

# 2020 ANNUAL WATER REPORT TO THE CITY COUNCIL

## NARRATIVE DESCRIPTION OF DEPARTMENT

The Water Department has: Six full-time Employees plus one Utility Billing Clerk and one part- time receptionist doing collections and data entry at City Hall.

Name	Years of Service	Certificate grade and type
1. Rich Sudtelgte	15 years	Grade III Treatment/ Grade III Distribution
2. Mike Haverhals	25 years	Grade IV Treatment / Grade IV Distribution
3. Monte Brent	4 years	Grade II Treatment / Grade II Distribution
4. Scott Tillman	4 years	Grade II Treatment / Grade II Distribution
5. Curt Allen	4 years	Grade II Treatment / Grade II Distribution
6. Justin Frericks	3 Year	Grade II Treatment / Grade II Distribution
7. Angie Kneip	13 years	Utility Billing and Collections

The water department operates the City of Le Mars water system which consists of over 90 miles of underground water main, 4871 water meters, 692 fire hydrants, over 1866 main line valves, 2- one-million-gallon elevated water tanks, 1 - 1.5-million-gallon underground storage tank, over 1 million gallons in the distribution system, A 6 MGD Filtration Plant, 1 - high service pump station with a total of 4 pumps, 1 booster pump station w/ 3 pumps run in alteration, and 6 - Dakota Aquifer wells.

The Water Department also: handles some locates for water and many service calls for various reasons, oversees cellular companies at the Le Mars water tower, moves snow at over 10 different locations in the downtown and surrounding areas, preforms small capital projects, replaces valves and fire hydrants, changes water meters, customer service work orders, repairs emergency water main breaks and performs many other in house maintenance tasks at a great cost savings to the citizens of Le Mars.

### Information of interest

Total metered water pumped from 6 wells for the year	1,129,738,000gallons
Backwashes @ approximately 78,000 gallons each total	37,507,000 gallons
Backwash percentage of well water pumped	3.30%
Total metered water pumped into the distribution system	1,092,231,000gallons
Average daily water pumped	2,981,500 gallons
Billed metered water for 2020	1,023,903,500 gallons
Flushing, WTP use, Hydrant meter sales, & other	2,177,750 gallons
Water used for testing equipment	7,537,560 gallons
Leaks estimated	1,082,400 gallons
City meters not billed	17,998,200 gallons
Water from the fill station	1,123,403 gallons
Difference between pumped and non-accountable water	38,408,187 gallons

Percentage of non-accountable gallons

3.5%

This is an acceptable or low percentage rate in the water industry.

### Work Completed

Number of locates performed by the Water Department	226
Water concerns	29
Work orders completed at Water Treatment Plant	1279
Work orders completed for meters and customer service	188
Work orders for fire hydrants	768
Water tests done	3878
Meter replacements completed	28
New meters installed	112
Number of disconnect notices	2056
Shut-off and collections	340
Water main breaks repaired	11
Fire hydrants repaired, moved or replaced	9
Hours of snow moved in City with 3 pieces of equip	94
Finals and applications done	691
Service taps completed	38
Service leaks	14
Frozen meters	2
Call outs not including leaks	54
Service call with fee's	54

### Review of Gallons Pumped

2019	Ave. Daily Produced	Monthly Water Produced	Total Pumped from well
January	<b>2,172,000</b>	<b>67,341,000</b>	<b>71,676,000</b>
February	2,290,000	<b>66,416,000</b>	<b>71,629,000</b>
March	<b>2,460,000</b>	<b>76,273,000</b>	<b>79,252,000</b>
April	<b>2,451,000</b>	<b>73,542,000</b>	<b>79,965,000</b>
May	<b>2,787,000</b>	<b>86,385,000</b>	<b>87,565,000</b>
June	<b>4,020,000</b>	<b>120,608,000</b>	<b>127,566,000</b>
July	<b>4,460,000</b>	<b>138,248,000</b>	<b>139,880,000</b>
August	<b>4,026,000</b>	<b>124,812,000</b>	<b>128,010,000</b>
September	<b>3,520,000</b>	<b>105,613,000</b>	<b>107,509,000</b>
October	<b>2,980,000</b>	<b>92,392,000</b>	<b>94,318,000</b>
November	<b>2,391,000</b>	<b>71,737,000</b>	<b>71,540,000</b>
December	<b>2,221,000</b>	<b>68,864,000</b>	<b>70,828,000</b>

Total 1,092,231,000 1,129,738,000  
 = 37,507,000 back wash = 3.3%

Average gallons pumped per day for 2019 = 2,981,500 gallons, up  
376,000 gallons per day from 2019

### **Projects completed and worked on in 2020**



1. Replaced KMNO lines in the treatment plant.
2. Pulled Well # 11, had to replace 95ft of the column pipe, spider gears, & bowl.
3. Performed annual filter checks (sand depth & condition of sand).
4. Sounded fire hydrants for water leaks that are not coming to the top of the ground.
5. Change 7 large meters that didn't get changed in 2014.
6. Kellen's cleaned out our first lagoon, there was 4ft of dirt & sand in it.
7. Sargent pulled & filled in well #6, it had a hole in the well & is no longer useable.
8. Added dirt & reseeded grass on Central Ave South where we eliminated the 4" water main. We had a lot of help from the street dept. doing the seeding.
9. Annual service on high service pump station motors.
10. Updated our SOP's & had someone with no water experience come try to perform the duties. Lined up 4 people to run the treatment plant if all the staff came down with COVID-19.
11. Diver came to inspect & clean our 1.5-million-gallon reservoir. Everything looks good.
12. Submitted CCR to DNR & distributed to nursing homes, assisted living, & big businesses.
13. Helped work on Cleveland park playground.
14. Replaced part of the driveway to the treatment plant.
15. DNR performed our Sanitary survey on 8/12/2020, everything went well.
16. Gingrich drilled well #14.
17. Well #11 motor burned up at 5AM on 8/12/2020. By 9:30AM we had the well back up and running. That was because Gingrich was here working on well# 14 & was willing to replace the motor for us.
18. Hoogeveen replaced HSP building roof.
19. Eliminated 2 blocks of 4" main on 12th St SW & moved service over to the 8" main.
20. Worked with Vander Pols on KNS 4th addition. Did 6 service taps & 2- 8" main taps.
21. Worked with Neptune on getting new meter reading equipment & software.
22. Renewed our public water supply operating permit with Iowa DNR.
23. Submitted annual water usage report to Iowa DNR.
24. Was able to get long lines to put electrical power in their name at the water tower.
25. Completed all required tests for DNR including 10 Bacteria tests per month, 1 Nitrogen-Ammonia, 1 Nitrate, 1 Manganese, 1 Trihalomethanes & Haloacetic

acids tests. Took Bacteria tests for 7 business & new water lines add by developers.

26. Spring and fall flushing completed.
27. Yearly hydrant maintenance.
28. Installed 6- EZ valve for us & 22- EZ valve for other towns, 1 town 4000 people were without water for 36 hours until we put in an EZ valve.
29. Completed many more tasks as mentioned in Quarterly Reports.



### Work to be done in 2021

1. Well 14
2. Install raw water line to Well 14.
3. Rehab well # 9.
4. Lead and copper testing.
5. Work with EPA on new lead and copper requirements for 2024.
6. Work on getting an inventory of what material water service lines consist of.
7. Review operating permit if the 2020 Census goes over 10,000 population.
8. Continue on hydrant maintenance.
9. Work with developers and contractors on codes and water issues.
10. Upgrade testing equipment at the Water Department as needed.
11. Spring and fall water main flushing.

12. More backflow awareness, compliance, testing and checks along with compiling information on computer program.
13. Fix valves that are inoperable & add valves where needed.
14. Replace fire hydrants that are not functioning correctly.
15. Continue to work with contractors and other projects as they pertain to the water treatment and distribution system.
16. Water looping from Lincoln & 18th SW across to west side of Business 75 by walking trail.
17. Eliminate 1 blocks of 4" main on 6<sup>th</sup> St SE between 1<sup>st</sup> Ave & 2<sup>nd</sup> Ave SE.



Saving lives one gallon at a time.