

# **Water Department**

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## WATER DEPARTMENT

<b>Budget Highlights</b>	<b>FY 2018 Actual</b>	<b>FY 2019 Budget</b>	<b>FY 2020 Requested</b>	<b>% Change From FY 2019 Budget</b>
<u>Expenses</u>				
Employee Expense	2,151,486	2,420,488	2,404,255	(0.7)%
Supplies and Services	2,413,097	2,495,838	2,601,359	4.2 %
Machinery and Equipment	386,822	869,690	736,780	(15.3)%
Administrative Overhead Recharges	264,683	405,172	454,496	12.2 %
Finance Utility Billing	160,396	—	—	— %
Engineering Water Maintenance Charges	31,472	20,046	20,010	(0.2)%
Payment in Lieu of Taxes	142,884	142,884	142,884	— %
Payment to Construction Fund	1,157,000	935,000	400,000	(57.2)%
Debt Service	2,558,707	3,115,807	3,689,299	18.4 %
Total Expenses	9,266,547	10,404,925	10,449,083	0.4 %
<u>Resources</u>				
Operating Revenue	10,518,160	10,423,618	10,497,358	0.7 %
Total Resources	10,518,160	10,423,618	10,497,358	0.7 %
Net Operating Surplus (Deficit)	1,251,613	18,693	48,275	29,582
<b>Personnel - Authorized FTE</b>	<b>25.57</b>	<b>25.87</b>	<b>26.37</b>	
<b>Water User Fee Rate Increase</b>	<b>3%</b>	<b>3%</b>	<b>5%</b>	
<b>Revenue 1% Rate Increase Generates</b>			<b>\$ 79,438</b>	

### Improvement Package Summary

#### 1 of 6

This improvement package would provide funding to systematically upgrade the two ruggedized cell phones to smartphones for the water distribution crew. Smartphones would enable the crews to have access to WebQA and GIS mapping during the response to an emergency improving the time with which it takes to locate isolation valves. The City operations would be improved with decreased response times to emergency sites and the community would benefit from a shortened interruption of water service in the event of a water main break. In addition, WebQA notifications would come directly to the staff member. WebQA is currently used as the department work order system. As work orders are available electronically, the crew would be able to view the order, complete and close it, thereby improving response times in the City's WebQA process. This request follows the City Council Goal and Priority of Sustainable Environment: Preserving and Enhancing Natural Resources to readily respond to provide safe, dependable drinking water and using affordable technology for water activities.

Related Cost:	\$ 672	Water User Fees	Recurring	<b>Recommend - Yes</b>
Related Cost:	\$ 700	Water User Fees	Non-Recurring	
Total Cost:	\$ 1,372			
Water Rate Impact:	0.02%			
Activity: Distribution				

**2 of 6**

This improvement package would provide funding to systematically upgrade the two ruggedized cell phones to smartphones for the water meter crew. Smartphones would enable the crews to have access to WebQA and GIS mapping during the response to an emergency improving the time with which it takes to locate isolation valves. The City operations would be improved with decreased response times to emergency sites and the community would benefit from a shortened interruption of water service in the event of a water main break. In addition, WebQA notifications would come directly to the staff member. WebQA is currently used as the department work order system. As work orders are available electronically, the crew would be able to view the order, complete and close it, thereby improving response times in the City's WebQA process. This request follows the City Council Goal and Priority of Sustainable Environment: Preserving and Enhancing Natural Resources to readily respond to provide safe, dependable drinking water and using affordable technology for water activities.

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Total Cost:	<u>\$ 1,372</u>			
Water Rate Impact:	<u>0.02%</u>			
Activity: Water Meters				

**3 of 6**

This improvement package would provide funding for replacement of an unsupported Access database currently used for the collection of water treatment process data. HACH WIMS is an industry standard supported software database used to compile, track, and trend data for treatment facilities, and is also used at the Water & Resource Recovery Center. The quote includes non-recurring costs totaling \$26,980, which includes one time set up costs of and estimated 70 hours for programming services along with 3 days of on-site training, and SCADA interface installation and training to collect up to 10 variables. The recurring cost is for three licensed concurrent users and would reoccur annually. The water treatment data is collected and entered into operating reports that are submitted monthly to the Department of Natural Resources to ensure the drinking water treatment process is compliant with all standards listed in the City's operating permit. Continued and improved data collection and entry ensure continued compliance of the City with its regulatory requirements stipulated by the Safe Drinking Water Act as enforced by the United States Environmental Protection Agency and the Iowa Department of Natural Resources. This improvement supports the City Council Goal and Priority of Sustainable Environment: Preserving and Enhancing Natural Resources providing safe, dependable drinking water using affordable technology for water activities.

Related Cost:	\$ 3,120	Water User Fees	Recurring	<b>Recommend - Yes</b>
Related Cost:	\$ 26,980	Water User Fees	Non-Recurring	
Total Cost:	<u>\$ 30,100</u>			
Water Rate Impact:	<u>0.38%</u>			
Activity: Operations and Maintenance				

**4 of 6**

This improvement package would provide funding for the purchase of a water treatment plant tablet for the purpose of entering water treatment data into new software proposed in improvement package 3. The data is collected and entered into operating reports that are submitted monthly to the Department of Natural Resources to ensure the drinking water treatment process is compliant with all standards listed in the City's operating permit. Continued and improved data collection and entry ensure continued compliance of the City with its regulatory requirements stipulated by the Safe Drinking Water Act as enforced by the United States Environmental Protection Agency and the Iowa Department of Natural Resources. This improvement supports the City Council Goal and Priority of Sustainable Environment: Preserving and Enhancing Natural Resources providing safe, dependable drinking water using affordable technology for water activities.

Related Cost:	\$ 950	Water User Fees	Non-Recurring	<b>Recommend - Yes</b>
Related Cost:	\$ 120	Water User Fees	Recurring	
Total Cost:	<u>\$ 1,070</u>			
Water Rate Impact:	0.01%			
Activity: Operations and Maintenance				

**5 of 6**

This improvement package provides funding for the purchase of a water street valve box cutter. Valve box cutter use is for cutting around valve boxes in street pavement from asphalt over-lay program and other valve boxes that are buried under pavement to raise the valve box flush with street paving to make valve accessible. The street valve box cutter would be powered from the back-hoe hydraulics. The Public Works Department currently has similar cutter for raising their manhole cover lids. This request would provide a safer and faster means of raising valve boxes for Water staff. This improvement request supports the City Council Goal and Priority of Sustainable Environment: Preserving and Enhancing Natural Resources, enable the City's crews to quickly restore access to system valves improving the response to provide safe, dependable drinking water using affordable technology for water activities.

Related Cost:	<u>\$ 30,000</u>	Water User Fees	Non-Recurring	<b>Recommend - Yes</b>
Water Rate Impact:	0.38%			
Activity: Water Distribution				

**6 of 6**

This improvement package would provide six additional American Water Works Association (AWWA) memberships. AWWA membership would provide membership in Dubuque's local Section for attendance at local and regional AWWA meetings to discuss policy and standards. In addition, membership would provide access to training, networking, and community engagement opportunities. In addition, each member would have a subscriptions to Journal – American Water Works Association presenting the latest industry research, peer-reviewed articles, and information on all aspects of the water profession, and Opflow to gain monthly hands-on guidance for smoother, more efficient utility operations from the publication that focuses on the best emerging and established technologies. Members also would have access to the the latest technical reports and tools and special-engagement webinars, along with discounts up to 33% on technical resources and educational opportunities in the AWWA Store. The City of Dubuque is also the host of the state AWWA conference every 4 years. AWWA is also the provider of the Standards the City adheres to manage, operate and maintain its water system. This request supports the City Council Goal and Priority of Sustainable Environment: Preserving and Enhancing Natural Resources to provide safe, dependable drinking water.

Related Cost Savings:	<u>\$1,380</u>	Water User Fees	Recurring	<b>Recommend - Yes</b>
Water Rate Impact:	0.02%			
Activity: Administration/Meters/Plant Operations/Distribution				

**7 of 7**

This improvement package would provide the elimination of the Part-Time Confidential Account Clerk and the creation of a Full-Time Confidential Account Clerk at the City's Water Department. The Water Department processes over 3,650 calls through the water plant and the distribution office; accounts payable including approximately 700 purchase orders, 500 to 600 procurement cards purchases, and bi-monthly payroll meeting union contract requirements equating to over 1,200 hours of work per year. In addition, from an estimated 3,650 calls handled by the shift operator, department manager or the engineering assistant in the distribution office, over 90% require a distribution crew member or members be dispatched to respond to a water distribution system need, such as a water quality issue, main break, or private contractor request for information.

For each call, a work order is created in WebQA, by a water plant operator, department manager, or a distribution staff member. The WebQA alerts the water distribution foreman to the issue where he is able to dispatch a crew. For each dispatch, the crew responds with the appropriate parts and materials available in inventory or contacts the distribution foreman if a part needs to be located elsewhere immediately. Should residents require notification of a distribution system issue the distribution crew with assistance from water department administration provides the alerts to the City's public information officer.

There are numerous challenges associated with the current process of handling calls, processing accounts payable, completion of payroll, creation of work orders via WebQA, and providing alerts and community notifications. The work described is handled by current full-time staff members. The water distribution foreman is a working foreman and assists crews in the field and operates equipment and responds to residential issues. Often, he is not able to enter a new work order due to the current onsite/fieldwork demands of his position and delays in responding to issues can happen. This is also true of the engineering assistant who is responsible for completing development reviews, creating request for proposals, preparing bid documents, reviewing, maintaining, and modifying water department standards, project managing smaller engineering projects, working with contractors in the field, and performing some of the functions of the water foreman, as needed, or in his absence. The engineering assistant currently answers over 2,300 of the 3,600 calls to the department and as such, is not available to respond to the other needs of his role. Payroll and accounts payable are handled by a water plant shift operator and the water department manager, who is also performing the role of water plant manager handling all regulatory compliance requirements.

It is critical that the above information, financial data, and customer responses are handled in a manner that is effective and timely. The creation of a full time confidential account clerk will meet the needs of the department as described above.

This package supports the City's goals and priority of a Financially Responsible, High Performing City Organization as the department looks to provide services delivered in the most effective manner by evaluating better ways to perform water supply services. This improvement package maintains the benefits of having a dedicated staff member to address the administrative functions listed above will provide the necessary support to the department's other full time positions, affording them the time to provide the needed services of the water department.

Related Cost:	<u>\$34,028</u>	Water User Fees	Recurring	<b>Recommend - Yes</b>
Water Rate Impact:	0.43%			
Activity: Administration/Meters/Plant Operations/Distribution				

**Significant Line Items**

**Employee Expense**

1. FY 2020 employee expense reflects a 1.5% wage package increase.

2. The Iowa Public Employee Retirement System (IPERS) City contribution of 9.44% is unchanged from FY 2019 The employee contribution of 6.29% is unchanged from FY 2019.
3. The City portion of health insurance expense decreased from \$1,193 in FY 2019 to \$921 in FY 2020 per month per contract which results in an annual cost savings of \$75,798 or 22.77%.
4. Overtime is unchanged from \$94,040 in FY 2019 to \$94,040 in FY 2020 . FY 2018 actual was \$109,707.
5. Sick Leave Payout is decreased from \$32,279 in FY 2019 to \$32,007 in FY 2020.

### **Supplies & Services**

6. Property Insurance decreased from \$77,050 in FY 2019 to \$66,812 in FY 2020. An appraisal of all city buildings was completed during FY 2019.
7. Electricity Utility Expense decreased from \$633,850 in FY 2019 to \$628,223 in FY 2020 based on FY 2018 actual.
8. Sales Tax expense increased from \$516,274 in FY 2019 to \$520,583 in FY 2020 based on increased water rates in FY 2020 of 5%. This expense is directly offset by Sales Tax Revenue.
9. Machinery and Equipment Maintenance decreased from \$100,660 in FY 2019 to \$69,816 in FY 2020 based on FY 2018 actual of \$69,826. This line item represents wells, filters, pumps, generators, chemical unloading and storage, chemical feed equipment, chlorinators, lime slackers, clarifiers, air compressors and air system components, telemetry, HVAC, elevator, computer maintenance, sludge plant, electrical controls, and sensors.
10. Costs for Fluoride, Phosphate, Chlorine, Lime, and Polymer expense (water processing materials) increased from \$399,400 in FY 2019 to \$433,950 in FY 2020. FY 2018 actual was \$408,768. Lime increased from \$265,000 in FY 2019 to \$310,000 in FY 2020.
11. Hauling Services decreased from \$150,000 in FY 2019 to \$148,250 in FY 2020 based on FY 2019 actual. The amount of hauled tons of lime sludge is highly variable from year to year based on water usage. FY 2018 actual expense was \$136,887.
12. Property Maintenance increased from \$52,210 in FY 2019 to \$65,560 in FY 2020 based on FY 2018 actual. This line item represents the contract for building and grounds maintenance for Eagle Point Plant, sludge plant, storage tanks, reservoirs, booster stations, well houses (\$1335 per week for 26 weeks).
13. Pipe Special Fittings is increased from \$70,000 in FY 2019 to \$79,332 in FY 2020 based on FY 2018 actual. This line item represents the purchase of water pipe, special fitting and tapping material for the distribution system. There is associated revenue budgeted in taps (\$33,000) and taps services (\$14,500).
14. Valves decreased from \$33,600 in FY 2019 to \$24,192 in FY 2020 based on FY 2018 actual. This line item represents the material cost only for valves in the distribution system. The budget represents approximately 9 valves.
15. Environment Testing/Monitoring unchanged from \$60,000 in FY 2019 to \$60,000 in FY 2020. FY 2018 actual was \$41,604. It is expected that there will be increased samples due to boil advisories, chlorine monitoring, and increased testing for expansion of system. The additional funds are for

water quality testing using the Heterotrophic Plate Count (HPC) test. It detects the growth of pathogens beyond bacteria testing, that might be present, which is especially important after main breaks, loss of pressure, and following new connections. This testing is conducted twice per month or as needed following an emergency.

## Machinery & Equipment

16. Equipment replacement items at the maintenance level include (\$736,780):

<u>Meters</u>	
(1) Smartphone & (2) Cellphones	\$ 1,246
Portable Radio	\$ 1,200
Large Water Meters	\$ 27,000
<u>Plant Operation &amp; Maintenance</u>	
Laboratory Equipment	\$ 3,000
Shop Equipment	\$ 1,000
Pumps	\$ 1,000
Smartphone (2)	\$ 792
<u>Water Distribution System</u>	
Utility Truck with Crane	\$ 80,000
Hydraulic Valve Operator	\$ 55,500
Electric Generator	\$ 2,400
Cut Off Saw	\$ 3,000
Tapping Machine	\$ 48,000
Cell Phones	\$ 1,692
<u>Annual Maintenance Projects</u>	
Pump Replace Vacuum Filter	\$ 15,000
Large Valve Replacement (2)	\$ 25,000
Water Main Replacements (Repair of 70 mains)	\$ 350,000
Large Water Meters	\$ 75,000
Water Valve Box Maintenance (Public Works)	\$ 20,000
Water Meter Testing	\$ 25,000
<b>Recommended Improvement Packages</b>	<b>\$ 950</b>
Total	<b>\$ 736,780</b>



## Debt Service

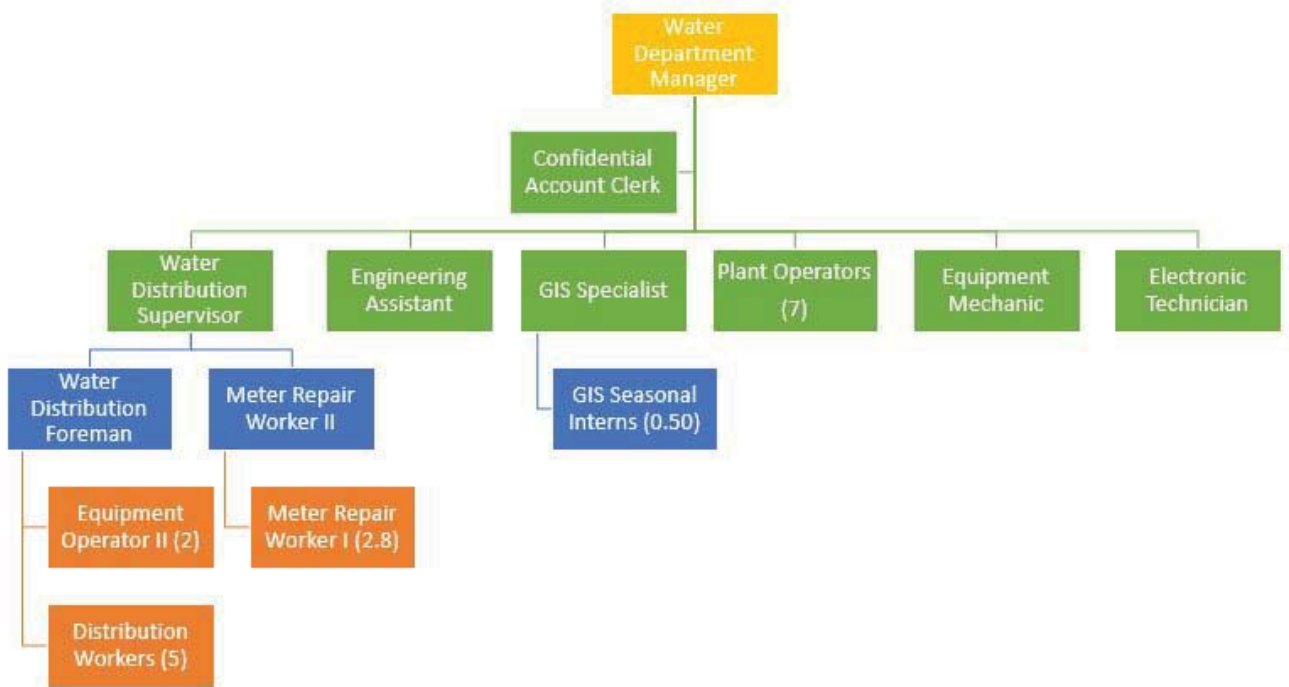
17. Annual debt service reflects repayment to (\$3,689,299):

Amount	Debt Series	Source	Purpose	Final Payment	Call Date
\$ 56,640	SRF 2007A	Water Fees	Clear Wells	2028	
\$ 115,158	Revenue 2008D	Water Fees	Water Improvements	2023	2016
\$ 218,550	SRF Series 2009	Water Fees	Meter Change-Out	2031	
\$ 386,500	Revenue 2010D	Water Fees	Water Improvements	2030	2017
\$ 106,920	G.O. 2011A	Water Fees	Water Improvements	2031	2018
\$ 42,772	G.O. 2012E	Water Fees	Water Improvements	2032	2018
\$ 127,300	G.O. 2012D	Water Fees	Water Improvements	2033	2019
\$ 756,031	G.O. 2014B	Water Fees	Water Improvements	2032	2021
\$ 44,688	G.O. 2016C	Water Fees	Water Improvements	2033	2024
\$ 674,220	SRF 2017	Water Fees	CIWA Purchase/Imp	2036	
\$1,090,000	CIWA Contract	Water Fees	CIWA Purchase	2022	
\$ 70,520	SRF 2018	Water Fees	Roosevelt Water Tower	2038	
<b>\$3,689,299</b>	<b>Total Water Annual Debt Service</b>				

## Revenue

18. Water User Fees decreased from \$8,166,483 in FY 2019 to \$8,161,223 in FY 2020. Increase is based on FY 2018 actual of \$7,943,791 plus the FY 2019 rate increase of 3% and the FY 2020 projected rate increase of 5%.
19. Flat Rates increased from \$16,296 in FY 2019 to \$18,389 in FY 2020 based on FY 2018 actual of \$18,389. This charge is for customers purchasing bulk water. Rates are set by City ordinance.
20. Fire Protection Rates increased from \$161,368 in FY 2019 to \$170,410 in FY 2020 based on FY 2018 actual of \$170,410. This fee is the demand charge for fire sprinkler head connection. The rates are set by City ordinance.
21. Taps decreased from \$33,905 in FY 2019 to \$33,000 in FY 2020 based on a three year historical average and planned new subdivisions. FY 2018 actual was \$64,217 due to South Pointe and Rustic Point new subdivisions. This fee is charged to customers for 3/4" to 1" taps and represents the cost of labor and materials. The rates are set by City ordinance.
22. Tap Service decreased from \$24,938 in FY 2019 to \$14,500 in FY 2020 based on three-year average. FY 2018 actual was \$16,655. This fee is charged to customers for 2" taps and represents the actual cost of labor and materials. The rates are set by City ordinance.
23. Connection Charge Front Footage increased from \$18,671 in FY 2019 to \$55,000 in FY 2020 based on a three-year average and planned new subdivisions. FY 2018 actual was \$99,495. This fee is charged to a new user when a connection is made to the City water supply. This represents the user share of the cost of the installation of the water main. Rates are set by City ordinance.
24. Backflow Prevention Administrative Fees increased from \$70,617 in FY 2019 to \$74,175 in FY 2020 based on FY 2018 actual of \$71,357. This is the \$25 annual fee charged to all customers with a backflow device.

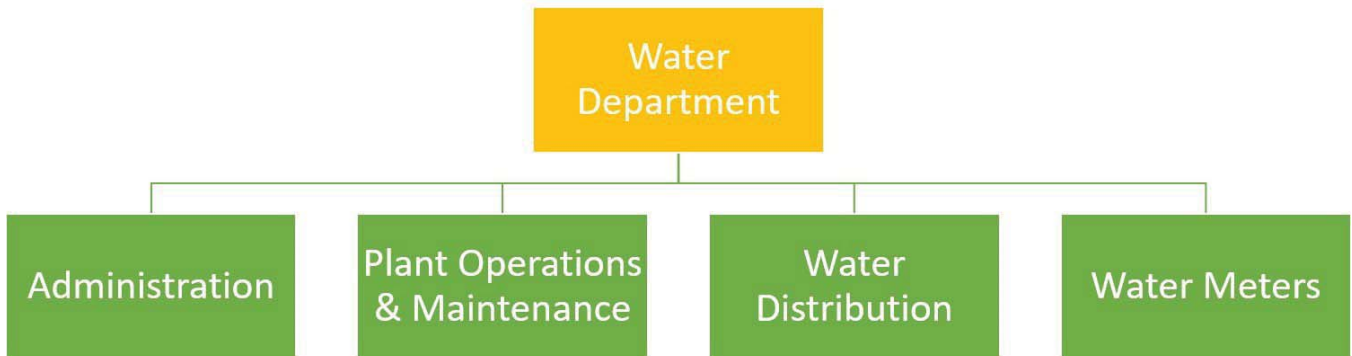
25. Penalties for late payments increased from \$82,636 in FY 2019 to \$84,383 in FY 2020 based on FY 2018 actual of \$84,393.
26. Tower Monthly Rental increased from \$89,449 in FY 2019 to \$101,495 in FY 2020 based on FY 2018 actual of \$101,495.
27. Sales Tax Collected increased from \$516,274 in FY 2019 to \$520,583 in FY 2020 based on the rate increase for water fees. This line item off-sets the sales tax expense.



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# WATER DEPARTMENT

The Water Department ensures our community has high quality, safe, reliable and affordable drinking water.

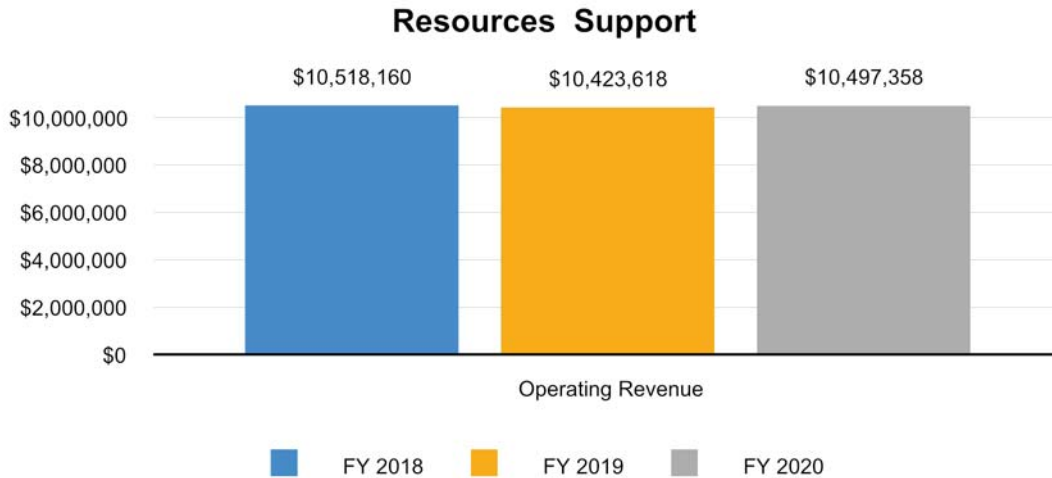


## SUCCESS IS ABOUT PLANNING, PARTNERSHIPS AND PEOPLE LEADING TO OUTCOMES



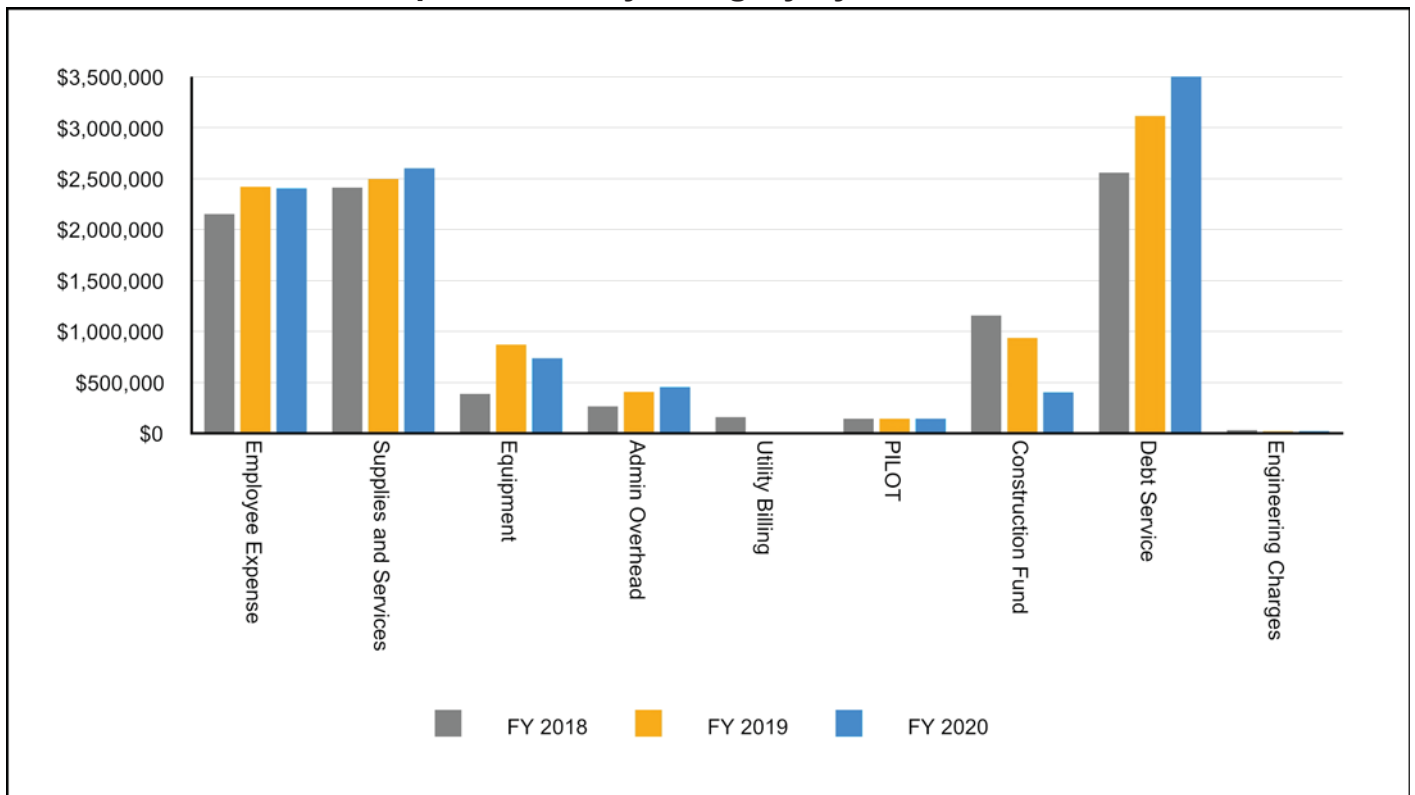
# WATER DEPARTMENT

	FY 2018	FY 2019	FY 2020
Full-Time Equivalent	25.57	25.87	26.37



The Water Department is supported by 26.37 full-time equivalent employees, which accounts for 23.01% of the department expense as seen below. Overall, the department's expenses are expected to increase by 0.42% in FY 2020 compared to FY 2019.

### Expenditures by Category by Fiscal Year



# WATER DEPARTMENT Administration

## Overview

The Dubuque Water Department is dedicated to producing and delivering drinking water that is in compliance with all state and federal drinking water standards. We continually strive to adopt new and better methods of delivering the best quality drinking water to the citizens of Dubuque in the most cost-effective manner.

Water Department Administration is responsible for the preparation of operating and capital budgets, analysis of rate structure, interacting with the state and federal regulatory agencies, evaluation and coordination of treatment facility operations and the water distribution system functions.

Water Administration Funding Summary			
	FY 2018 Actual	FY 2019 Budget	FY 2020 Requested
Expenditures	\$3,374,228	\$3,943,635	\$4,546,855
Resources	\$1,172,921	\$—	\$—

Water Administration Position Summary	
	FY 2020
Water Department Manager	1.00
Confidential Account Clerk	1.00
GIS Specialist	1.00
GIS Intern	0.50
<b>Total FT Equivalent Employees</b>	<b>3.50</b>

## Highlights of the Past Year

- Completion of the Westside Water System Improvements, which included the installation of over 2 miles of water main and the addition of the English Mill Pump Station, connecting the Vernon Water Tower and the Vernon and Barrington Lakes Water Systems to the City of Dubuque water supply.
  
- Completion of the John F. Kennedy Road water main extension project. A 12-inch water main was extended north of Derby Grange Road providing water service to the Derby Grange Road Housing Urban Renewal Area.
  
- Initiation of the Roosevelt Street Water Tower planning and design. The tower will improve water pressure and flows to better serve the residents in the 2nd Pressure Zone (Peru Road and Roosevelt Street) and prepare the City for continued growth.



*JFK Road Water Main Installation FY18*

# WATER DEPARTMENT

## Future Initiatives

- Develop a Water Master Plan meeting the needs of current and future residents and businesses in the Dubuque community.
- Maintain appropriate department staffing levels to ensure regulatory compliance and maintain and operate the department's facilities and distribution system.
- Provide industry and professional development related training to maintain licensing and expand the skill set of Water Department employees.

## Performance Measures

### Administration - Activity Statement

Provides evaluation and coordination of daily operations and long term planning of the department and interacts with state and federal regulatory agencies to maintain regulatory compliance.



### Goal: Financially Responsible, High Performance Organization

#### **Outcome #1: Maintain a financially viable water utility**

*Financial viability allows the Water Department to achieve its operating objectives and allows the department to fulfill its mission over the long term.*

#### **Outcome #2: Strategic planning of Water Department activities**

*Strategic planning enables the Water Department to be proactive and responsive to the current and changing needs of the community, while focusing valuable resources of the organization in the same direction to become more efficient and cost-effective.*



# WATER DEPARTMENT

## Plant Operations and Maintenance

### Overview

Plant Operations and Maintenance ensures that water used for domestic, commercial and industrial purposes is safe for drinking and is supplied at sufficient volumes to meet the needs of our community as well as provide for fire protection. Responsible for the management of equipment and chemicals used to treat and disinfect groundwater for human consumption and to maintain compliance with all Federal, State and Local water quality standards.

Over 200 tests per day are performed by water treatment plant operators. In addition to these tests, the Dubuque W&RRC Laboratory performs over 60 bacteriological analysis of our drinking water on a monthly basis.



Other compliance-related testing is performed by the University of Iowa Hygienic Laboratory. All of these analytical measures ensure the water reaching homes is of drinking-water quality.

Plant Operations and Maintenance Funding Summary			
	FY 2018 Actual	FY 2019 Budget	FY 2020 Requested
Expenditures	\$2,443,137	\$2,485,477	\$2,468,782
Resources	\$911	\$480	\$—

Plant Operations and Maintenance Position Summary	
	FY 2020
Electronic Technician	1.00
Equipment Mechanic	1.00
Plant Operator II	1.00
Plant Operator III & IV	0.00
Plant Operator IV	6.00
<b>Total FT Equivalent Employees</b>	<b>9.00</b>

### Highlights of the Past Year

- Abandoned the Barrington Lakes Wells, removed the well house and restored the site for hand over to Barrington Lakes Homeowners Association.
- Maintained Regulatory Compliance. Focus on Lead and Copper water sampling in residential homes.
- Completed the 2017-2018 Consumer Confidence Reports for Dubuque. Zero violations were reported.

# WATER DEPARTMENT

## Future Initiatives

- Maintain the operation and maintenance of the Eagle Point Water Plant and all associated storage, pumping and well facilities in the most environmentally conscious manner
- Ensure continued compliance with all regulatory agencies

## Performance Measures

### Plant Operations and Maintenance - Activity Statement

Protect, preserve and promote the public health and welfare of the residents of the city of Dubuque by effectively and efficiently managing, maintaining and operating the Eagle Point Water Treatment Plant.



**Goal: Sustainable Environment**

### **Outcome #1: Provide water treatment and distribute high quality, clean, drinking water that meets or exceeds drinking water regulations**

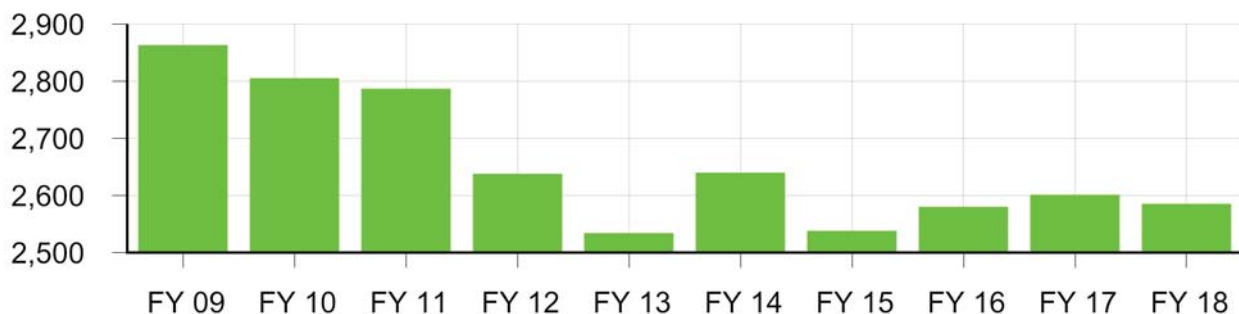
*Drinking water is one of our most vital resources and is essential to human health. The Eagle Point Water Treatment Plant delivers an average of 7 million gallons of clean water each day to our homes, schools and businesses which is then used for cooking, drinking, cleaning, bathing, and available for fire suppression.*

The **2018 Water Quality Report** can be downloaded at: <http://www.cityofdubuque.org/waterquality>

### **Outcome #2: Produce high quality water at the required pressures and volumes**

*Maintaining the proper pressures and volumes ensures adequate fire suppression abilities and consumer demand.*

### Water Treated (Million Gallons)



# WATER DEPARTMENT

## Water Distribution

### DID YOU KNOW?

Dubuque's drinking water comes from wells. There are five shallow wells located at the A.Y. McDonald Park and four deep wells located around the Eagle Point Water Treatment PLant on Hawthorne Street.



### Overview

The function of the Water Distribution Division is to safely transport potable water from the source to point of use. Distribution is also responsible for the machinery, equipment, materials and personnel required to repair main breaks; install water mains, control valves and fire hydrants and assist other sections of the Water Department. It is our goal to operate and maintain a water distribution system consistent with established procedures recognized by the American Water Works Association for efficient management practices and to meet Federal, State and local rules and regulations

Water Distribution Funding Summary			
	FY 2018 Actual	FY 2019 Budget	FY 2020 Requested
Expenditures	\$2,586,126	\$2,935,545	\$2,328,838
Resources	\$9,218,783	\$10,309,518	\$10,378,220

Water Distribution Position Summary	
	FY 2020
Equipment Operator II	2.00
Water Distribution Maintenance Worker	4.00
Water Distribution Foreman	1.00
Water Distribution Supervisor	1.00
Water Engineering Assistant	1.00
Custodian I	0.07
<b>Total FT Equivalent Employees</b>	<b>9.07</b>

# WATER DEPARTMENT

## Highlights of the Past Year

- Completion of Highway 20/Menards intersection water main installation
- Street Reconstruction/Engineering Projects

## Future Initiatives

- The Water Distribution Division is prepared to replace; as needed, the aged, existing water main, fire hydrants, control valves and lead service lines on construction projects in partnership with the Engineering and Public Works Departments.

## Performance Measures

### Water Distribution - Activity Statement

Operate and maintain a water distribution system consistent with established procedures recognized by the American Water Works Association for efficient management practices.

 **Goal: Financially Responsible, High Performance Organization** 

### **Outcome #1: Ensure the integrity of the distribution system piping system**

*Maintains the safety of our drinking water through flushing, replacing aged piping, valves and fire hydrants.*

### **Outcome #2: Addressing customer and system issues in a timely manner**

*The Water Department's Distribution Crew is available 24/7/365 to repair water mains and reduce service outages, minimizing the time customers are without water.*



# WATER DEPARTMENT

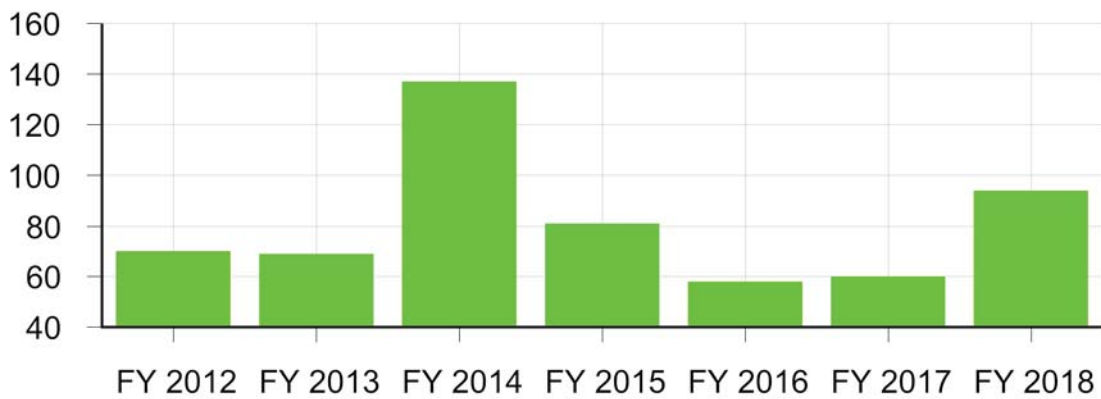
## Water Meters

### Overview

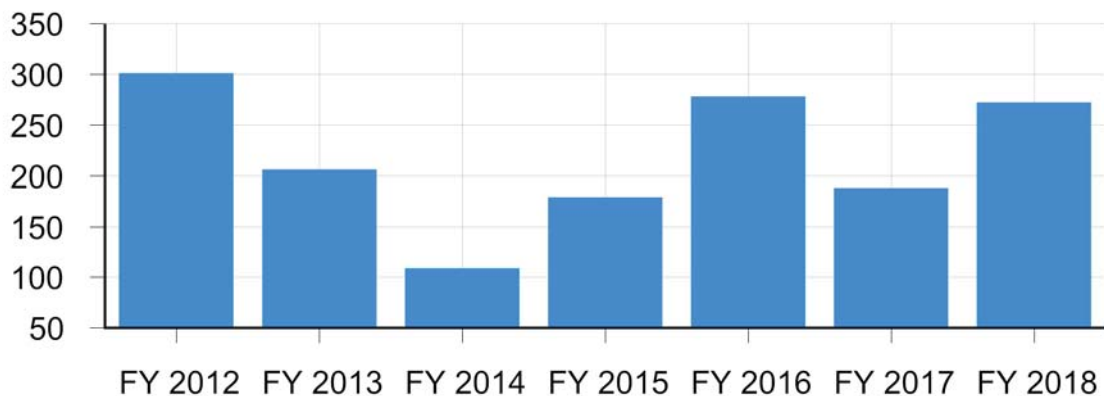
The Water Meter Division provides dependable meter repair consisting of testing, dismantling, cleaning, repairing, and reassembling meters as required. The Meter Division performs installation services, addresses pressure complaints, investigates illegal use of water, installs outside registers, and performs special reading of meters upon request and performs backflow administration to comply with state and federal mandates while ensuring accurate charges to the customer.

**DID YOU KNOW?** The distribution system is composed of 336 miles of water mains ranging in diameter from 4" up to 30", 7,196 control valves; and 2,444 fire hydrants

### Water Main Breaks



### Service Taps



Service taps are new connections to the public water mains

# WATER DEPARTMENT

Water Meters Funding Summary			
	FY 2018 Actual	FY 2019 Budget	FY 2020 Requested
Expenditures	\$295,216	\$497,222	\$494,598
Resources	\$120,545	\$113,620	\$119,138

Water Meters Position Summary	
	FY 2020
Water Meter Repair Worker I	3.00
Water Meter Repair Worker II	1.00
Water Meter Inspector	0.00
Water Meter Service Worker I	0.80
Total Full-Time Equivalent Employee's	<b>4.80</b>

## Future Initiatives

- Continue to educate the public of the importance of adhering to all State and Federal mandates concerning Backflow Control Devices, which protect public water supplies from potential contamination
- Continue to provide excellent customer service

## Performance Measures

### Water Meters - Activity Statement

Provide dependable meter repair, installation services and backflow administration to comply with state and federal mandates to ensure accurate charges to customers.



Goal: Sustainable Environment



### **Outcome #1: Provide accurate meter readings**

*Ensures that customers pay for the appropriate amount of water used by tracking private water service line leaks (internal and external). Repair reimbursement and service line assistance.*

### **Outcome #2: Backflow protection**

*Minimizes the possibility of contamination of the distribution system by preventing back siphonage. A backflow prevention device prevents contamination of the water system from industrial and commercial water services by using equipment that stops the backward flow of water through a pipe or cross connection between potable water and contaminants.*

# WATER DEPARTMENT

## DID YOU KNOW?

Since the adoption by the Dubuque City Council of the Backflow Prevention Program, we have established over 2,004 accounts having Backflow Protection and we also monitor over 2,967 Control Devices. These accounts are a combination of various Industrial and Commercial facilities. Annually we receive \$25.00 per device as the administration fee. It is expected an additional 40 accounts will be established before the end of the fiscal year 2020.



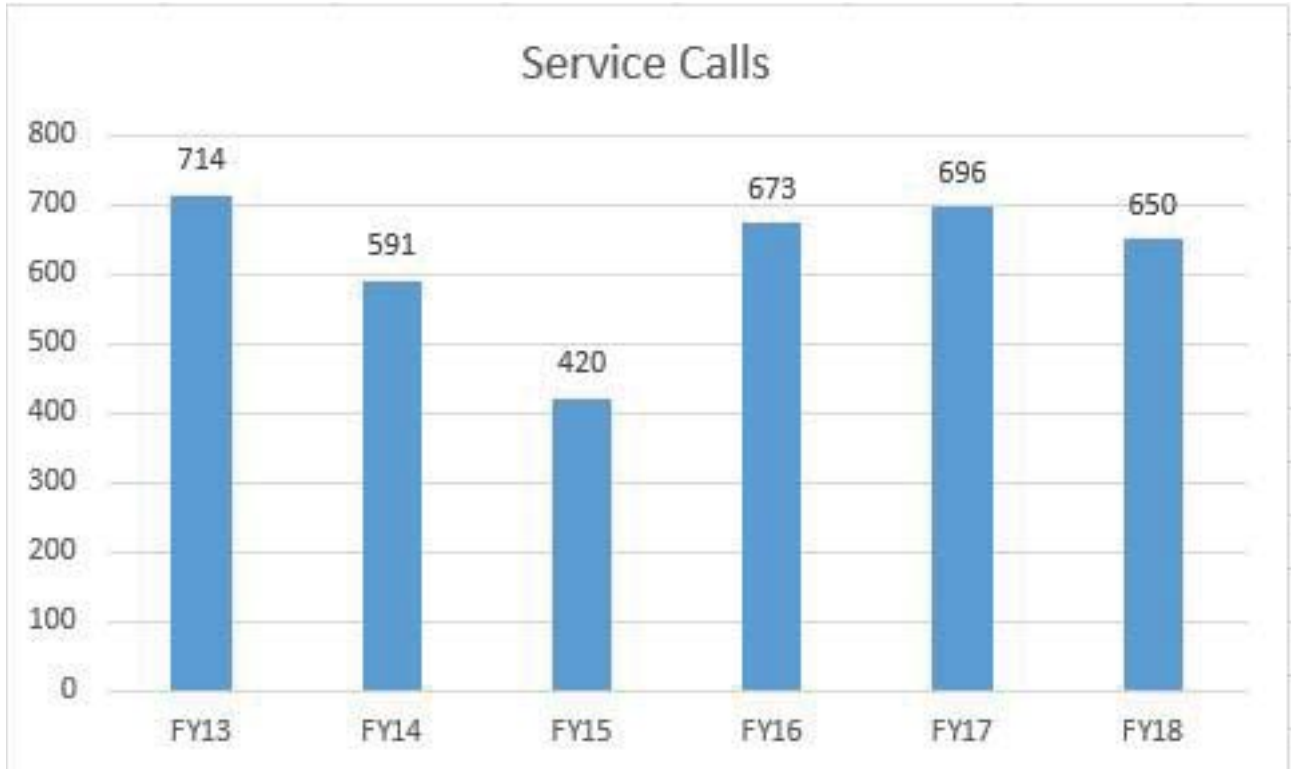
Typical Meter/Fire Sprinkler Room



Meter

# WATER DEPARTMENT

**Outcome #3: Responding to customer inquiries in a timely manner**  
*Maintains consumer confidence in the water utility*





## Recommended Operating Revenue Budget - Department Total

### 42 - WATER

Fund	Account	Account Title	FY17 Actual Revenue	FY18 Actual Revenue	FY19 Adopted Budget	FY20 Recomm'd Budget
640	43110	INVESTMENT EARNINGS	38,222	51,283	35,000	76,061
<b>43</b>	<b>USE OF MONEY AND PROPERTY - Total</b>		<b>38,222</b>	<b>51,283</b>	<b>35,000</b>	<b>76,061</b>
640	44405	FEMA PUBLIC ASSISTANCE	0	2,453	0	0
<b>44</b>	<b>INTERGOVERNMENTAL - Total</b>		<b>0</b>	<b>2,453</b>	<b>0</b>	<b>0</b>
640	51105	METER RATES	7,800,231	7,943,791	8,166,483	8,161,223
640	51106	UB REFUND CLEARING ACCT	0	45	0	0
640	51107	UNAPPLIED CREDITS	0	11,374	0	11,374
640	51110	FLAT RATES	16,296	18,389	16,296	18,389
640	51111	FLAT RATE KEY WEST	41,534	123,765	0	0
640	51115	FIRE PROTECTION RATES	161,368	170,410	161,368	170,410
640	51125	TAPS-3/4 & 1 INCH	28,123	64,217	33,905	33,000
640	51130	CONNECT CHG LARGE SERVICE	24,938	16,655	24,938	14,500
640	51135	CONNECT CHG FRONT FOOTAGE	18,671	99,495	18,671	55,000
640	51140	METER SALES-REMOTES	1,840	13,218	500	13,500
640	51145	SALE OF METERS	17,139	12,513	25,000	12,500
640	51146	SALE OF UFR DEVICES	5,420	7,825	5,973	5,600
640	51160	BOX-LID-PART SALES	5	0	0	0
640	51165	MAINTENANCE CHARGES	6,390	10,306	7,304	7,300
640	51170	REPAIR OF METERS	8,868	12,902	10,271	12,500
640	51175	SHUT OFF PENALTIES	23,721	18,660	23,721	18,660
640	51176	METER TAMPERING FEE	1,319	1,006	1,319	1,006
640	51177	CALL OUT CHARGE	795	1,335	1,000	1,335
640	51180	CROSS CON. CNTL ADMIN FEE	70,617	71,357	70,617	74,175
640	51215	LATE PAYMENT PENALTY	77,134	84,393	82,636	84,383
640	51310	PERMIT	89,449	101,495	89,449	101,495
640	51330	RAMP ASSIGNED	0	(6,262)	0	0
<b>51 - CHARGES FOR SERVICES</b>			<b>8,393,860</b>	<b>8,776,888</b>	<b>8,739,451</b>	<b>8,796,350</b>
640	53605	MISCELLANEOUS REVENUE	72	0	0	0
640	53610	INSURANCE CLAIMS	2,205	0	119	0
640	53615	DAMAGE CLAIMS	15,397	21,265	12,221	12,500
640	53620	REIMBURSEMENTS-GENERAL	93	5,691	73	364
640	53630	SALES TAX COLLECTION	486,637	485,981	516,274	520,583
<b>53 - MISCELLANEOUS</b>			<b>504,405</b>	<b>512,937</b>	<b>528,687</b>	<b>533,447</b>
640	54109	SALVAGE SALES	1,359	1,847	480	1,500
640	54230	SRF GO BOND PROCEEDS	0	1,155,899	0	0
640	59100	FR GENERAL	0	16,854	0	0
640	59500	TRF TO PEONY TRUST	0	0	1,120,000	1,090,000
<b>59 - TRANSFER IN AND INTERNAL</b>			<b>1,359</b>	<b>1,174,600</b>	<b>1,120,480</b>	<b>1,091,500</b>
<b>42 - WATER TOTAL</b>			<b>8,937,845</b>	<b>10,518,160</b>	<b>10,423,618</b>	<b>10,497,358</b>

## Recommended Operating Expenditure Budget - Department Total

### 42 - WATER

Fund	Account	Account Title	FY17 Actual Expense	FY18 Actual Expense	FY19 Adopted Budget	FY 20 Recomm'd Budget
250	61010	FULL-TIME EMPLOYEES	0	1,187	0	0
640	61010	FULL-TIME EMPLOYEES	1,467,387	1,229,655	1,458,560	1,539,445
640	61020	PART-TIME EMPLOYEES	4,900	4,953	63,505	46,318
640	61030	SEASONAL EMPLOYEES	1,125	7,638	16,671	15,154
250	61050	OVERTIME PAY	0	641	0	0
640	61050	OVERTIME PAY	70,114	109,065	94,040	94,040
640	61071	HOLIDAY PAY-OVERTIME	17,135	24,605	17,000	17,000
640	61072	TANK CLIMBING PAY	90	120	1,200	1,200
640	61091	SICK LEAVE PAYOFF	9,346	29,311	32,279	32,007
640	61092	VACATION PAYOFF	4,292	34,719	0	0
250	61310	IPERS	0	163	0	0
640	61310	IPERS	139,375	122,458	155,851	161,724
250	61320	SOCIAL SECURITY	0	131	0	0
640	61320	SOCIAL SECURITY	114,748	104,048	128,771	133,505
250	61410	HEALTH INSURANCE	0	503	0	0
640	61410	HEALTH INSURANCE	393,964	381,097	357,750	281,952
640	61415	WORKMENS' COMPENSATION	82,465	94,589	87,466	74,335
250	61416	LIFE INSURANCE	0	3	0	0
640	61416	LIFE INSURANCE	1,059	913	1,245	1,375
640	61640	SAFETY EQUIPMENT	2,460	2,221	4,750	4,750
640	61650	MEAL ALLOWANCE	484	1,618	500	500
640	61660	EMPLOYEE PHYSICALS	254	1,848	900	950
<b>61 - WAGES AND BENEFITS</b>			<b>2,309,196</b>	<b>2,151,486</b>	<b>2,420,488</b>	<b>2,404,255</b>
640	62010	OFFICE SUPPLIES	3,342	3,028	4,009	3,205
640	62011	UNIFORM PURCHASES	13,006	17,152	15,686	17,152
640	62030	POSTAGE AND SHIPPING	1,780	2,472	1,700	2,149
640	62033	HAND TOOLS/EQUIPMENT	6,032	8,637	5,265	5,775
640	62034	REPAIR PARTS/SUPPLIES	8,669	4,373	7,846	4,373
640	62036	CONSTRUCTION SUPPLIES	856	4,012	1,830	3,827
640	62060	O/E MAINT CONTRACTS	0	0	0	2,698
640	62061	DP EQUIP. MAINT CONTRACTS	80	0	0	0
640	62062	JANITORIAL SUPPLIES	17,453	17,608	20,268	20,560
640	62063	SAFETY RELATED SUPPLIES	4,689	4,873	4,750	4,764
640	62064	ELECTRICAL SUPPLIES	5,122	3,050	3,000	3,050
640	62065	LAB SUPPLIES	10,199	9,808	10,453	9,800
640	62066	PLUMBING MATERIALS	12,754	15,757	13,500	15,757
640	62090	PRINTING & BINDING	585	2,415	2,000	2,390
640	62110	COPYING/REPRODUCTION	844	1,592	920	1,521
640	62130	LEGAL NOTICES & ADS	1,681	4,022	1,545	4,054
640	62170	SUBSCRIPTIONS-BOOKS-MAPS	1,705	1,267	38,100	705
640	62190	DUES & MEMBERSHIPS	1,227	2,208	870	914
640	62204	REFUNDS	2,543	3,612	4,615	5,605
640	62206	PROPERTY INSURANCE	5,396	8,828	5,091	6,284
640	62207	BOILER INSURANCE	71,583	67,141	77,050	66,812
640	62208	GENERAL LIABILITY INSURAN	0	120	0	120
640	62210	SALES TAX	20,896	18,419	21,392	20,087
640	62216	REFUND LEAK ALLOWANCE	489,433	501,222	516,274	520,583
640	62310	TRAVEL-CONFERENCES	2,256	4,188	6,000	6,950

## Recommended Operating Expenditure Budget - Department Total

### 42 - WATER

Fund	Account	Account Title	FY17 Actual Expense	FY18 Actual Expense	FY19 Adopted Budget	FY 20 Recomm'd Budget
640	62320	TRAVEL-CITY BUSINESS	0	20	200	1,425
640	62340	MILEAGE/LOCAL TRANSP	4,738	4,513	4,150	4,574
640	62360	EDUCATION & TRAINING	9,289	6,669	14,755	12,000
640	62411	UTILITY EXP-ELECTRICITY	555,798	628,223	633,850	628,223
640	62412	UTILITY EXP-GAS	32,174	35,021	33,783	35,021
640	62414	UTILITY EXP-FUEL OIL	1,488	0	1,500	1,500
640	62415	UTILITY EXPENSE STORMWATR	180	192	180	218
640	62421	TELEPHONE	9,489	9,717	11,487	12,238
640	62423	TELECOMMUNICATION CG	7,898	6,244	7,898	7,500
640	62424	RADIO/PAGER FEE	0	2,559	0	6,481
640	62431	PROPERTY MAINTENANCE	41,607	45,560	52,210	65,560
640	62433	CUSTODIAL SERVICES	1,488	1,540	2,000	1,540
640	62435	ELEVATOR MAINTENANCE	1,764	1,819	2,244	1,819
640	62436	RENTAL OF SPACE	3,226	8,927	5,000	8,927
640	62437	BARRICADE RENTAL	18,464	23,977	21,964	23,978
640	62511	FUEL, MOTOR VEHICLE	32,950	30,764	20,992	24,545
640	62521	MOTOR VEHICLE MAINT.	2,641	0	0	0
640	62522	VEHICLE MAINT., ACCIDENT	4,321	712	5,633	726
640	62528	MOTOR VEH. MAINT. OUTSOUR	84,232	69,826	100,660	69,816
640	62611	MACH/EQUIP MAINTENANCE	379	877	10,000	10,000
640	62613	METER MAINTENANCE	0	0	835	0
640	62614	EQUIP MAINT CONTRACT	3,727	1,450	1,500	1,450
640	62615	MACH/EQUIP MAINT. OUTSOUR	3,615	19	0	1,500
640	62628	INSTRUMENTATION MAINT	13,074	10,433	14,700	10,450
640	62630	FLUORIDE	261,335	288,125	265,000	310,000
640	62631	LIME	70,696	64,561	71,000	65,000
640	62632	PHOSPHATE	38,693	37,474	40,000	40,000
640	62633	CHLORINE	6,855	8,176	8,700	8,500
640	62638	POLYMER	16,217	17,016	16,460	16,500
640	62639	LIQUID CO2/O2	1,256	1,026	351	88,625
640	62663	SOFTWARE LICENSE EXP	7,061	7,159	7,200	7,159
640	62664	LICENSE/PERMIT FEES	1,777	1,622	4,152	5,400
640	62667	INTERNET SERVICES	5,062	4,491	25,000	19,829
640	62669	PROGRAMMING	0	25	0	0
640	62671	MISC. OPERATING SUPPLIES	0	1,594	0	0
640	62675	VALVES	62,190	24,192	33,600	24,192
640	62676	PIPE-SPECIAL FITTINGS	38,264	79,332	70,000	79,332
640	62692	LANDFILL FEES	759	70	200	70
640	62696	OUTSIDE COLLECTOR EXPENSE	6,884	5,418	7,400	5,418
640	62710	CONTRACTOR SERVICES	144	6,549	0	0
640	62713	LEGAL SERVICES	29,000	33,464	0	0
640	62716	CONSULTANT SERVICES	0	7,905	0	0
640	62726	AUDIT SERVICES	3,000	3,000	4,070	4,100
640	62731	MISCELLANEOUS SERVICES	6,966	37,454	20,000	40,000
640	62746	ONE CALL OPERATION	4,932	5,358	0	5,358
640	62765	GRANTS	6,061	5,731	5,000	15,000
640	62767	ENVIRON. TESTING/MON.	40,958	41,604	60,000	60,000
640	62780	HAULING SERVICES	129,154	136,887	150,000	148,250

## Recommended Operating Expenditure Budget - Department Total

### 42 - WATER

Fund	Account	Account Title	FY17 Actual Expense	FY18 Actual Expense	FY19 Adopted Budget	FY 20 Recomm'd Budget
<b>62 - SUPPLIES AND SERVICES</b>			<b>2,251,937</b>	<b>2,413,097</b>	<b>2,495,838</b>	<b>2,601,359</b>
640	71120	PERIPHERALS, COMPUTER	0	0	0	950
640	71123	SOFTWARE	1,790	20,889	14,150	0
640	71124	COMPUTER	0	0	4,600	0
640	71225	SHELVING	0	894	0	0
640	71312	VAN/PICKUP/WAG REPL	0	0	95,000	0
640	71314	TRUCK-REPLACEMENT	0	0	0	80,000
640	71318	HEAVY EQUIP-REPLACEMENT	88,941	0	110,000	0
640	71329	VEHICLE ACCESSORIES	0	0	23,000	0
640	71410	SHOP EQUIPMENT	408	651	1,000	1,000
640	71413	LABORATORY EQUIPMENT	4,558	685	3,500	3,000
640	71415	SAWS	0	0	1,800	3,000
640	71419	TAPPING MACHINE	768	0	6,200	48,000
640	71510	HYDRANTS	66,517	13,949	35,000	0
640	71511	PUMPS	1,099	3,351	24,000	16,000
640	71516	LARGE WATER METERS	93,888	53,752	102,000	102,000
640	71550	MISCELLANEOUS EQUIPMENT	0	0	45,500	57,900
640	71619	OTHER MAINT. EQUIPMENT	22,324	0	0	0
640	72111	GAS SAFETY MONITOR	0	133	0	0
640	72410	PAGER/RADIO EQUIPMENT	0	0	0	1,200
640	72418	TELEPHONE RELATED	948	674	940	3,730
640	72515	TEST EQUIPMENT, OTHER	1,099	115	0	0
<b>71 - EQUIPMENT</b>			<b>282,340</b>	<b>95,093</b>	<b>466,690</b>	<b>316,780</b>
640	72115	BARRICADES/WARN SIGNALS	644	307	0	0
<b>72 - EQUIPMENT</b>			<b>644</b>	<b>307</b>	<b>0</b>	<b>0</b>
640	73211	CONST.CONTR-NOT BLDG	219,203	291,422	385,000	420,000
640	73410	EQUIP ACQUISITION	0	0	18,000	0
<b>73 - CIP EXPENDITURES</b>			<b>219,203</b>	<b>291,422</b>	<b>403,000</b>	<b>420,000</b>
640	74111	PRINCIPAL PAYMENT	876,595	1,857,435	2,191,434	2,746,524
640	74112	INTEREST PAYMENT	729,399	701,272	924,373	942,775
<b>74 - DEBT SERVICE</b>			<b>1,605,994</b>	<b>2,558,707</b>	<b>3,115,807</b>	<b>3,689,299</b>
640	91100	TO GENERAL	142,884	407,567	548,056	597,380
640	91740	TO WATER CONSTRUCTION	2,412,000	1,157,000	935,000	400,000
<b>91 - TRANSFER TO</b>			<b>2,554,884</b>	<b>1,564,567</b>	<b>1,483,056</b>	<b>997,380</b>
<b>42 - WATER TOTAL</b>			<b>9,224,198</b>	<b>9,074,678</b>	<b>10,384,879</b>	<b>10,429,073</b>

## Recommended Expenditure Budget Report by Activity & Funding Source

### 42 - WATER

**UNDISTRIBUTED - 10640**

#### FUNDING SOURCE: WATER UTILITY OPERATION

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
SUPPLIES AND SERVICES	11,703	12,491	11,702
TRANSFER TO	1,564,567	1,483,056	997,380
<b>UNDISTRIBUTED</b>	<b>1,576,270</b>	<b>1,495,547</b>	<b>1,009,082</b>
<b>WATER ADMINISTRATION - 42100</b>			

#### FUNDING SOURCE: WATER UTILITY OPERATION

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
DEBT SERVICE	2,558,707	3,115,807	3,689,299
EQUIPMENT	—	4,950	—
SUPPLIES AND SERVICES	580,244	539,855	543,873
WAGES AND BENEFITS	235,277	283,023	313,683
<b>WATER ADMINISTRATION</b>	<b>3,374,228</b>	<b>3,943,635</b>	<b>4,546,855</b>
<b>METERS - 42300</b>			

#### FUNDING SOURCE: WATER UTILITY OPERATION

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
EQUIPMENT	21,934	40,770	29,446
SUPPLIES AND SERVICES	19,562	40,612	67,575
WAGES AND BENEFITS	253,720	415,840	397,577
<b>METERS</b>	<b>295,216</b>	<b>497,222</b>	<b>494,598</b>
<b>SNOW &amp; ICE CONTROL - 42420</b>			

#### FUNDING SOURCE: ROAD USE TAX

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
WAGES AND BENEFITS	2,628	—	—
<b>PLANT OPER. &amp; MAINT</b>	<b>2,628</b>	<b>—</b>	<b>—</b>
<b>PLANT OPER. &amp; MAINT - 42400</b>			

#### FUNDING SOURCE: WATER UTILITY OPERATION

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
EQUIPMENT	5,399	5,500	6,742
SUPPLIES AND SERVICES	1,485,130	1,625,971	1,612,118
WAGES AND BENEFITS	952,608	854,006	849,922
<b>PLANT OPER. &amp; MAINT</b>	<b>2,443,137</b>	<b>2,485,477</b>	<b>2,468,782</b>
<b>WATER DISTR. SYSTEM - 42700</b>			

#### FUNDING SOURCE: WATER UTILITY OPERATION

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
CIP EXPENDITURES	2,452	—	—
EQUIPMENT	15,510	320,470	190,592
SUPPLIES AND SERVICES	284,640	251,909	286,091
WAGES AND BENEFITS	707,254	867,619	843,073

## Recommended Expenditure Budget Report by Activity & Funding Source

### 42 - WATER

WATER DISTR. SYSTEM	1,009,856	1,439,998	1,319,756
<b>WATER DIST SYSTEM - 42700</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY17 Actual Expense	FY18 Adopted Budget	FY19 Recomm'd Budget
SUPPLIES AND SERVICES	—	14,137	—
<b>STORAGE TANK INSPECT/MON</b>	—	14,137	—
<b>AUTO MTR RD SYS MNT PROG - 42710</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
CIP EXPENDITURES	5,500	15,000	—
<b>AUTO MTR RD SYS MNT PROG</b>	5,500	15,000	—
<b>PUMP REPLC VACUUM FILTER - 42713</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
EQUIPMENT	—	20,000	15,000
<b>PUMP REPLC VACUUM FILTER</b>	—	20,000	15,000
<b>FIRE HYDRANT PAINTING - 42720</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
SUPPLIES AND SERVICES	—	5,000	5,000
<b>FIRE HYDRANT PAINTING</b>	—	5,000	5,000
<b>GENERATOR MAIN PROGRAM - 42725</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
CIP EXPENDITURES	—	18,000	—
<b>GENERATOR MAIN PROGRAM</b>	—	18,000	—
<b>GIS MAINT/UPDATES - 42730</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
SUPPLIES AND SERVICES	—	—	25,000
<b>GIS MAINT/UPDATES</b>	—	—	25,000
<b>SERVICE LINE ASSIST - 42735</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
SUPPLIES AND SERVICES	26,062	15,000	35,000
<b>SERVICE LINE ASSIST</b>	26,062	15,000	35,000
<b>VALVE REPLACEMENT - 42745</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

## Recommended Expenditure Budget Report by Activity & Funding Source

### 42 - WATER

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
CIP EXPENDITURES	12,250	25,000	25,000
VALVE REPLACEMENT	12,250	25,000	25,000
<b>WATER MAIN REPLACEMENTS - 42755</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
CIP EXPENDITURES	251,766	300,000	350,000
WATER MAIN REPLACEMENTS	251,766	300,000	350,000
<b>WATER METER EXCHANGE - 42760</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
EQUIPMENT	52,557	75,000	75,000
WATER METER EXCHANGE	52,557	75,000	75,000
<b>WATER LEAK REPAIR GRANT - 42765</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
SUPPLIES AND SERVICES	5,731	5,000	5,000
WATER LEAK REPAIR GRANT	5,731	5,000	5,000
<b>COUNTY WATER ASSISTANCE - 42766</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
SUPPLIES AND SERVICES	—	—	10,000
COUNTY WATER ASSISTANCE	—	—	10,000
<b>WATER VALVE BOX MAINT - 42770</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
CIP EXPENDITURES	19,331	20,000	20,000
WATER VALVE BOX MAINT	19,331	20,000	20,000
<b>WATER METER TESTING - 42790</b>			

**FUNDING SOURCE: WATER UTILITY OPERATION**

Account	FY18 Actual Expense	FY19 Adopted Budget	FY20 Recomm'd Budget
CIP EXPENDITURES	123	25,000	25,000
WATER METER TESTING	123	25,000	25,000
WATER TOTAL \$	9,074,678.45 \$	10,384,879.00 \$	10,429,073.00

CITY OF DUBUQUE, IOWA  
DEPARTMENT DETAIL - PERSONNEL COMPLEMENT

42 WATER DEPARTMENT

FD	JC	WP-GR	JOB CLASS	FY 2018		FY 2019		FY 2020	
				FTE	BUDGET	FTE	BUDGET	FTE	BUDGET
<b>61010 Full Time Employee Expense</b>									
640	3275	GE-40	WATER DEPARTMENT MANAGER	1.00	\$ 104,255	1.00	\$ 106,616	1.00	\$ 109,298
640	2775	GE-37	WATER PLANT MGR.	1.00	\$ —	0.00	\$ —	0.00	\$ —
640	3200	GE-37	WATER DISTRIBUTION SUPERVISOR	1.00	\$ 86,711	1.00	\$ 88,009	1.00	\$ 90,025
640	2950	GE-33	WATER ENGINEERING ASSISTANT	1.00	\$ 67,933	1.00	\$ 72,779	1.00	\$ 74,429
640	2650	GE-31	FOREMAN - WATER DISTR.	1.00	\$ 52,000	1.00	\$ 59,221	1.00	\$ 67,509
640	2610	GE-30	GIS SPECIALIST	1.00	\$ 61,606	1.00	\$ 62,541	1.00	\$ 64,050
640		GE-25	CONFIDENTIAL ACCOUNT CLERK	0.00	\$ —	0.00	\$ —	1.00	\$ 39,153
640		NA-49	WATER METER INSPECTOR	0.00	\$ —	1.00	\$ 56,327	0.00	\$ —
640	2400	OE-16	ELECTRONIC TECHNICIAN	1.00	\$ 62,244	1.00	\$ 63,165	1.00	\$ 64,610
640	2800	OE-14	EQUIPMENT MECHANIC	1.00	\$ 59,143	1.00	\$ 60,041	1.00	\$ 61,862
640	2550	OE-13	WATER PLANT OPR CERT GR III/IV	3.00	\$ 166,238	1.00	\$ 58,579	0.00	\$ —
640	2475	OE-12	WATER PLANT OPERATOR CRT GR II	5.00	\$ 277,038	3.00	\$ 168,592	1.00	\$ 57,751
640	2475	OE-12	WATER PLANT OPERATOR CRT GR IV	0.00	\$ —	3.00	\$ 185,509	6.00	\$ 380,552
640	2305	OE-10	EQUIPMENT OPERATOR II	2.00	\$ 106,554	2.00	\$ 108,273	2.00	\$ 110,767
640	1775	OE-09	WATER METER REPAIRWORKER I	3.00	\$ 156,289	2.00	\$ 110,396	3.00	\$ 163,136
640		OE-14	WATER METER REPAIRWORKER II	0.00	\$ —	1.00	\$ 59,453	0.00	\$ —
640	1,476	OE-09	WATER DISTR MAINTENANCE WORKER	4.00	\$ 211,555	4.00	\$ 204,648	5.00	\$ 256,303
			<b>TOTAL FULL TIME EMPLOYEES</b>	<b>25.00</b>	<b>\$ 1,411,566</b>	<b>24.00</b>	<b>\$ 1,464,149</b>	<b>25.00</b>	<b>\$ 1,539,445</b>
<b>61020 Part-Time Employee Expense</b>									
640	225	GE-25	SECRETARY	0.50	\$ 18,850	0.50	\$ 19,136	0.00	\$ —
640		OE-07	WATER METER SERVICE WORKER I	0.00	\$ —	0.80	\$ 41,080	0.80	\$ 42,954
640	2050	OE-06	CUSTODIAN I	0.07	\$ 3,241	0.07	\$ 3,289	0.07	\$ 3,364
			<b>TOTAL PART TIME EMPLOYEES</b>	<b>0.57</b>	<b>\$ 22,091</b>	<b>1.37</b>	<b>\$ 63,505</b>	<b>0.87</b>	<b>\$ 46,318</b>
<b>61030 Seasonal Employee Expense</b>									
640		NA-34	GIS INTERN	0.00	\$ —	0.50	\$ 16,671	0.50	\$ 15,154
			<b>TOTAL SEASONAL EMPLOYEES</b>	<b>0.00</b>	<b>\$ —</b>	<b>0.50</b>	<b>\$ 16,671</b>	<b>0.50</b>	<b>\$ 15,154</b>
			<b>TOTAL WATER DEPARTMENT</b>	<b>25.57</b>	<b>\$ 1,433,657</b>	<b>25.87</b>	<b>\$ 1,544,325</b>	<b>26.37</b>	<b>\$ 1,600,917</b>



**CITY OF DUBUQUE, IOWA**  
**ACTIVITY PERSONNEL COMPLEMENT SUMMARY**

ACCT	FD	JC	WP-GR	POSITION CLASS	FY 2018		FY 2019		FY 2020		
					FTE	BUDGET	FTE	BUDGET	FTE	BUDGET	
<b>Water Administration-FT</b>											
64042100	61010	640	2610	GE-30	GIS SPECIALIST	1.00	\$ 61,606	1.00	\$ 62,541	1.00	\$ 64,050
64042100	61010	640	3275	GE-40	WATER DEPARTMENT MANAGER	1.00	\$ 104,255	1.00	\$ 106,616	1.00	\$ 109,298
64042100	61010	640		GE-25	CONFIDENTIAL ACCOUNT CLERK	0.00	\$ —	0.00	\$ —	1.00	\$ 39,153
<b>Total</b>						2.00	\$ 165,861	2.00	\$ 169,157	3.00	\$ 212,501
<b>Water Administration-PT</b>											
64042100	61020	640	225	GE-25	SECRETARY	0.50	\$ 18,850	0.50	\$ 19,136	0.00	\$ —
<b>Total</b>						0.50	\$ 18,850	0.50	\$ 19,136	0.00	\$ —
<b>Water Administration-SEASONAL</b>											
64042100	61030	640		NA-34	GIS INTERN	0.00	\$ —	0.50	\$ 16,671	0.50	\$ 15,154
<b>Total</b>						0.00	\$ —	0.50	\$ 16,671	0.50	\$ 15,154
<b>Water Meters-FT</b>											
64042300	61010	640	1775	OE-09	WATER METER REPAIRWORKER I	3.00	\$ 156,289	2.00	\$ 110,396	3.00	\$ 163,136
64042300	61010	640		OE-14	WATER METER REPAIRWORKER II	0.00	\$ —	1.00	\$ 59,453	0.00	\$ —
64042300	61010	640			WATER DISTRIBUTION MAINTENANCE WORKER	0.00	\$ —	0.00	\$ —	1.00	\$ 52,691
64042300	61010	640		NA-49	WATER METER INSPECTOR	0.00	\$ —	1.00	\$ 56,327	0.00	\$ —
<b>Total</b>						3.00	\$ 156,289	4.00	\$ 226,176	4.00	\$ 215,827
<b>Water Meters-PT</b>											
64042300	61020	640	1775	OE-07	WATER METER SERVICE WORKER I	0.00	\$ —	0.80	\$ 41,080	0.80	\$ 42,954
<b>Total</b>						0.00	\$ —	0.80	\$ 41,080	0.80	\$ 42,954
<b>Water Plant Operation-FT</b>											
64042400	61010	640	2475	OE-12	WATER PLANT OPER. CRT GR II	5.00	\$ 277,038	3.00	\$ 168,592	1.00	\$ 57,751
64042400	61010	640	2550	OE-13	WATER PLANT OPR CERT GR III/IV	3.00	\$ 166,238	1.00	\$ 58,579	0.00	\$ —
64042400	61010	640		OE-13	WATER PLANT OPR CERT GR IV	0.00	\$ —	3.00	\$ 185,509	6.00	\$ 380,552
64042400	61010	640	2775	GE-37	WATER PLANT MGR.	1.00	\$ —	0.00	\$ —	0.00	\$ —
64042400	61010	640	2800	OE-16	ELECTRONIC TECHNICIAN	1.00	\$ 62,244	1.00	\$ 63,165	1.00	\$ 64,610
64042400	61010	640	3015	OE-14	EQUIPMENT MECHANIC	1.00	\$ 59,143	1.00	\$ 60,041	1.00	\$ 61,862
<b>Total</b>						11.00	\$ 564,663	9.00	\$ 535,886	9.00	\$ 564,775
<b>Water Distribution-FT</b>											
64042700	61010	640	1476	OE-09	WATER DIST MAINTENANCEWOR	4.00	\$ 211,555	4.00	\$ 204,648	4.00	\$ 203,612
64042700	61010	640	2305	OE-10	EQUIPMENT OPERATOR II	2.00	\$ 106,554	2.00	\$ 108,273	2.00	\$ 110,767
64042700	61010	640	2650	GE-31	FOREMAN - WATER DISTR.	1.00	\$ 52,000	1.00	\$ 59,221	1.00	\$ 67,509
64042700	61010	640	2950	GE-33	WATER ENGINEERING ASSISTANT	1.00	\$ 67,933	1.00	\$ 72,779	1.00	\$ 74,429
64042700	61010	640	3200	GE-37	WATER DISTRIBUTION SUPV	1.00	\$ 86,711	1.00	\$ 88,009	1.00	\$ 90,025
<b>Total</b>						9.00	\$ 524,753	9.00	\$ 532,930	9.00	\$ 546,342
<b>Water Distribution - PT</b>											
64042700	61020	640	2050	GD-03	CUSTODIAN I	0.07	\$ 3,241	0.07	\$ 3,289	0.07	\$ 3,364
<b>Total</b>						0.07	\$ 3,241	0.07	\$ 3,289	0.07	\$ 3,364
<b>TOTAL WATER DEPARTMENT</b>						<b>25.57</b>	<b>\$ 1,433,657</b>	<b>25.87</b>	<b>\$ 1,544,325</b>	<b>26.37</b>	<b>\$ 1,600,917</b>

**Capital Improvement Projects by Department/Division**

<b>WATER</b>					
<b>CIP Number</b>	<b>Capital Improvement Project Title</b>	<b>FY 17 Actual Expense</b>	<b>FY 18 Actual Expense</b>	<b>FY 19 Adopted Budget</b>	<b>FY 20 Recomm'd Budget</b>
7102639	LOWELL STREET	6,380	—	—	—
7401339	SCADA SYSTEM UPGRADE	—	—	—	505,000
7401405	WATER MAIN REPLACEMENTS	88,027	10,565	456,860	209,000
7401411	MAIN EXT ANNEXATION REL.	76,177	—	—	—
7401415	SHALLOW WELL REHAB	—	—	137,000	—
7401672	ROOSEVELT RD MAIN EXT.	3,638	151,977	2,582,200	—
7401829	SECURITY UPGRADES	—	—	39,000	—
7402030	VACUUM FILTER BACK-UP	—	—	—	—
7402052	WATER METER REPL PROGRAM	—	—	28,030	79,845
7402234	SOUTHGATE WATER	—	—	64,375	—
7402261	RAMP UTILITY RELOCATION	—	—	—	—
7402349	MANSON ROAD WATER MAIN	—	27	—	—
7402395	WATER EXT - AIRPORT	281,557	—	—	—
7402504	ENGLISH MILL WATER MAIN E	25,451	—	—	—
7402524	ONLINE PROCESS ANALYZER	—	—	35,000	—
7402525	N CASCADE WATER MAIN	—	—	—	804,100
7402526	SRF GREEN ALLEY	21,901	8,679	—	—
7402527	GENERATOR	7,887	1,008	—	—
7402594	SW ARTERIAL MAIN EXT	19,225	—	770,000	855,000
7402595	CREEK CROSSING RESTORE	—	—	35,000	—
7402596	MAIN RELOC SEWER MANHOLE	—	—	20,000	—
7402633	PRIVATE WATER SYS PURCH	242,996	—	—	—
7402639	LOWELL STREET	5,154	—	—	—
7402641	AIRPORT SCADA SYSTEM	47,360	—	—	—
7402653	LIME SLAKER REPLACE STUDY	—	—	—	—
7402654	FIRE HYDRNT ASSMBLY SW PG	—	32,665	16,000	20,000
7402655	MAINT WTR MN - RETAIN WAL	—	—	—	—
7402656	WATER STORAGE TANK COATIN	—	—	—	—
7402657	WTR MN UPGRADES - STREET	—	—	20,000	—
7402658	WTR MN REPLACE - SWR CONS	—	—	104,000	122,500
7402703	WEST RURAL WATER PURCHASE	1,391,885	2,655,921	543,275	—
7402704	TIMBER RIDGE WATER MAIN	42,947	866,746	—	—
7402705	GRANDVIEW/LORAS INTER IMP	—	11,300	—	—
7402713	RPR/MAINT WATER LINE ISLA	—	—	30,000	—
7402714	BULK CO2 TANK REPLACEMENT	—	—	—	—
7402734	RURAL WATER ENGLISH PUMP	—	903,680	—	—
7402744	PUBLIC LEAD LINE WATER RE	—	—	49,697	61,833
7402745	TAMARAK FRONTAGE WATER MN	—	—	518,125	—
7402746	COTTINGHAM RD WATER MAIN	0	0	1,085,937	1,085,937
7402747	CHESTERFIELD DR WATER MAI	0	0	100,000	15,000
7402748	EPWP TRANSFORMER SAFETY	0	0	45,000	0
7402786	DAVENPORT RD EXT/PMP STAT	0	0	0	100,000
<b>WATER</b>	<b>TOTAL</b>	<b>2,260,586</b>	<b>4,642,569</b>	<b>6,679,499</b>	<b>3,858,215</b>

PRGRM/ DEPT	PROJECT DESCRIPTION	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	TOTAL	PAGE
<b>WATER DEPARTMENT</b>								
<b>Business Type</b>								
	Water Meter Replacement Program	\$ 79,845	\$ 150,265	\$ 153,370	\$ 56,412	\$ 159,580	\$ 599,472	70
	Manhole Replacement Rehab	\$ —	\$ —	\$ 25,000	\$ —	\$ 25,000	\$ 50,000	71
	Water Main Upgrades during Street General Repairs	\$ —	\$ —	\$ 20,000	\$ —	\$ 25,000	\$ 45,000	72
	Maintenance of Public Water Mains during Stone Retaining Wall Repair	\$ —	\$ 20,000	\$ —	\$ 22,550	\$ —	\$ 42,550	73
	Fire Hydrant Assembly Relocation/Replacement for the Sidewalk Program	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,400	\$ 100,400	74
	Cottingham Road Water Main	\$ 1,085,937	\$ —	\$ —	\$ —	\$ —	\$ 1,085,937	75
	Southwest Arterial Water Main Extension	\$ 855,000	\$ —	\$ —	\$ —	\$ —	\$ 855,000	76
	SCADA & Communications Infrastructure	\$ 505,000	\$ 325,000	\$ —	\$ —	\$ —	\$ 830,000	78
	North Cascade Road Water Main Extension	\$ 804,100	\$ —	\$ —	\$ —	\$ —	\$ 804,100	80
	Water Main Replacements - Streets	\$ 209,000	\$ 206,000	\$ —	\$ —	\$ —	\$ 415,000	81
	Water Main Replacements - Sewer Consent Decree	\$ 122,500	\$ —	\$ —	\$ —	\$ —	\$ 122,500	82
	Public Lead Line Water Replacement	\$ 61,833	\$ 122,470	\$ 84,500	\$ —	\$ —	\$ 268,803	84
	Water Line Extensions to New Developments	\$ —	\$ 307,500	\$ 650,000	\$ —	\$ —	\$ 957,500	85
	Wells, Well Field, and Raw Transmission Piping Repair	\$ —	\$ 227,000	\$ —	\$ —	\$ 102,500	\$ 329,500	86
	Chesterfield Drive Water Main	\$ 15,000	\$ 301,500	\$ —	\$ —	\$ —	\$ 316,500	87
	Water Source & Hydraulic Model: Master Plan	\$ —	\$ 115,000	\$ 25,000	\$ —	\$ 25,000	\$ 165,000	88
	Water Storage Tank Coating Program	\$ —	\$ —	\$ 150,000	\$ 1,350,000	\$ 100,000	\$ 1,600,000	89
	Old Davenport Road Water Main Extension	\$ 100,000	\$ —	\$ —	\$ —	\$ —	\$ 100,000	90
	Tamarak Park Frontage Road Water Main	\$ —	\$ —	\$ —	\$ 65,000	\$ 600,000	\$ 665,000	91
	West End Annexation Phase II	\$ —	\$ —	\$ —	\$ —	\$ 200,250	\$ 200,250	92
	West End Annexation Phase I	\$ —	\$ —	\$ —	\$ —	\$ 70,000	\$ 70,000	93
	Creek Crossing Restoration	\$ —	\$ —	\$ —	\$ —	\$ 35,000	\$ 35,000	94
	Total - Water Department	\$ 3,858,215	\$ 1,794,735	\$ 1,127,870	\$ 1,513,962	\$ 1,362,730	\$ 9,657,512	

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