

State Water Resources Control Board Delta Flow Criteria and San Joaquin River Flow Objectives

Recirculated DRAFT Substitute Environmental Document

Potential Impacts to the North Fork Stanislaus Hydroelectric Project

State Clearinghouse #2012122071

September 2016

Recirculated Draft

Substitute Environmental Document in Support of
Potential Changes to the Water Quality Control Plan
for the San Francisco Bay-Sacramento San Joaquin Delta Estuary

**San Joaquin River Flows and
Southern Delta Water Quality**

State Water Resources Control Board | California Environmental Protection Agency

Background

- *The San Joaquin River Watershed does not produce enough water to both meet existing human demands and support a healthy ecosystem. SWRCB*
 - SWRCB 2006 Bay-Delta Water Quality Control Plan
 - Sacramento-San Joaquin Delta Reform Act of 2009
 - 2012 DRAFT Substitute Environmental Document
 - 2016 Recirculated DRAFT Substitute Environmental Document

SWRCB Recommendation

- 40% unimpaired flow (February – June) on the San Joaquin River & its tributaries (Stanislaus, Tuolumne, and Merced)

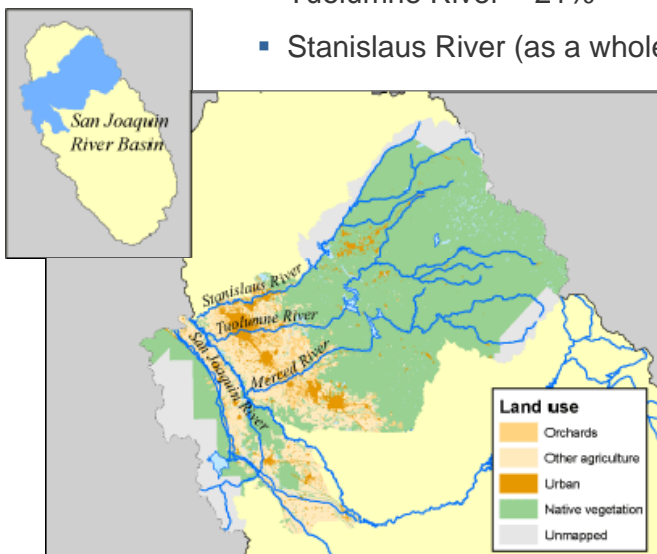
SWRCB Anticipated Impacts:

- 7 to 23% reduction in water available for human consumptive use.
- \$64 million average annual decrease in agricultural economic output.
- 1% increase in total Stanislaus watershed hydropower [but potential impacts to timing and peaking capabilities].
- Largest hydrologic effects and impacts will be at and downstream of the rim dams - New Melones, Don Pedro, & McClure (New Exchequer Dam).
- Effect on specific individual water rights is unknown.

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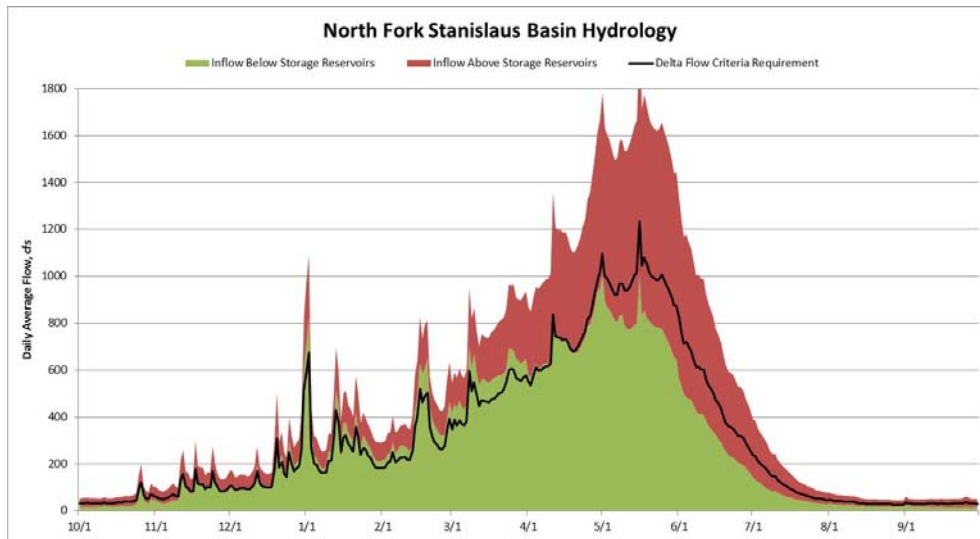
Tributary Comparison

- Historical median February – June flows (1984 – 2009)
 - Merced River = 26%
 - Tuolumne River = 21%
 - Stanislaus River (as a whole, not just North Fork) = 40%



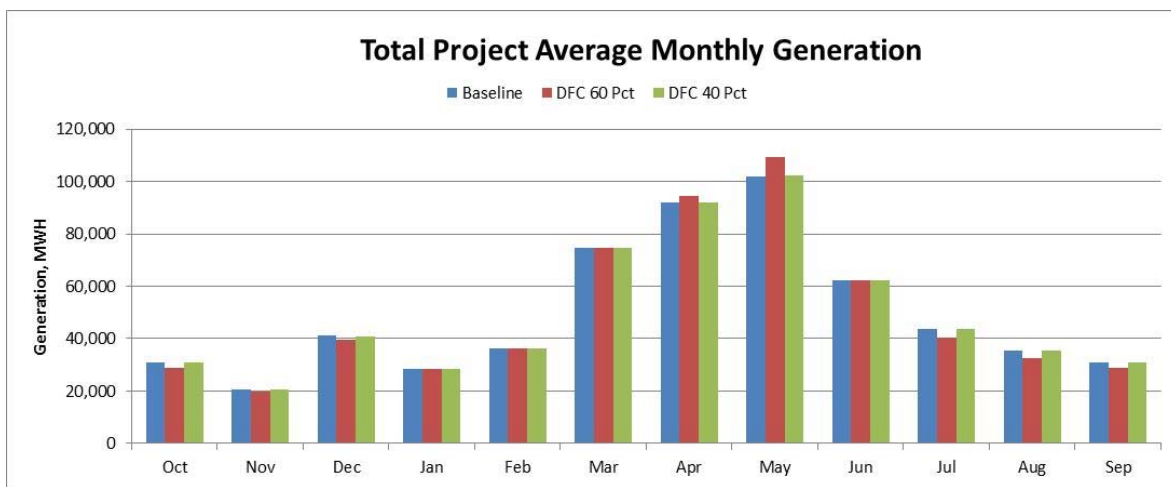
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Analysis of Potential Impacts to NCPA (2011 Modeling by ECORP)



- About 60% of the unimpaired flow occurs below the NF Stanislaus watershed reservoirs
- Natural runoff, routed through Collierville PP, achieves a little less than 60%

Analysis of Potential Impacts to NCPA (2011 Modeling by ECORP)



- 40% criteria has negligible impact on quantity or timing of NCPA power production
 - Fiscal impact <\$25K / year

