

2019 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	14 years	Grade III Treatment/ Grade III Distribution
2. Mike Haverhals	24 years	Grade IV Treatment / Grade IV Distribution
3. Monte Brent	3 years	Grade II Treatment / Grade II Distribution
4. Scott Tillman	3 years	Grade II Treatment / Grade II Distribution
5. Curt Allen	3 years	Grade II Treatment / Grade II Distribution
6. Justin Frericks	2 Year	Grade I Treatment / Grade I Distribution
7. Angie Kneip	12 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, 4751 water meters, 683 fire hydrants, over 1757 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	1,012,072,000gallons
Backwashes @ approximately 78,000 gallons each total	58,800,000 gallons
Backwash percentage of well water pumped	5.80%
Total metered water pumped into the distribution system	953,272,000gallons
Average daily water pumped	2,608,500 gallons
Billed metered water for 2018	918,793,100 gallons
Flushing, WTP use, Hydrant meter sales, & other	2,042,150 gallons
Water used for testing equipment	7,537,560 gallons
Leaks estimated	1,377,600 gallons
City meters not billed	12,452,700 gallons
Water from the fill station	503,600 gallons
Difference between pumped and non-accountable water	10,565,290 gallons

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

Work Completed

Number of locates performed by the Water Department	193
Water concerns	40
Work orders completed at Water Treatment Plant	1279
Work orders completed for meters and customer service	264
Work orders for fire hydrants	814
Water tests done	3811
Meter replacements completed	28
New meters installed	107
Number of disconnect notices	2462
Shut-off and collections	310
Water main breaks repaired	14
Fire hydrants repaired, moved or replaced	8
Hours of snow moved in City with 3 pieces of equip	180
Finals and applications done	688
Service taps completed	50
Service leaks	7
Frozen meters	8
Call outs not including leaks	39
Service call with fee's	64

Review of Gallons Pumped

2019	Ave. Daily Produced	Monthly Water Produced	Total Pumped from well
January	1,990,000	61,679,000	67,299,000
February	2,069,000	57,938,000	59,902,000
March	2,286,000	70,880,000	73,510,000
April	2,604,000	78,106,000	83,083,000
May	2,752,000	85,312,000	87,863,000
June	3,330,000	99,912,000	106,764,000
July	3,515,000	108,966,000	113,021,000
August	3,246,000	100,625,000	108,364,000
September	2,754,000	82,629,000	87,198,000
October	2,439,000	75,603,000	82,206,000
November	2,201,000	66,033,000	67,316,000
December	2,116,000	65,589,000	75,546,000

Total 953,272,000 1,012,072,000
= 58,800,000 back wash =5.8%

Average gallons pumped per day for 2019 = 2,608,500 gallons,
down 86,833 gallons per day from 2018

Projects completed and worked on in 2019



1. Tower #1 was painted.
2. Eliminate 5 blocks of 4" main on Central Ave. south for next year's white topping project. There are two mains on Central, we moved the service lines to the 8" main & eliminated the 4" main.
3. Replaced Beacon on tower # 2 with a new beacon.
4. 2 Bacteria tests at the Little league ball field because of the flood
5. DNR came & did an Air Quality Permit review.
6. Performed tests on all the wells & Head box for McClure's (for hardness reduction).
7. Had a student from LCHS job shadow at the water dept. for 3 weeks
8. Give LCHS Chemistry students a tour of the water treatment plant (around 160 students). Also gave a tour to Kiwanis & Cub Scout Troop 184
9. Put in 16" of sand in filter #1, talked with DNR for the correct procedure. (all went well)
10. Worked on the troughs in filter # 1,2,3 & 4.
11. Fixed hydrant & air vent after flooding.
12. Fixed a leak on one of the Golf Course wells.
13. Tapped a sewer line for waste water for one of their test ports.
14. Regouted base of Water plant
15. Worked on Well's 7,9,10,11,12 all had different problems.
16. **Did 12 EZ valve installations for other towns/Rural Waters (5 ½ days), also did 6 EZ valves in town.**
17. Midwest Alarms installed new cameras & put our door locks on one software program.
18. Worked with School for the stadium water service/main. They had to raise our water main in front of the stadium because of the sewer elevation. We worked with DNR to make sure it was done right.
19. Prepared CCR & sent in to DNR.
20. Replaced column pipe & rehabbed well # 12.
21. Performed fire flow tests for the ISO rating.
22. Filled in old booster station.
23. Disconnect 2 water services for old police department.
24. 2 side taps, 2 hydro-stops, 11 valves added, 3 city owned water services disconnected
25. Worked with several contractors shutting down, line stopping, & tapping mains.
26. Renewed Annual Water Use permit.
27. Completed all required tests for DNR including 10 Bacteria tests per month, 1 Nitrogen-Ammonia, 1 Nitrate, 1 Sodium, 1 Trihalomethanes & Haloacetic acids tests.

28. Spring and fall flushing completed.
29. Yearly hydrant maintenance.
30. Completed many more tasks as mentioned in Quarterly Reports.



Work projects to be done in 2020

1. Well 14
2. Install raw water line to Well 14.
3. Rehab well # 6.
4. DNR Sanitary Survey (August 2020).
5. Review operating permit if the 2020 Census goes over 10,000 population.
6. Continue on hydrant maintenance.
7. Work with developers and contractors on codes and water issues.
8. Upgrade testing equipment at the Water Department as needed.
9. Spring and fall water main flushing.
10. More backflow awareness, compliance, testing and checks along with compiling information on computer program.
11. Fix valves that are inoperable & add valves where needed.
12. Replace fire hydrants that are not functioning correctly.
13. Continue to work with contractors and other projects as they pertain to the water treatment and distribution system.
14. Water looping from Lincoln & 18th SW across to west side of Business 75 by walking trail.
15. Eliminate 2 blocks of 4" main on 12th St SW from Central Ave to 2nd Ave SW to get ready for the white topping project in 2021.



Saving lives one gallon at a time.