Staff Report

for the Regular Meeting of the Board of Directors, June 27, 2018

TO: Board of Directors

FROM: Jana Kolakowski, Human Resources Manager

DATE: June 19, 2018

SUBJECT: **New Job Description – Information Technology Administrator**

_____ *HUMAN RESOURCES*

RECOMMENDATION:
Approve the new Information Technology Administrator job description, as recommended by the Administrative Practices Committee on June 5, 2018.

BACKGROUND:
Staff has developed a list of historical and projected demand necessary for District technological continuity. Considering current and future project priorities, and the reasonable amount of staff hours required to ensure District projects' success, a staffing increase is needed. Staff has reviewed the Municipal Information Systems Association of California (MISAC) survey of comparable agencies and IT staffing levels. Additionally, Staff has surveyed comparable positions and salaries. Based on these factors, Staff recommends that the IT Administrator role be added to the IT Department to ensure adequate project and Staff leadership.

Staff has met and conferred with AFSCME regarding this position. This classification has been designated by the General Manager in the Supervisor unit.

BUDGETARY IMPACT:
Conversion of the IT Analyst to the IT Administrator would result in a $20,000 annual increase in salary and benefits. Reduction in budgeted temporary staffing will result in no net impact to the operational budget.

Attachments (5):
Information Technology Administrator Job Description
IT Administrator Salary Survey
IT 5 Year Demand Schedule
MISAC Survey
Budget Amendment

NEVADA IRRIGATION DISTRICT

INFORMATION TECHNOLOGY ADMINISTRATOR
Range WOC03 – BOD <mark>XX/XX/XX</mark>

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

DEFINITION

To plan, organize, direct and supervise staff responsible for Information Technology activities and to perform a variety of professional level duties related to technical and operational support, programming, and internal customer services for District departments; implement host systems, communications, network infrastructure and security; and to perform technical tasks related to evaluating, introducing, and maintaining information technology systems.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Finance Manager.

Exercises direct supervision over assigned technical and administrative personnel.

ESSENTIAL FUNCTION STATEMENTS
Essential and other important responsibilities and duties may include, but are not limited to, the following:

Essential Functions:

1. Develop and implement divisional goals and objectives; establish schedules and methods for service delivery of a variety of computer, network, application and telecommunications systems for the District. Create and maintain the Information Technology Master Plan forecasting. Manage District needs and resources considering evolving Information Systems technologies.

2. Plan, prioritize, assign, supervise and review the work of staff involved in providing helpdesk services, technical and system project tasks and cross-functional process activities.

3. Perform a variety of specialized, highly technical and complex computer database system or network system duties in support of specialized functions or programs.

4. Provide operation systems oversight to the District's network and database infrastructure, including but not limited to programming, building, analyzing, diagnosing, maintaining, securing and operating various systems and applications.

5. Answer questions and responds to end-user requests in a timely manner, and provide information, assistance and training to personnel and departments on technology-related issues.

6. Coordinate information system activities with users and participate in planning and project implementation of systems and processes; assist in the assessment of output requirements, data processing schedules, volume of transaction data and other factors to determine the level and type of computer information system support required.

7. Oversee the installation, configuration, management and support of the network, server and telecommunications infrastructure; monitor and maintain local and wide area computer network; manage network file and print server functions; oversee the creation and maintenance of user connectivity; manage and coordinate phone system software; oversee the creation of user accounts based on established protocols; manage and coordinate installation of network and application software.

8. Participate in and implement internal control, network security methodologies and other security systems for data, systems, buildings, hardware protection and recovery procedures; ensure timely and accurate back-up of data; coordinate with building security vendors; implements disaster recovery procedures as needed; maintains appropriate confidentiality of sensitive information.

9. Participate in or oversee installation, configuration, program and test servers, network systems and other computer related software and hardware; monitor systems and network resources; perform appropriate testing functions as needed; coordinate network and software upgrades; develop time and cost estimates for new projects and maintenance changes as needed.

10. Ensure maintenance and availability of network systems; review system logs and troubleshoot network malfunctions; allocate and monitor server disk storage space for users on network; allocate and monitor server memory usage to insure efficient dynamic memory usage.

11. Provide technical expertise as needed for the database environment; plan, design, develop, modify, test and implement all aspects of database administration and relational database management system support.

12. Prepare recommendations to users for the collection of data to be stored in tables; maintain and/or create schematics, data models and/or schemas for databases; manage naming conventions and data dictionaries; perform routine maintenance to the organization's tables.

13. Oversee implementation and maintenance of database, digital archives, and data file security features and procedures to assure the integrity and security of data resources and maintain appropriate confidentiality of sensitive information.

14. Create and maintain scheduled tasks to automate routine procedures and processes; develop test plans and program scripts; monitor logs; implement and test backup, restore and disaster recovery procedures.

15. Review database utilization and perform tuning to ensure optimal performance; conduct and review tests of database servers to verify performance objectives and quality standards.

16. Stay current with technology advancements; develop and present training to District staff on relevant technology related information, new equipment, and program upgrades.

17. Research solutions and procurement of technology related equipment or services; research specifications and costs; beta test experimental systems, programs, and equipment; and research and prepare related reports with recommendations.

18. Plan, prioritize, and review the work of technical staff, develop schedules and methods to accomplish assignments, provide and coordinate staff training, and work with employees to correct deficiencies.

19. Recommend the appointment of personnel; provide or coordinate staff training; conduct performance evaluations; implement discipline procedures as required to maintain discipline and high standards necessary for the efficient and professional operations of the division.

20. Monitor, support and oversee vendor software release cycles and deployment activities; develop time and cost estimates for new projects and maintenance changes as needed.

21. Build and maintain positive working relationships with co-workers, other District employees and the public using principles of good customer service.

22. Perform related duties as assigned.

QUALIFICATIONS

Knowledge of:

Methods and techniques of evaluation and analysis of software, hardware, and application systems and for achieving efficient system utilizations.
Principles and practices of business office automation and information technology including network systems, geographic information systems, database administration and operating systems, software and hardware, and telecommunications.
Common application programming languages.
Computer logic and capabilities, characteristics and limitations of automation systems.

Principles and practices of systems and procedures analysis, and design, including procedures and
methods for systems documentation.
Computer technology, system analysis, programming techniques, and computer and system
capacity.
Networks, database, Internet, hardware and software technology.
Troubleshooting methods to resolve difficult system problems.
Database security standards and file and recovery methods, and techniques.
Principles and practices of supervision, training and performance evaluations.
Principles and practices of budget monitoring.
Principles and practices of safety management.
Pertinent local, State and Federal laws, ordinances and rules
Modern office equipment including use of applicable computer applications.
Principles and practices of effective customer service.

<u>Ability to</u>:

Perform a variety of professional level duties related to technical and operational support,
programming, and internal customer services for District departments.
Work efficiently and effectively with various software, hardware, operating systems, databases,
network systems, geographic information systems and telecommunications systems to include
installation, upgrade, maintenance and trouble shooting.

Develop, revise, install, and utilize automated systems and procedures.
Analyze and develop functional and technical requirements and specifications and conduct
feasibility studies.
Operate and maintain hardware and software systems.
Integrate various software applications.
Conduct research and analysis to solve technical and administrative problems and recommend
alternatives.
Write and perform programming functions in appropriate computer languages.
Monitor computer information system utilization and recommend appropriate revisions to
processes.
Develop and test programs; prepare test data, and test and debug application programs.
Provide technical and functional supervision over assigned staff; effectively train staff.
Operate and use modern office equipment including a computer and applicable software.
Establish and maintain effective working relationships with those contacted in the course of work.
Communicate clearly and concisely, both orally and in writing.

<u>Responsibility to</u>:

Obey safe work practices, procedures, and regulations including wearing protective equipment
and safety devices.
Operate equipment in a careful and safe manner.
Acknowledge the use of safeguards by other employees.

Report any removal, displacement, damage, destruction, or tampering of safety devices, safeguards, notices or warnings.

Report any safety risks or hazards to your supervisor or other management personnel.

Report to your supervisor or other management personnel any work assignment that you feel would require you to perform the work in an unsafe manner.

EXPERIENCE AND EDUCATION GUIDELINES

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Four years of responsible journey experience similar to an Information Technology Analyst with Nevada Irrigation District.

Education:

A Bachelor's degree from an accredited college or university in computer science, information systems, network administration or a related field.

License and Certificate:

Possession of a valid California driver's license.

WORKING CONDITIONS

Environmental Conditions:

Work is normally performed in a temperature controlled office environment subject to typical office noise.

Physical Conditions:

Essential functions may require maintaining physical condition necessary to sit at desk for long periods of time; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone, write or use a keyboard to communicate through written means; and lift or carry weight of 50 pounds or less.

Mental Conditions:

Essential functions may require maintaining mental condition necessary to know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures; handle conflict.

Organization	Position	Low	High	Salary Schedule Date
Water/Utility Agencies				
YCWA	Info Systems Manager	$ 115,176	$ 139,997	Jul-17
Modesto ID	Info Systems Supervisor	$ 101,046	$ 129,334	Dec-17
Merced ID	IT Manager	$ 85,864	$ 128,795	Apr-18
PCWA	Info System Supervisor	$ 81,468	$ 103,980	Jan-18
	Average	$ 95,888.59	$ 125,526.61	
Cities/Counties				
Nevada County	Info Systems Manager I	$ 102,428	$ 125,151	Jan-18
Placer County	Info Technology Supervisor	$ 100,630	$ 122,346	Oct-17
Yuba County	Info Technology Supervisor	$ 91,824	$ 98,160	Mar-18
	Average	$ 98,294.16	$ 115,219.04	
U.S. Labor Statistics				
Bureau of Labor Statistics - Sac Metro Area	Computer & Info Systems Managers (113021)	$ 111,160.00	$ 157,200.00	May-17
Bureau of Labor Statistics - Chico	Computer & Info Systems Managers (113021)	$ 87,190.00	$ 134,320.00	May-17
Nevada Irrigation District - Current/Comparables				
NID	IT Analyst	$ 81,473	$ 98,904	WOB77
NID	Hydroelectric Maintenance Supervisor	$ 98,404	$ 119,641	WOC16
NID	Controller	$ 100,900	$ 122,636	WOC21
NID	Hydroelectric Compliance Administrator	$ 110,947	$ 134,825	WOC40
Nevada Irrigation District - Proposed				
NID	IT Administrator	$ 90,810	$ 110,372	

Nevada Irrigation District

IT 5 Year Demand & Accomplishments

FTE Annual Hours = (2,080 less 40 for Sick, less 168 for Vacation & Holidays) = 1,872

Estimated Annual Hours					
Total Hours	7,480	7,446	7,014	6,802	6,631
FTEs needed	4.00	3.98	3.75	3.63	3.54

Major Projects	High/Med/Low	2018	2019	2020	2021	2022

Hardware: Setup/Configure

	High/Med/Low	2018	2019	2020	2021	2022
* GV Campus Nework Redesign and Implementation	High	80				
* Mobile device integration and security	High	20	60			
* Treated Water Network Refresh	High	80				
* GV Card Access system replacement	High	10				
* Camera video storage expansion/retention	High	30				
* GV burglar / Fire alarm replacement/expansion	High	40				
* Phone system replacement for Hydro	High	20				
* Refresh servers (38)**	High	80	90	100	110	120
* Refresh workstations (131)**	High	52	54	56	58	60
* Refresh laptops (80)**	High	40	42	44	46	48
* Refresh tablets, phones (20)**	High	14	16	20	24	29
* Network Device Replacement	High	48	48	48	48	48
* Colfax Network redesign/new server room, etc.	Med	30			30	
* GV campus remodel, workstation setup, etc.	Med	20	40	60		
* Phone system for Recreation	Med		40			
* Hydro Card Access Expansion	Med	20	60			
* Hydro Comms Project	Med	10	30			

Software: Install/Program/Test/Implement

	High/Med/Low	2018	2019	2020	2021	2022
* ERP sytem with electronic timecards	High	160	160	160	80	
* CMMS deployment	High	80	80	80	80	
* Billing Invoice Changes	High	60				
* Recreation IT integration of processes	High	30	30			
* OSI SCADA software replacement	High	50				
* Online payments/paperless billing	High	60				
* SB-88 Telemetry / Reporting	Med	20	20			
* Website redevelopment	Med	20	80			
* Windows 10 migration	Med		120			
* Office 2016 migration	Med	40				
* Exchange 2016 migration	Med	20				
* Laserfiche Districtwide invoice change	Med	20	40	40		
* Hydstra/Datawise migration / expansion	Med		40			
* Sharepoint upgrade / Replacement	Low			40		
* Replacement of Box and Parcel	Low		30	30		

Nevada Irrigation District

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Total Hours		7,480	7,446	7,014	6,802	6,631
FTEs needed		4.00	3.98	3.75	3.63	3.54

Major Projects	High/Med/Low	2018	2019	2020	2021	2022
* Replacement of YBRun	Low		10	10		
* OSI SCADA expansion to powerhouses	Low		30			
Planning/Training/Documenting:						
* Disaster Recovery Planning Exercising	High	40	40	40	40	40
* IT Documentation/Processes/Networks	High	40	40	40	40	40
* Succession/Cross Training	Med	40	40	40	40	40

Routine Help Desk

Avg annual Tickets (2016 - 2017)

2,758

Varies

Annual Hours to Complete (Troubleshoot, Document, etc.)

6,206

	2018	2019	2020	2021	2022
	6,206	6,206	6,206	6,206	6,206
Total Hours	7,480	7,446	7,014	6,802	6,631

Prior 5 Year Major Accomplishes:

1) Districtwide Remote Site network connectivity/segregation with security / redundancy
2) Complete replacement of high cost, high downtime communications paths
3) Relocation of district website and improved availability and reliability
4) Deployment of Lucity CMMS
5) Deployment of integration of FuelMaster fuel system
6) Deployment and migration of district camera surveillance systems (X 7)
7) Virtualization of majority of IT servers
8) Windows XP to Windows 7 deployment
9) Office 2010 migration
10) Network storage replacement and expansion
11) Redundant Disk / Tape / Offsite Backup system
12) Rollout / upgrade of Districtwide wireless coverage
13) Creation and maintenance of 100s of reports
14) Complete refresh of all workstations and laptops
15) Replacement of 80% of servers
16) Modification of Pentamation (ERP) at code level to improve reports, research analysis
17) Manager smartphone deployment / managing

18) Laserfiche Document Management (Zazio replacement)
19) WAVE Security implementation
20) GV Security laser fence integration / main building issue
21) IT Ticketing and workflow system
22) Partial IT Documentation (Network, Switches, Phones, Ports, etc.)
23) Development of many critical District processes including:

* Row Docs
* Community Plus Finance Interface
* Finance Plus Purchase Orders
* Finance Plus Check stock
* YBRun (water storage)
* Datawise - EAP Alarming
* LRGS - USGS / GIS satellite data
* SCADA Power page
* Treatment Alarming page
* Treatment Trending page

* FinPlus Project COA conversion
* Pipeline sending
* Invoice and other bulk mailing
* Credit Card Processing
* Cellular Meter Reading
* Fuelmaster to Lucity, Finance Plus
* Hydro SCADA historian
* Crop Report
* GIS Server implementation
* Board Meeting / Livestream

MISAC Quick Survey
IT Staffing Levels for Water/Wastewater entities
3/10/2016

City/Agency	Users	Full Time IT	Part Time IT	Consultants	Include GIS	Include SCADA	Notes	IT STAFF
Western Municipal Water	160	6	0	1	Yes	Partial	Partial- servers/firewall only	7
San Mateo	600	13	2	0	Yes	No		15
Lancaster	300	7	0	0	Yes	No		7
Healdsburg	125	3	0	0	Yes	No	Fire & PD	3
Belmont	150	4	0	0	Yes	No		4
Aliso Viejo	50	1	0		Yes	No		1
Vernon	260	4	1	0	Yes	Partial	No GIS personnel	5
Imperial Beach	140	2	1	1	Yes	No		4
Monrovia	300	3	0	0	Yes	Yes	Fire & Some PD	3
Lathrop	150	2	0	0	Partial	Partial	Partial- servers/SW only	2
Hemet	293	4	0	0	Yes	Yes		4
El Dorado Irrigation	210	7	0	0	No	Partial		7
Elsinore Valley Water	170	10	0	0	Yes	Yes		10
Valley Center Water	64	2	0	0	Partial	Partial	Partial- servers/SW only	2
Paso Robles	180	5	0	0	Yes	Partial	Partial- servers/SW only	5
Jurupa Community Services	175	3	1	0	Yes	No		4
Santa Margarita Water	150	4	0	1	Yes	No		5
Palmdale Water	100	2	1	4	Partial	Partial	Relationships but no staff	7
Dublin San Ramon Services	114	6	0	0	No	Partial	Network Only	6
Alameda County Water	230	9	0	0	Yes	Partial	Network/Servers	9
Padre Dam Municipal Water	135	5	0	2	Yes	Yes		7
Hayward	850	15	0	1	Yes	Yes		16
Pleasanton	596	8	0	0	Yes	Yes		8
Minimum	50.0						**Minimum**	1.0
Maximum	850.0						**Maximum**	16.0
Average	239.2						**Average**	6.1
Nevada Irrigation District	206	3	0	0	No	Yes		3.0
Nevada Irrigation District	206	3	0	1	No	Yes		4.0

NEVADA IRRIGATION DISTRICT

BUDGET AMENDMENT REQUEST

Request Number

Req. No | BA 2018 - 81

Date: 4/24/2018
To: Remleh Scherzinger, General Manager
From: Marvin Davis, Finance Manager

Initial _~~~~_

Budget Transfer: Enter Operating/Capital Expenditure or Revenue line items.

Department	Object / Account	Increase/(Decrease)
10118 Info Technology	51101 Salary	$ 45,000.00
10118 Info Technology	51311 Pension Premiums	$ 13,500.00
10118 Info Technology	51312 Health Insurance	$ 10,700.00
10118 Info Technology	52609 Temporary Labor	$ 30,000.00
10118 Info Technology	52915 Proj Bud: Non-Programmatic	$ (99,200.00)

Budget Increase: Enter Operating/Capital Expenditure or Revenue line items.

Department	Object / Account	Increase/(Decrease)

Division Fund	Funding Account	Increase/(Decrease)

Explanation: Enter narrative explaining reason for amendment.

Transfer from capital project ERP system budget to cover IT Administrator and IT Technician by July 1, cover temporary staffing through June 30

APPROVALS:

	Date	Signature	AGM/FM Initials	Approved/Denied
Level I:				
Level II:				
Level III:				

Version 11-15-2016