

SPRWS Drought Response Plan

Patrick Shea- General Manager

Racquel Vaske- Assistant General Manager



Statewide Drought Plan

July 20th -Present

Non-Drought Phase

Drought Watch Phase

Drought Warning Phase (severe drought)

- 5 consecutive days at or below 2,000 cfs
- Implement water use restrictions to reach 50% above January levels (53.1 MGD)
 - SPRWS implemented voluntary watering restrictions on July 20th

Restrictive Phase (extreme drought)

- 5 consecutive days at or below 1,500 cfs
- Implement water use restrictions to reach 25% above January levels (44.25 MGD)

Emergency Phase (exceptional drought)

- 5 consecutive days at or below 1,000 cfs
- Mandatory reductions to reach January water use levels (35.4 MGD)

Mississippi River Flow

Used to Determine Drought Phase

Mean River Flow for
August 11th Over
the Last 90 Years:

6,590 cfs

How does 2021
compare?



Date	Daily Mean Discharge Cubic Feet Per Second	Drought Phase/Trigger
July 20-31, 2021	1,530-1,970	Drought Warning Phase
August 1, 2021	1,560	Drought Warning Phase
August 2, 2021	1,630	Drought Warning Phase
August 3, 2021	1,610	Drought Warning Phase
August 4, 2021	1,490	Drought Warning Phase: Day 1 < 1,500
August 5, 2021	1,300	Drought Warning Phase: Day 2 < 1,500
August 6, 2021	1,380	Drought Warning Phase: Day 3 < 1,500
August 7, 2021	1,660	Drought Warning Phase: Reset Day Count
August 8, 2021	1,640	Drought Warning Phase
August 9, 2021	1,620	Drought Warning Phase
August 10, 2021	1,550	Drought Warning Phase
August 11, 2021	Potentially below 1,500	Drought Warning Phase: Day 1 < 1,500
August 12, 2021	Potentially below 1,500	Drought Warning Phase: Day 2 < 1,500
August 13, 2021	Potentially below 1,500	Drought Warning Phase: Day 3 < 1,500
August 14, 2021	Potentially below 1,500	Drought Warning Phase: Day 4 < 1,500
August 15, 2021	Potentially below 1,500	Drought Warning Phase: Day 5 < 1,500
August 16, 2021	5 Days at/or Below 1,500	Start of Restrictive Phase

SPRWS Production

Used to Monitor
Progress Towards
Drought Plan
Reduction Goals

Date	Total Water Pumped (MGD)	Rolling 5 Day Average (MGD)	% Above January Levels
Drought Warning Phase			Goal: 50%
Goal: 53.1 MGD (50% above 35.4 MGD)			
July 20, 2021	59.7	57.0 (+3.9)	61.02%
July 21, 2021	65.6	61.0 (+7.9)	72.32%
July 22, 2021	56.8	59.4 (+6.3)	67.80%
July 23, 2021	54.2	58.6 (+5.5)	65.54%
July 24, 2021	54.0	58.1 (+5.0)	64.12%
July 25, 2021	58.1	57.7 (+4.6)	63.00%
July 26, 2021	64.5	57.5 (+4.4)	62.43%
July 27, 2021	64.0	59.0 (+5.9)	66.67%
July 28, 2021	52.5	58.6 (+5.5)	65.54%
July 29, 2021	57.7	59.4 (+6.3)	67.68%
July 30, 2021	59.2	59.6 (+6.5)	68.31%
July 31, 2021	50.5	56.8 (+3.7)	60.40%
August 1, 2021	58.6	55.7 (+2.6)	57.34%
August 2, 2021	53.9	56.0 (+2.9)	58.14%
August 3, 2021	59.5	56.3 (+3.2)	59.15%
August 4, 2021	58.1	56.1 (+3.0)	58.53%
August 5, 2021	59.7	58.0 (+4.9)	63.73%
August 6, 2021	49.7	56.2 (+3.1)	58.70%
August 7, 2021	40.4	53.5 (+0.4)	51.07%
August 8, 2021	41.7	49.9 (-3.2)	41.02%
August 9, 2021	54.4	49.2 (-3.9)	38.93%
August 10, 2021	44.7	46.2 (-6.9)	30.45%
Restrictive Phase			Goal: 25%
Goal: 44.25 MGD (25% above 35.4 MGD)			

Next Steps

July 20th -Present

Drought Warning Phase

- Continued Education and Awareness Efforts.
- Prepare for Restrictive Phase.
 - Board of Water Commissioners Special Meeting- July 29th
 - Board Resolution authorizing SPRWS to implement mandated watering restrictions and associated penalties if needed.
- **City Council meeting to consider Emergency Ordinance to allow fines to be included in watering restriction violation schedule.**
- Implement authorized water use mandates if voluntary measures are not resulting in adequate progress towards defined goals in the Drought Warning Phase (50% of January).

Restrictive Phase

- Implement authorized water use mandates if previous measures are not resulting in adequate progress towards defined goals in the Restrictive Phase (25% of January).
- Prepare for Emergency Phase.

Emergency Phase

- Implement additional authorized water use mandates if needed.
- Coordinate efforts with MN-DNR drought task force.
- Work directly with stakeholders.

Additional Restrictions Require a Plan for Violations

1st: Educational Notice

2nd: Written Warning

3rd: \$50.00 Fine

4th: \$100.00 Fine

5th: \$150.00 Fine + Water Shut Off
(\$50.00 Fee)

