



— BUREAU OF —
RECLAMATION

Upper Basin Drought Response Operations Sensitivity Analysis

Comparison of June 2021 and August 2021 CRSS Results

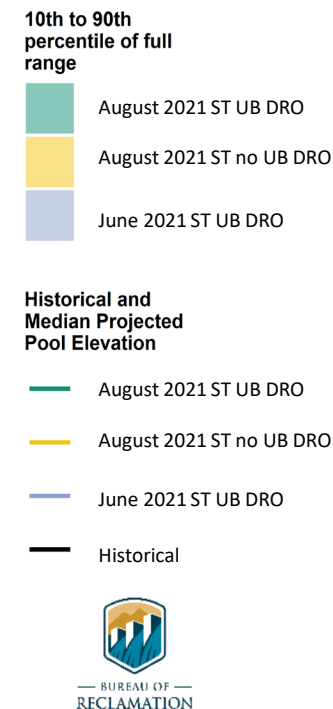
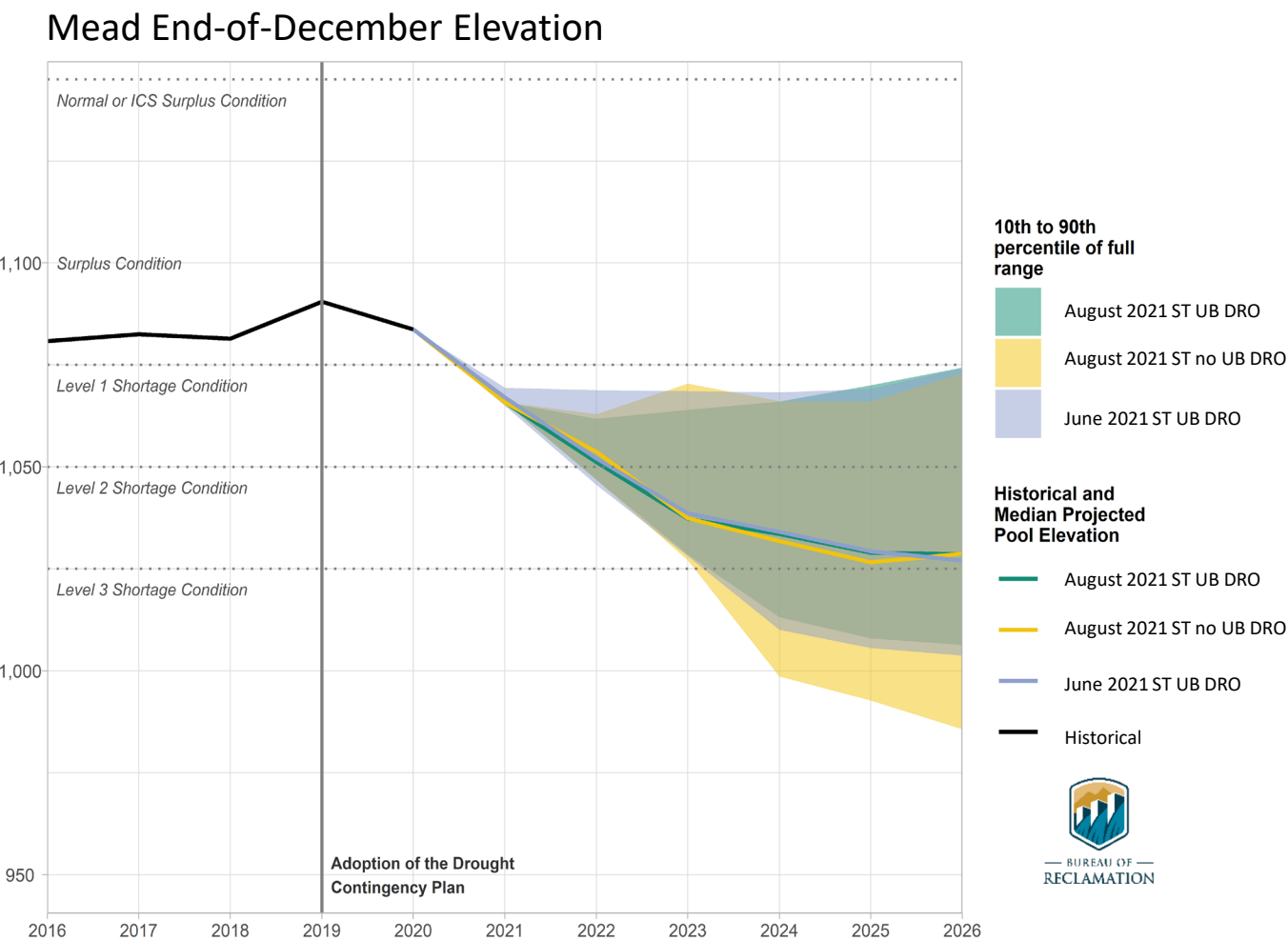
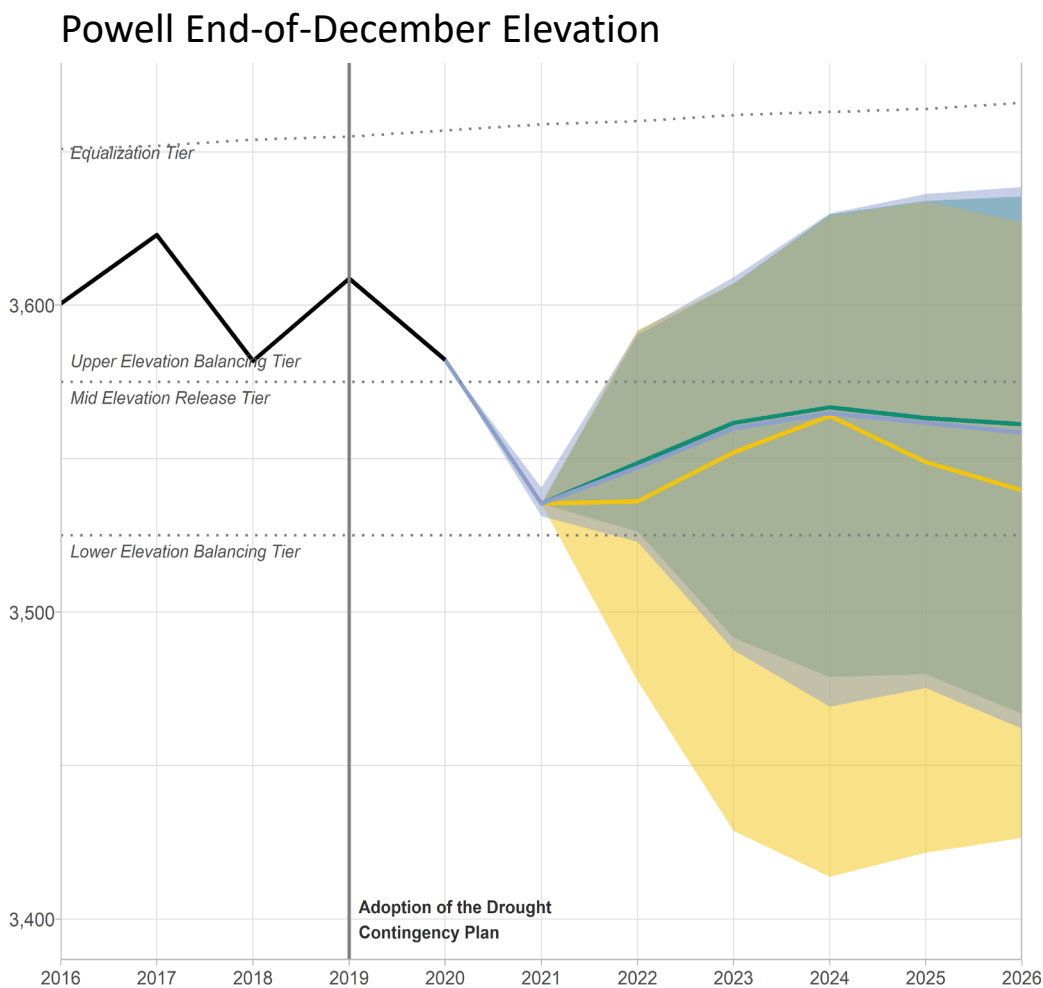
Overview

- This presentation provides information on the sensitivity to Lake Powell and Lake Mead projected elevations from changes in modeling assumptions regarding Upper Basin Drought Response Operations (UB DRO).
- As the Upper Basin States continue to work towards the development of a Drought Operations plan to govern potential future Drought Response Operations, the CRSS modeling assumptions regarding UB DRO used to generate the June 2021 Official Results have been removed from the August 2021 CRSS in order to provide a clearer representation of future risk.
- The presentation provides a comparison of the following modeled scenarios:
 - “June 2021 ST UB DRO” – the published official June 2021 results that include assumptions for UB DRO
 - “August 2021 ST UB DRO” – August 2021 results that include assumptions for UB DRO
 - Comparison to “June 2021 ST UB DRO” provides the sensitivity of changes other than UB DRO assumptions. These are mostly changes in projected EOCY 2021 reservoir elevations (which are used to initialize the model run) between June and August.
 - “August 2021 ST no UB DRO” – the published official August 2021 results that does not include UB DRO
- All other modeling assumptions have been held constant, including those regarding future hydrology. Projections assume 1988-2019 resampled natural flows, or “Stress Test Hydrology” for future hydrology.



June 2021 with UB DRO vs. August 2021 with and without UB DRO

Stress Test Hydrology

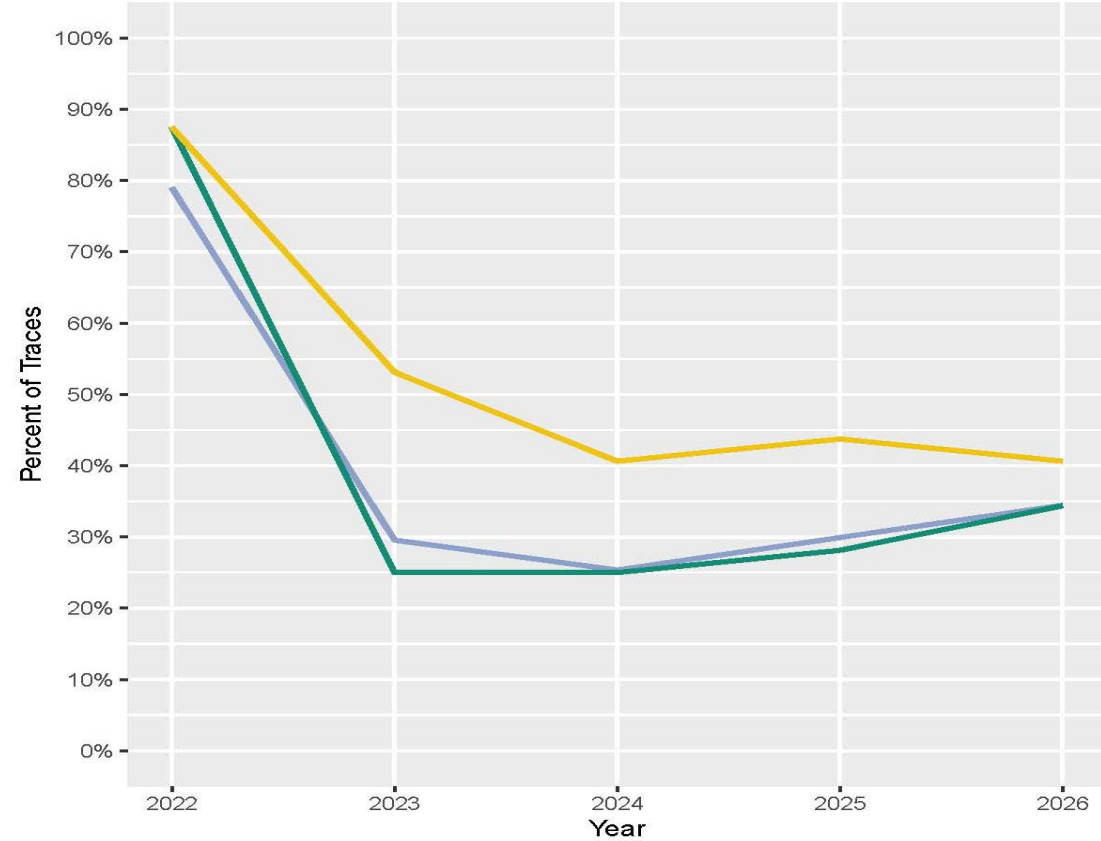


June 2021 with UB DRO vs. August 2021 with and without UB DRO

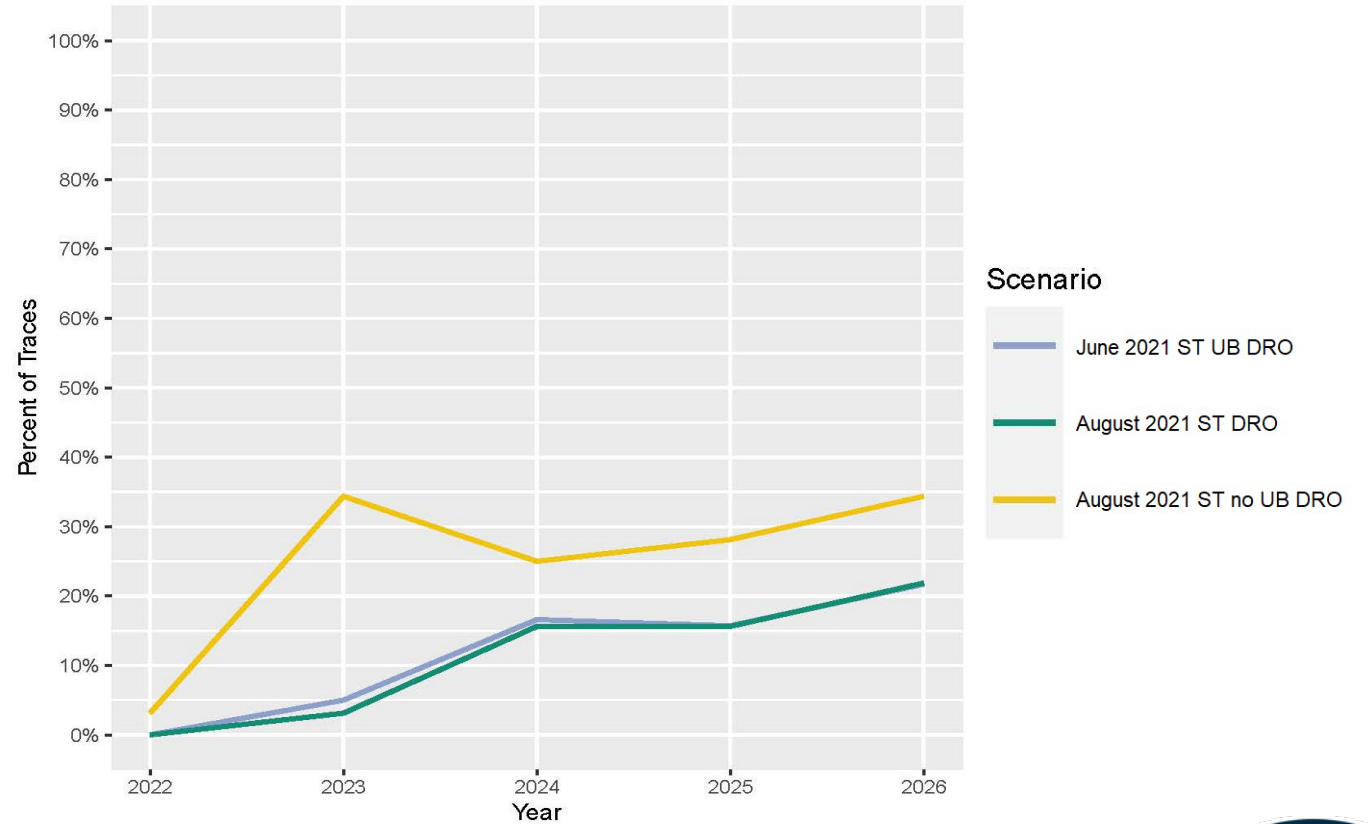
Stress Test Hydrology

Lake Powell:

Percent of traces less than elevation 3,525' in any water year



Percent of traces less than elevation 3,490' (power pool) in any water year

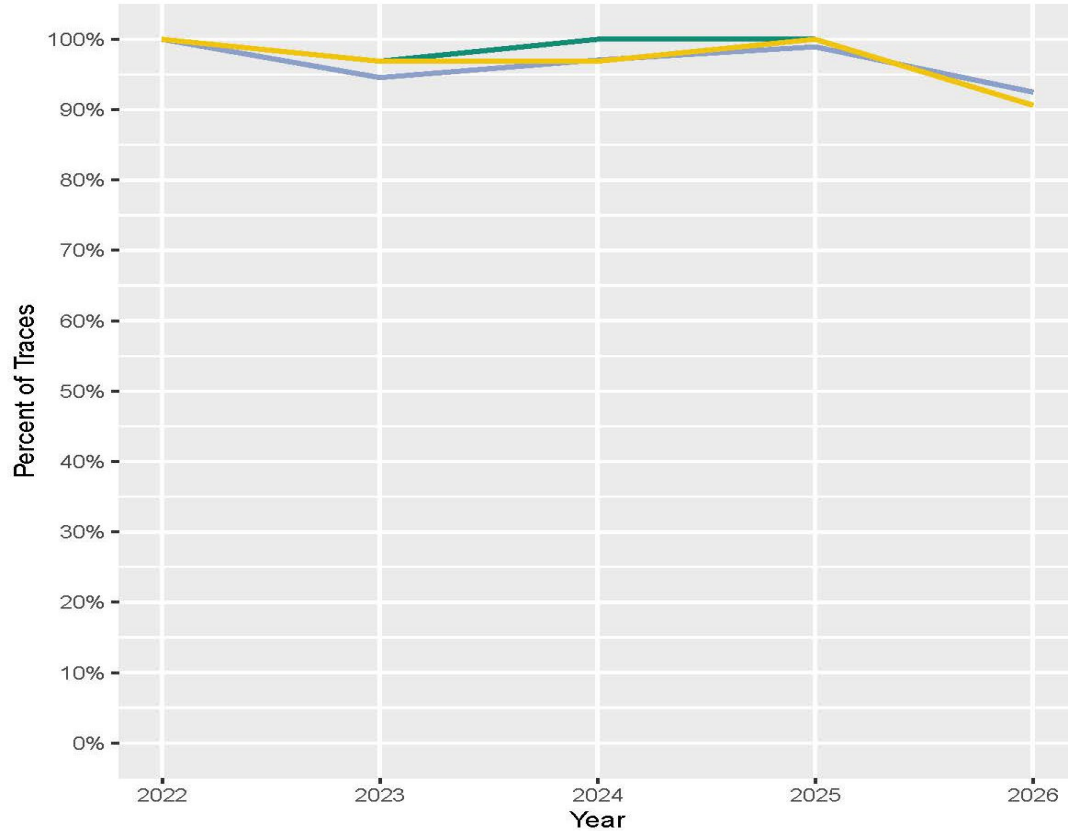


June 2021 with UB DRO vs. August 2021 with and without UB DRO

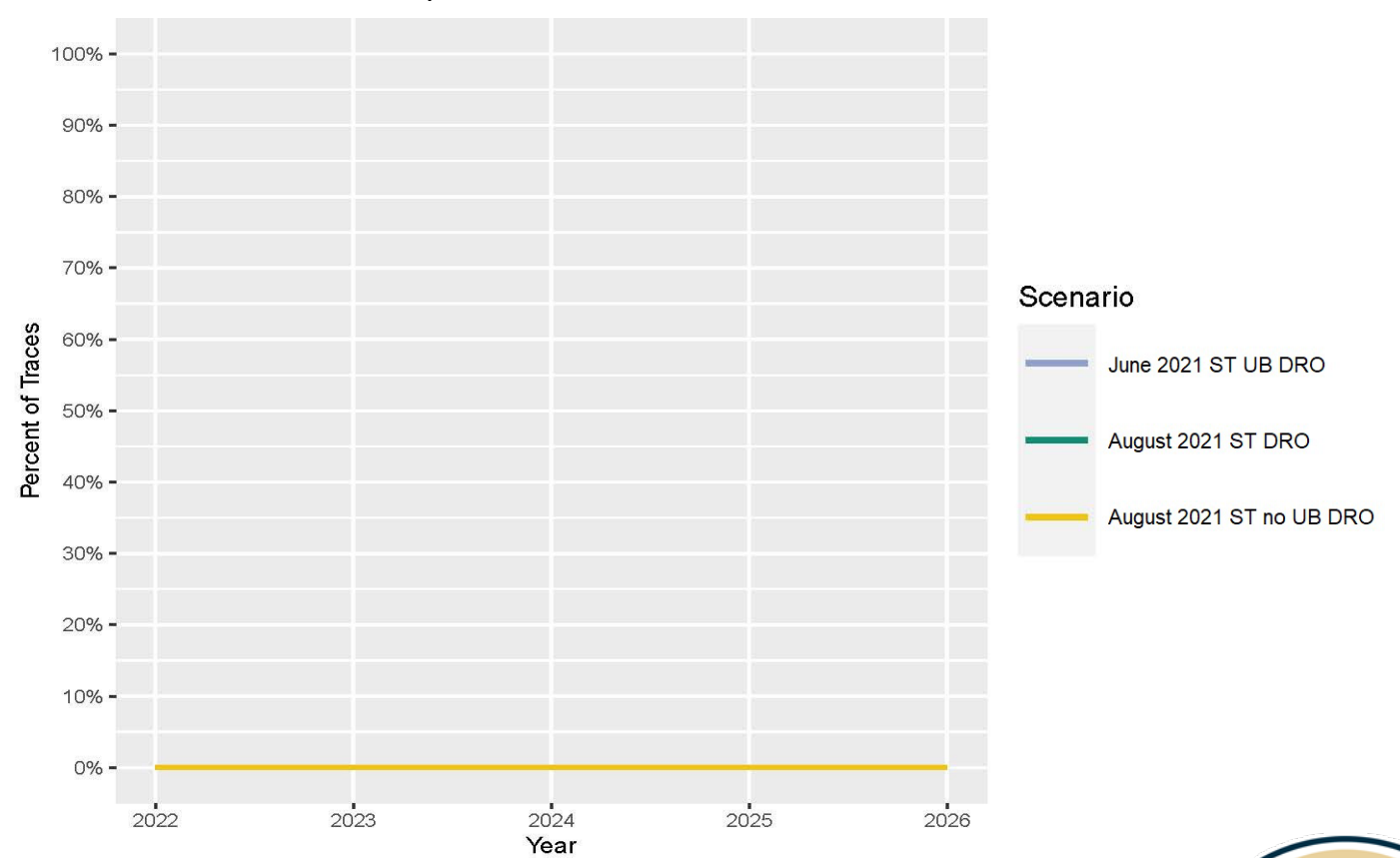
Stress Test Hydrology

Lower Basin:

Percent of traces in Shortage Conditions



Percent of traces in Surplus Conditions



Scenario

- June 2021 ST UB DRO
- August 2021 ST DRO
- August 2021 ST no UB DRO

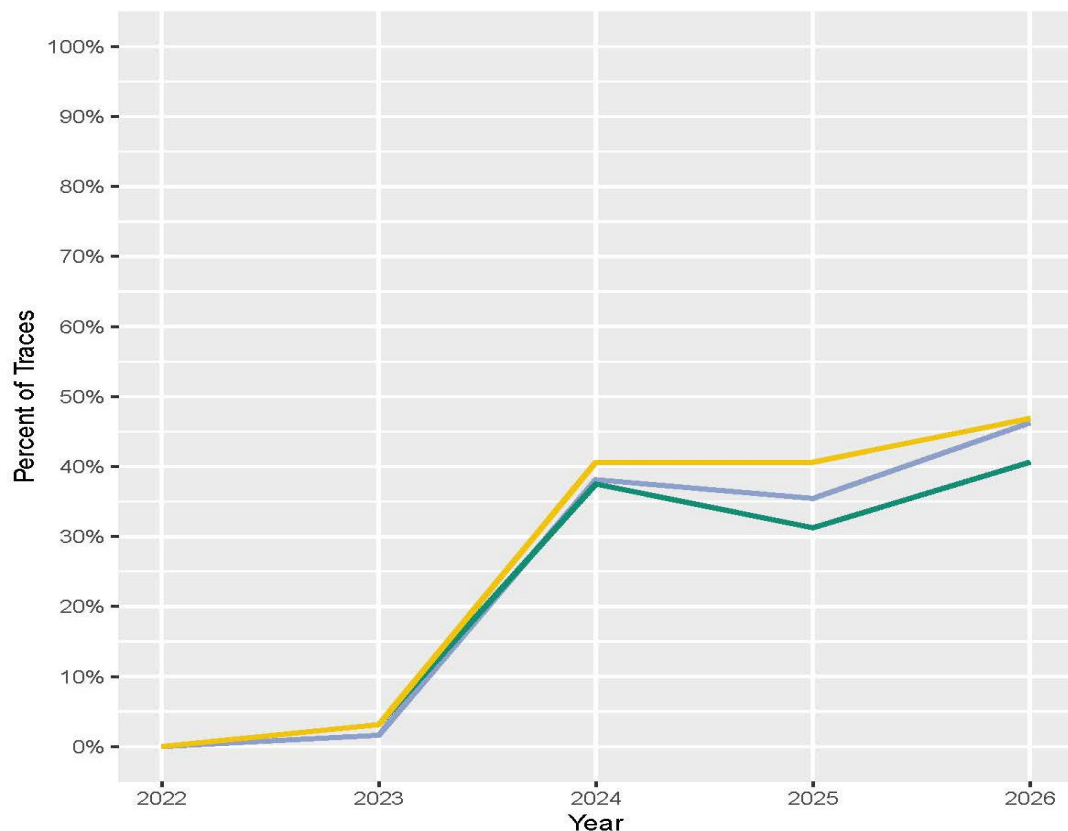


June 2021 with UB DRO vs. August 2021 with and without UB DRO

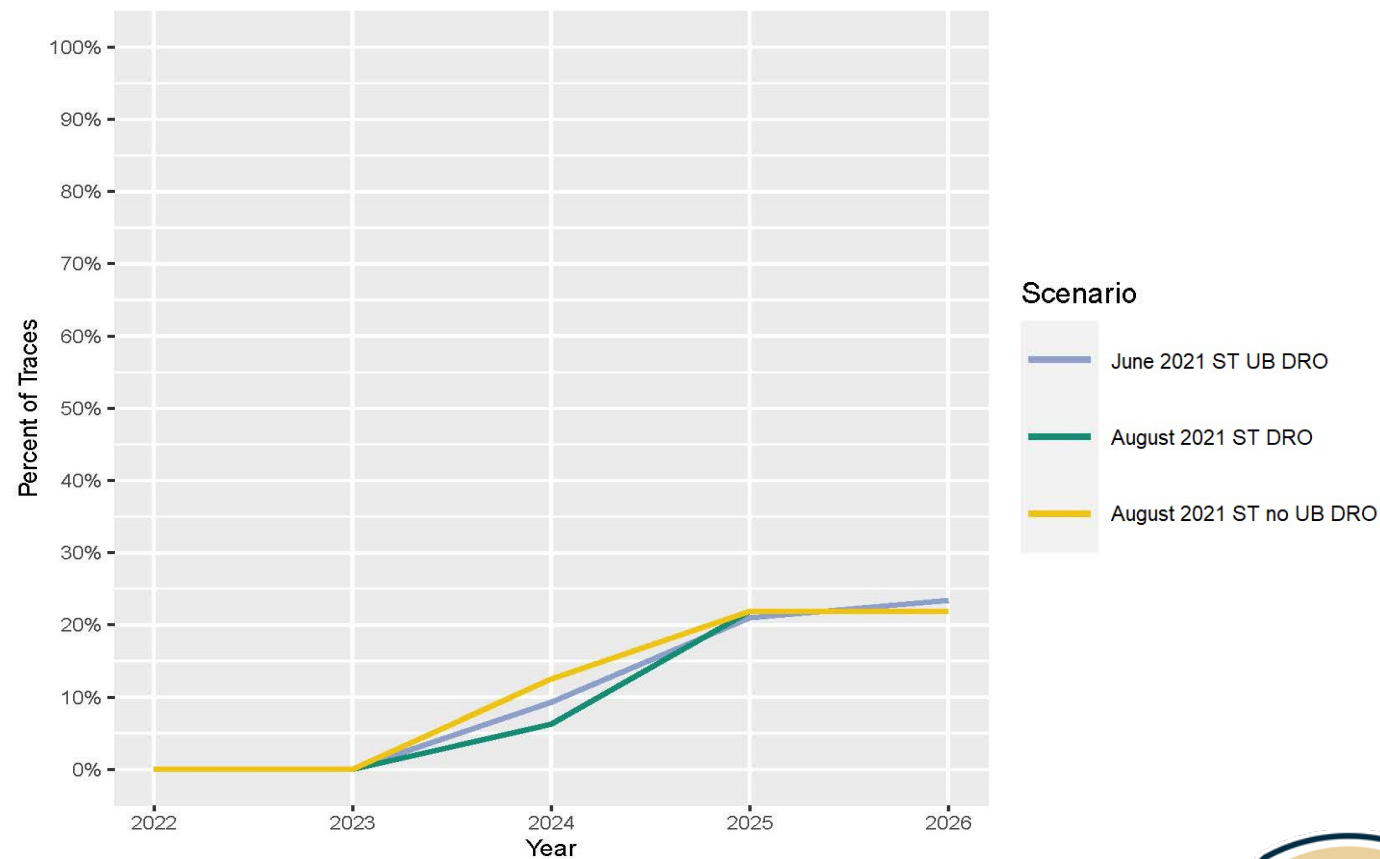
Stress Test Hydrology

Lake Mead:

Percent of traces less than elevation 1,025' in December



Percent of traces less than elevation 1,000' in any month



Scenario

- June 2021 ST UB DRO
- August 2021 ST DRO
- August 2021 ST no UB DRO



For additional information on Colorado River
modeling please visit:
[https://www.usbr.gov/lc/region/g4000/riverops/
coriver-projections.html](https://www.usbr.gov/lc/region/g4000/riverops/coriver-projections.html)



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