BUREAU OF RECLAMATION

Cool-Mix 2025

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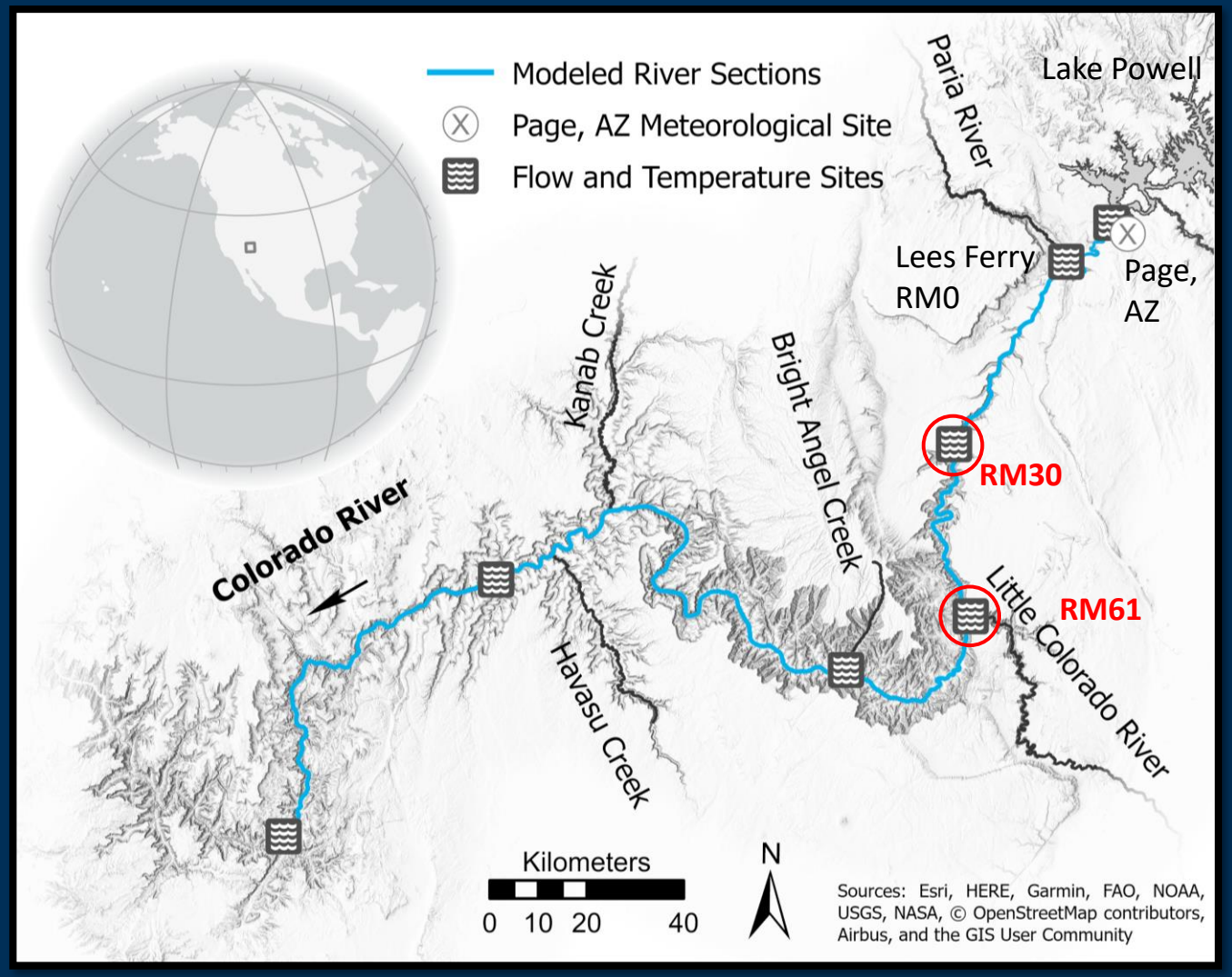
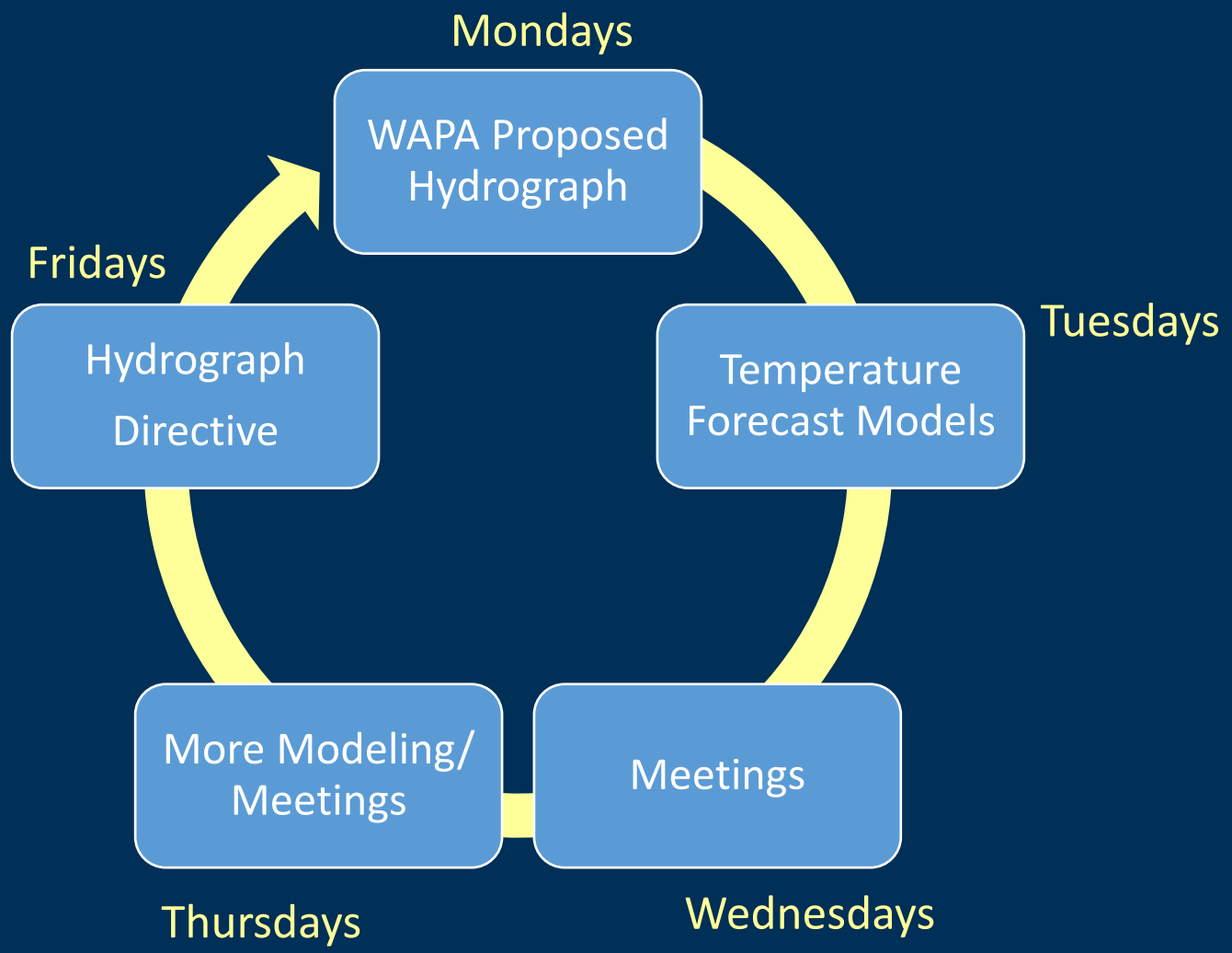
12/10/2025

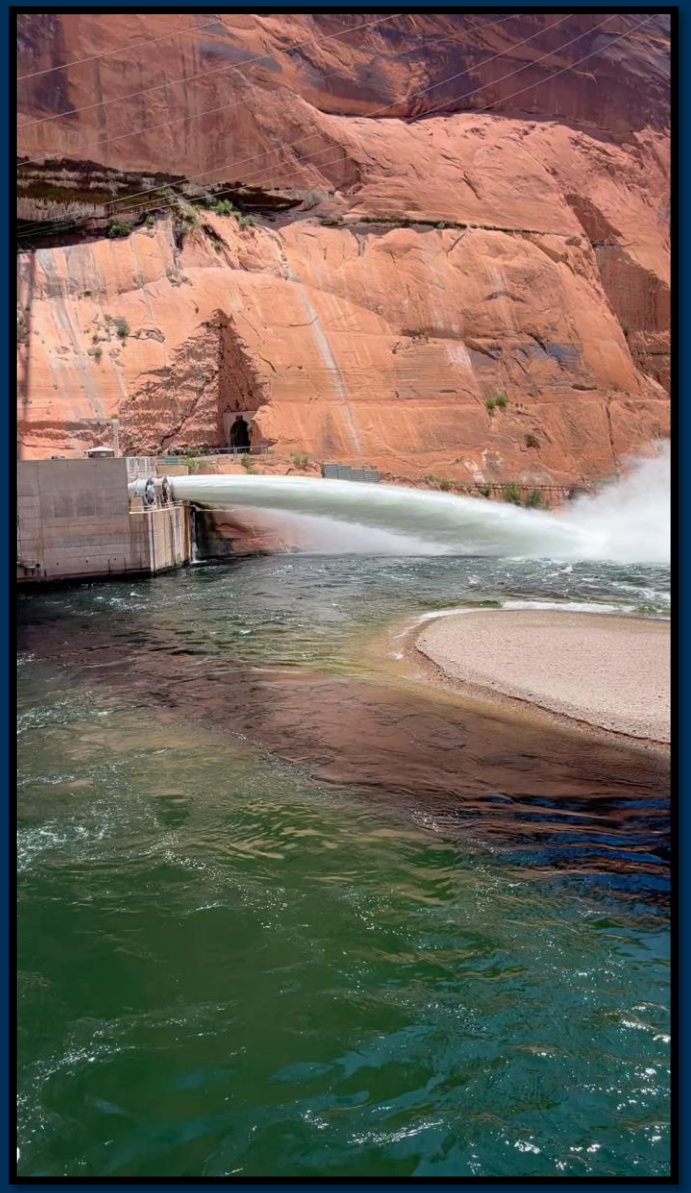
Cool-Mix Temperature Objective



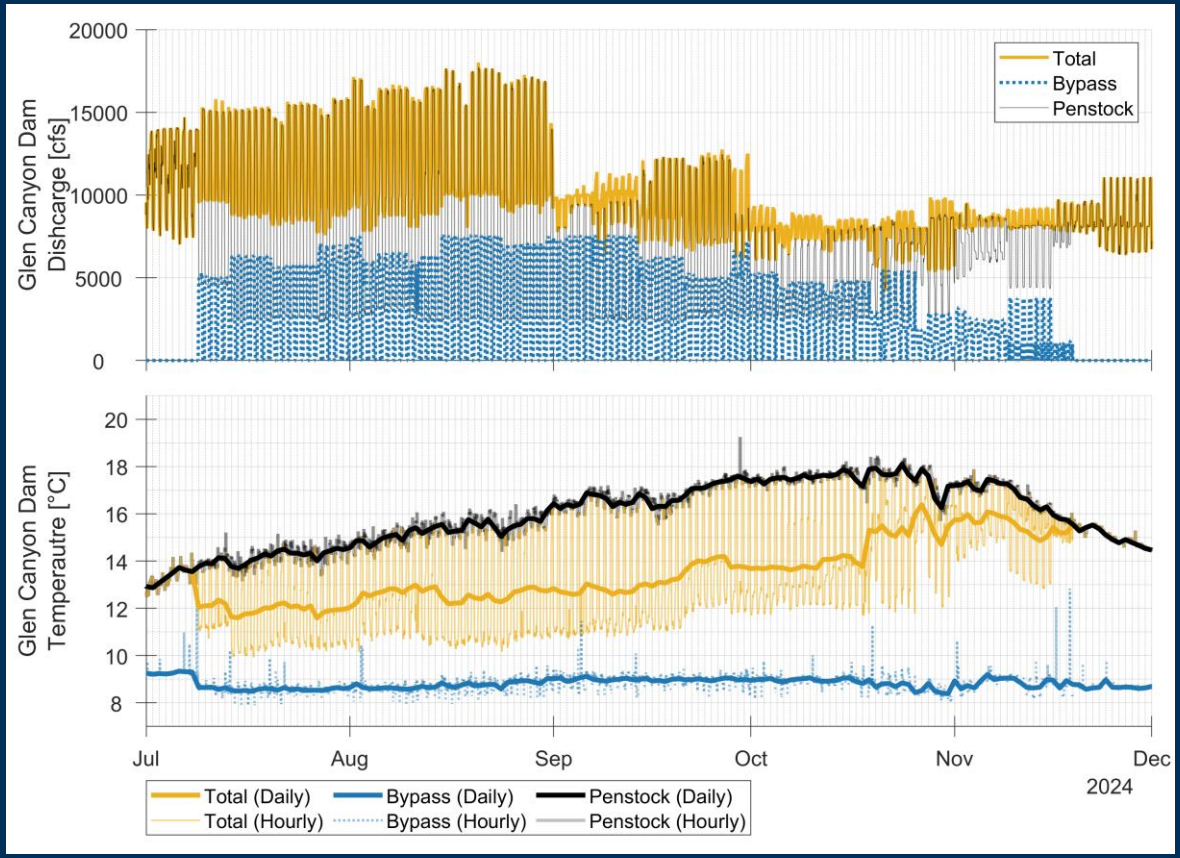
	2024	2025
Target Temperature	≤ 15.5 °C	≤ 15.5 °C
Target River Mile	RM61 (76 miles)	RM30 (45 miles)
On-Ramp	3 Days > 15.5 °C	3 Days > 15.5 °C
Off-Ramp	3 Days < 15.5 °C	Oct. 20th

Cool-mix Flow Implementation:

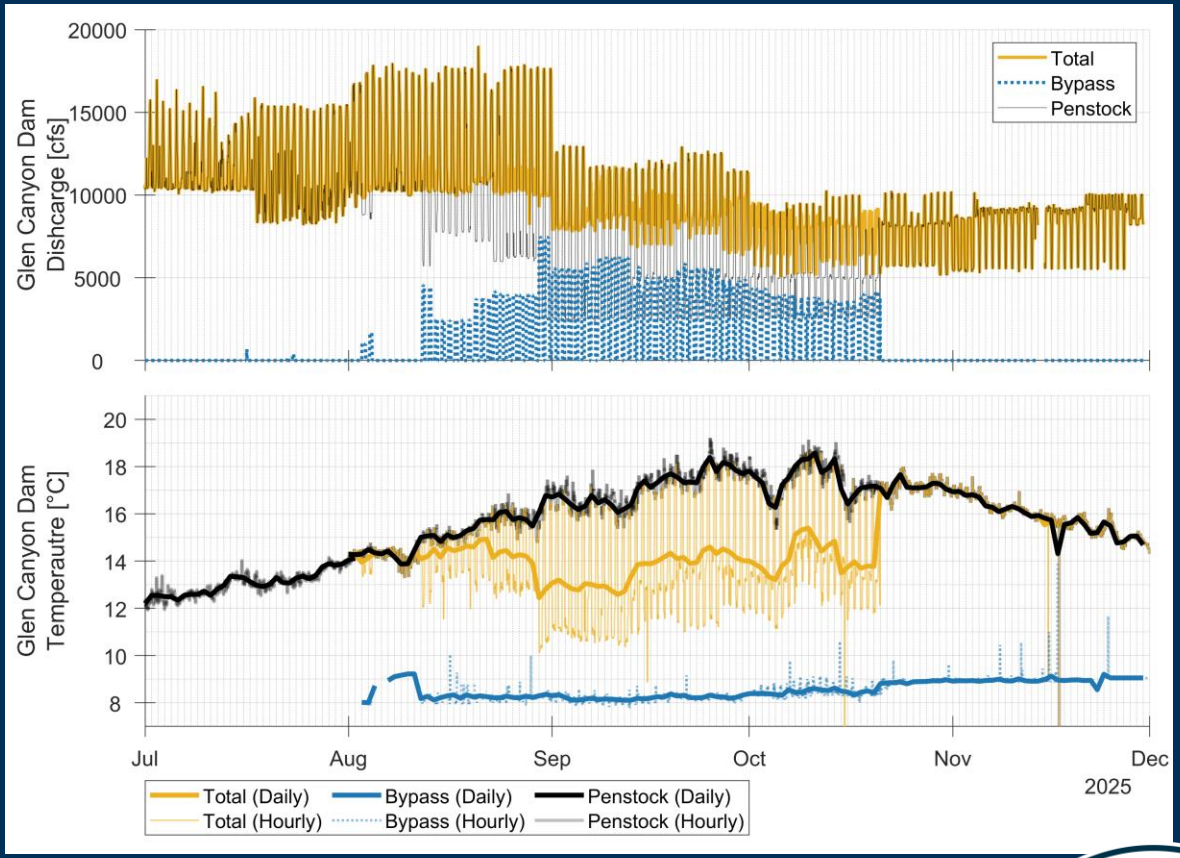




Cool Mix Flows and Temperatures



2024

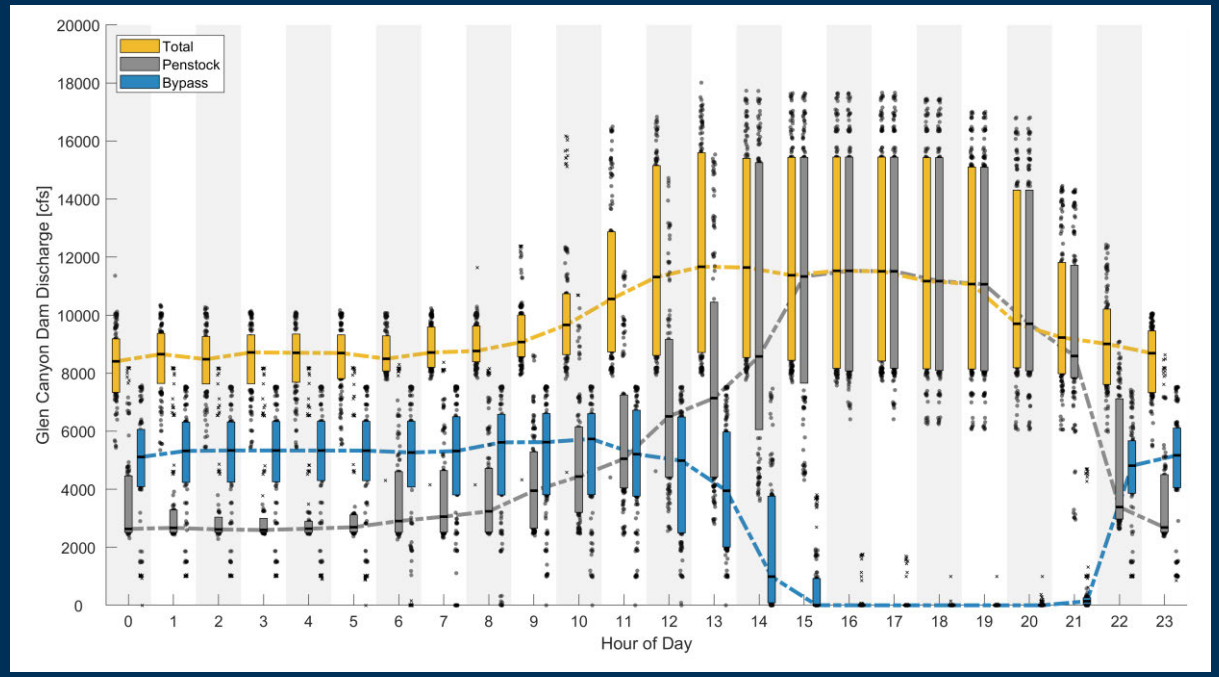


2025

Coordination for Peak Hydropower

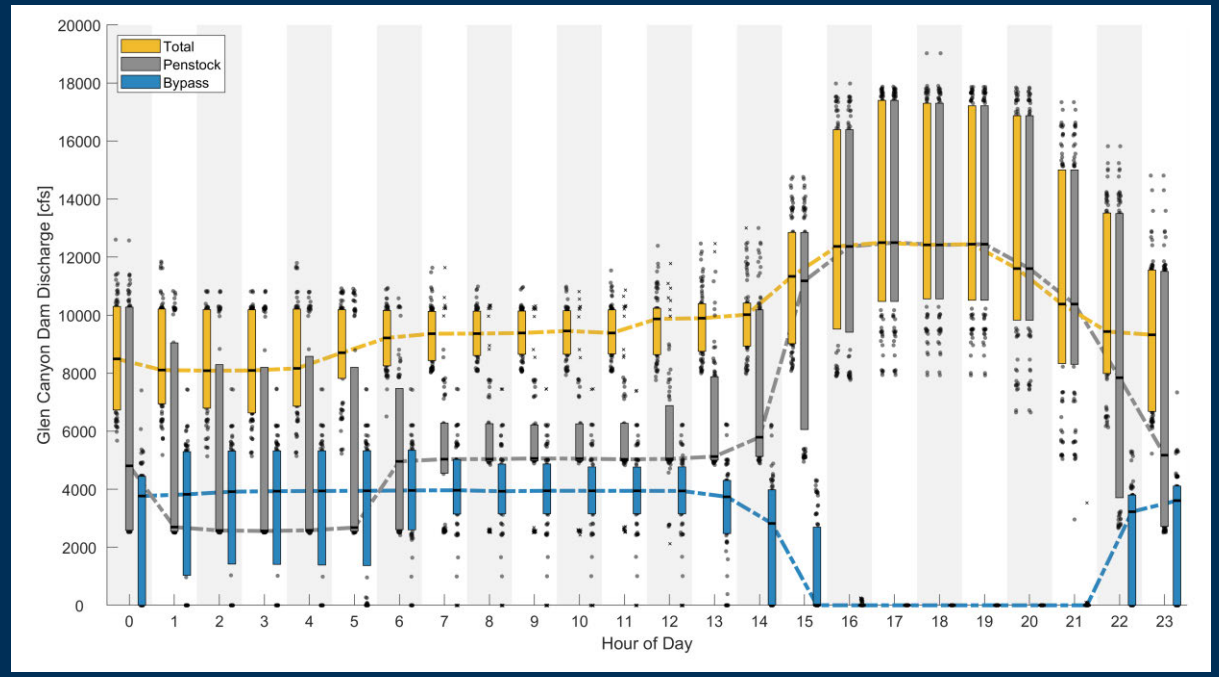
Timed bypass releases to preserve peak hydropower demands

2024



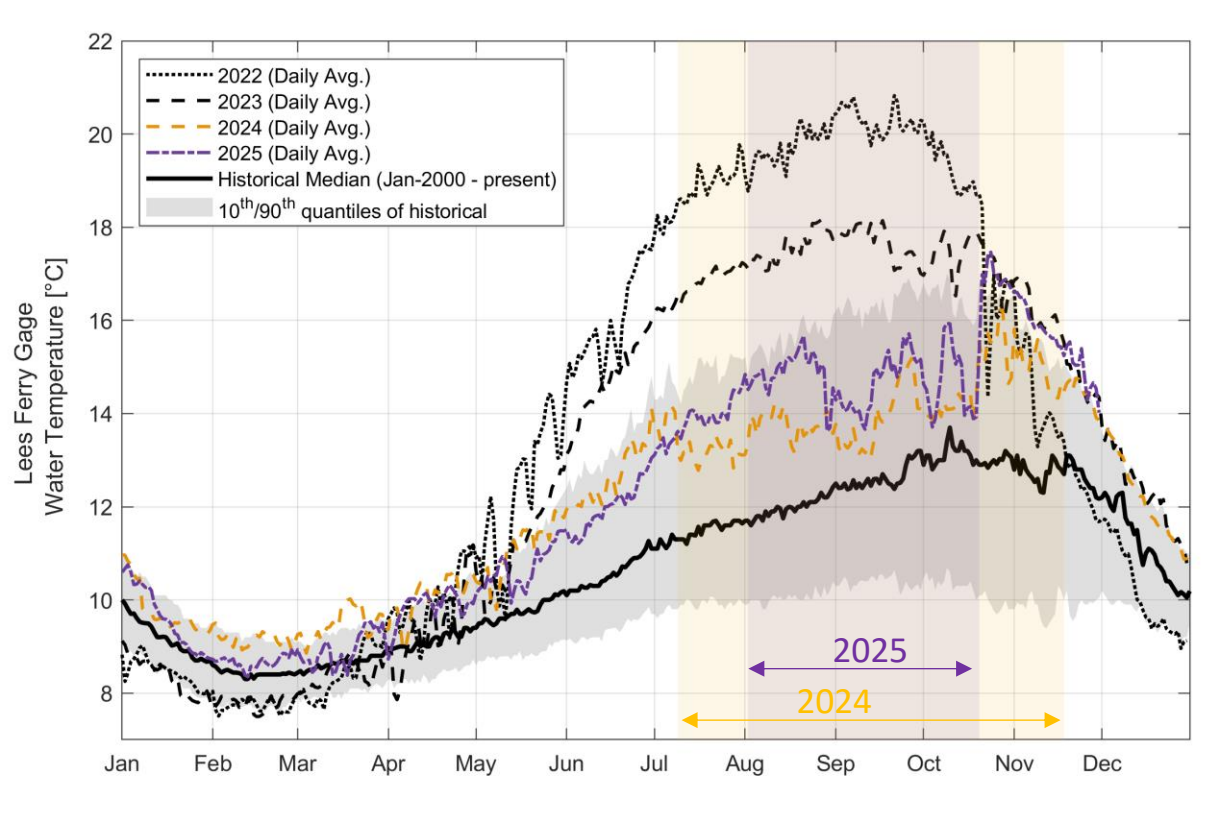
- ~$19M in costs to replace power
  - Saved WAPA $4M

2025

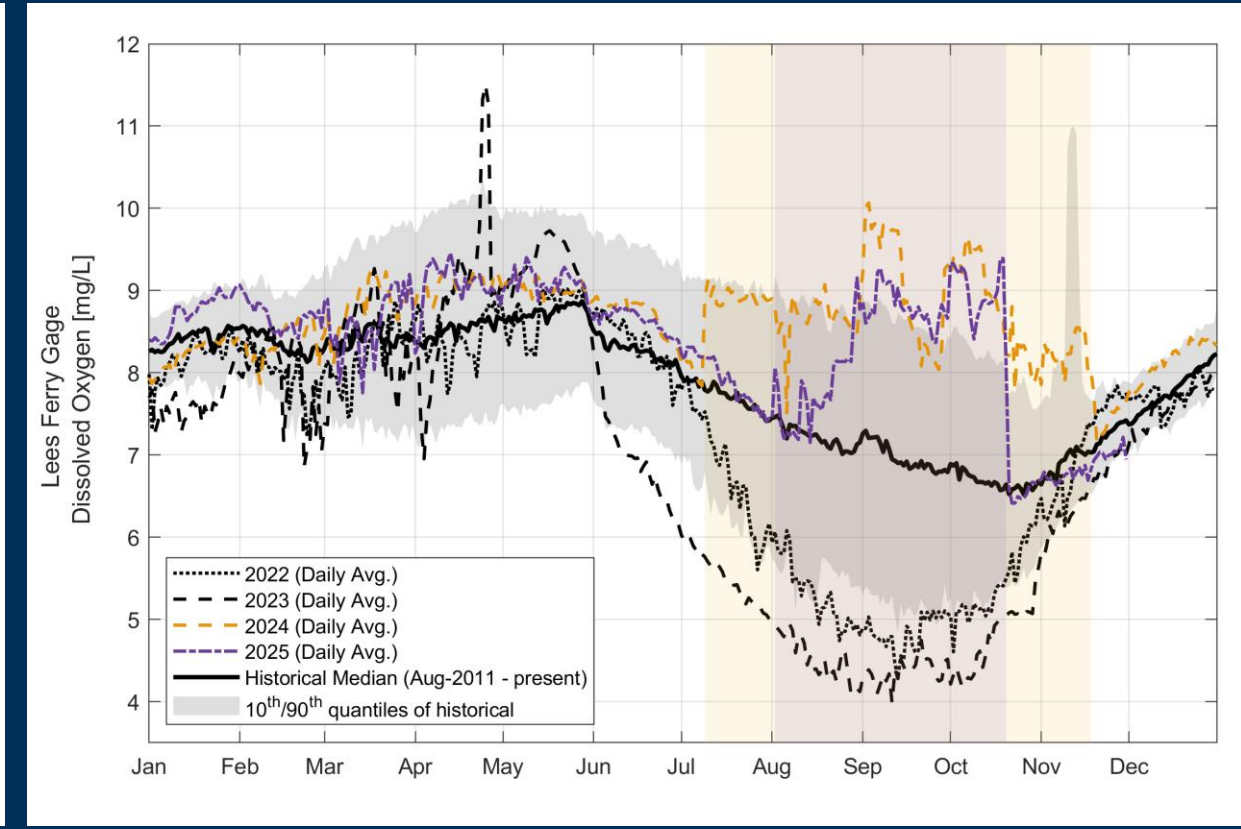


- ~$6.5M in costs to replace power

Effects on Water Quality

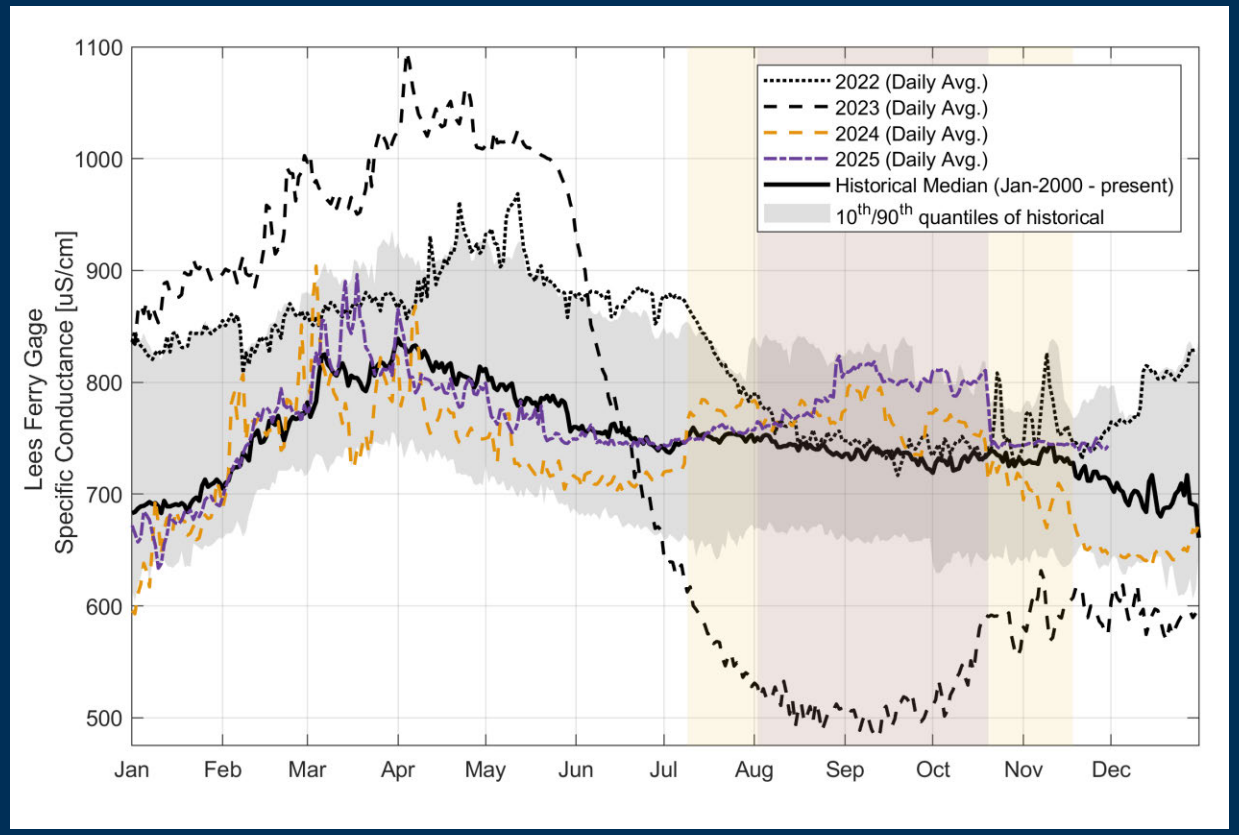


Temperature



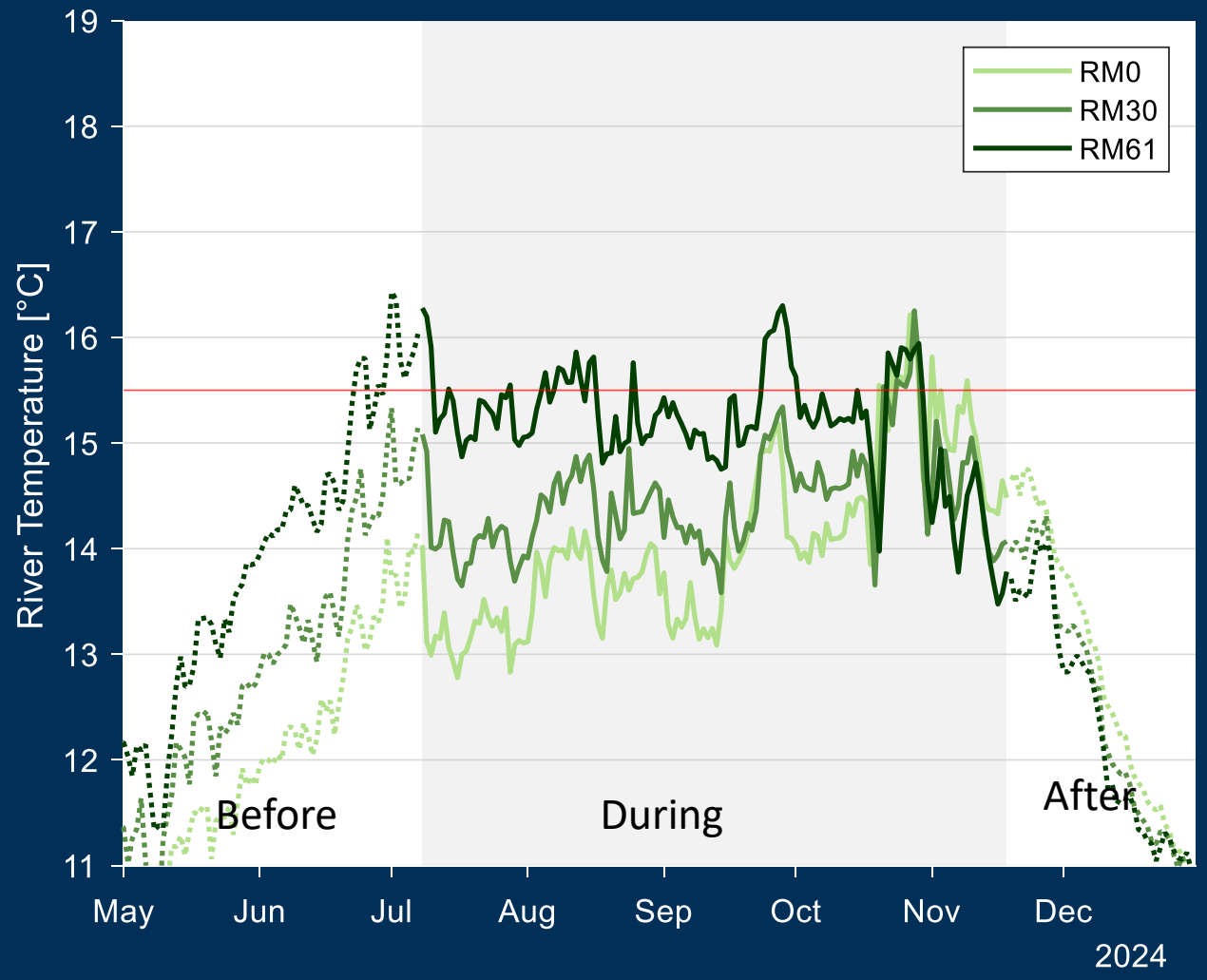
Dissolved Oxygen

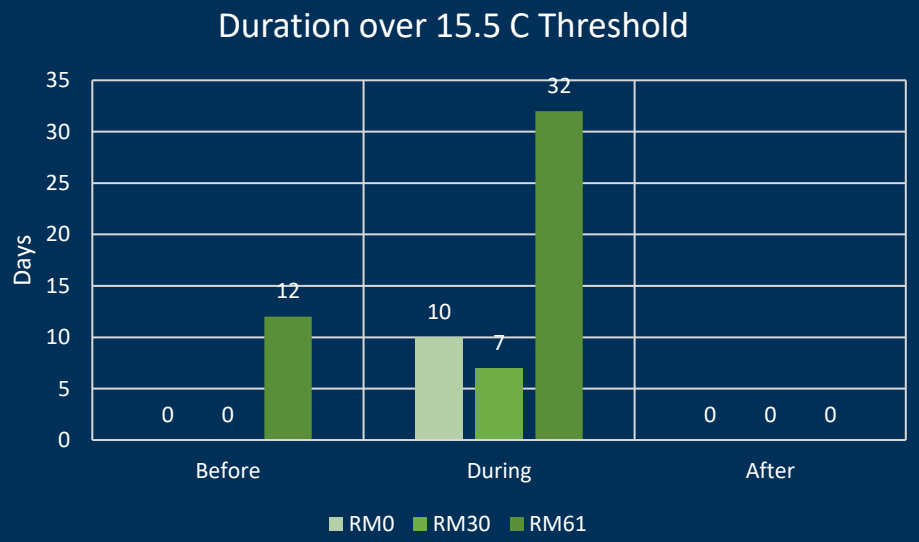
Effects on Specific Conductance

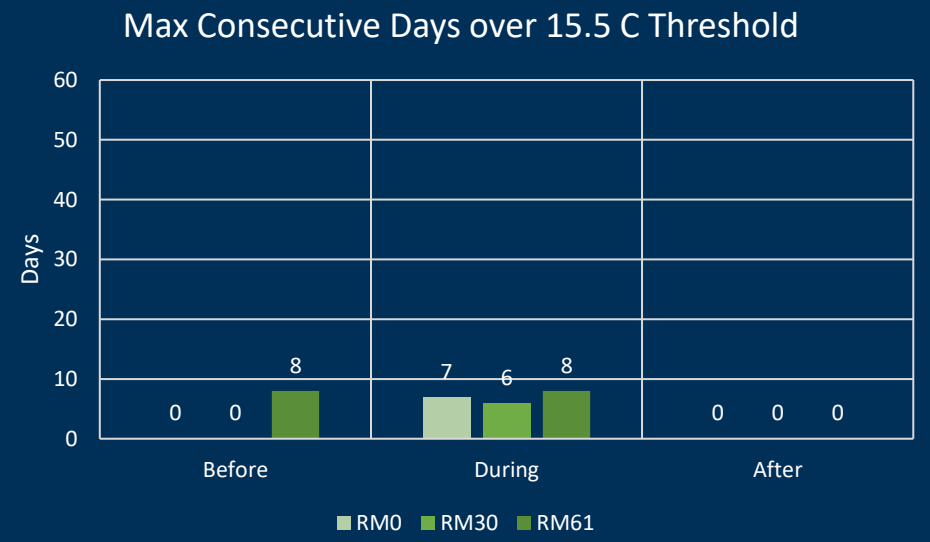


Specific Conductance

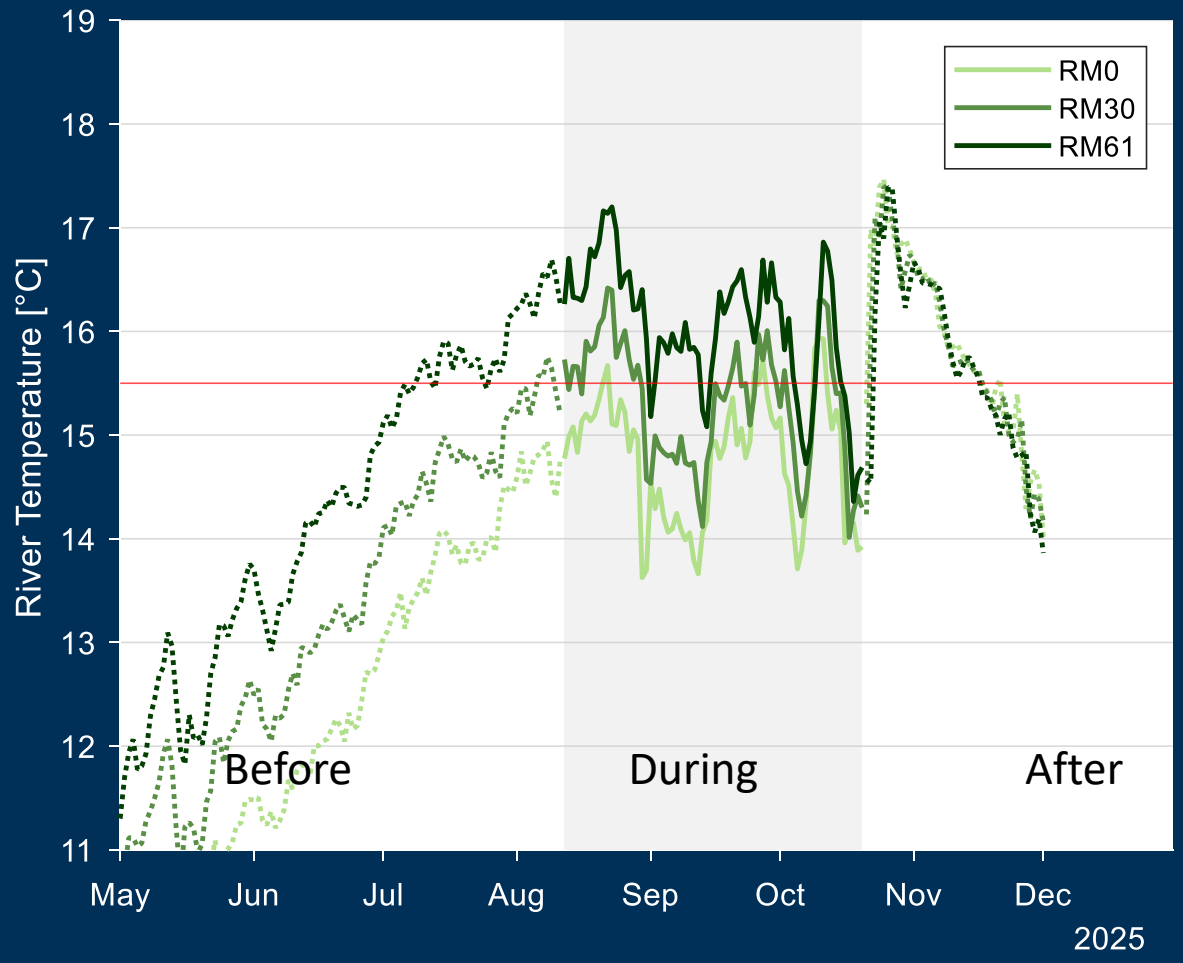
Summary (2024)

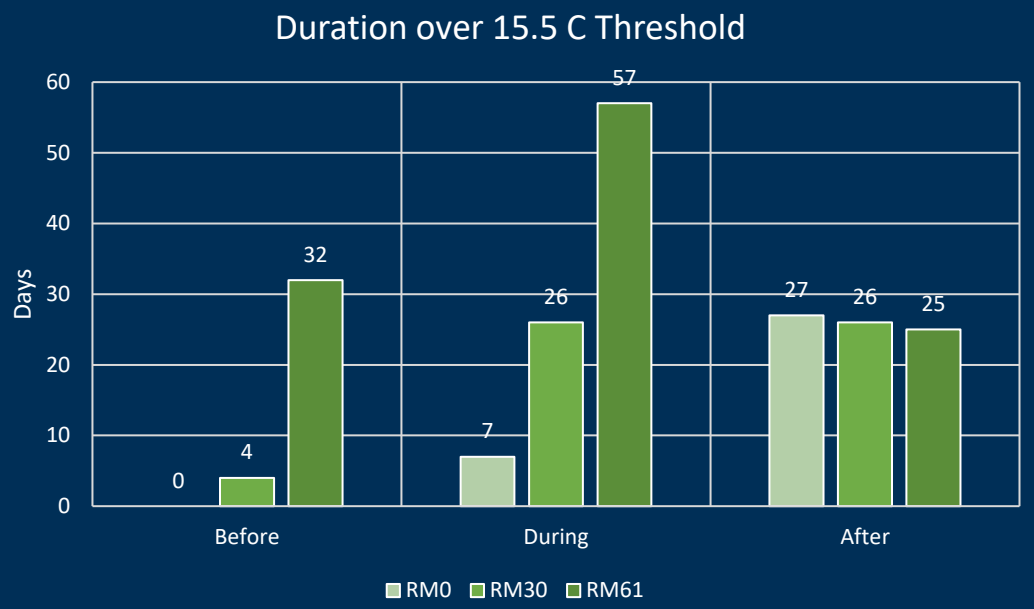


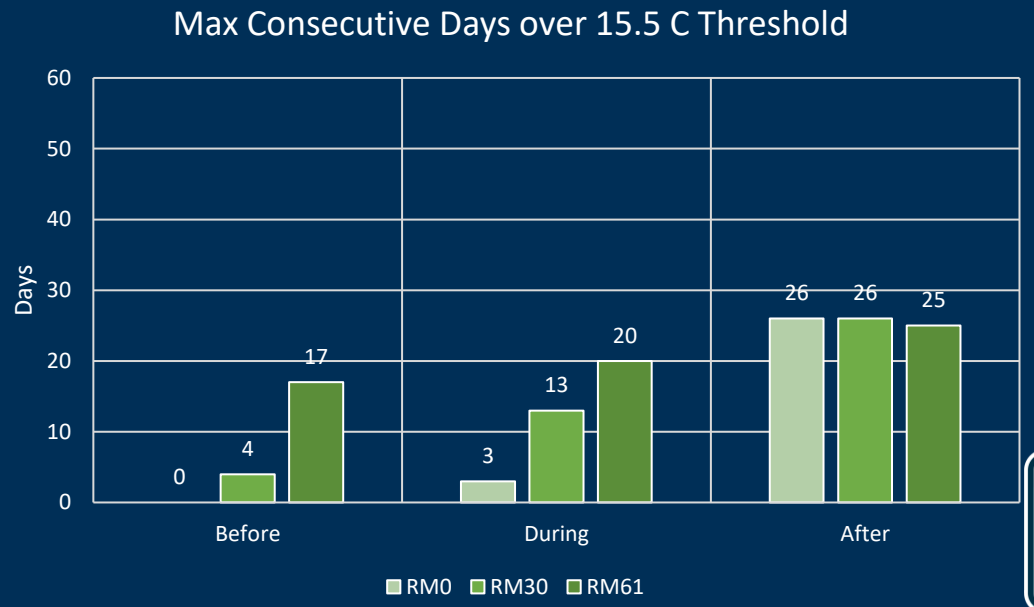




Summary (2025)







Preliminary Information-Subject to Revision. Not for Citation or Distribution.

Summary

	2024	2025
Dates	Jul. 8 – Nov. 18	Aug. 12 – Oct. 20
Duration (days)	133	63
Volume Bypassed (ac-ft)	893,877	372,873
Percent of Total Flow (%)	33.78 %	23.69 %
Cost of Replacement Power	$18.97 M	~ $6.5 M*

Questions? Bryce Mihalevich
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