



Photo Credit: Jake Ohlson, NPS



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Slough Modification Overview

Technical Work Group, July 9, 2025

Matt O'Neill, Bureau of Reclamation, Upper Colorado Basin



Demobilization May 31/June 1



Demobilization May 31/June 1



Completed project



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Slough water temps, NPS

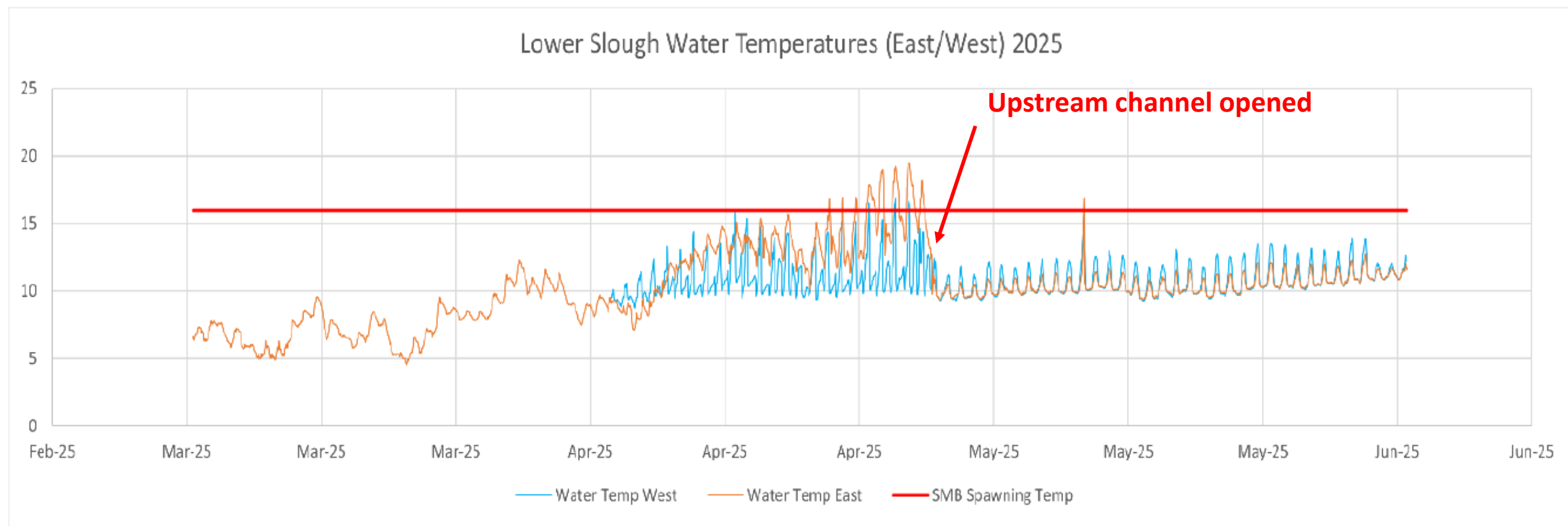


Figure 1. Temperatures within -12 Mile Slough from March - June 2025.



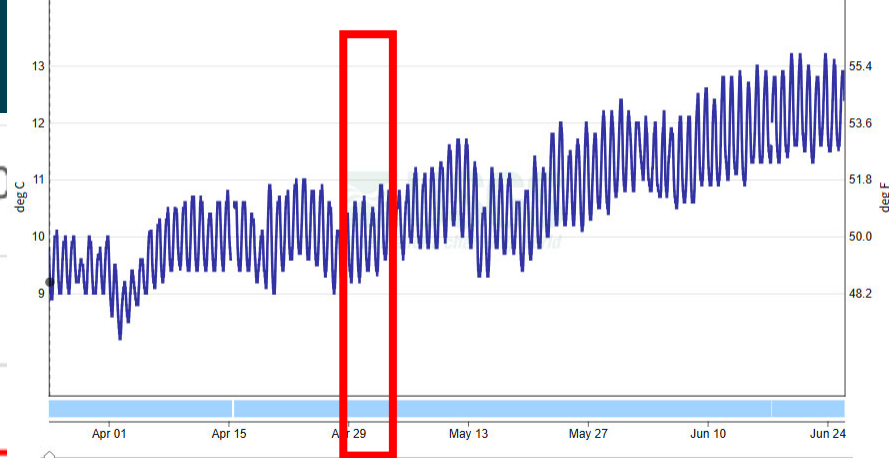
Water temps, NPS & USGS

Colorado River at Lees Ferry, AZ - 09380000

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- using custom time span -
March 25, 2025 - June 25, 2025
Temperature, water, degrees Celsius

9.2 deg C (48.6 deg F) - Mar 25, 2025 03:00:00 AM MST



Lower Slough Water Temperatures (East/West) 20

River temp 10C or less,
Slough temp nearing 16C

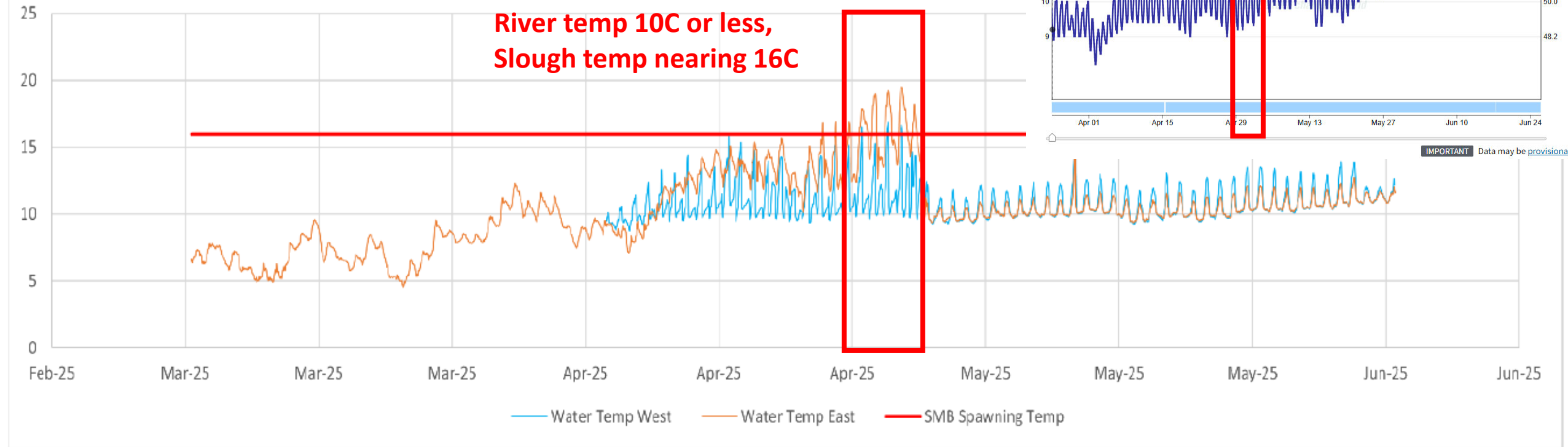
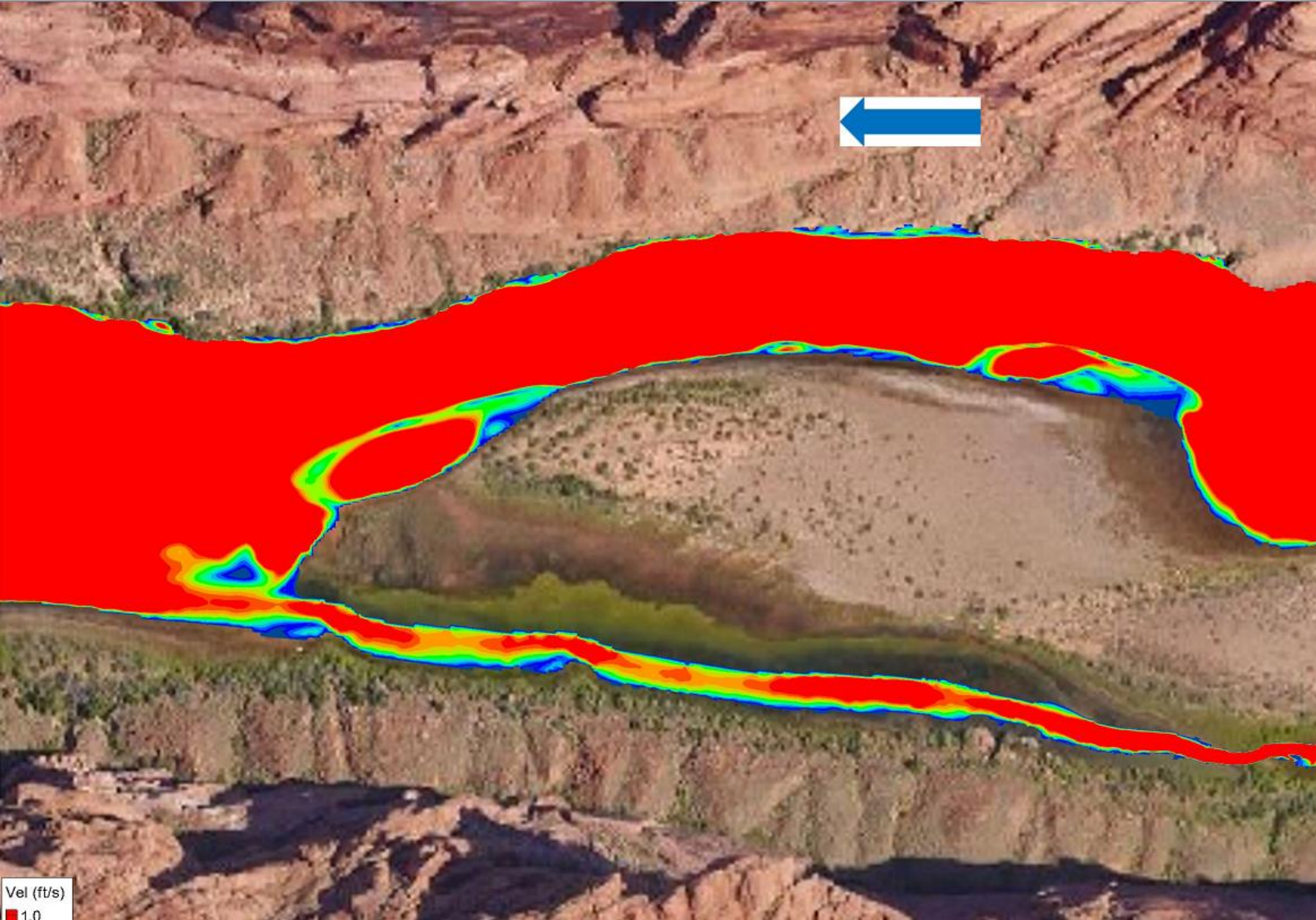


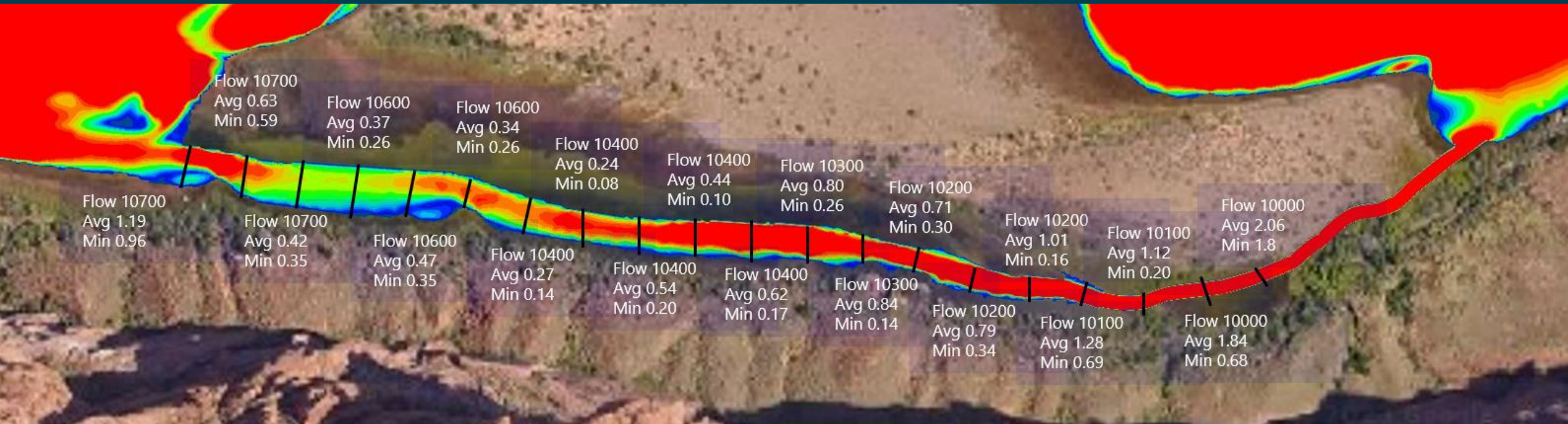
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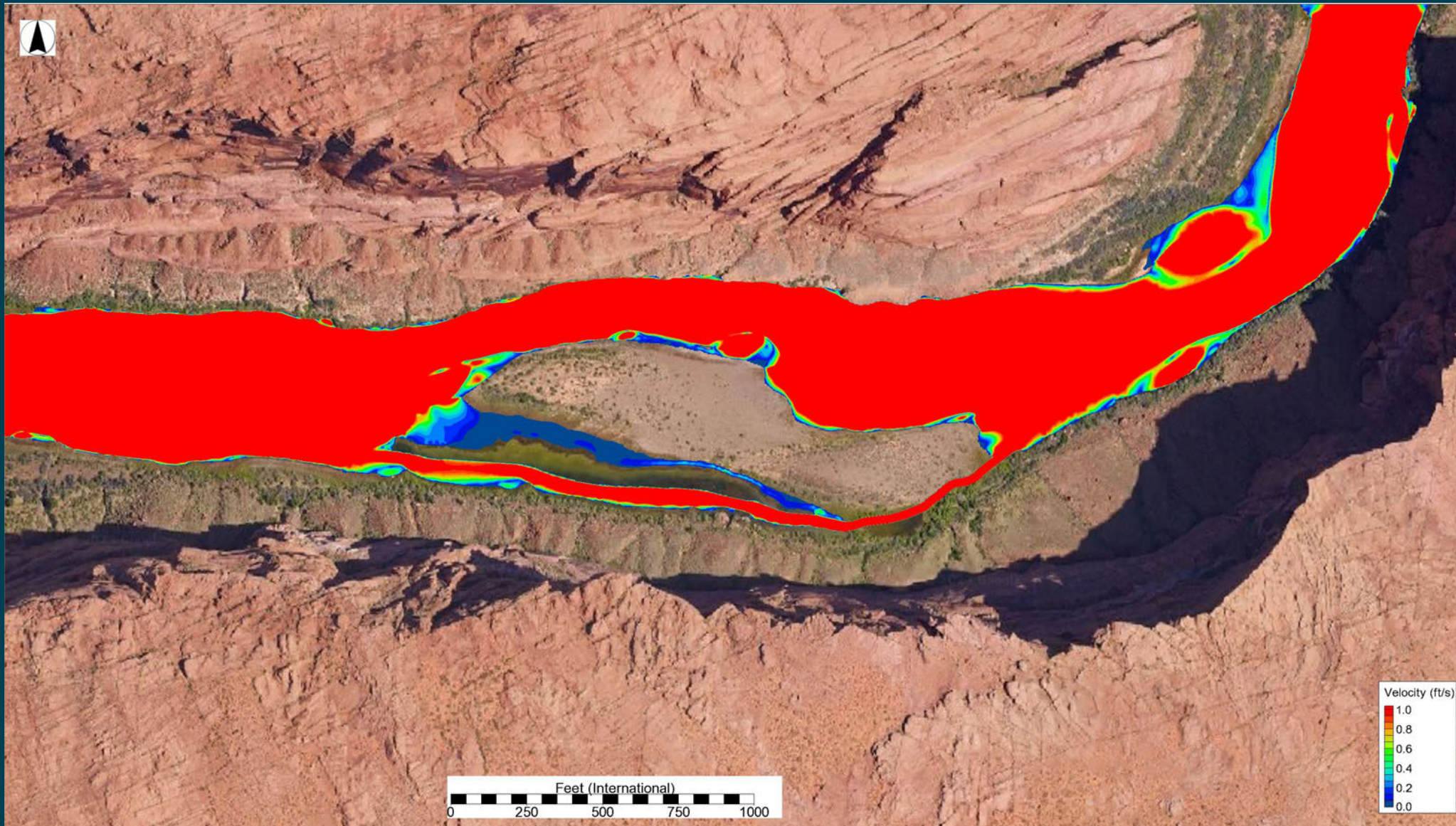
Modeled flow velocity, 11k CFS



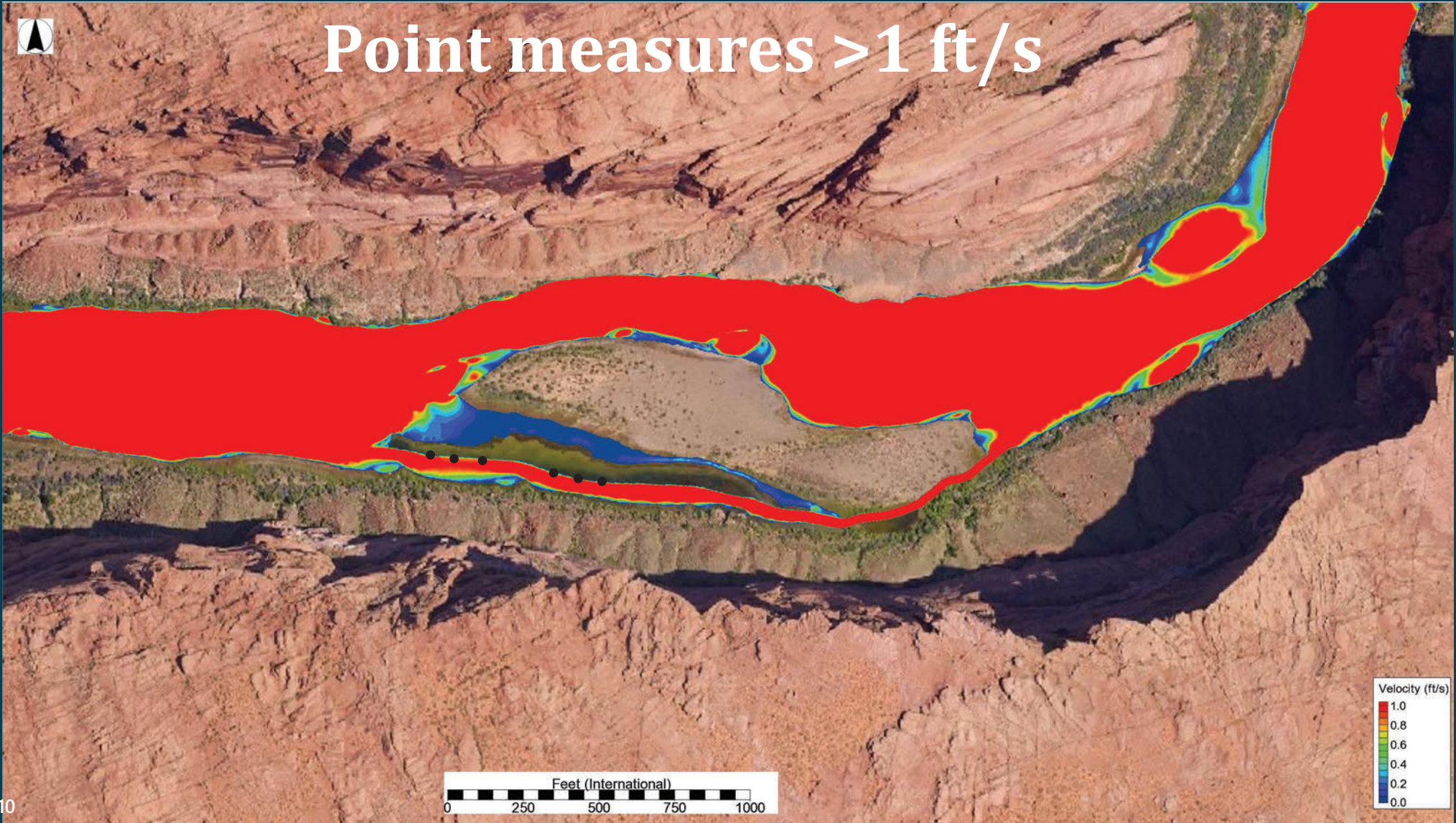
Measured Velocities 5/28/25
Modeled Discharge of 11,000 cfs
Realized Discharge (estimated)
10,000-10,700 CFS
Flow in CFS, Avg and Min velocity in feet/sec.



Modeled flow, 15k CFS



Point measures >1 ft/s



Velocities at higher flows

- Drifted through the channel around 13-14k CFS
- Boat traveled at greater than 1ft/s for the whole area (estimated)
- Benthic algae showed flow effects
- Smaller (absent?) eddies and still areas



Low velocity/1-2m depth, 11k CFS



Inundated bar, 15k CFS



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Conclusions

- Water velocities largely matching modeled velocities
- Slack areas and eddies at flows below 11k
- Temperature mixing appears effective regardless of flow
- Flows around 15k CFS appear much faster but will be hard to measure

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Acknowledgements

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