



Comments on Draft Scientific Basis Report

Lower American River Issues



Tom Gohring

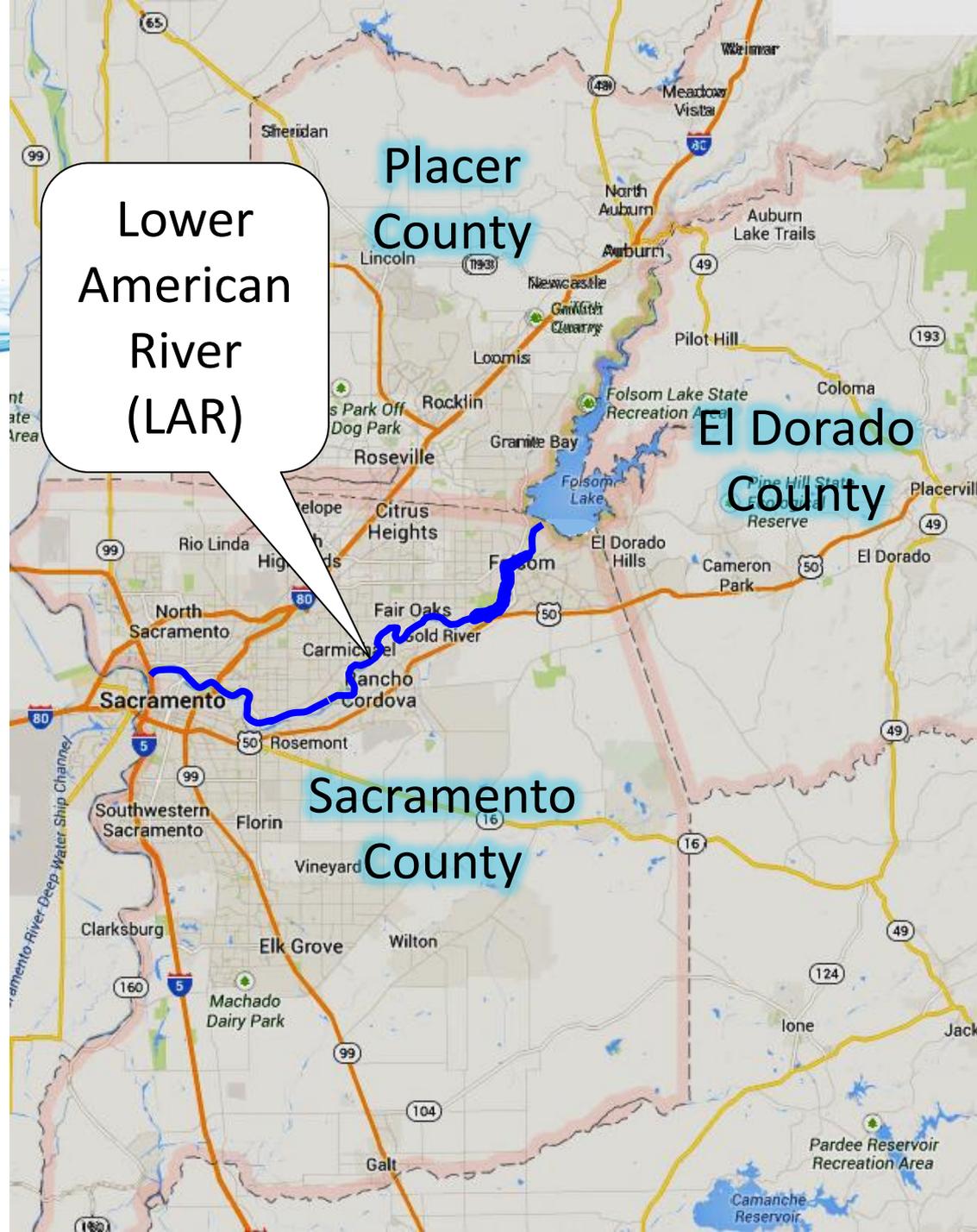
12/7/16



American River Watershed

Lower American River

- Wild & Scenic
- 23 miles long
- Confluence with Sacramento River
- Home to over 40 fish species including steelhead and fall-run
- Runs through Am. River Parkway





Lower American River: Science-Based Site-Specific Work

- Water Forum Agreement
- Ongoing habitat improvements
- Work to improve Temperature Control Device
- Ongoing scientific studies
- Adaptive management
- Flow Standard in 2006
- Refinements to 2006 Flow Standard

Functional
Flows



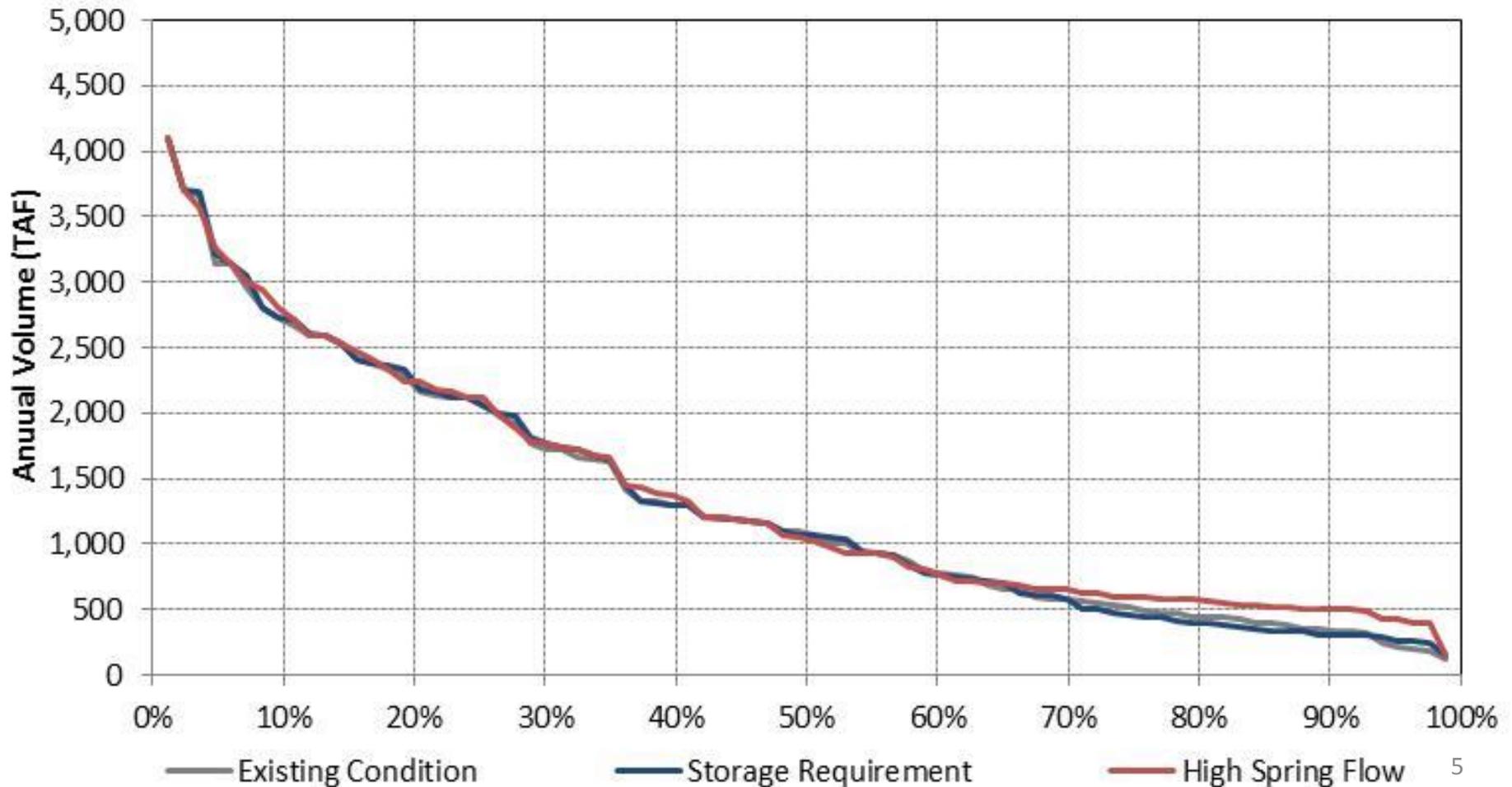
American River Flow Standard Refinements

- Promising
 - Storage requirement: for temperature
 - Pulse flow
 - Updates of hydrologic indices and min. flows
- Unsuccessful
 - Unconstrained temperature optimization
 - High spring flows (similar to percent of unimpaired flow approach)



Comparison of Approaches

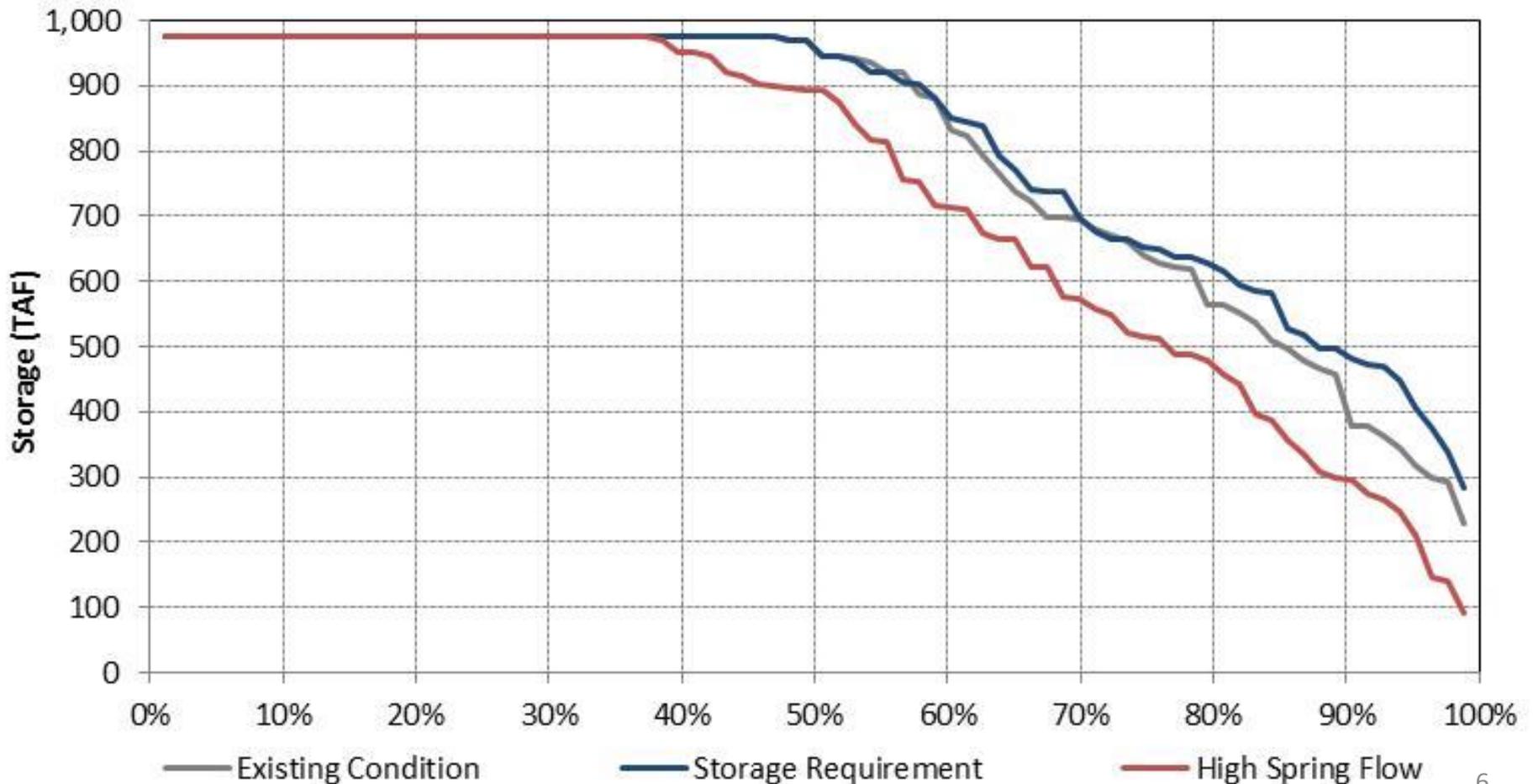
Simulated Annual January-June American River Flow Volume at its Mouth (1922-2003)





Comparison of Approaches

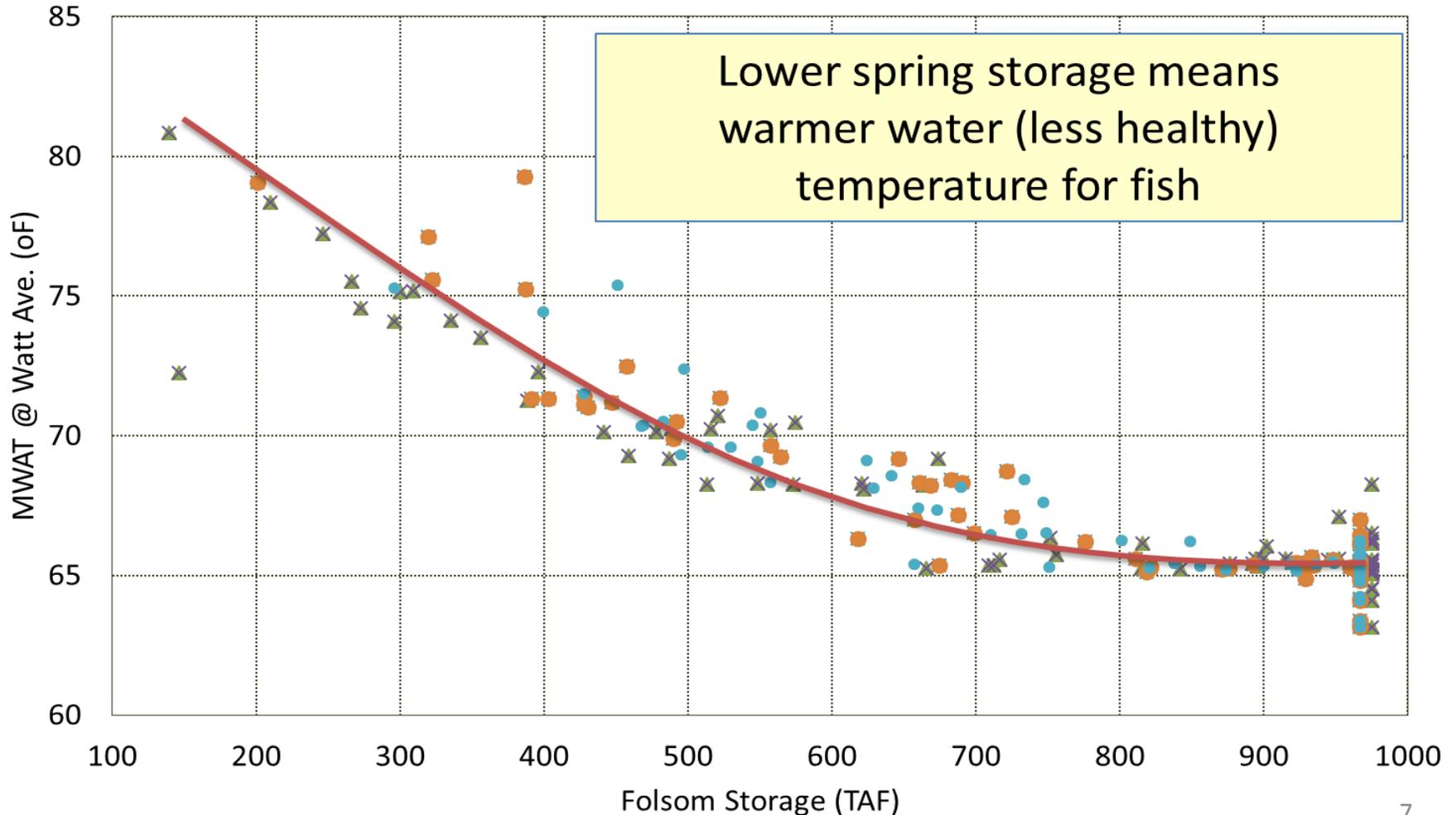
Simulated Annual End-of-June Folsom Reservoir Storage
(1922-2003)



Comparison of Approaches

End-of-June Folsom Reservoir Storage and MWAT

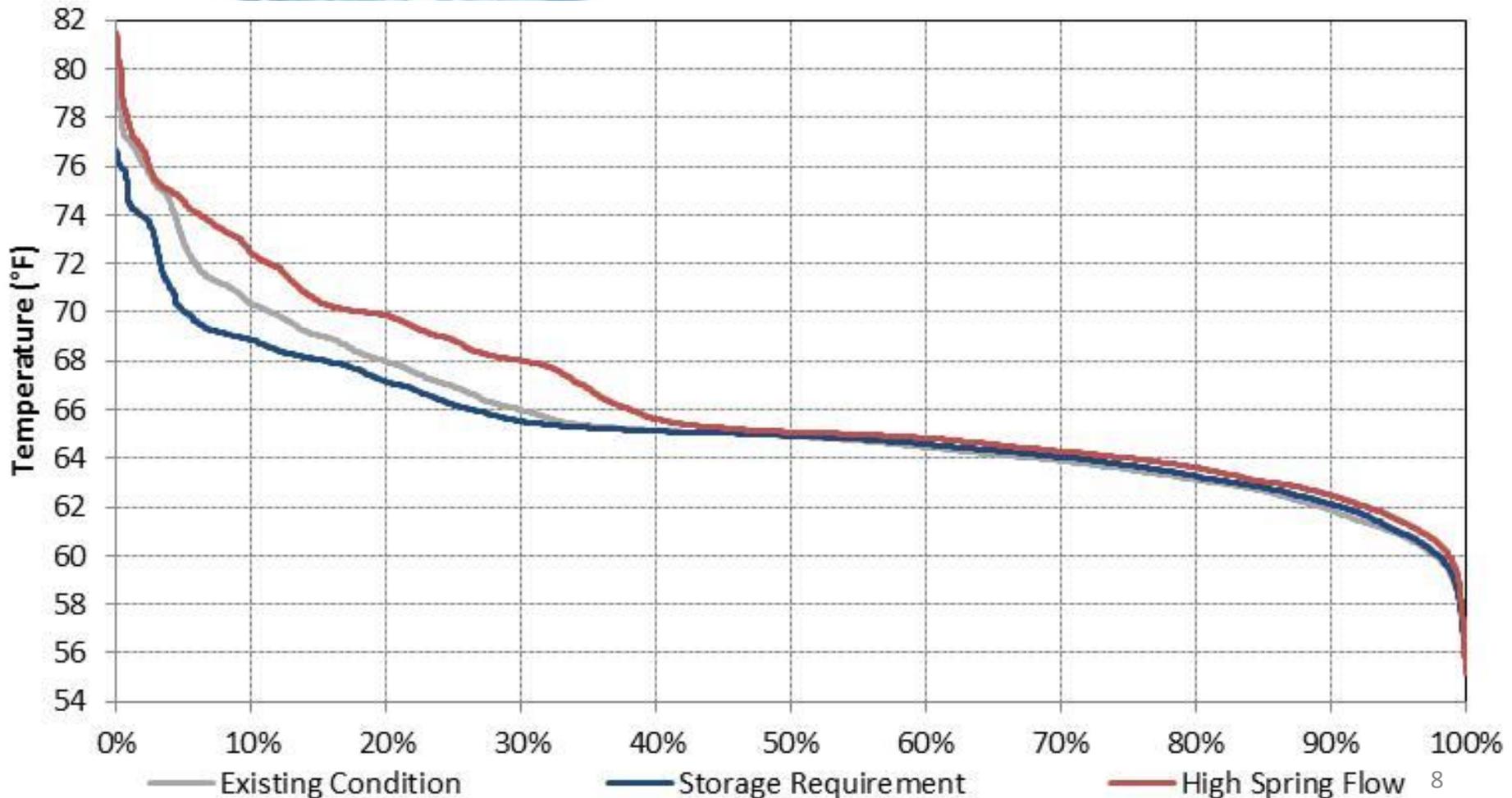
June Storage vs. Max. Weekly Average Temperature (MWAT)



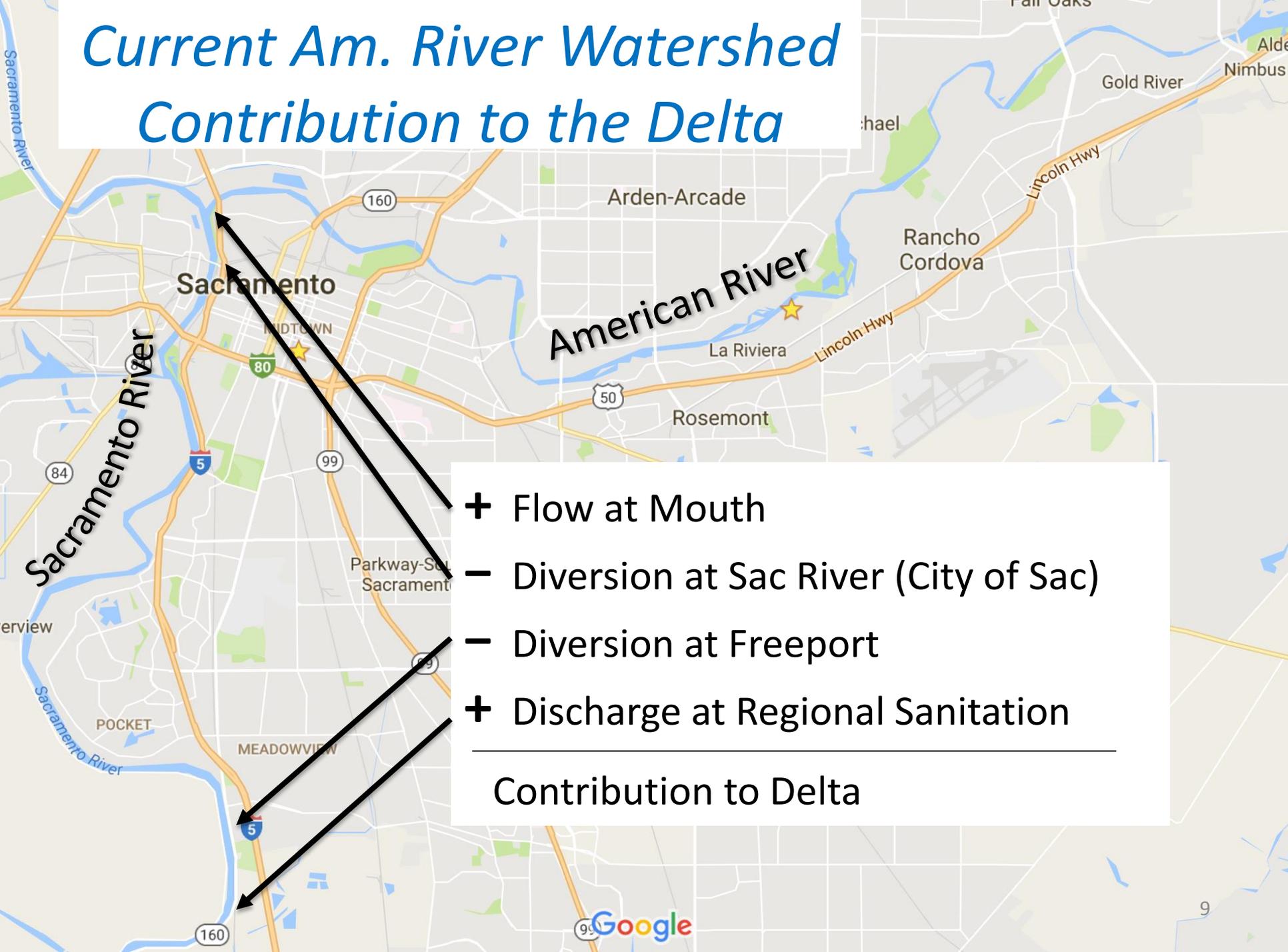


Comparison of Approaches

Simulated Daily American River at Watt Avenue Bridge Water Temperatures for July through September (1922-2003)



Current Am. River Watershed Contribution to the Delta



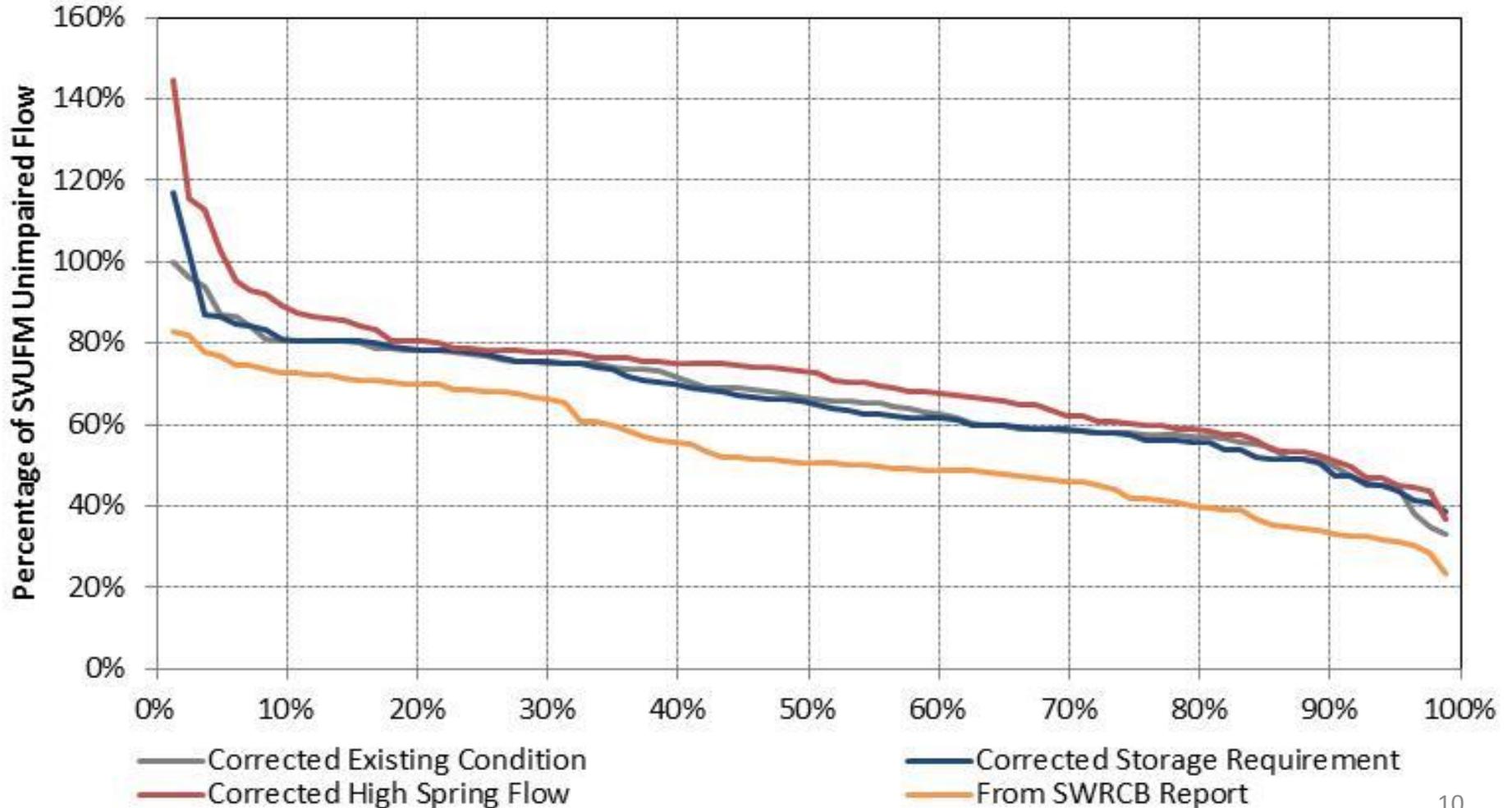
- + Flow at Mouth
- Diversion at Sac River (City of Sac)
- Diversion at Freeport
- + Discharge at Regional Sanitation

Contribution to Delta



Current Am. River Watershed Contribution to the Delta

January-June Unimpaired American River Flow





Conclusions Regarding American River Flow Standards

- Current Am. River Watershed Contribution to the Delta under corrected flows:
 - 40 to 140 % of unimpaired flow (65% median)
(Jan thru June percent measured at Freeport)
- Water Forum approach: functional flows
 - Significant improvements to water temperatures (especially for juvenile steelhead)
 - Substantially better than high spring flow approach
 - Includes pulse flow and storage requirement
 - Supported by broad stakeholder coalition
 - Preferable to “percent of unimpaired flow” approach