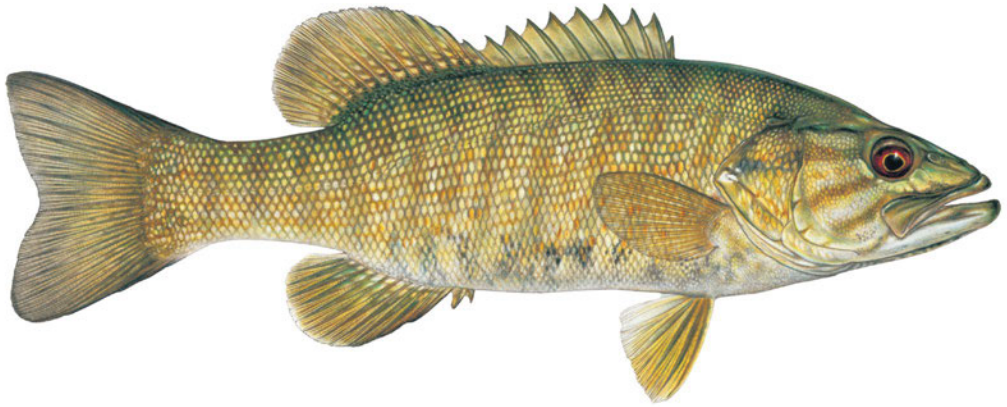
Flow Screening Tool

Lucas Bair
Drew Eppehimer
Charles B. Yackulic

U.S Department of the Interior
U.S. Geological Survey,
Southwest Biological Science Center,
Grand Canyon Monitoring and Research Center



July 9, 2025

Acknowledgements

Matija Pavičević, Jerry Wilhite, Craig Ellsworth, Bill Stewart, Jeremy Hammen, and the P & I Team

Glen Canyon Dam Adaptive Management Program

Overview:

Hydrology:

30 traces, April 2025 CRMMS

Most, Min, Max probable, May 2025 24-month study

Alternatives:

No Action

Cool Mix: full temperature period, Oct 20, Oct 1, Sept 15

Non-bypass: full temperature period, Oct 20, Oct 1, Sept 15

Target locations:

RM 0 (Lees Ferry)

RM 15

RM 30

RM 61 (LCR confluence)

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Experimental Flow Triggers and Offramps

- Alternatives were triggered for a given scenario when the 3-day mean of estimated temperature at the selected target RM exceeded 15.5°C.

- Flows were discontinued when the 3-day mean dropped below 15.5°C and were expected to remain below 15.5°C, or based on hard cut off dates for off-ramping:

  October 20
  October 1
  September 15

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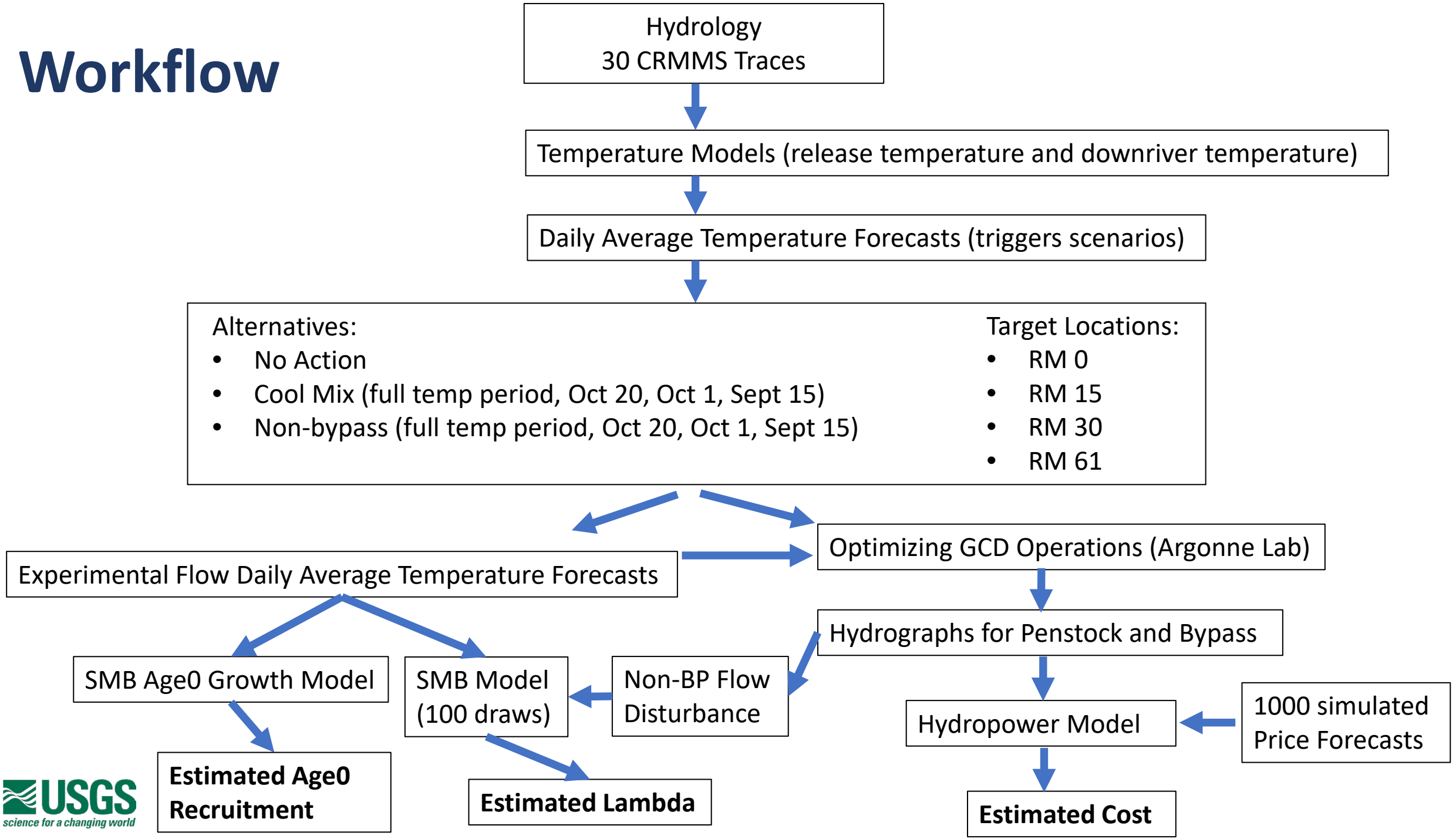
Brief Methods

Same modeling approaches used as in analyses for LTEMP sEIS with a few improvements:

- Lambda analysis incorporates demographic uncertainty.
- We assumed the -12 mile slough had zero spawning habitat.
- Incorporated new analysis to inform off ramps based on literature review.
  - More accurate predictions of growth of early life stages to predict recruitment to age 1.
  - Complimentary to lambda analysis but expected to be more accurate at marginal water temperatures.
- Hydrographs produced by Argonne account for within day timing of bypass to minimize costs while meeting daily temperature targets.
- Price estimates by GCMRC updated to more fully account for volatility and price uncertainty.

Workflow



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Questions?

Photo Credit: Richard McLeish

Lucas Bair
lbair@usgs.gov

Drew Eppehimer
deppehimer@usgs.gov

Charles B. Yackulic
cyackulic@usgs.gov

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