

# Water Authority Position Description

## SYSTEMS ANALYST I

Status	Position Code	Level	Date
APPROVED	SAN1	I27	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

SYSTEMS ANALYST I IS THE MID-LEVEL IN THE SYSTEMS ANALYST JOB SERIES. PERFORM ROUTINE ASSISTANCE IN FACILITATING THE INTRODUCTION AND MAINTENANCE OF MANAGEMENT INFORMATION SERVICE FOR THE WATER AUTHORITY'S OPERATIONS. PERFORM A VARIETY OF ROUTINE SYSTEMS ANALYSIS DUTIES IN THE DESIGN, IMPLEMENTATION AND MAINTENANCE OF MANAGEMENT INFORMATION SYSTEMS AND SUPPORTING COMPUTER HARDWARE AND SOFTWARE APPLICATIONS. PERFORM A VARIETY OF ROUTINE TECHNICAL TASKS RELATIVE TO ASSIGNED AREA OF RESPONSIBILITY.

### MIN EDUCATION & EXPERIENCE REQ

BACHELOR'S DEGREE FROM AN ACCREDITED COLLEGE OR UNIVERSITY WITH MAJOR COURSE WORK IN INFORMATION SYSTEMS, COMPUTER SCIENCE OR RELATED FIELD, PLUS FOUR (4) YEARS OF SOFTWARE APPLICATIONS ANALYSIS, DESIGN, PROGRAMMING, IMPLEMENTATION AND PROJECT MANAGEMENT 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

RECEIVES GENERAL DIRECTION FROM HIGHER LEVEL SUPERVISORY OR MANAGEMENT STAFF.

### ESSENTIAL FUNCTIONS

1. MAY SERVE AS LEAD OVER ALL ASPECTS OF ASSIGNED APPLICATIONS DEVELOPMENT AND SOFTWARE IMPLEMENTATION PROJECTS. EVALUATE AND ASSESS CLIENT NEEDS. IDENTIFY AND ALLOCATE RESOURCES INCLUDING STAFF, EQUIPMENT AND MATERIALS. SET TASK PRIORITIES.
2. CONFER WITH PERSONNEL OF ORGANIZATIONAL UNITS INVOLVED TO ANALYZE CURRENT OPERATIONAL PROCEDURES, IDENTIFY OPPORTUNITIES FOR IMPROVEMENT, AND LEARN SPECIFIC INPUT AND OUTPUT REQUIREMENTS SUCH AS FORMS OF DATA INPUT, HOW DATA IS TO BE SUMMARIZED AND FORMATS FOR REPORTS.
3. WRITE DETAILED DESCRIPTION OF USER NEEDS, PROGRAM FUNCTIONS AND STEPS REQUIRED TO DEVELOP OR MODIFY COMPUTER PROGRAM, AND APPLICATION SPECIFICATIONS INCLUDING DATABASE INTERFACES, USER INTERFACES, BUSINESS RULES, AND DATABASE RELATIONSHIPS.
4. REVIEW COMPUTER SYSTEM CAPABILITIES, WORKFLOW, AND SCHEDULING LIMITATIONS TO DETERMINE IF REQUESTED PROGRAM OR PROGRAM CHANGE IS POSSIBLE WITHIN EXISTING SYSTEM.
5. STUDY EXISTING INFORMATION PROCESSING SYSTEMS TO EVALUATE EFFECTIVENESS AND DEVELOP SPECIFICATIONS FOR NEW SYSTEMS OR PROTOTYPE SYSTEMS TO IMPROVE PRODUCTION OR WORKFLOW AS REQUIRED.
6. PREPARE WORKFLOW CHARTS AND DIAGRAMS TO SPECIFY IN DETAIL OPERATIONS TO BE PERFORMED BY EQUIPMENT AND COMPUTER PROGRAMS AND OPERATIONS TO BE PERFORMED BY PERSONNEL IN SYSTEM.
7. CONDUCT STUDIES PERTAINING TO DEVELOPMENT OF NEW INFORMATION SYSTEMS TO MEET CURRENT AND PROJECTED NEEDS.
8. PLAN AND PREPARE TECHNICAL REPORTS, MEMORANDA, AND INSTRUCTIONAL MANUALS AS DOCUMENTATION OF PROGRAM DEVELOPMENT.
9. COORDINATE AND CONDUCT USER TRAINING, EDUCATION AND PROBLEM SOLVING SESSIONS. COUNSEL USERS REGARDING SYSTEM FUNCTIONALITY.
10. UPGRADE SYSTEM AND CORRECT ERRORS TO MAINTAIN SYSTEM AFTER IMPLEMENTATION. DIRECT AND COORDINATE WORK OF OTHERS TO DEVELOP TEST INSTALL AND MODIFY PROGRAMS. TROUBLESHOOT AND IDENTIFY THE SOURCE. ASSIST PROGRAMMER ANALYSTS IN RESOLUTION OF WORK PROBLEMS RELATED TO FLOW CHARTS, PROJECT SPECIFICATIONS, OR PROGRAMMING.
11. PREPARE TIME AND COST ESTIMATES FOR COMPLETING PROJECTS.
12. DEVELOP REQUEST FOR PROPOSALS (RFP)S. NEGOTIATE AND MANAGE VENDOR CONTRACT FOR INFORMATION TECHNOLOGY SERVICES.

13. PREPARE AND PRESENT PROJECT PROGRESS REPORTS FOR DIVISION MANAGEMENT OR COMMITTEE. IDENTIFY PROBLEMS AND ISSUES. RECOMMEND SOLUTIONS.

14. REVIEW PROPOSED APPLICATION SOFTWARE FOR COMPLIANCE WITH APPLICABLE QUALITY ASSURANCE STANDARDS BEFORE ACQUISITION OR IMPLEMENTATION.

15. MANAGE THE RELATIONSHIP AND EXPECTATIONS OF USER PERSONNEL AND DIVISIONS INCLUDING THE PREPARATION OF SERVICE AGREEMENTS.

16. PROVIDE STRATEGIC PLANNING DIRECTION AND TECHNICAL ASSISTANCE FOR USER INFORMATION TECHNOLOGY PLANS.

17. ENSURE THAT QUALITY METHODS AND PROCEDURES ARE EXECUTED. ENSURES THAT PRODUCTS, APPLICATIONS, AND SYSTEMS ARE IN COMPLIANCE WITH ESTABLISHED QUALITY STANDARDS AND MEET CUSTOMER REQUIREMENTS. ANALYZES BEST-IN-CLASS PROCESSES, UNDERSTANDS THE INTERACTION AND RELATIONSHIP OF BUSINESS OPERATIONS AND OPERATING SYSTEMS AND NETWORK PROCESSES.

18. PERFORM DEVELOPMENT TASKS, TO INCLUDE REQUIREMENTS ANALYSIS, SYSTEMS ANALYSIS, DESIGN, APPLICATION DEVELOPMENT AND TESTING, SYSTEM IMPLEMENTATION AND DEVELOPMENT OF SYSTEM DOCUMENTATION FOR MULTI-DIVISION SYSTEMS. DESIGN, DEVELOP, TEST AND IMPLEMENT SYSTEM INTERFACES. DEVELOPMENT TASKS TO INCLUDE USING PROGRAMMING LANGUAGES AND TOOLS SUCH AS: XHTML, SML, VB.NET, C#.NET, ASP.NET, JAVASCRIPT, PYTHON, ESRI ARCGIS 9.3, ARCOBJECTS 9.3, ARCCATALOG 9.3, ARCMAP 9.3, WEB ADF, AND MODEL BUILDER, VISUAL STUDIO 2008 OR HIGHER, .NET FRAMEWORK 2.0 OR ABOVE, WINDOW XP OR HIGHER, ORACLE SQL, MS ACCESS, EXCEL, AND WORD, MS PROJECT, ESRI GEOFILE DATABASES, PUTTY, ARCGIS API FOR SILVERLIGHT/WPF 1.3 OR HIGHER, TOAD, MS SQL SERVER, ORACLE 11G OR HIGHER, MS REPORTING SERVICES, ARCSDE 9.3 OR HIGHER, GLOBAL ASSEMBLY CACHE, SHAREPOINT, .NET FORMS AUTHENTICATION, WORKING WITH AND IMAGING/SCANNING SOFTWARE AND LIBRARIES, UNIX, JAVA, COBOL, SQL DEVELOPER, DB ARTISAN, APPLICATIONS INCLUDING ORACLE'S CUSTOMER CARE & BILLING, MAXIMO, MAXGIS, MAXWEB, COGNOS, KRONOS, UC4 SCHEDULING SOFTWARE, WEBLOGIC, WEBSPHERE, GIS, TELDIG ONECALL SYSTEM.

19. PARTICIPATE IN THE EMPLOYEE INTERVIEW/SELECTION PROCESS. TRAIN, EVALUATE AND COMMUNICATE WITH ASSIGNED STAFF. PROVIDE OR COORDINATE TRAINING. WORK WITH EMPLOYEES TO CORRECT DEFICIENCIES.

20. DEVELOP AND/OR IMPLEMENT CHANGE CONTROL PLANS FOR PRODUCTION SYSTEMS.

### **SUPPLEMENTAL FUNCTIONS**

1. ATTEND AND PARTICIPATE IN PROFESSIONAL GROUP MEETINGS. STAY ABREAST OF NEW TRENDS AND INNOVATIONS IN THE FIELD OF INFORMATION SERVICES.

2. PERFORM RELATED DUTIES AND RESPONSIBILITIES AS REQUIRED.

3. MAY REQUIRE 24 X 7 ON CALL AVAILABILITY.

### **PREFERRED KNOWLEDGE**

THEORIES AND APPLICATIONS OF COMPUTER SCIENCE  
METHODS AND TECHNIQUES OF APPLICATION DEVELOPMENT, SYSTEM DESIGN,  
PROGRAMMING, INSTALLATION, TROUBLE SHOOTING AND MAINTENANCE OF SOFTWARE  
APPLICATIONS  
PERSONAL COMPUTER HARDWARE AND SOFTWARE COMPONENTS  
SYSTEM DEVELOPMENT LIFE CYCLE PHASES, ACTIVITIES AND IMPLICATIONS  
BASIC BUDGETING CONTRACTING, PURCHASING PRACTICES, POLICIES AND PROCEDURES  
ADVANCED PROGRAMMING TECHNIQUES INCLUDING INTEGRATED DATABASE MANAGEMENT  
APPLICATIONS  
OPERATIONAL CHARACTERISTICS AND CAPABILITIES OF DATA BASE MANAGEMENT  
SYSTEMS  
PRINCIPLES AND PROCEDURES OF QUALITY ASSURANCE AND SECURITY  
RELATED TO COMPUTER APPLICATIONS  
GATHERING BUSINESS REQUIREMENTS AND TRANSLATING THEM INTO INTERNET/WEB  
ARCHITECTURE TO ACHIEVE BUSINESS OBJECTIONS  
DEVELOPMENT AND SUPPORT OF ALL INTERNET/INTRANET/EXTRANET SITES AND  
SUPPORTING SYSTEMS  
DEMONSTRATED SKILLS IN GRAPHIC APPLICATIONS, HTML DEVELOPMENT TOOLS AND  
OTHER APPLICABLE AUTHORING TOOLS

KNOWLEDGE AND EXPERIENCE IN HTML, INCLUDING STYLE SHEETS, TEMPLATES,  
COMPLEX TABLES, FRAMES, IMAGE MAPS, CGI PROGRAMMING, APPLETS, ANIMATION,  
MULTIMEDIA DESIGN AND DELIVERY AND WEB PUBLISHING PROCEDURES  
DEVELOPMENT AND MANAGEMENT OF WEB SECURITY POLICIES AND PROCEDURES FOR  
THE ENTERPRISE  
DEVELOPMENT AND MAINTENANCE OF GEOSPATIAL DATABASES  
ABILITY TO PERFORM SPATIAL ANALYSIS AND DATABASE DEVELOPMENT,  
EXTRACTION AND MANIPULATION  
KNOWLEDGE OF IMPORTING AND EXPORTING AUTOCAD DRAWINGS TO/FROM GIS SYSTEM  
KNOWLEDGE OF HTML, XML, VB.NET, C#.NET, ASP.NET, JAVASCRIPT, PYTHON  
KNOWLEDGE OF ESRI ARCGIS 9.3, ARCOBJECTS 9.3, ARCCATALOG 9.3, ARCMAP 9.3,  
WEB ADF, AND MODEL BUILDER, VISUAL STUDIO 2008 OR HIGHER, .NET FRAMEWORK  
2.0 OR ABOVE, WINDOW XP OR HIGHER

SQL EXPERIENCE DEVELOPING QUERIES, TABLES, FUNCTIONS AND STORED  
PROCEDURES (SOME ORACLE EXPERIENCE PREFERRED)  
KNOWLEDGE OF MS ACCESS, EXCEL, AND WORD, MS PROJECT, ESRI GEOFILE  
DATABASES, PUTTY, ARCGIS API FOR SILVERLIGHT/WPF 1.3 OR HIGHER, TOAD, MS  
SQL SERVER, ORACLE 11G OR HIGHER, MS REPORTING SERVICES, ARCSDE 9.3 OR  
HIGHER, GLOBAL ASSEMBLY CACHE, SHAREPOINT, .NET FORMS AUTHENTICATION,  
WORKING WITH AND IMAGING/SCANNING SOFTWARE AND LIBRARIES, UNIX, JAVA,  
COBOL, SQL DEVELOPER, DB ARTISAN  
APPLICATIONS INCLUDING ORACLE'S CUSTOMER CARE & BILLING, MAXIMO, MAXGIS,  
MAXWEB, COGNOS, KRONOS, UC4 SCHEDULING SOFTWARE, WEBLOGIC, WEBSPHERE,  
GIS, TELDIG ONECALL SYSTEM

**PREFERRED SKILL/ABILITY**

RECOMMEND, DESIGN, IMPLEMENT, INSTALL AND MAINTAIN COMPUTER SOFTWARE APPLICATIONS  
APPLY A WIDE VARIETY OF COMPUTER PROGRAMMING LANGUAGES  
DEFINE PROBLEMS, COLLECT DATA, ESTABLISH FACTS, DRAW VALID CONCLUSIONS AND PREPARE APPROPRIATE REPORTS  
DETECT, ISOLATE AND RESOLVE INFORMATION SYSTEM PROBLEMS  
ANALYZE AND ASSESS THE TECHNOLOGICAL NEEDS OF THE AUTHORITY  
PROVIDE APPLICATION DEVELOPMENT PROJECT MANAGEMENT SERVICES  
MANAGE CUSTOMER RELATIONS AND EXPECTATIONS  
UTILIZE AUTOMATED PROJECT MANAGEMENT TOOLS  
IMPLEMENT REVIEW QUALITY ASSURANCE AND SECURITY PROCEDURES FOR APPLICATIONS SERVICES  
EFFECTIVELY PRESENT INFORMATION AND /OR RESPOND TO INQUIRIES/COMPLAINTS FROM AUTHORITY MANAGEMENT, REGULATORY AGENCIES OR THE PUBLIC  
COMMUNICATE CLEARLY AND CONCISELY, BOTH ORALLY AND IN WRITING  
ESTABLISH AND MAINTAIN EFFECTIVE WORKING RELATIONSHIPS WITH THOSE CONTACTED IN THE COURSE OF WORK  
PERFORM ADVANCED PROGRAMMING DUTIES  
PERFORM APPLICATION DESIGN FUNCTION FOR MULTI-DIVISION SYSTEMS  
WORK INDEPENDENTLY IN THE ABSENCE OF SUPERVISION

#### **WORKING CONDITIONS**

OFFICE ENVIRONMENT; EXPOSURE TO COMPUTER SCREENS. MAY BE REQUIRED TO VISIT OFF SITE CLIENT OFFICES

#### **PHYSICAL REQUIREMENTS**

MAINTAIN PHYSICAL CONDITION APPROPRIATE TO THE PERFORMANCE OF ASSIGNED DUTIES AND RESPONSIBILITIES SUCH AS: SITTING, STANDING FOR PROLONGED PERIODS OF TIME AND EXTENSIVE USE OF COMPUTER KEYBOARD  
MAINTAIN EFFECTIVE AUDIO-VISUAL DISCRIMINATION AND PERCEPTION NEEDED FOR MAKING OBSERVATIONS, COMMUNICATING WITH OTHERS, READING, WRITING AND OPERATING ASSIGNED EQUIPMENT