



Straight River Groundwater Management Area
Monitoring and Analysis Report

April 2024

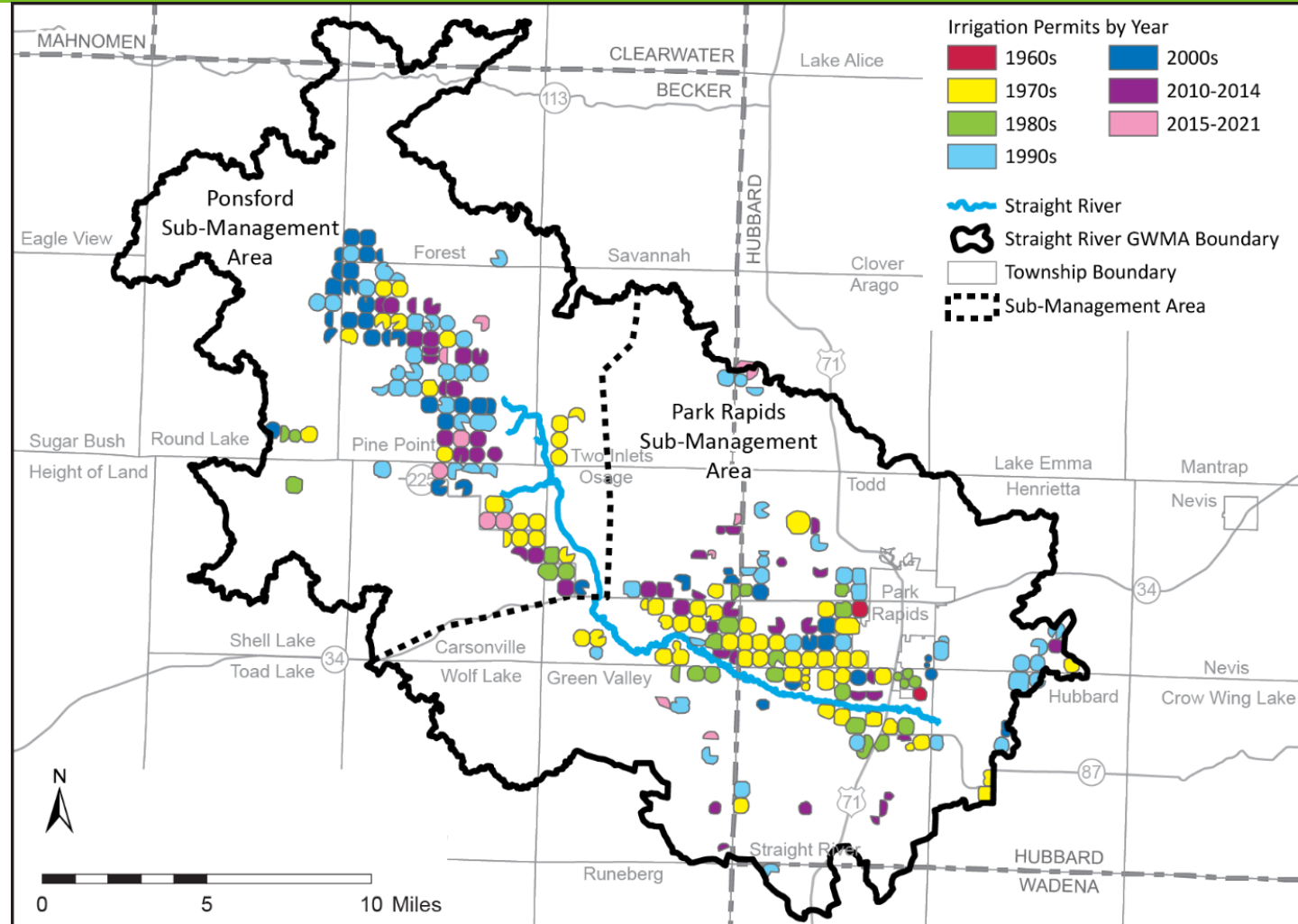
Presentation for the Legislative Water Policy Subcommittee

Jason Moeckel | Section Manager, EWR

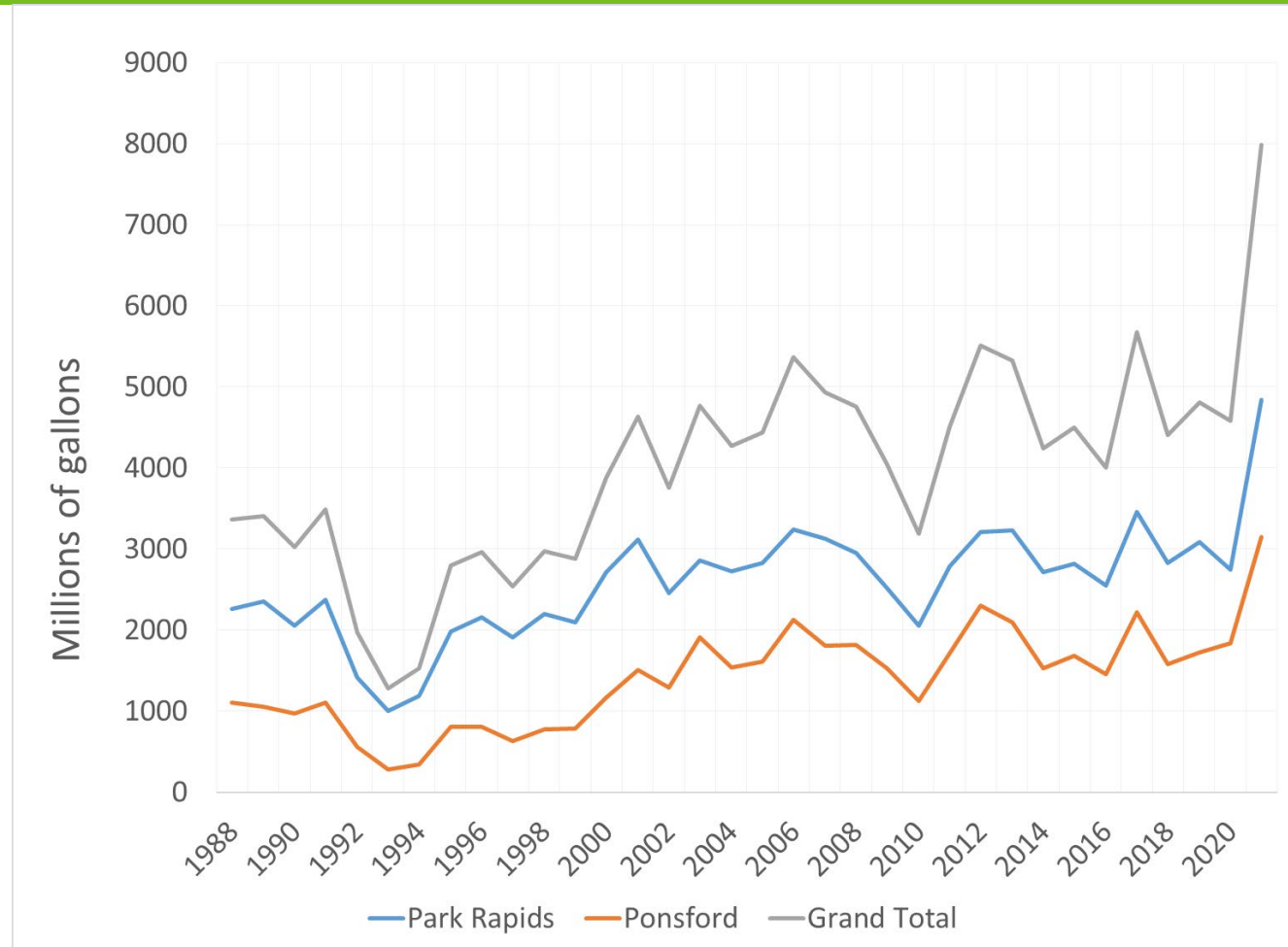
Summary

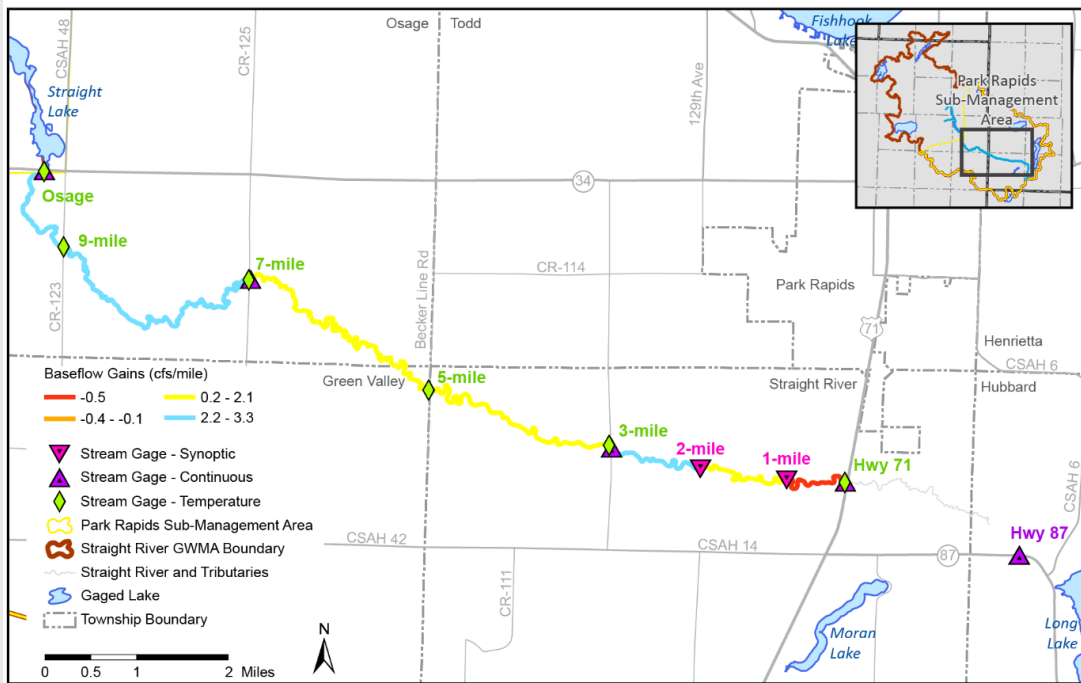
- Summer streamflow at the outlet of the SRGWMA has shown no downward trend.
- Aquifer levels have been stable and resilient through the extensive period of record, and the DNR is not concerned about long-term aquifer sustainability.
- All of the streamflow data we analyzed included a period of irrigation water use. Therefore, we don't have "true before and after comparisons".
- A groundwater model would be needed to further quantify any cumulative impact from water use on streamflow.
- The recently completed geologic atlas indicates that shallow confined aquifers are separated by thin, intermittent, and leaky confining layers that create connections between the confined and water table aquifers as well as surface waters.

2017 DNR Established Ground Water Management Area



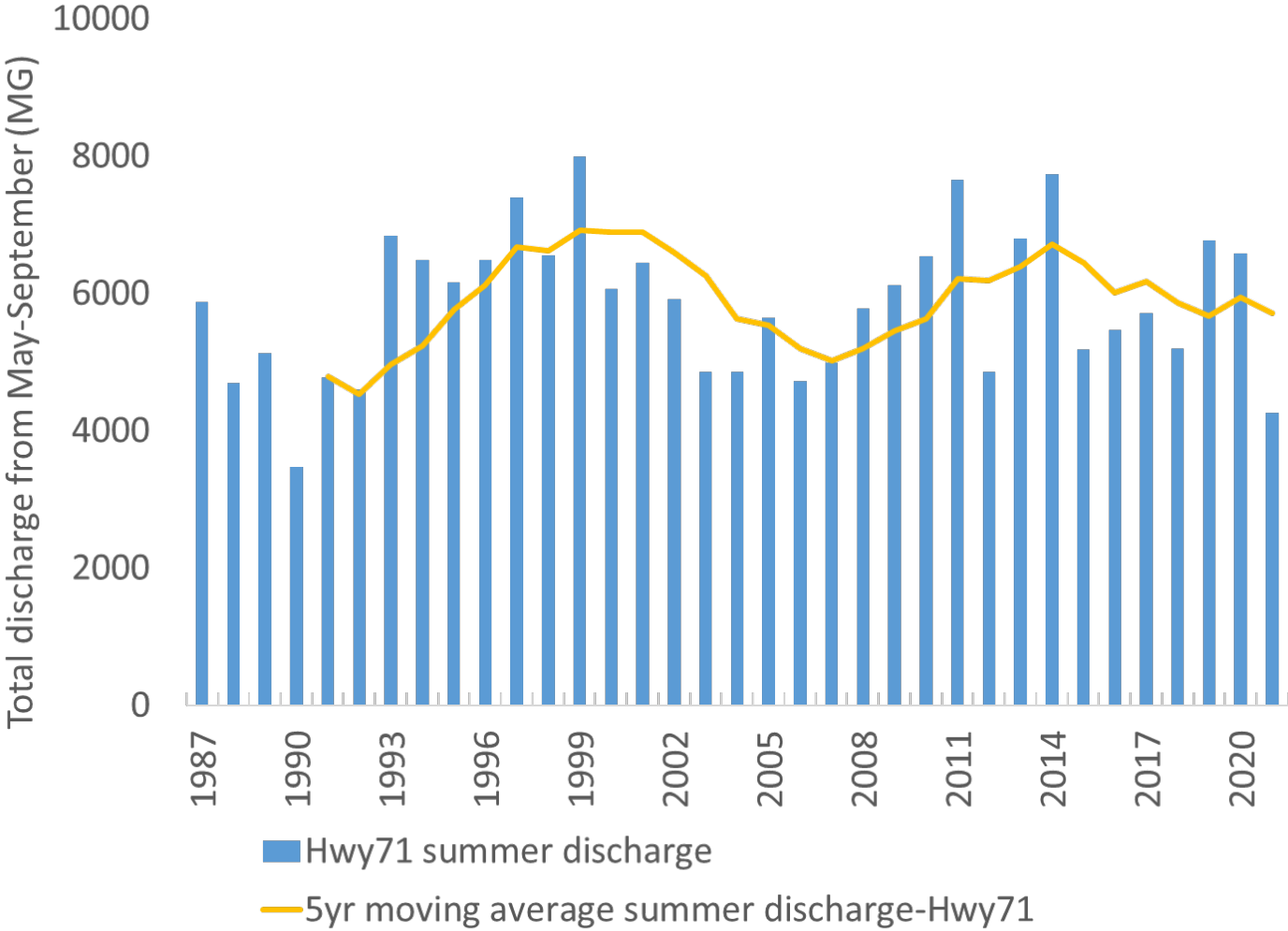
Water Use from 1988–2021 for all sources within the SRGWMA



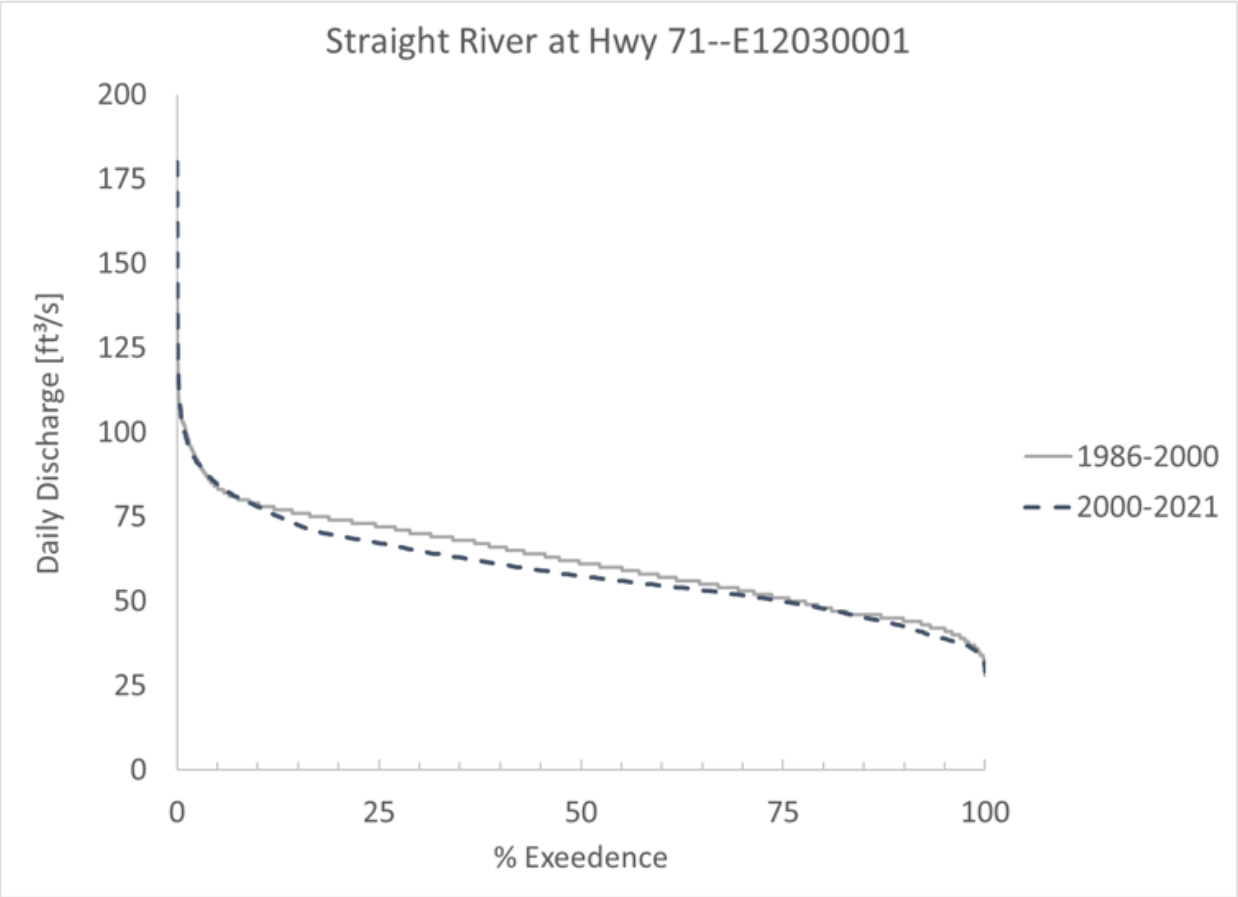


Station	Median August Base flow (cfs)
<i>Lady Slipper Inn</i>	0.3
520th Ave	1.4
Straight Lake Creek	
Bass Bay Ave	7.9
Straight Lake	
Osage	19
7-mile	34
3-mile	40
Hwy 71	53

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Streamflow Differences



Hwy 71 E12030001	1986 – 2000 (N= 4355)	2000 – 2021 (N=7990)	% Difference
Q90	44	42	-4%
Q75	51	50	-2%
Q50	61	57	-6%
Q25	72	67	-7%

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Thank You!

Jason Moeckel

Jason.Moeckel@state.mn.us

651-259-5240