## SPRWS Drought Response Plan

Patrick Shea- General Manager Racquel Vaske- Assistant General Manager



#### July 20<sup>th</sup> -Present

# Statewide Drought Plan

## 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 20<sup>th</sup>

## **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 MDG)

## 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 11<sup>th</sup> 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		
Drou Goal: 53.1 M	Goal: 50%				
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%		
R Goal: 44.25 N	Goal: 25%				

# Next Steps

July 20<sup>th</sup> -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).

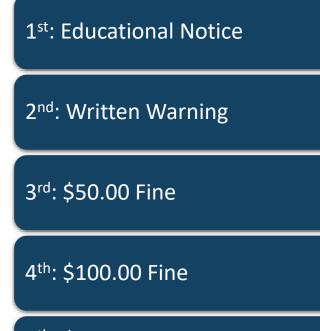
### **Restrictive Phase**

- 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



5<sup>th</sup>: \$150.00 Fine + Water Shut Off (\$50.00 Fee)

