

# Water Authority Position Description

## GIS SPECIALIST

Status	Position Code	Level	Date
APPROVED	GISS	M25	Mar 2017

Job descriptions are intended to present a general list of the tasks/duties performed by employees within this job Classification. Job Descriptions are not intended to reflect all duties performed within the job.

### POSITION SUMMARY

DEVELOP AND MAINTAIN THE WATER AUTHORITY'S GEOGRAPHIC INFORMATION SYSTEM (GIS) INCLUDING DATABASE APPLICATIONS. PROVIDE TECHNICAL SUPPORT TO WATER AUTHORITY DIVISIONS, OUTSIDE AGENCIES AND THE PUBLIC.

### MIN EDUCATION & EXPERIENCE REQ

ASSOCIATE'S DEGREE FROM AN ACCREDITED COLLEGE OR UNIVERSITY WITH MAJOR COURSE WORK IN INFORMATION SYSTEMS, GEOGRAPHY, PLANNING, CARTOGRAPHY OR A RELATED FIELD PLUS FOUR (4) YEARS OF GIS, CARTOGRAPHY, URBAN GEOGRAPHY OR RELATED EXPERIENCE.

### ADDITIONAL REQUIREMENTS

POSSESSION OF, OR ABILITY TO OBTAIN AND MAINTAIN A VALID AUTHORITY OPERATOR PERMIT (AOP)  
POSSESSION OF A VALID NEW MEXICO DRIVER'S LICENSE.

### SUPERVISION RECEIVED/EXERCISED

RECEIVE DIRECTION FROM HIGHER LEVEL SUPERVISORY OR MANAGEMENT STAFF.  
MAY EXERCISE TECHNICAL LEAD FUNCTIONS OVER STAFF.

### ESSENTIAL FUNCTIONS

1. PERFORM MAP DIGITIZING AND CONDUCT MAPPING RESEARCH AND INTERPRETATION OF ENGINEERING AND AS-BUILT CONSTRUCTION DRAWINGS TO RESOLVE CONFLICTING INFORMATION. ENSURE THE ACCURACY OF THE DATA AND GENERATE REPORTS.
2. DESIGN AND DEVELOP COMPUTER PROGRAMS USING ESRI ARCGIS SOFTWARE TO ANALYZE, MODEL AND DISPLAY GEOGRAPHIC DATA IN THE FORM OF REPORTS AND CUSTOMIZED MAPS.
3. OPERATE COMPUTER WORKSTATION TO UPDATE MAPS AS NEW DATA IS RECEIVED REGARDING NEW SUBDIVISIONS, DEVELOPMENTS, CAPITAL AND OTHER IMPROVEMENT PROJECTS.
4. PROVIDE TECHNICAL SUPPORT TO WATER AUTHORITY DIVISIONS AND OTHER CLIENTS REQUESTING GIS PRODUCTS. MEET WITH END USER TO DETERMINE NEEDS AND PRODUCT FORMAT. DESIGN, IMPLEMENT AND MONITOR PROGRAMS TO ENSURE CLIENT NEEDS ARE MET.
5. PARTICIPATE IN THE DESIGN AND DEVELOPMENT OF NEW DATABASE LAYERS OF GEOGRAPHIC INFORMATION. PERFORM DATABASE MAINTENANCE ON ZONING, LAND USE AND BASE MAP GEOGRAPHIC LAYERS.
6. PROVIDE GEOGRAPHIC INFORMATION IN HARD COPY OR ELECTRONICALLY TO WATER AUTHORITY DIVISIONS, OUTSIDE ORGANIZATIONS AND THE PUBLIC. RESPOND TO TELEPHONE INQUIRIES FOR GEOGRAPHIC INFORMATION.
7. UPDATE THE WATER AUTHORITY'S COMPUTER BASED MAP AND GIS DATA BASE. ADD MISSING PERTINENT FEATURES AND/OR ATTRIBUTES.
8. PARTICIPATE IN DEVELOPING STANDARDIZED METHODS OF MAP CREATING AND EDITING OF WATER AUTHORITY GIS DATA.
9. RESEARCH, PREPARE AND UPDATE UTILITY, WATER, STORM SEWER AND SANITARY SEWER MAPS. PERFORM FIELD RESEARCH TO VERIFY CORRECT SPATIAL LOCATION OF GIS FEATURES.
10. COLLECT PLATS FROM COUNTY OFFICE AND RESEARCH ANY CHANGES TO WATER AUTHORITY SURROUNDINGS THAT AFFECT OFFICIAL MAPS. TAKE APPROPRIATE ACTION TO INCLUDE INFORMATION IN MAPS.
11. DEVELOP SPECIAL SYMBOLS, LEGENDS AND LOGOS FOR USE AS INDICATORS ON MAPS. UPDATE NEW LANDMARKS TO INCLUDE IN MAPS.
12. RESPOND TO PUBLIC INQUIRIES IN A COURTEOUS MANNER. PROVIDE INFORMATION WITHIN ASSIGNED AREA. PROVIDE DIRECTIONS AS NEEDED.
13. DIRECT THE WORK OF TECHNICAL GIS STAFF. PROVIDE TRAINING TO GIS AND OTHER WATER AUTHORITY STAFF ON THE GIS PROGRAM. PARTICIPATE IN GIS OUTREACH PROGRAM TO FACILITATE KNOWLEDGE OF GIS PRODUCTS, PROGRAMS AND SYSTEMS.
14. UTILIZE SCANNED DIGITAL IMAGING SYSTEM TO INCLUDE THE LATEST IMAGE REPOSITORY PRODUCTS, SUCH AS ARC SERVER, TEGIS AND OTHER WEB BASED DATA AND INFORMATION AVAILABLE.

#### **SUPPLEMENTAL FUNCTIONS**

1. DEVELOP AND PREPARE STATISTICAL AND ANALYTICAL GEOGRAPHIC REPORTS.
2. SUPPLY GRAPHIC INFORMATION TO VARIOUS AGENCIES AND THE GENERAL PUBLIC.
3. PERFORM RELATED DUTIES AND RESPONSIBILITIES AS REQUIRED.
4. ATTEND STAFF MEETINGS AS REQUIRED. COORDINATE WORK SCHEDULES TO ENSURE PROJECTS ARE COMPLETED IN A TIMELY MANNER.
5. MAINTAIN AWARENESS OF APPLICABLE REVISIONS TO GIS SOFTWARE. LEARN NEW REVISIONS AND APPLY INFORMATION TO GIS TASKS AND PROJECTS.

### **PREFERRED KNOWLEDGE**

PRINCIPLES AND PRACTICES OF GEOGRAPHIC INFORMATION SYSTEMS INCLUDING  
HARDWARE AND SOFTWARE APPLICATIONS  
COMPUTERIZED INFORMATION SYSTEMS AND PROGRAMMING TECHNIQUES  
BASIC PRINCIPLES AND PRACTICES OF CARTOGRAPHY  
METHODS AND TECHNIQUES OF DRAFTING  
PRINCIPLES OF RECORDS MANAGEMENT AS PERTAINING TO MAPS, PLATS AND LEGAL  
SURVEY DOCUMENTS  
MATHEMATICAL PRINCIPLES INCLUDING TRIGONOMETRY AND GEOMETRY  
MODERN OFFICE PROCEDURES, METHODS AND EQUIPMENT  
RESEARCH METHODS AND TECHNIQUES, ABILITY TO ANALYZE, INTERPRET AND  
PRESENT FINDINGS  
KNOWLEDGE OF ESRI GEO DATABASE, VERSIONING AND SDE AND SQL PROGRAMMING  
ABILITY TO BECOME FAMILIAR WITH WATER AND WASTEWATER PLANNING,  
TERMINOLOGY AND SYMBOLOGY

### **PREFERRED SKILL/ABILITY**

DEVELOP COMPUTER PROGRAMS AND PROCEDURES USING ARC/INFO SOFTWARE  
READ AND INTERPRET TECHNICAL DOCUMENTS INCLUDING PLATS, DEEDS AND BOUNDS  
DESCRIPTIONS  
TRAIN OR INSTRUCT END USERS IN THE USE OF GIS COMPUTER EQUIPMENT AND  
SOFTWARE  
MAINTAIN GIS COMPUTER SYSTEMS AND DATA BASES  
PERFORM MAP REPRODUCTION ACTIVITIES ACCORDING TO ESTABLISHED TECHNIQUES  
UNDERSTAND AND FOLLOW ORAL AND WRITTEN INSTRUCTIONS  
RESPOND TO REQUESTS AND INQUIRIES FROM WATER AUTHORITY DIVISIONS, OUTSIDE  
ORGANIZATIONS AND THE PUBLIC  
WORK INDEPENDENTLY IN THE ABSENCE OF SUPERVISION  
COMMUNICATE CLEARLY AND CONCISELY, BOTH ORALLY AND IN WRITING  
ESTABLISH AND MAINTAIN EFFECTIVE WORKING RELATIONSHIPS WITH THOSE  
CONTACTED IN THE COURSE OF WORK

### **WORKING CONDITIONS**

OFFICE AND FIELD ENVIRONMENT; EXPOSURE TO COMPUTER SCREENS

### **PHYSICAL REQUIREMENTS**

MAINTAIN PHYSICAL CONDITION APPROPRIATE TO THE PERFORMANCE OF ASSIGNED DUTIES AND RESPONSIBILITIES SUCH AS; SITTING FOR PROLONGED PERIODS OF TIME; MODERATE OR LIGHT LIFTING  
MAINTAIN EFFECTIVE AUDIO/VISUAL DISCRIMINATION AND PERCEPTION TO THE DEGREE NECESSARY FOR THE SUCCESSFUL PERFORMANCE OF ASSIGNED DUTIES