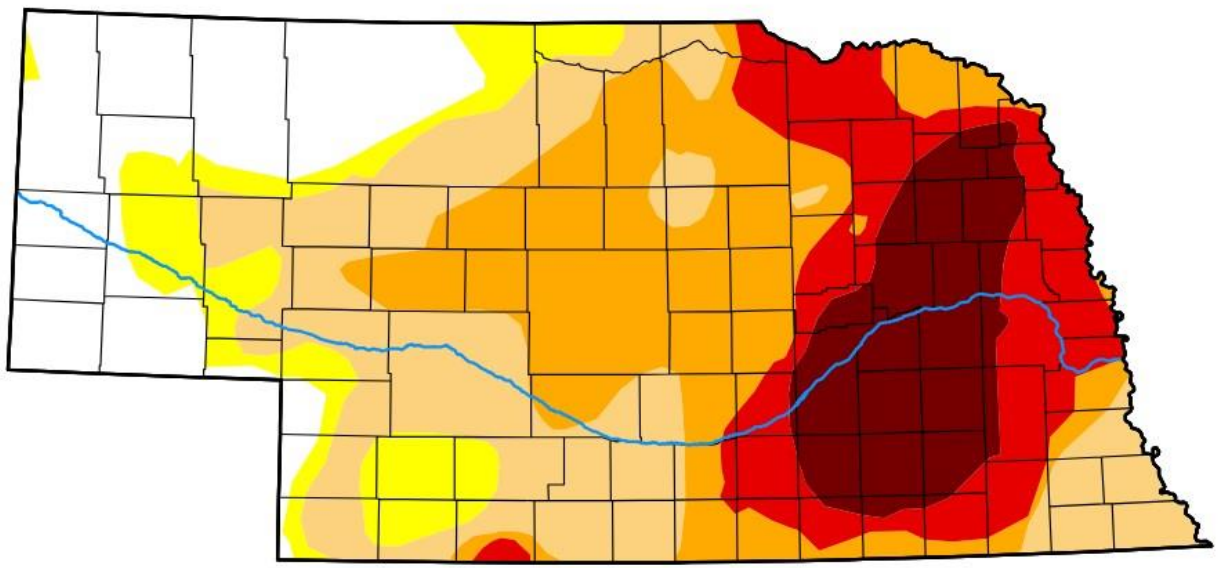
U.S. Drought Monitor

Current | Maps | Data | Summary | About | Conditions & Outlooks | Ag in Drought | En Español | NADM



Map released: Thurs. July 6, 2023

Data valid: July 4, 2023 at 8 a.m. EDT

Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

Authors

United States and Puerto Rico Author(s):

Curtis Riganti, National Drought Mitigation Center

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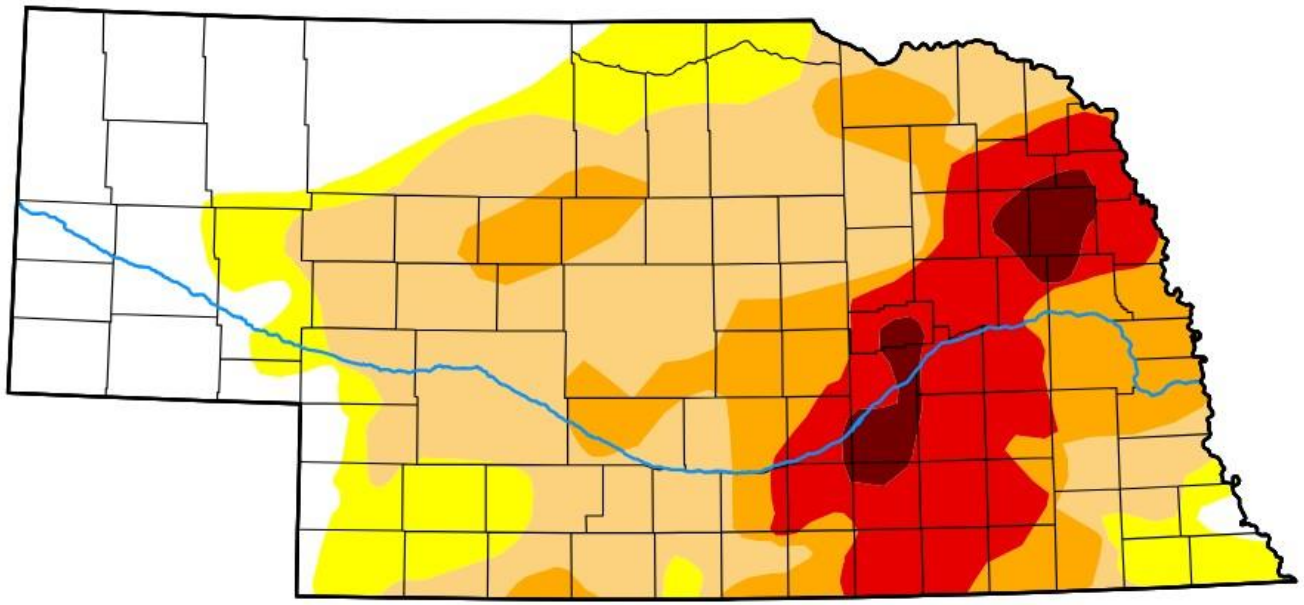
The drought has improved in our area on the surface.

However, the aquifer has not recovered yet.



Map released: Thurs. August 3, 2023

Data valid: August 1, 2023 at 8 a.m. EDT

Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

Authors

United States and Puerto Rico Author(s):

Brian Fuchs, National Drought Mitigation Center

Pacific Islands and Virgin Islands Author(s):

Richard Heim, NOAA/NCEI

Monthly and Annual Precipitation Totals (in inches) 1887 thru Last Month

August 2022 to end of June 2023 only 7.37 inches

10.14 inches June/July

Still 14.86 inches below normal

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
2023	1.32	1.29	0.63	0.59	0.51	4.53	5.61	.	.	.	.	.	14.48
2022	0.28	0.03	1.96	3.05	5.27	3.73	2.57	0.55	0.97	0.61	0.26	0.64	19.92
2021	1.53	0.79	5.23	1.74	2.55	4.46	1.73	3.41	0.64	4.04	0.49	0.25	26.86
2020	1.29	0.13	1.67	0.88	5.09	3.15	5.73	1.27	1.62	0.40	1.20	1.20	23.63
2019	0.75	1.59	2.65	1.13	7.29	4.38	4.08	2.79	3.40	4.69	0.79	2.57	36.11
2018	0.41	0.74	2.71	0.67	2.23	8.83	1.35	4.35	7.13	2.71	1.19	3.32	35.64
2021	1.53	0.79	5.23	1.74	2.55	4.46	1.73	3.41	0.64	4.04	0.49	0.25	2

2023 14.48 inches so far
Normal is 29.34 inches
Need 14.86 to get too normal
2nd driest year in recorded history

1936 Worst drought in recorded history for Lincoln at 14.09 inches, which was 87 years ago.
We have beat that record so far by just 0.39 inches in 2023.

1890 14.81 inches, we need 0.33 inches to be the 3rd driest year in recorded history,
that was 133 years ago.

The drought we are in now, is a rare event historically, also occurring 87 and 133 years ago.

June 2023

Total Gallons Per Day
1,516,452
965,107
1,019,780
1,071,399
1,199,295
1,047,527
1,158,978
1,246,400
1,264,894
1,156,600
838,474
705,800
940,699
1,166,200
1,199,563
1,273,000
1,091,434
812,300
1,039,338
1,234,400
1,601,813
1,263,300
1,397,802
1,337,800
933,601
1,143,400
1,253,869
1,305,900
1,145,887
869,800
720,802

July 2023

Total Gallons Per Day
720,802
587,400
468,462
821,700
736,642
585,800
774,069
593,300
475,538
464,200
609,270
648,700
692,306
649,100
587,474
603,300
462,927
643,400
579,819
578,100
694,370
699,800
713,382
600,400
754,122
938,800
901,139
1,035,800
848,554
698,900
590,573
665,000

August 2023

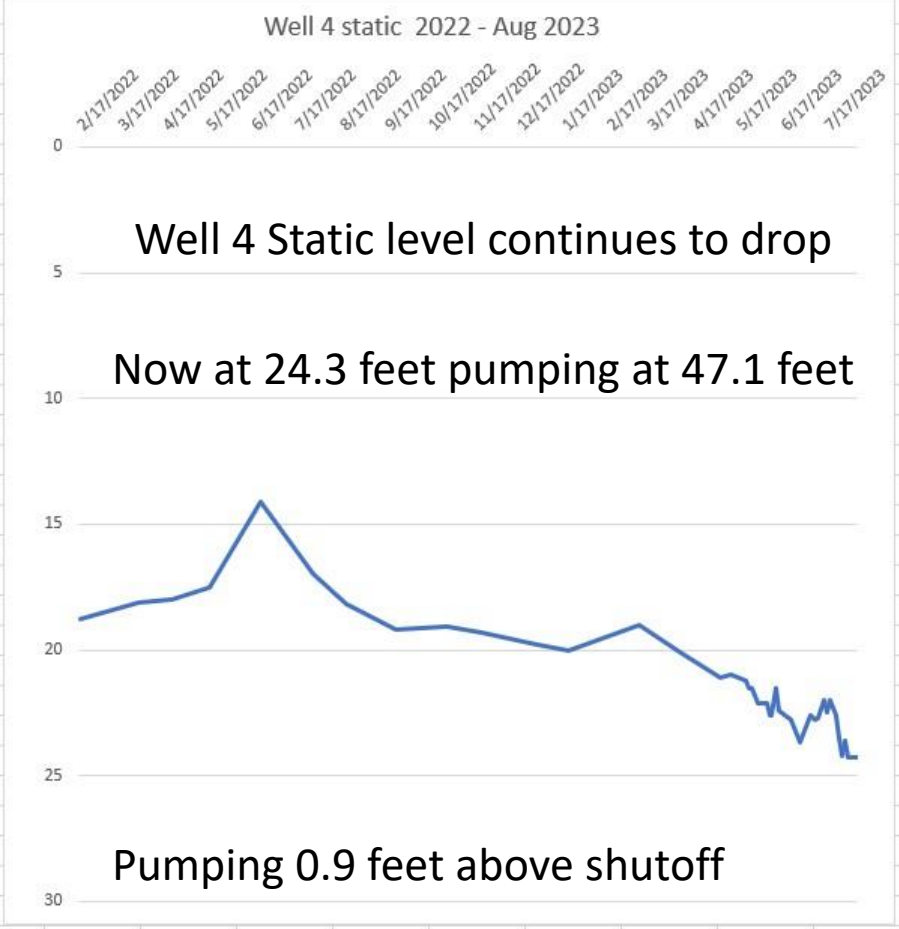
Total Gallons Per Day
665,000
517,231
621,600
735,842

June 2023 average daily gallons used 1,113,000
Peak day June 20,2023 with 1.6 million gallons
Total gallons was 33 million.

July 2023 average daily gallons used 667,818
Peak day July 27,2023 with 1.03 million gallons
Total gallons was 20 million.

June Average to July Average Demand dropped by

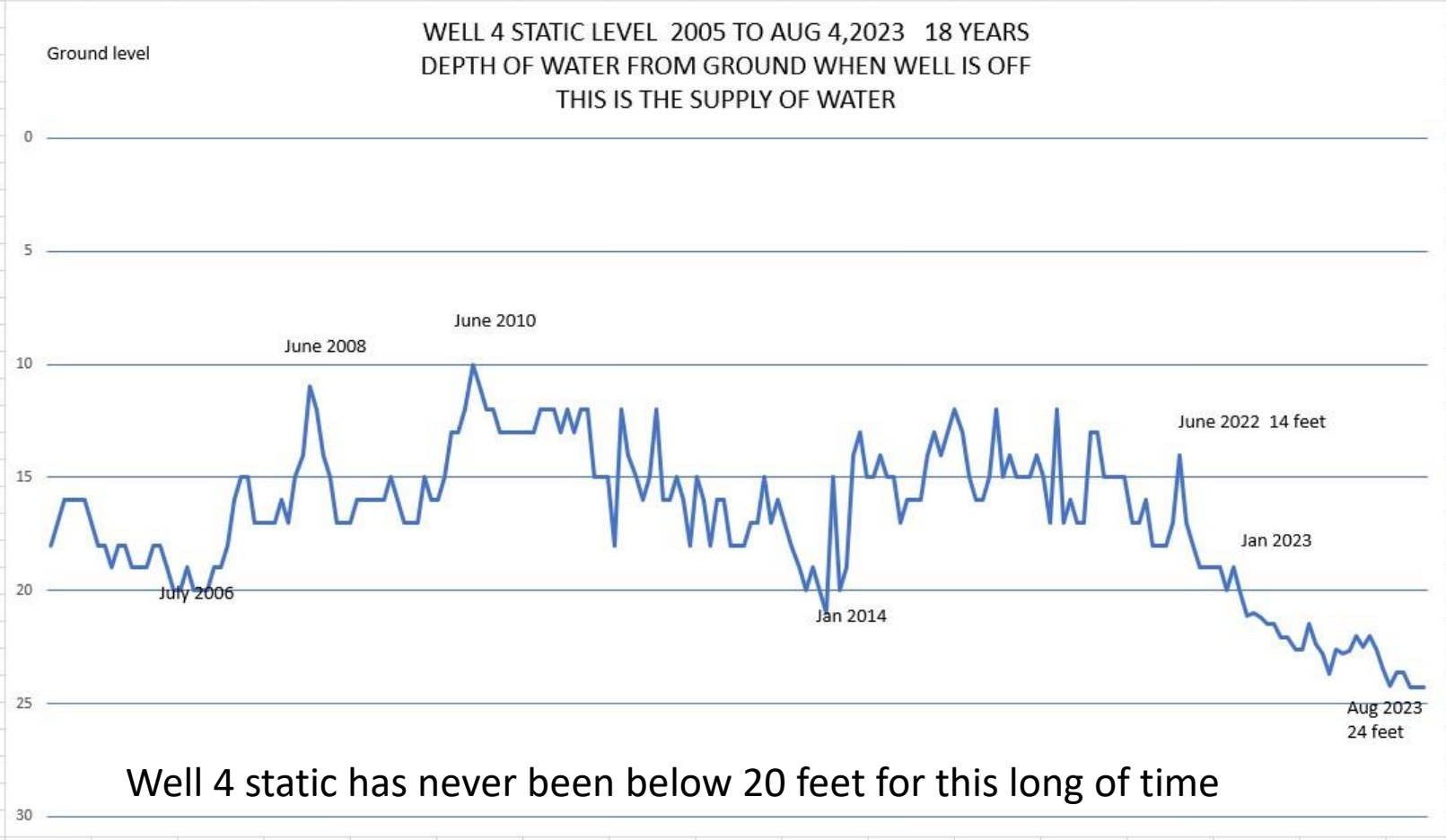
40%



Well 4 Static level continues to drop

Now at 24.3 feet pumping at 47.1 feet

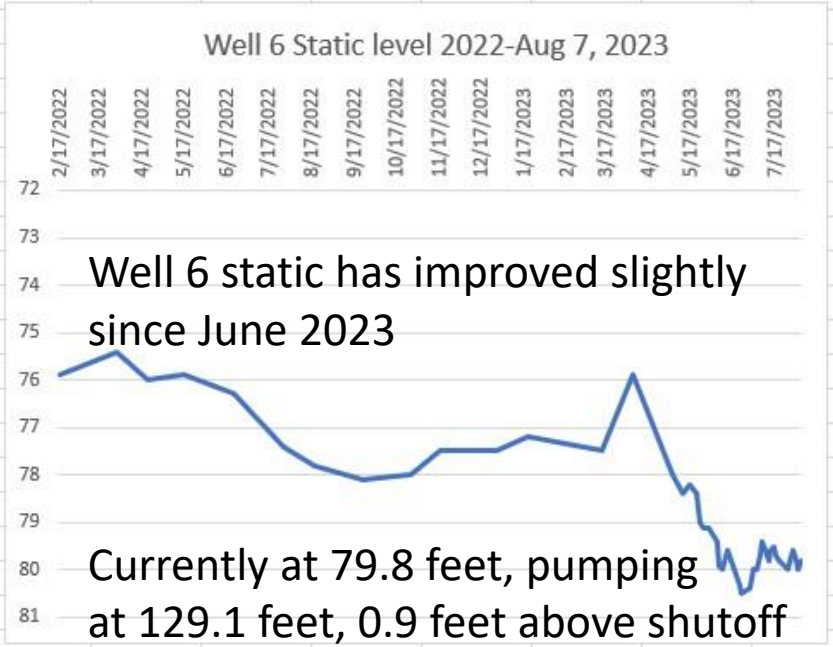
Pumping 0.9 feet above shutoff



Well 4 static has never been below 20 feet for this long of time

Well 5 static has improved slightly since its lowest point in June 2023

Currently at 19.8 feet, pumping at 45.5 feet, 2.5 feet above shut off

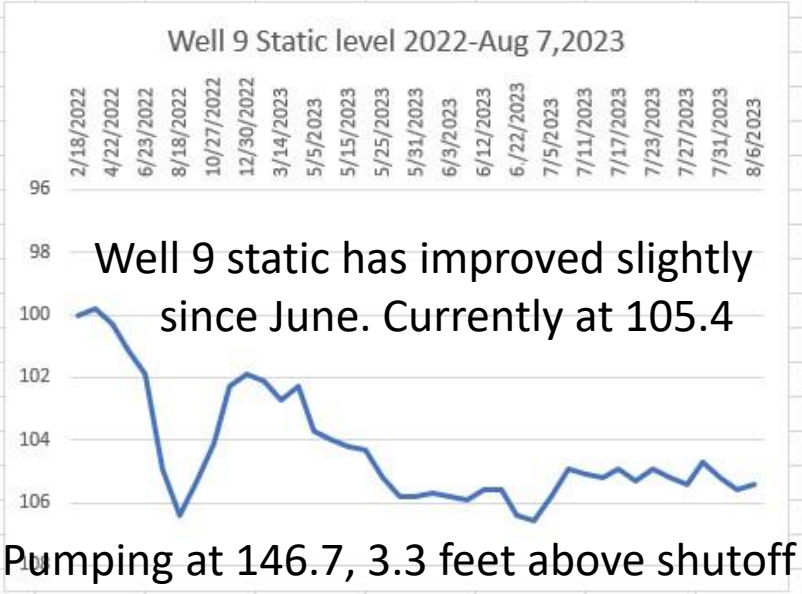


Well 6 static has improved slightly since June 2023

Currently at 79.8 feet, pumping at 129.1 feet, 0.9 feet above shutoff

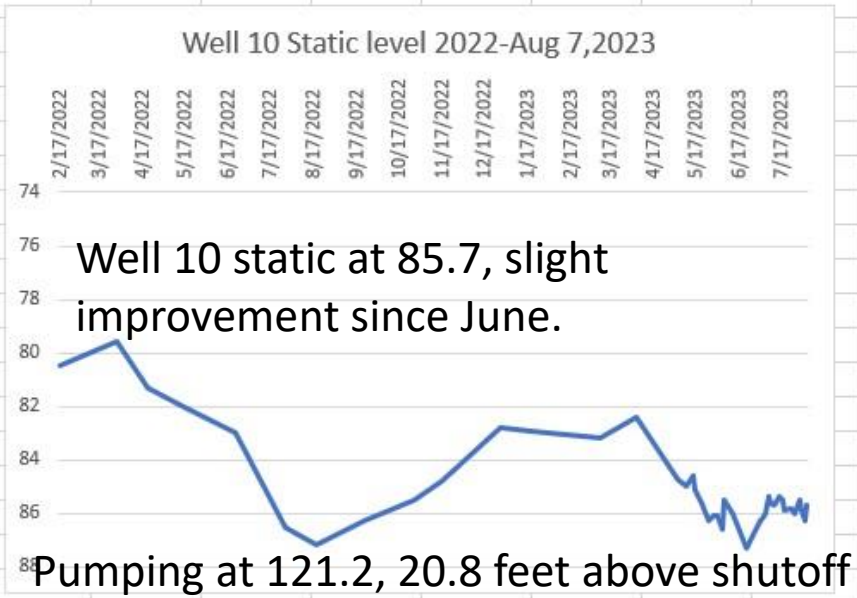
Well 8 static has improved slightly since June 2023, but is now trending down.

Currently at 73.7 feet, pumping at 131.6 feet, 6.4 feet above shutoff



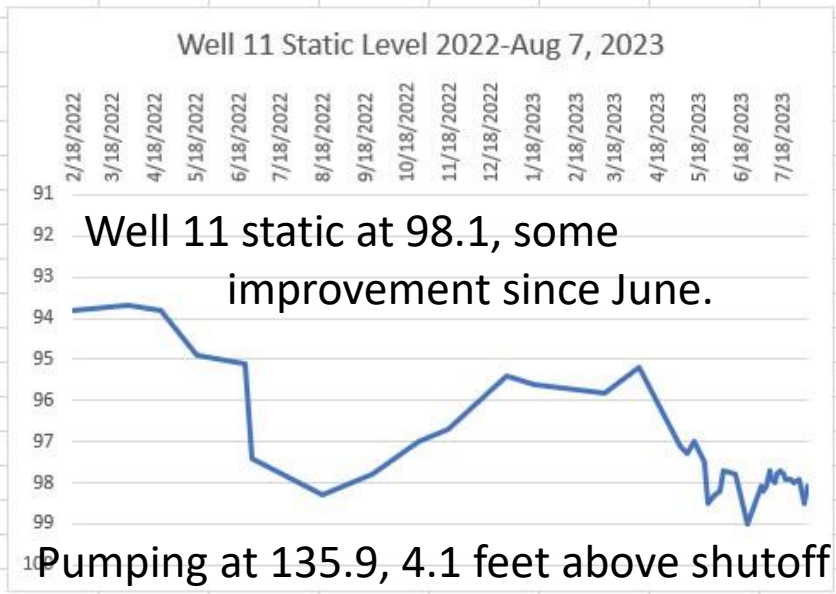
Well 9 static has improved slightly since June. Currently at 105.4

Pumping at 146.7, 3.3 feet above shutoff



Well 10 static at 85.7, slight improvement since June.

Pumping at 121.2, 20.8 feet above shutoff



Well 11 static at 98.1, some improvement since June.

Pumping at 135.9, 4.1 feet above shutoff

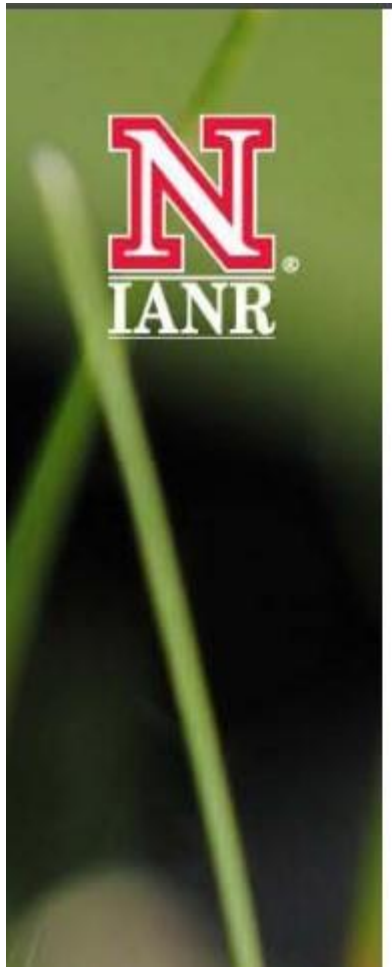
How much should you water your lawn??

1. Every Day???

2. What ever the sprinkler company left it on???

3. 1 inch per week??

4. I have no idea; I just know it turns on once in awhile??



Irrigating home lawns

Water lost from the soil can be estimated more accurately using an evaporation pan filled with water in a sunny location. The amount of water that evaporates from the pan is similar to that lost from turf due to ET. Usually, the amount of irrigation water applied is 75 to 85 percent of the amount

Table 1 Estimated water requirement of typical home lawns in western and eastern Nebraska during select months (from Rodie et al., 1999)

Month	Water amount (inches/week)	
	Western Nebraska	Eastern Nebraska
April / May	1.0 - 1.25	0.75 - 1.0
June	1.25 - 1.5	1.0 - 1.5
July	2.0 - 2.25	1.5 - 2.0
August	1.25 - 1.5	1.0 - 1.5
September / October	1.0 - 1.25	0.75 - 1.0

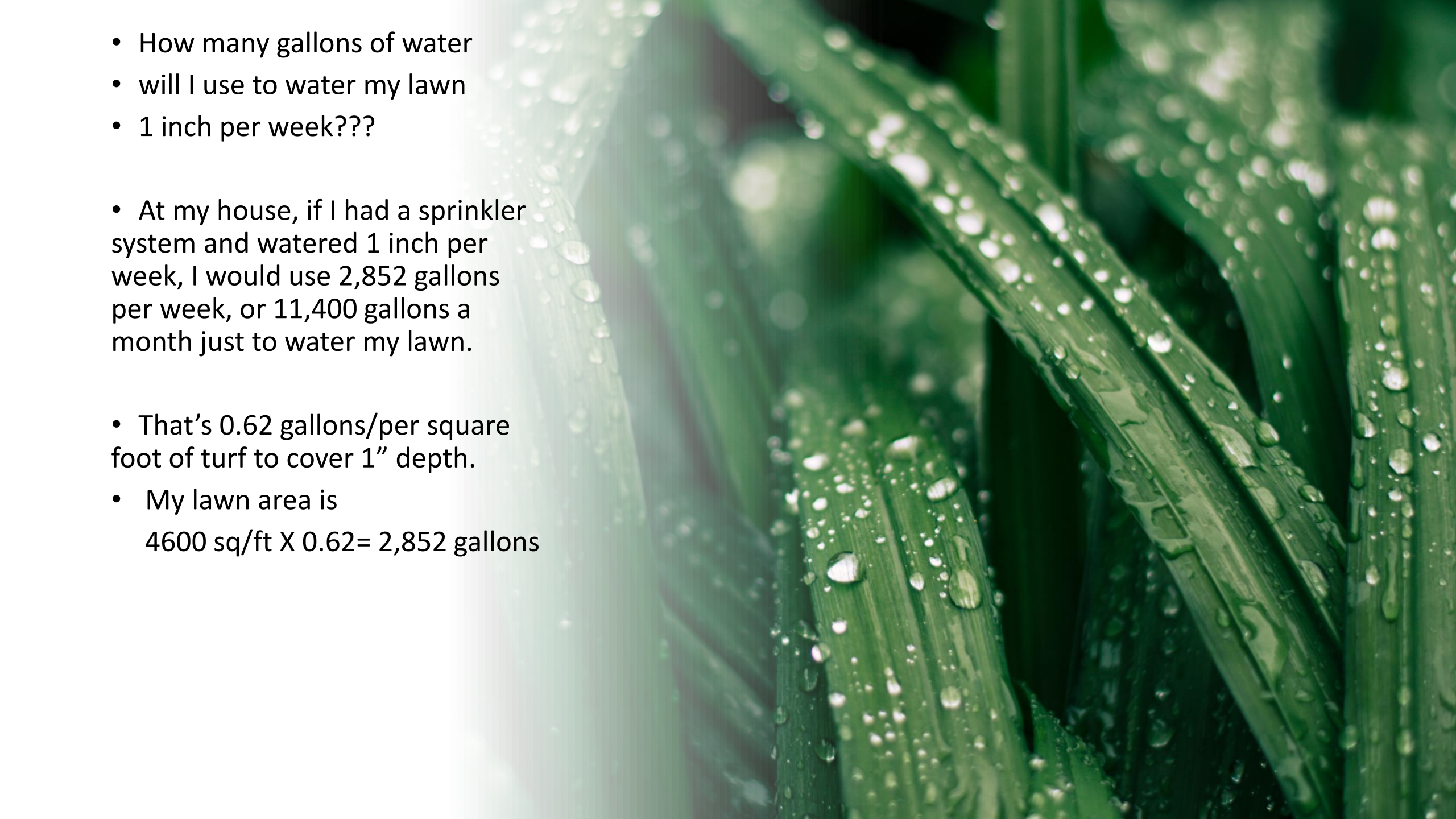
Depends on the month

- How many gallons of water
- will I use to water my lawn
- 1 inch per week???

- At my house, if I had a sprinkler system and watered 1 inch per week, I would use 2,852 gallons per week, or 11,400 gallons a month just to water my lawn.

- That’s 0.62 gallons/per square foot of turf to cover 1” depth.
- My lawn area is

  4600 sq/ft X 0.62= 2,852 gallons



I encourage you to calculate
how many inches per week you are watering your lawns.

Take your square feet of turf times 0.62
to determine how much water is needed
for 1” per week.

Then compare how much water you are using
per month.

We can help you with that figure by taking
out your normal domestic use compared to
your use in the summer.

For example, wintertime use per month is say 5,000 gallons. Summer use is 35,000 gallons per month.

Summer use 35,000 - winter use 5000 = 30,000 gallons going on your lawn typically.

If you need assistance with figuring your water use, please contact me at
Publicworksdirector@citywaverly.com