

USBR WTMP Summary Report

Study: WTMP_American

Simulation: ResSim-May2024Fcst

Simulation Date: October 07, 2025 10:30

Report Date: October 08, 2025

TABLE OF CONTENTS

Introduction	1
Summary of Models	2
Iteration Summary	2
Folsom Lake Outflow Temperature Summary	3
American River at Watt Ave Temperature Summary	5
Iterations	7
Iteration 000030: American River System Water Temperature Summary	7
Iteration 000040: American River System Water Temperature Summary	9
Iteration 000055: American River System Water Temperature Summary	11
Iteration 000060: American River System Water Temperature Summary	13

TABLE OF FIGURES

Figure 1. Folsom Lake outflow temperature, forecast runs (variable input) with percentile envelopes computed. ResSim.	3
Figure 2. Folsom Lake outflow temperature, forecast runs (variable input), by iteration. ResSim.	3
Figure 3. American River at Watt Ave temperature, forecast runs (variable input) with percentile envelopes computed. ResSim.	5
Figure 4. American River at Watt Ave temperature, forecast runs (variable input) by iteration. ResSim.	5
Figure 5. Iteration 000030: American River system water temperature, forecast 2024. ResSim.	7
Figure 6. Iteration 000030: Folsom Lake Buzz Plot 2024. ResSim.	8
Figure 7. Iteration 000040: American River system water temperature, forecast 2024. ResSim.	9
Figure 8. Iteration 000040: Folsom Lake Buzz Plot 2024. ResSim.	10
Figure 9. Iteration 000055: American River system water temperature, forecast 2024. ResSim.	11
Figure 10. Iteration 000055: Folsom Lake Buzz Plot 2024. ResSim.	12
Figure 11. Iteration 000060: American River system water temperature, forecast 2024. ResSim.	13
Figure 12. Iteration 000060: Folsom Lake Buzz Plot 2024. ResSim.	14

TABLE OF TABLES

Table 1. Iteration run information.	2
Table 2. Folsom Lake outflow temperature, iteration statistical summary, May - Nov 2024 (°F). ResSim.	4
Table 3. American River at Watt Ave temperature, iteration statistical summary, May - Nov 2024 (°F). ResSim.	6
Table 4. Iteration 000030 run information.	7
Table 5. Iteration 000030: American River stem water temperature statistical summary, May - Nov 2024 (°F). ResSim.	7
Table 6. Iteration 000030: American River system monthly average water temperature, 2024 (°F). ResSim.	8
Table 7. Iteration 000040 run information.	9
Table 8. Iteration 000040: American River stem water temperature statistical summary, May - Nov 2024 (°F). ResSim.	9
Table 9. Iteration 000040: American River system monthly average water temperature, 2024 (°F). ResSim.	10
Table 10. Iteration 000055 run information.	11
Table 11. Iteration 000055: American River stem water temperature statistical summary, May - Nov 2024 (°F). ResSim.	11
Table 12. Iteration 000055: American River system monthly average water temperature, 2024 (°F). ResSim.	12
Table 13. Iteration 000060 run information.	13
Table 14. Iteration 000060: American River stem water temperature statistical summary, May - Nov 2024 (°F). ResSim.	13
Table 15. Iteration 000060: American River system monthly average water temperature, 2024 (°F). ResSim.	14

Introduction

This report presents an overview of temperature model results for the following conditions.

Project: WTMP_American

Simulation: ResSim-May2024Fcst

Analysis Period: 14 May 2024, 00:00 to 30 November 2024, 24:00

Models:

Summary of Models: ResSim

Iterations: ResSim

Simulation Date: October 07, 2025 10:30

Report Date: October 08, 2025

Summary of Models

Iteration Summary

Iteration and member number are used interchangeably. The last two digits of the iteration/member number correspond to the ATSP Schedule number.

Table 1. Iteration run information.

Member Number	Operations	Met Set	Temp Target
30	May90_WY2024	Historic-2014	ATSP Leap Year - ScheduleA
40	May90_WY2024	Historic-2014	ATSP Leap Year - ScheduleA
55	May90_WY2024	Historic-2014	ATSP Leap Year - ScheduleA
60	May90_WY2024	Historic-2014	ATSP Leap Year - ScheduleA

Folsom Lake Outflow Temperature Summary

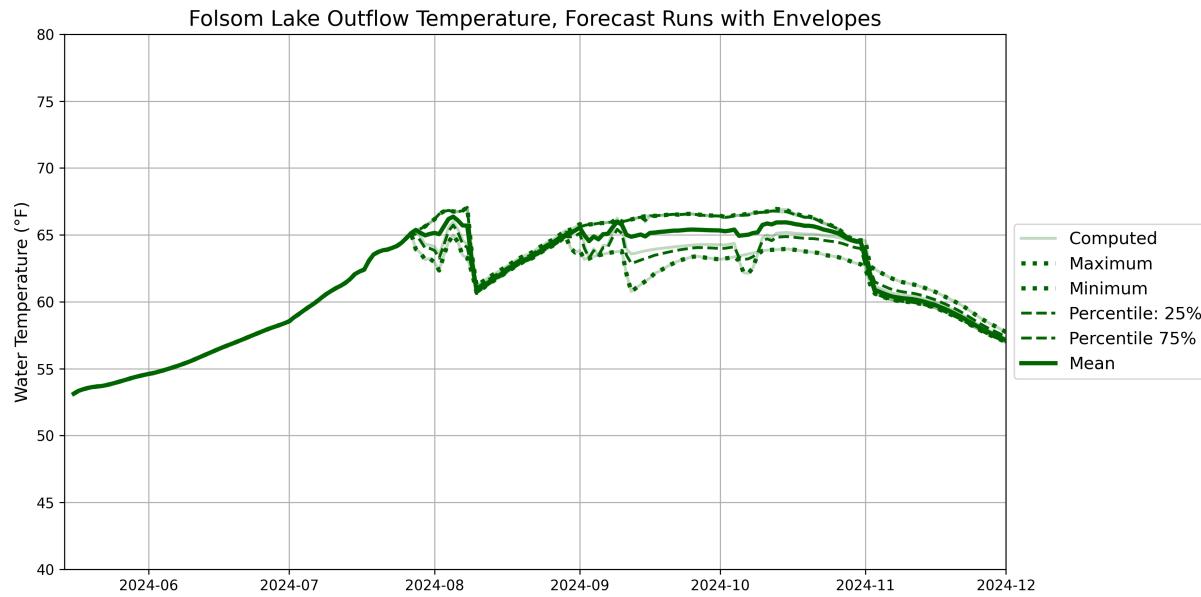


Figure 1. Folsom Lake outflow temperature, forecast runs (variable input) with percentile envelopes computed. ResSim.

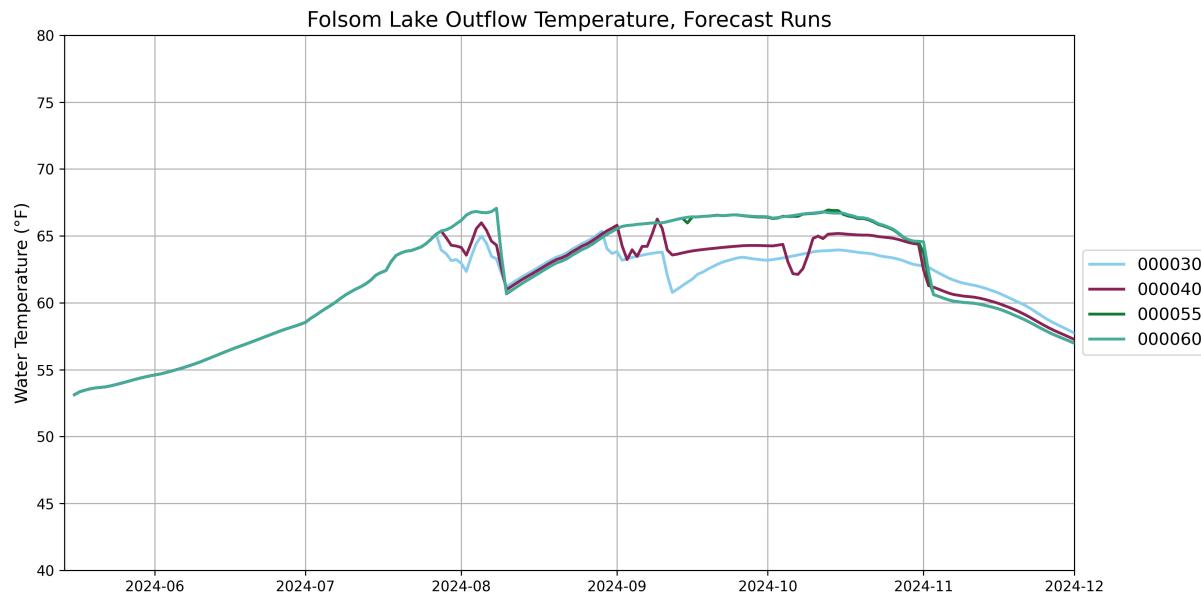


Figure 2. Folsom Lake outflow temperature, forecast runs (variable input), by iteration. ResSim.

Table 2. Folsom Lake outflow temperature, iteration statistical summary, May - Nov 2024 (°F). ResSim.

Iteration	Maximum	Mean	Minimum
000030	65.3	60.9	53.1
000040	66.3	61.2	53.1
000055	67.1	61.7	53.1
000060	67.1	61.7	53.1

American River at Watt Ave Temperature Summary

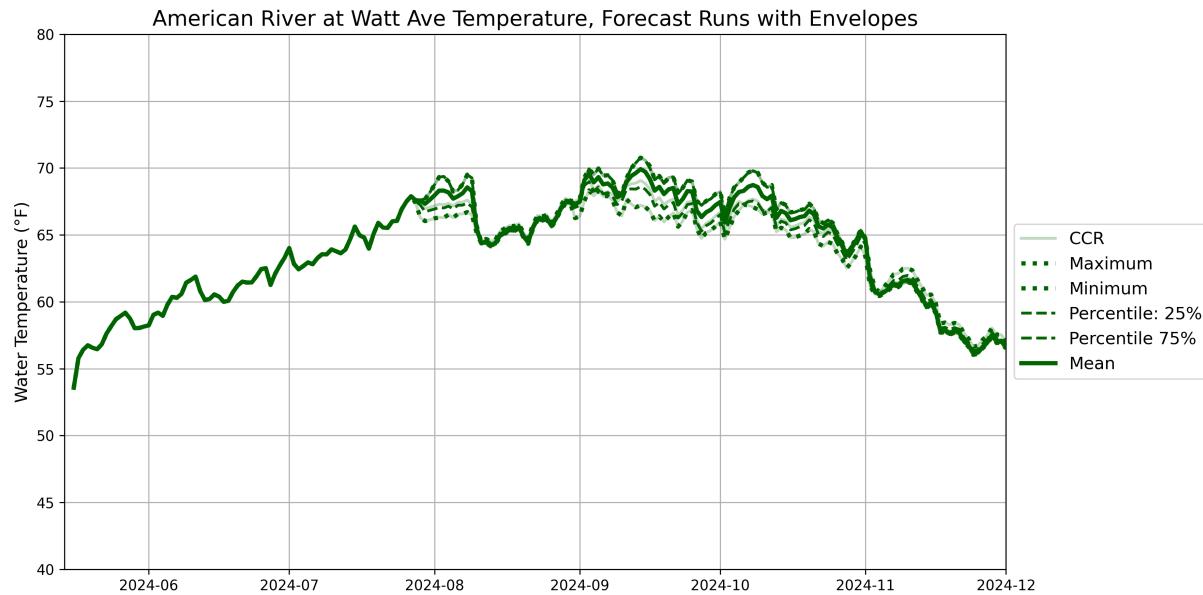


Figure 3. American River at Watt Ave temperature, forecast runs (variable input) with percentile envelopes computed. ResSim.

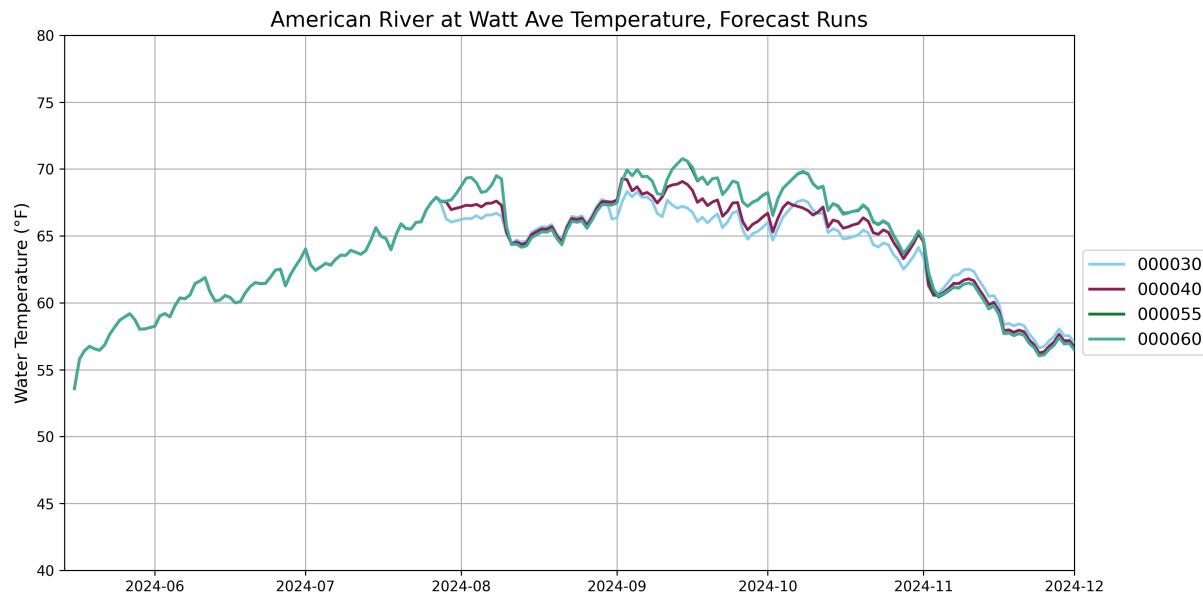


Figure 4. American River at Watt Ave temperature, forecast runs (variable input) by iteration. ResSim.

Table 3. American River at Watt Ave temperature, iteration statistical summary, May - Nov 2024 (°F). ResSim.

Iteration	Maximum	Mean	Minimum
000030	68.3	63.4	53.6
000040	69.3	63.6	53.6
000055	70.8	64.0	53.6
000060	70.8	64.0	53.6

Iterations

Iteration 000030: American River System Water Temperature Summary

American River system results are presented as outflow from Folsom Lake and flow in the American River at Hazel and Watt avenues.

Table 4. Iteration 000030 run information.

Member Number	Operations	Met Set	Temp Target
30	May90_WY2024	Historic-2014	ATSP Leap Year - ScheduleA

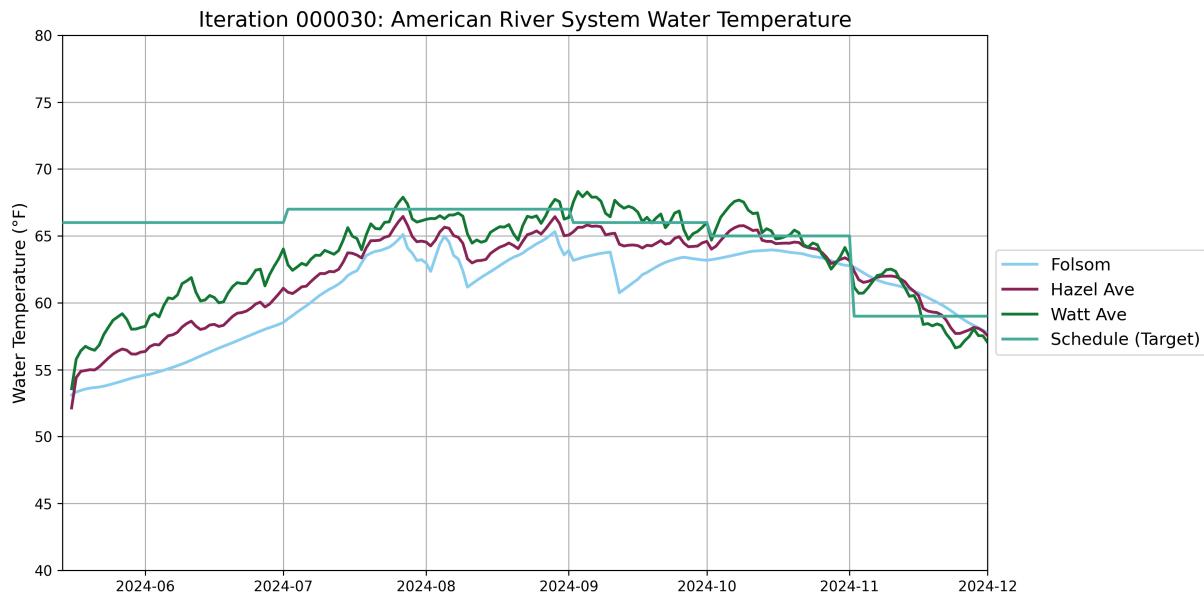


Figure 5. Iteration 000030: American River system water temperature, forecast 2024. ResSim.

Table 5. Iteration 000030: American River stem water temperature statistical summary, May - Nov 2024 (°F). ResSim.

Location	Maximum	Mean	Minimum
Folsom	65.3	60.9	53.1
Hazel	66.5	62.1	52.1
Watt	68.3	63.4	53.6
Target	67.0	65.1	59.0

Table 6. Iteration 000030: American River system monthly average water temperature, 2024 (°F). ResSim.

Month	Folsom (°F)	Hazel (°F)	Watt (°F)	Target (°F)
Apr	nan	nan	nan	nan
May	53.9	55.4	57.4	66.0
Jun	56.4	58.5	60.9	66.0
Jul	62.0	63.4	64.8	67.0
Aug	63.4	64.6	66.0	67.0
Sep	62.9	64.8	66.7	66.0
Oct	63.5	64.5	65.3	65.0

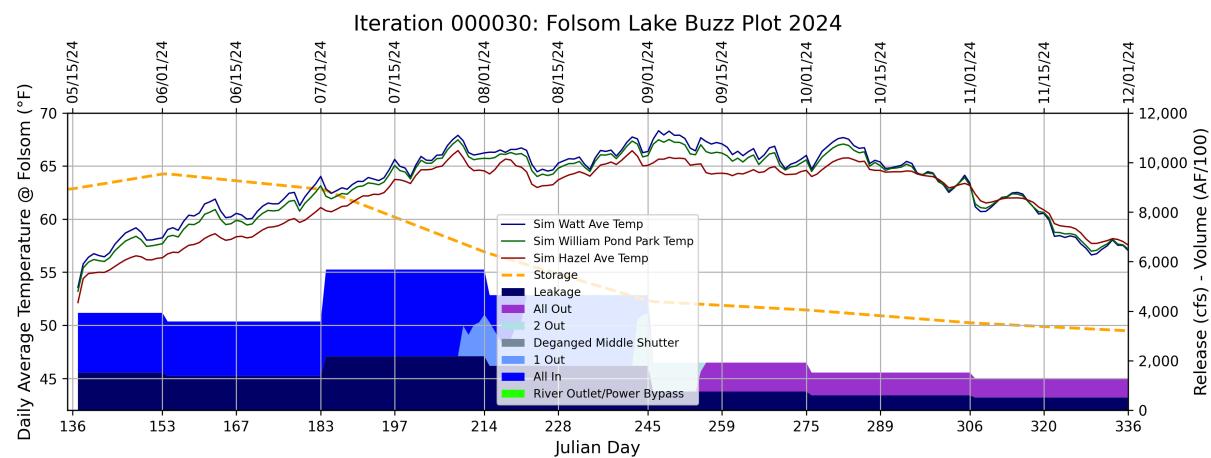


Figure 6. Iteration 000030: Folsom Lake Buzz Plot 2024. ResSim.

Iteration 000040: American River System Water Temperature Summary

American River system results are presented as outflow from Folsom Lake and flow in the American River at Hazel and Watt avenues.

Table 7. Iteration 000040 run information.

Member Number	Operations	Met Set	Temp Target
40	May90_WY2024	Historic-2014	ATSP Leap Year - ScheduleA

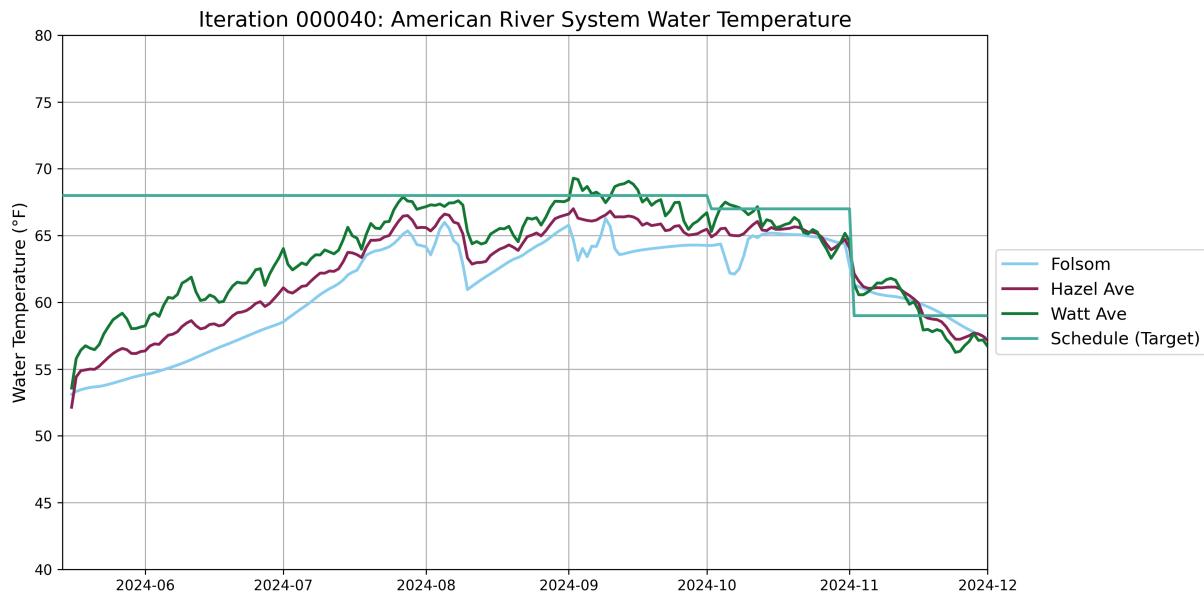


Figure 7. Iteration 000040: American River system water temperature, forecast 2024. ResSim.

Table 8. Iteration 000040: American River stem water temperature statistical summary, May - Nov 2024 (°F). ResSim.

Location	Maximum	Mean	Minimum
Folsom	66.3	61.2	53.1
Hazel	67.0	62.4	52.1
Watt	69.3	63.6	53.6
Target	68.0	66.5	59.0

Table 9. Iteration 000040: American River system monthly average water temperature, 2024 (°F). ResSim.

Month	Folsom (°F)	Hazel (°F)	Watt (°F)	Target (°F)
Apr	nan	nan	nan	nan
May	53.9	55.4	57.4	68.0
Jun	56.4	58.5	60.9	68.0
Jul	62.2	63.5	64.9	68.0
Aug	63.6	64.9	66.2	68.0
Sep	64.2	66.0	67.7	68.0
Oct	64.5	65.2	65.9	67.0

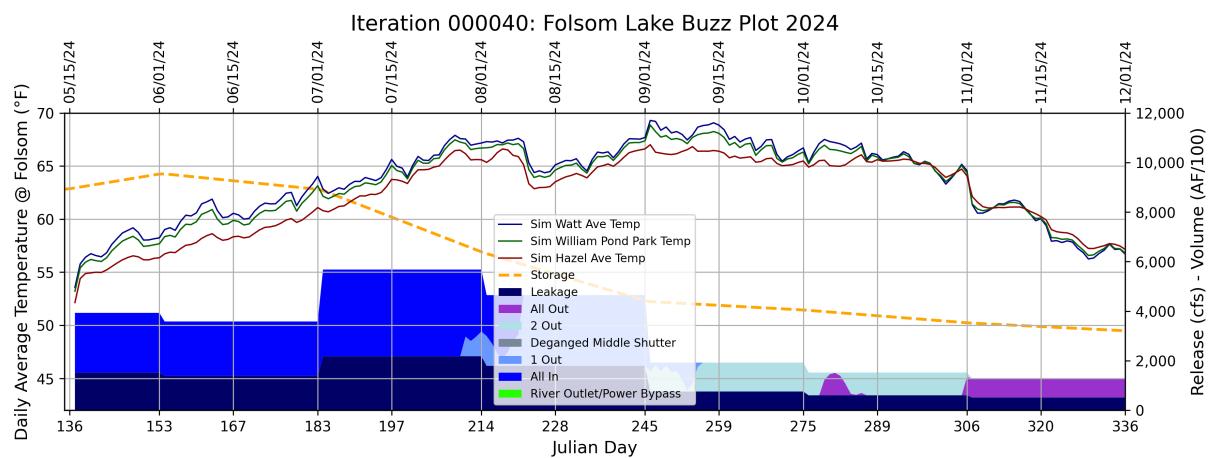


Figure 8. Iteration 000040: Folsom Lake Buzz Plot 2024. ResSim.

Iteration 000055: American River System Water Temperature Summary

American River system results are presented as outflow from Folsom Lake and flow in the American River at Hazel and Watt avenues.

Table 10. Iteration 000055 run information.

Member Number	Operations	Met Set	Temp Target
55	May90_WY2024	Historic-2014	ATSP Leap Year - ScheduleA

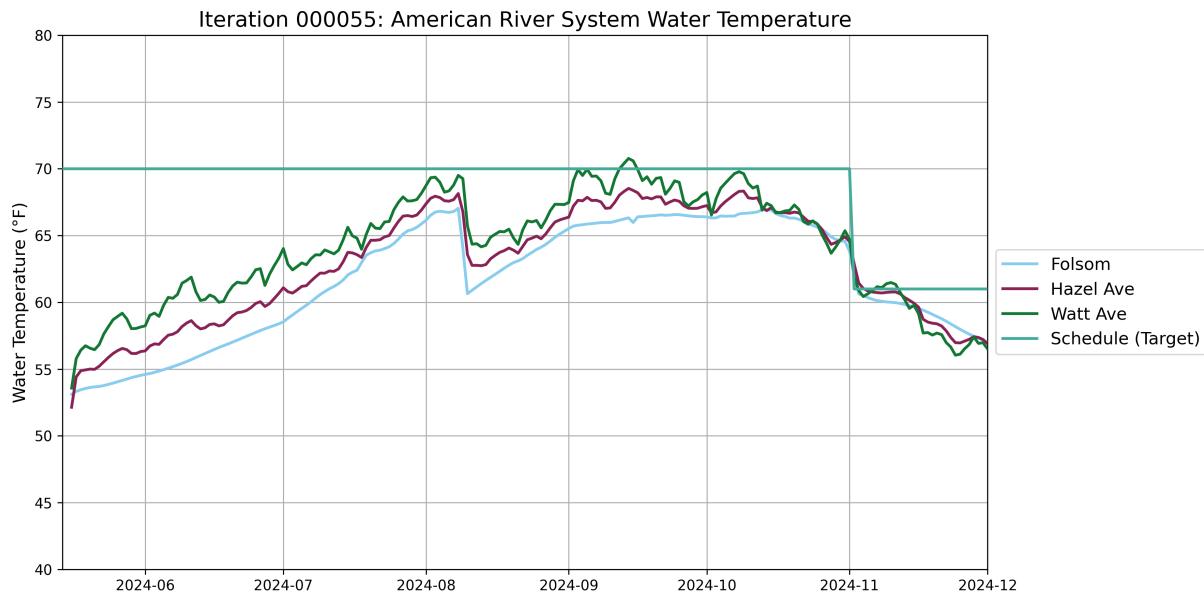


Figure 9. Iteration 000055: American River system water temperature, forecast 2024. ResSim.

Table 11. Iteration 000055: American River stem water temperature statistical summary, May - Nov 2024 (°F). ResSim.

Location	Maximum	Mean	Minimum
Folsom	67.0	61.7	53.1
Hazel	68.5	62.8	52.1
Watt	70.8	64.0	53.6
Target	70.0	68.7	61.0

Table 12. Iteration 000055: American River system monthly average water temperature, 2024 (°F). ResSim.

Month	Folsom (°F)	Hazel (°F)	Watt (°F)	Target (°F)
Apr	nan	nan	nan	nan
May	53.9	55.4	57.4	70.0
Jun	56.4	58.5	60.9	70.0
Jul	62.3	63.6	65.0	70.0
Aug	64.0	65.2	66.5	70.0
Sep	66.2	67.6	69.0	70.0
Oct	66.1	66.6	67.1	70.0

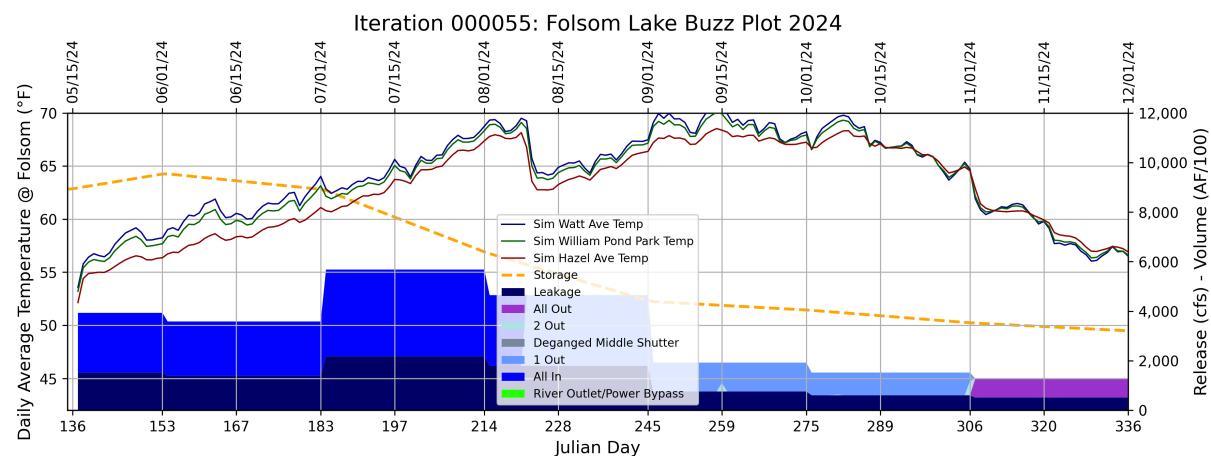


Figure 10. Iteration 000055: Folsom Lake Buzz Plot 2024. ResSim.

Iteration 000060: American River System Water Temperature Summary

American River system results are presented as outflow from Folsom Lake and flow in the American River at Hazel and Watt avenues.

Table 13. Iteration 000060 run information.

Member Number	Operations	Met Set	Temp Target
60	May90_WY2024	Historic-2014	ATSP Leap Year - ScheduleA

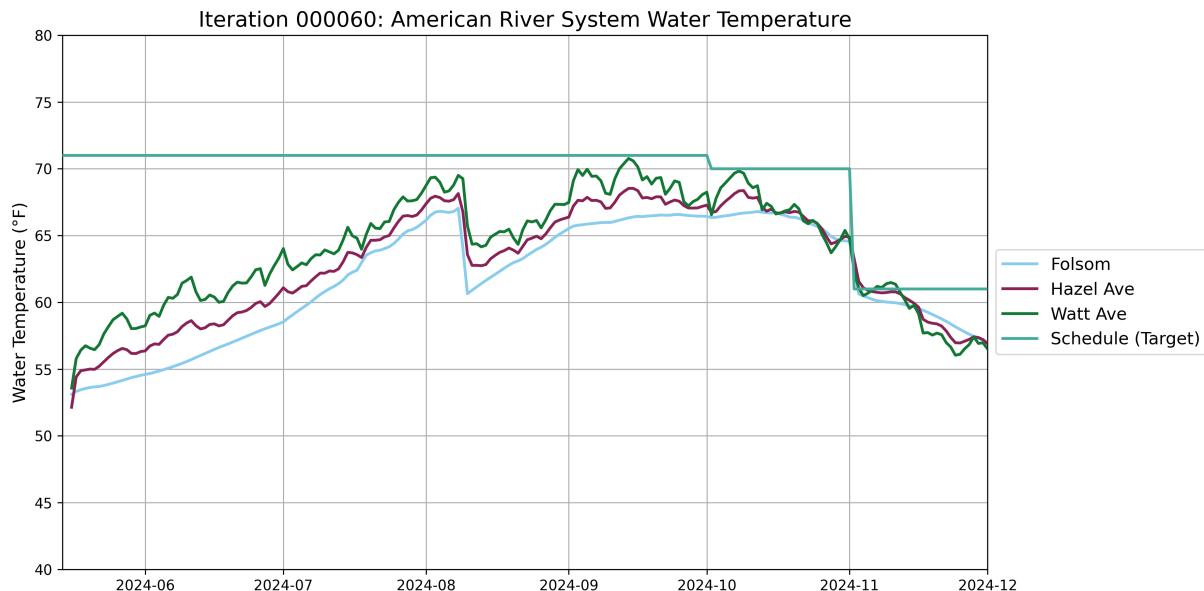


Figure 11. Iteration 000060: American River system water temperature, forecast 2024. ResSim.

Table 14. Iteration 000060: American River stem water temperature statistical summary, May - Nov 2024 (°F). ResSim.

Location	Maximum	Mean	Minimum
Folsom	67.0	61.7	53.1
Hazel	68.5	62.9	52.1
Watt	70.8	64.0	53.6
Target	71.0	69.4	61.0

Table 15. Iteration 000060: American River system monthly average water temperature, 2024 (°F). ResSim.

Month	Folsom (°F)	Hazel (°F)	Watt (°F)	Target (°F)
Apr	nan	nan	nan	nan
May	53.9	55.4	57.4	71.0
Jun	56.4	58.5	60.9	71.0
Jul	62.3	63.6	65.0	71.0
Aug	64.0	65.2	66.5	71.0
Sep	66.2	67.6	69.0	71.0
Oct	66.2	66.7	67.1	70.0

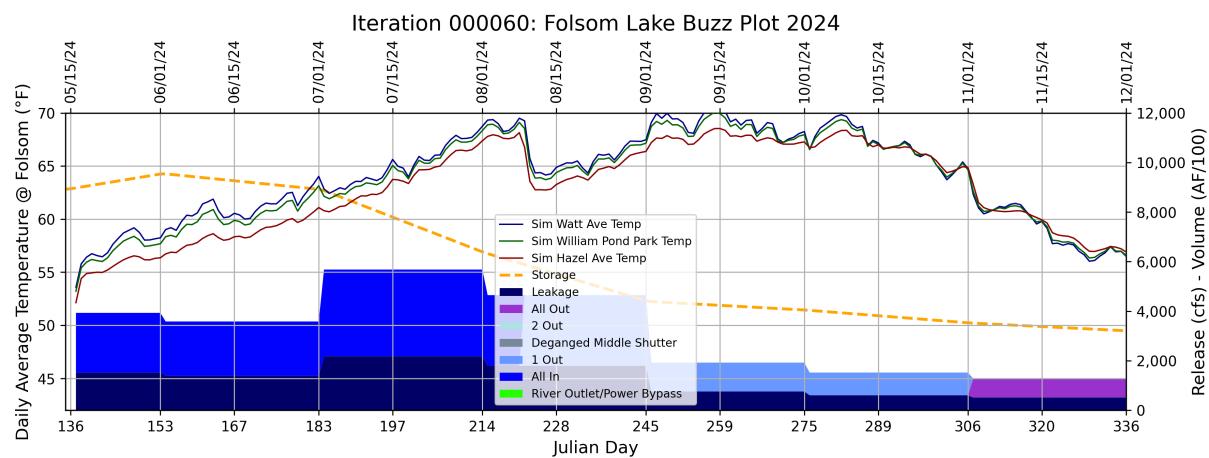


Figure 12. Iteration 000060: Folsom Lake Buzz Plot 2024. ResSim.