines (1)

Determine need for water conservation
 Obtain authorization for implementing conservation guidelines
 Identify available resources
 Identify triggers for implementing water conservation guidelines
 Establish enforcement guidelines
 Establish incentives for water conservation
 Research alternative water harvesting methods
 Develop communication plan for water conservation protocols

Knowledge, Skills & Abilities**Knowledge of:**

Capital development
 Cost / benefit analysis
 Cultural awareness
 Customer awareness
 Industry standards
 Political environment
 Rules and regulations
 System operations
 Water quality standards
 Copyright regulations
 Presentation software
 Marketing
 Media
 Program development
 Conservation programs
 Population
 Source water protection
 System capacity

Skills & Abilities:

Communication skills
 Written communication skills
 Computer skills
 Cultural sensitivity
 Educational skills
 Interpersonal skills
 Presentation skills
 Motivational skills
 Planning skills
 Public relations
 Critical thinking skills
 Problem solving

SUGGESTED REFERENCES

The following reference sources were consulted by the Tribal subject matter expert panel in developing the ITCA Tribal Utility Management Certification-Level 1 examination. Candidates should use the latest edition of these reference sources to prepare for the exam.

Rural Community Assistance Corporation (RCAC)

- ***Tribal Utility Governance Program – Building Managerial and Financial Capacity*** training manual

To order, contact: Rural Community Assistance Corporation
3120 Freeboard Drive, Suite 201
West Sacramento, California 95691

Phone: (916) 447-2854
Fax: (916) 447-2878
Website: www.rcac.org

American Water Works Association (AWWA)

- ***Water Utility Management***, M5 AWWA Manual of Water Supply Practices
- ***Utility Management for Water and Wastewater Operators***, by Frederick Bloetscher

To order, contact: American Water Works Association
6666 West Quincy Avenue
Denver, Colorado 80235

Phone: (800) 926-7337
Fax: (303) 347-0804
Website: www.awwa.org

California State University, Sacramento (CSUS) Foundation, Office of Water Programs

- ***Utility Management – A Field Study Training Program***
- ***Manage for Success – Effective Utility Leadership Practices***

To order, contact: Office of Water Programs
California State University, Sacramento
6000 J Street
Sacramento, California 95819-6025

Phone: (916) 278-6142
Fax: (916) 278-5959
Website: www.owp.csus.edu

United States Environmental Protection Agency (U.S. EPA)

Numerous materials concerning water utility management can be found on U.S. EPA website pages starting at: www.epa.gov