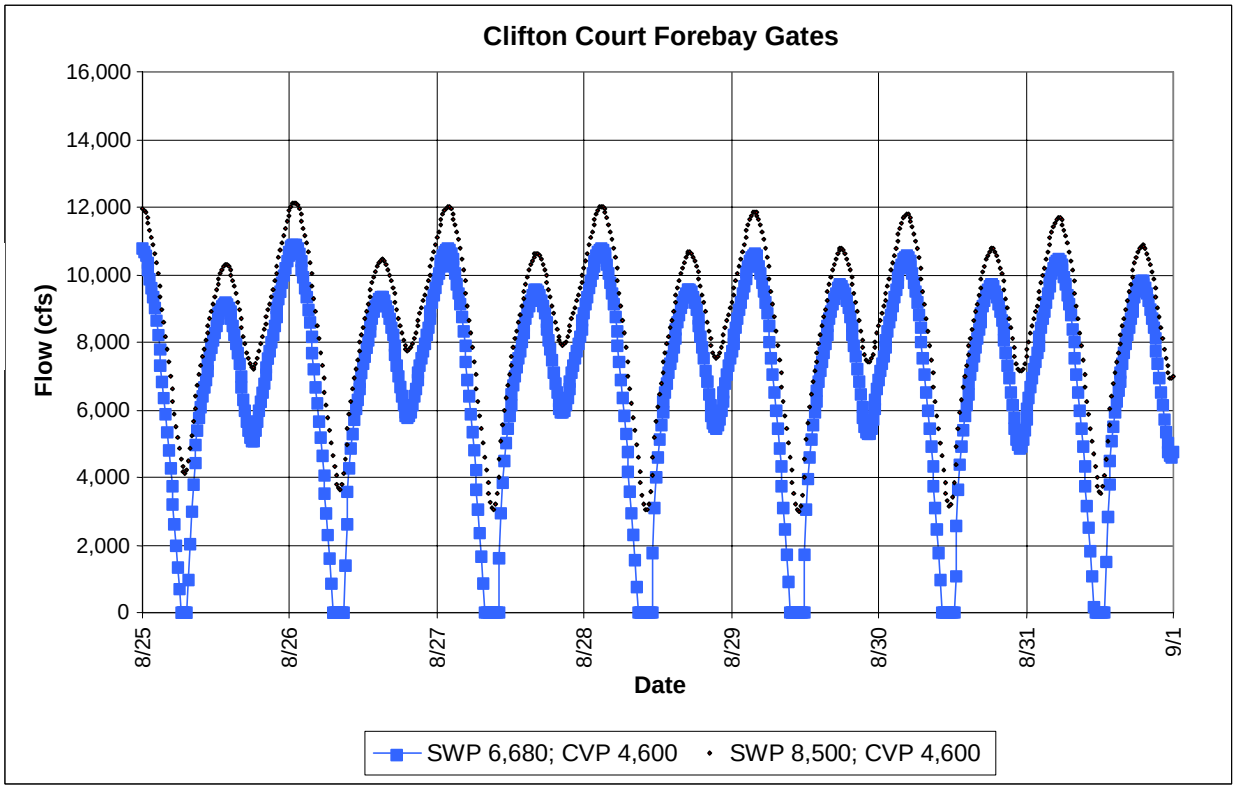

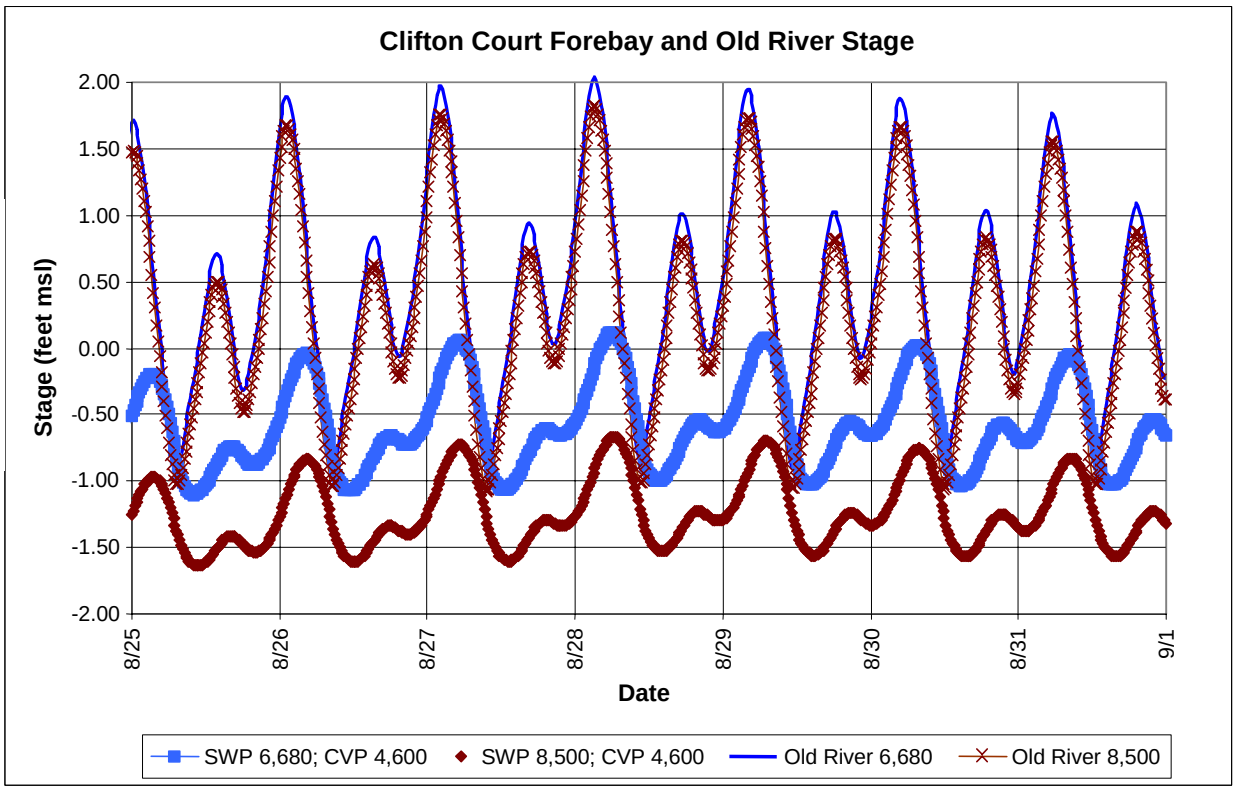

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Figure D-94

Simulated Flow and Stage at Clifton Court Forebay

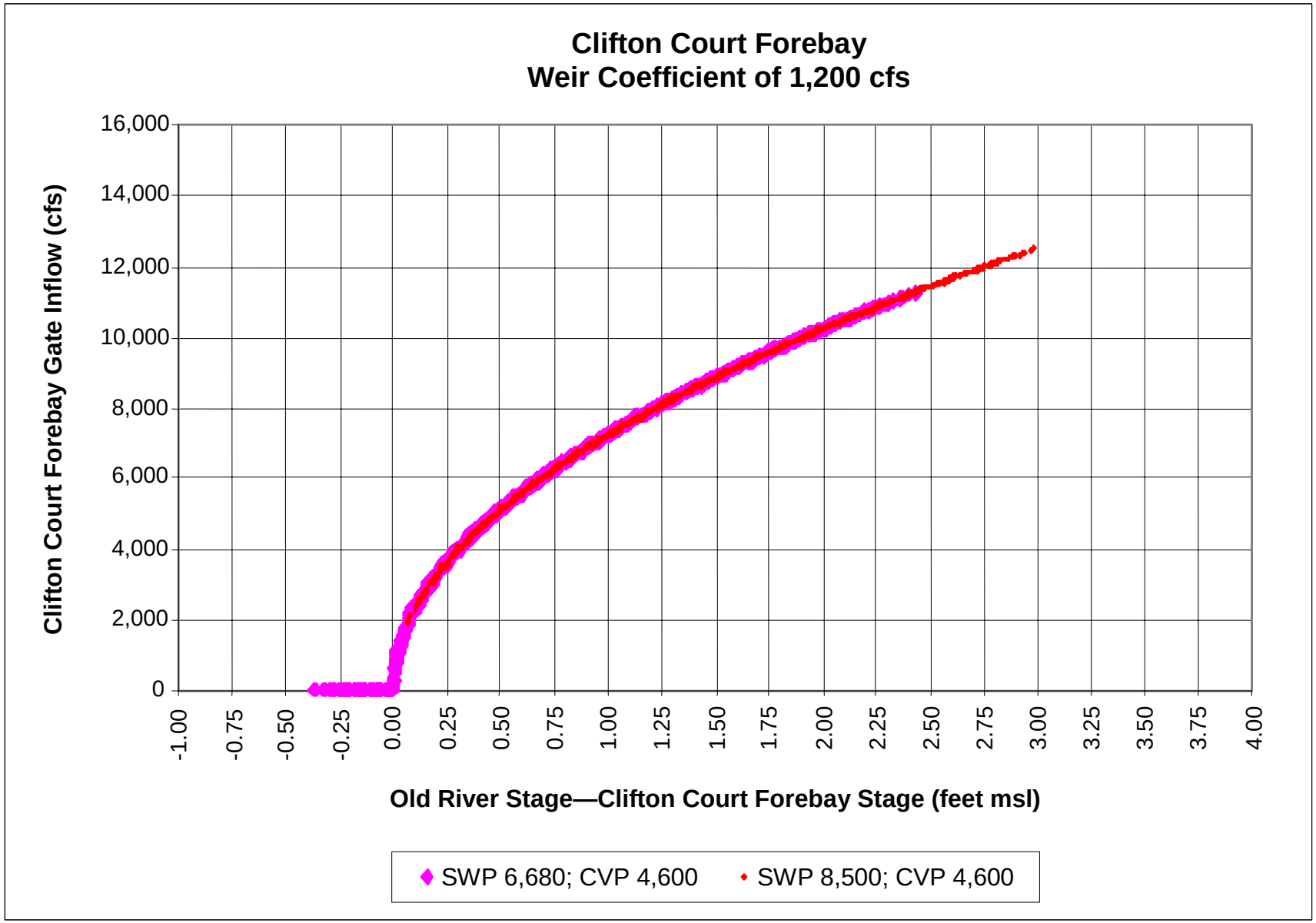

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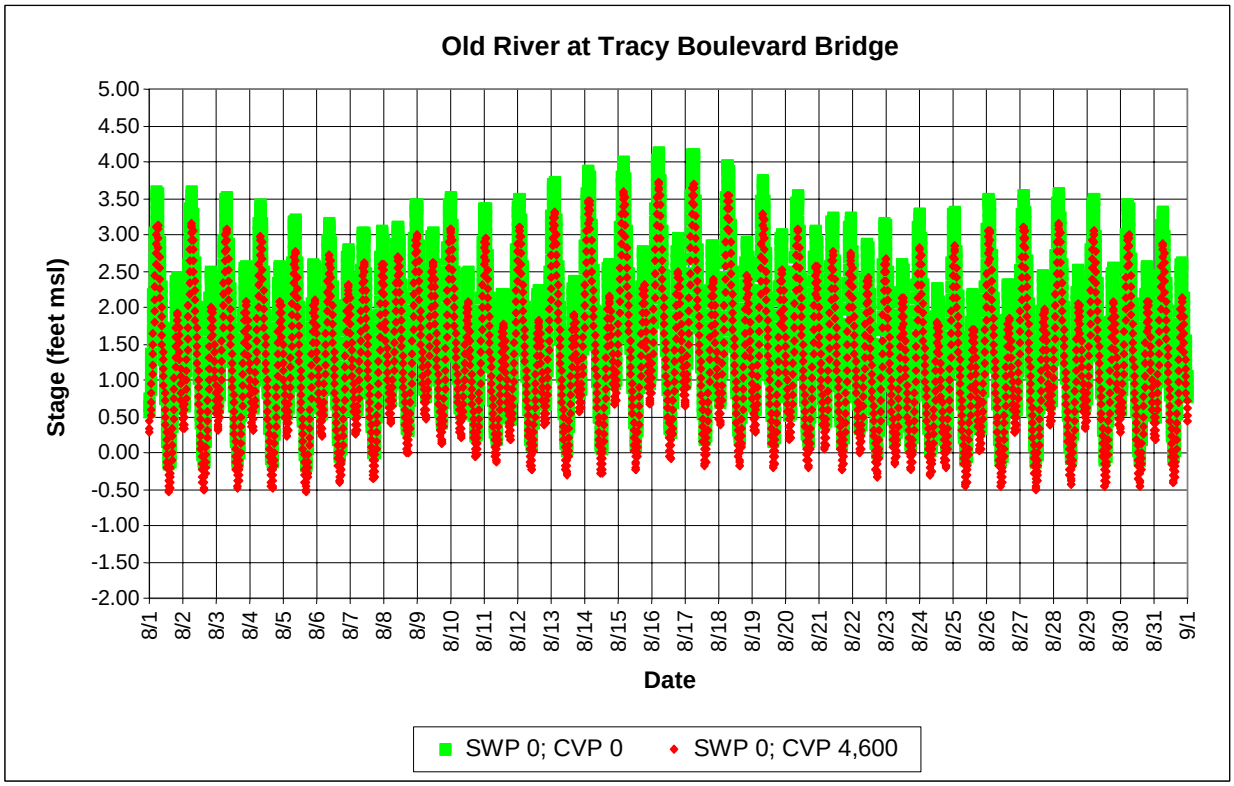
Figure D-95

Simulated Clifton Court Forebay Weir Coefficient



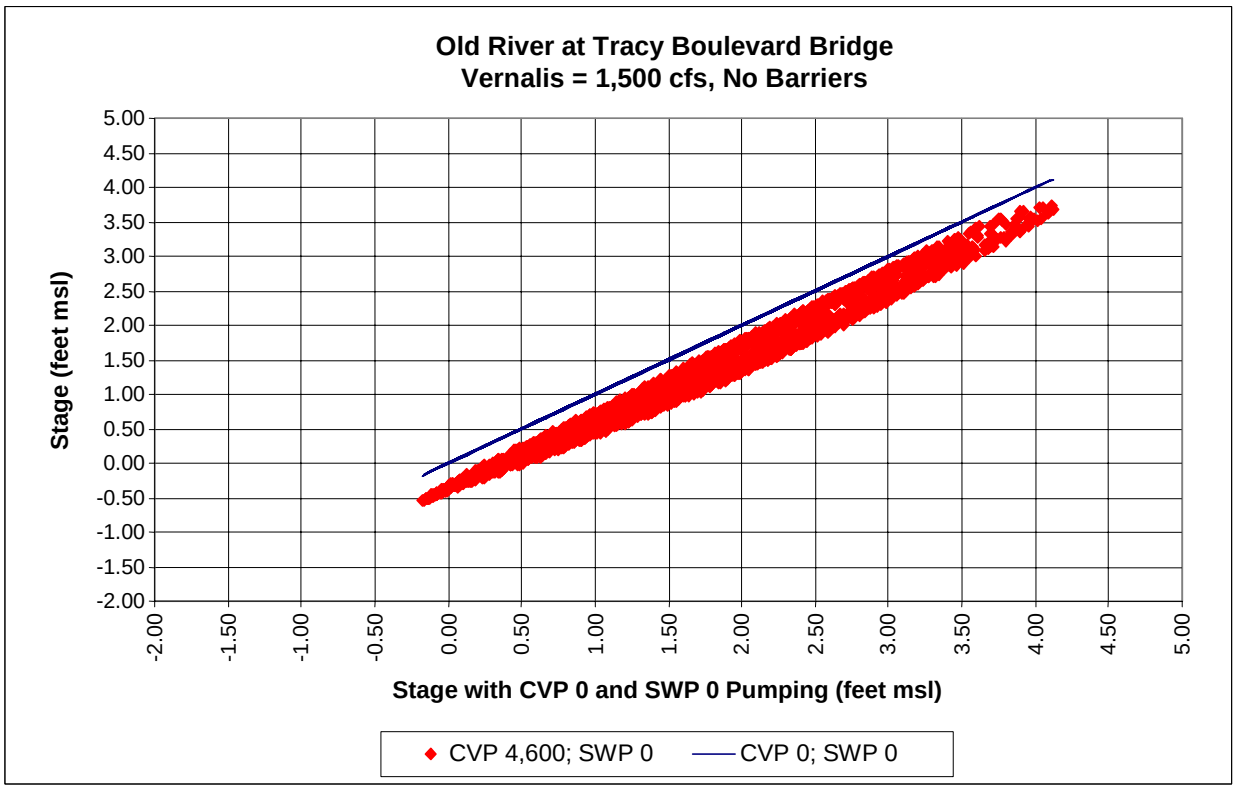


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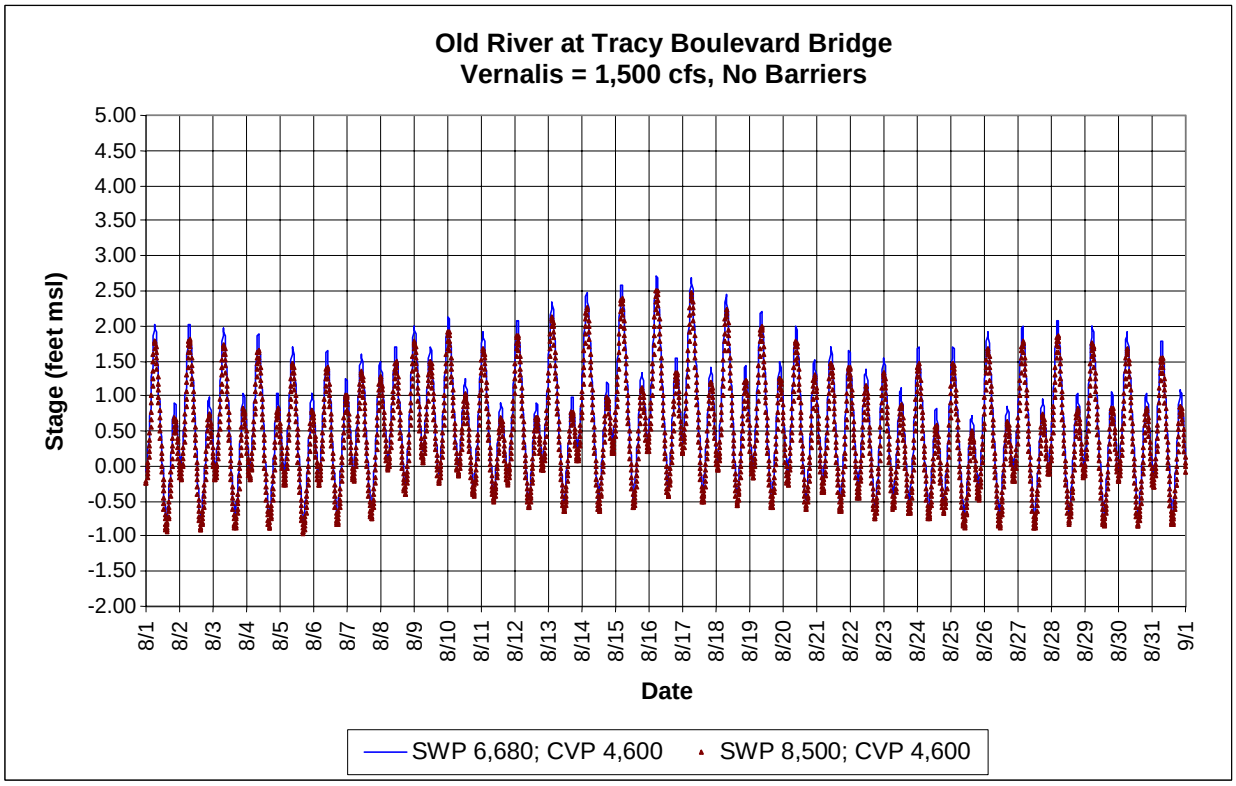
Figure D-96

Simulated Water-Surface Elevation (Stage) in Old River at Tracy Boulevard Bridge with CVP Pumping Only



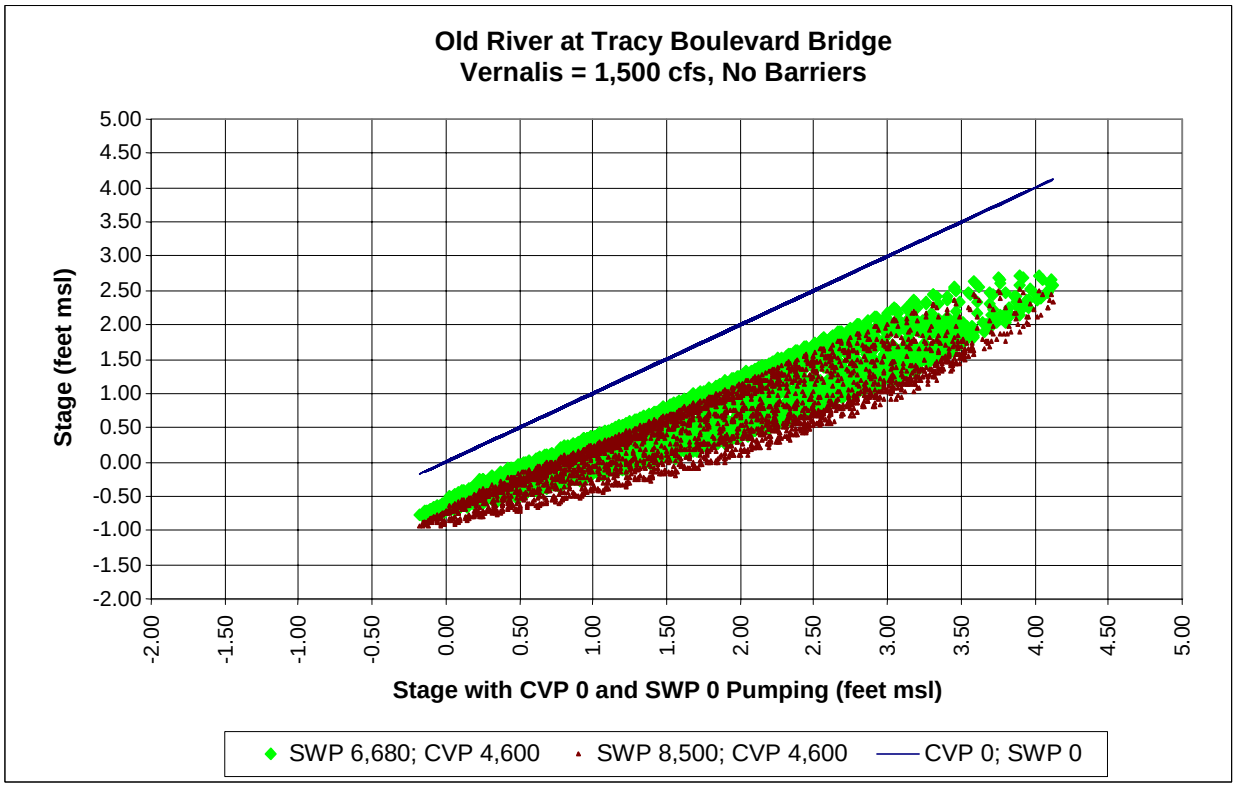


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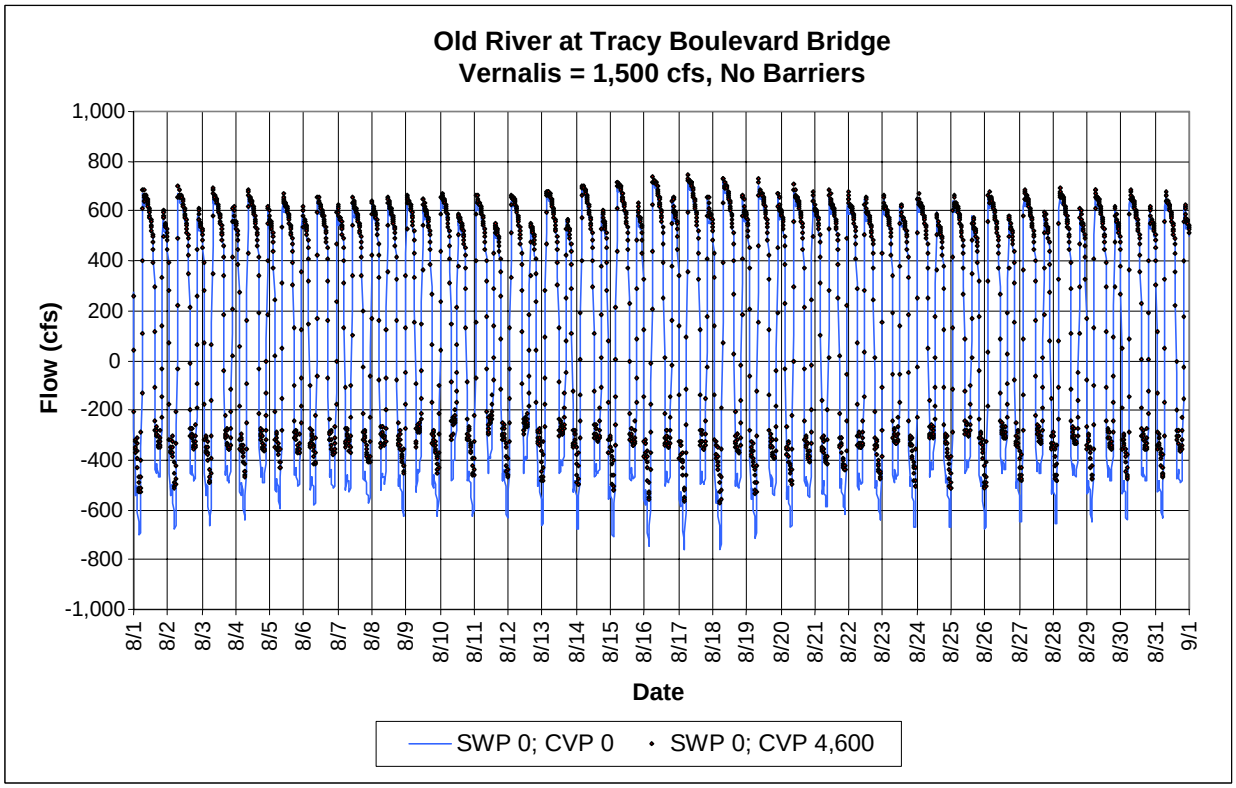
Figure D-97

Simulated Water Surface Elevation (Stage) in Old River at Tracy Boulevard Bridge with CVP and SWP Pumping



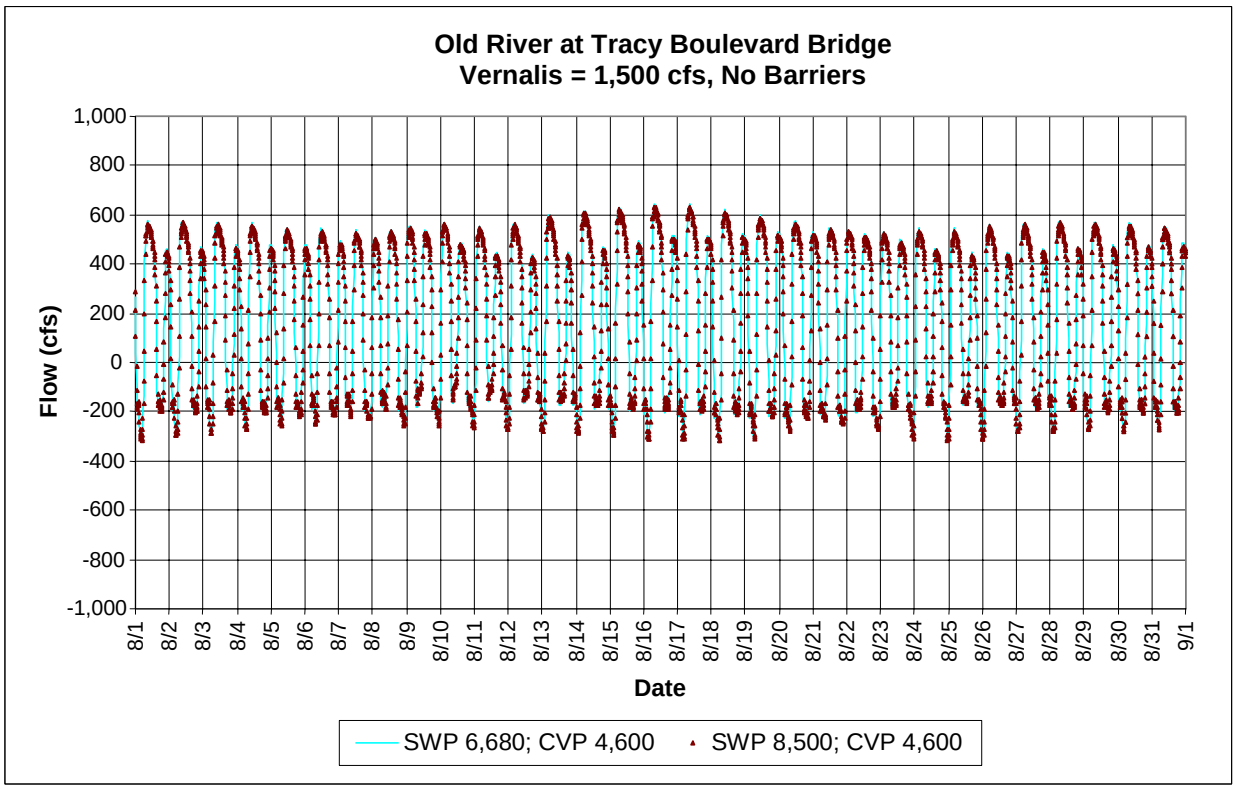


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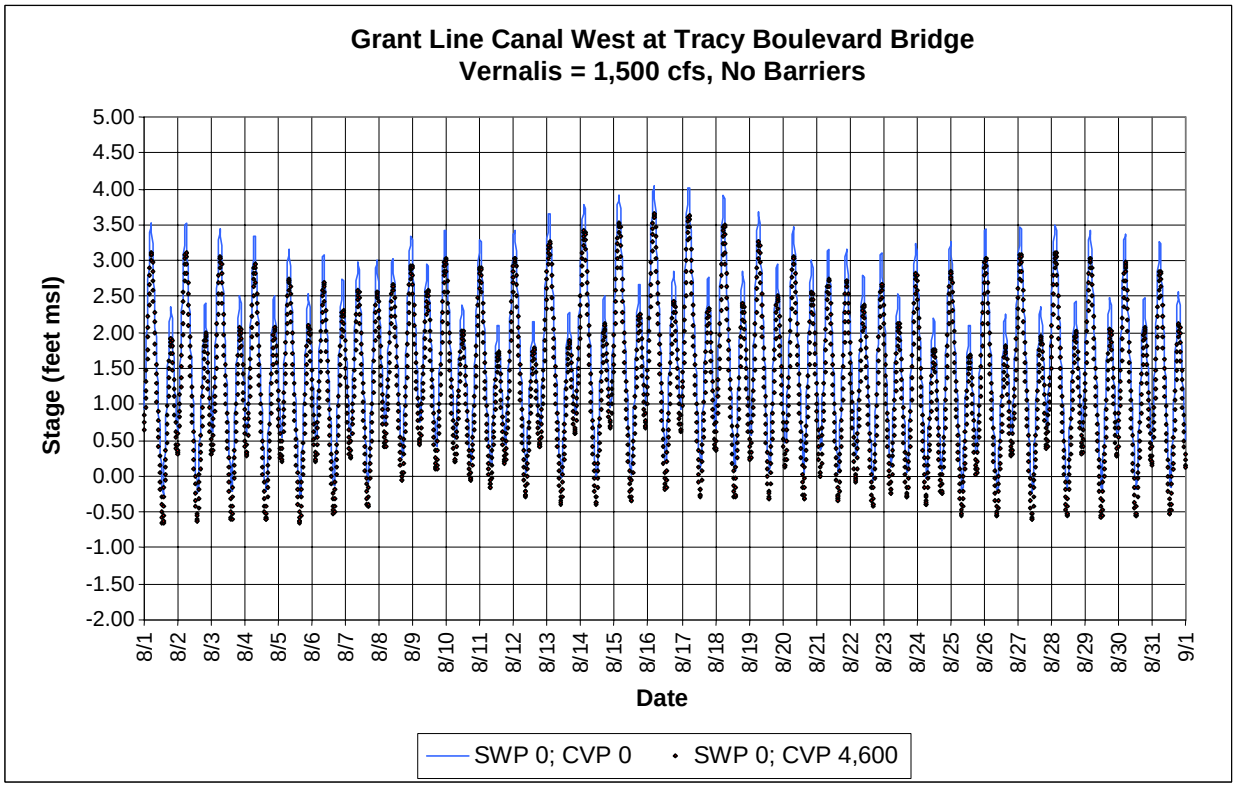
Figure D-98

Simulated Flow in Old River at Tracy Boulevard Bridge with CVP and SWP Pumping



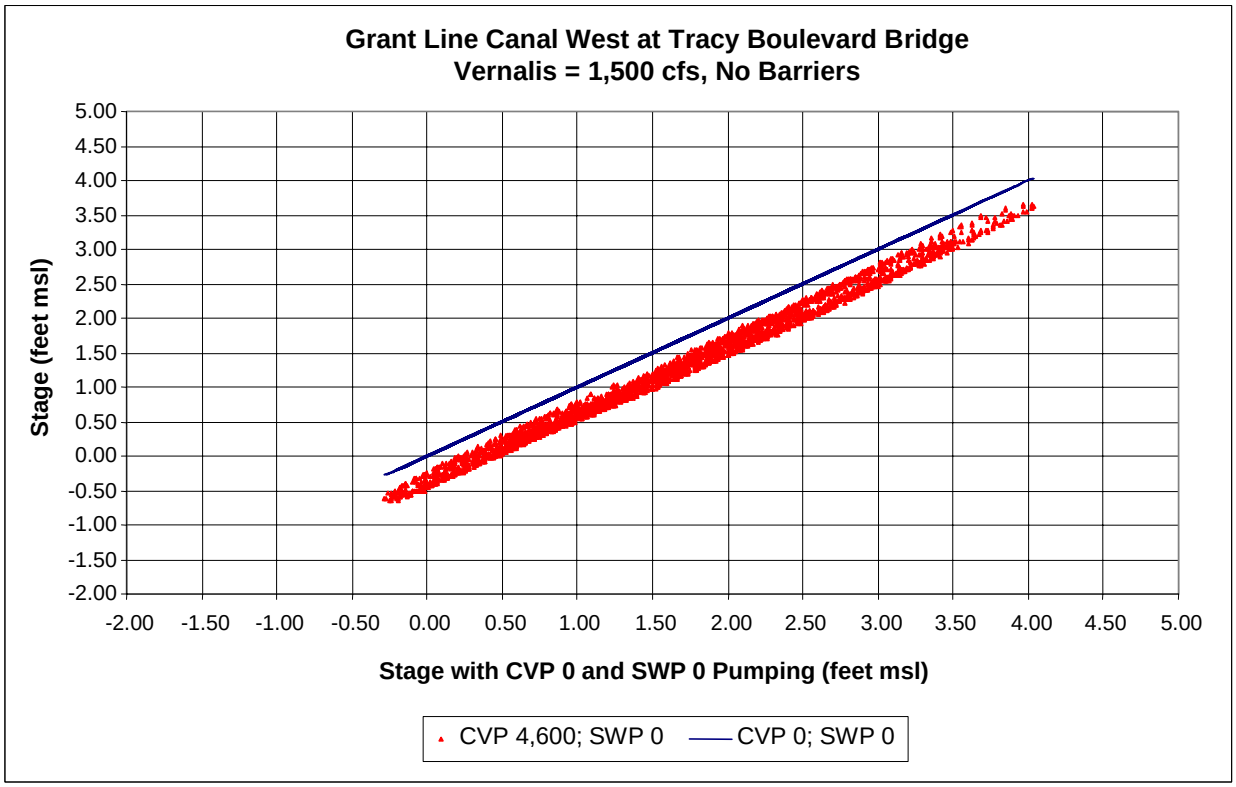


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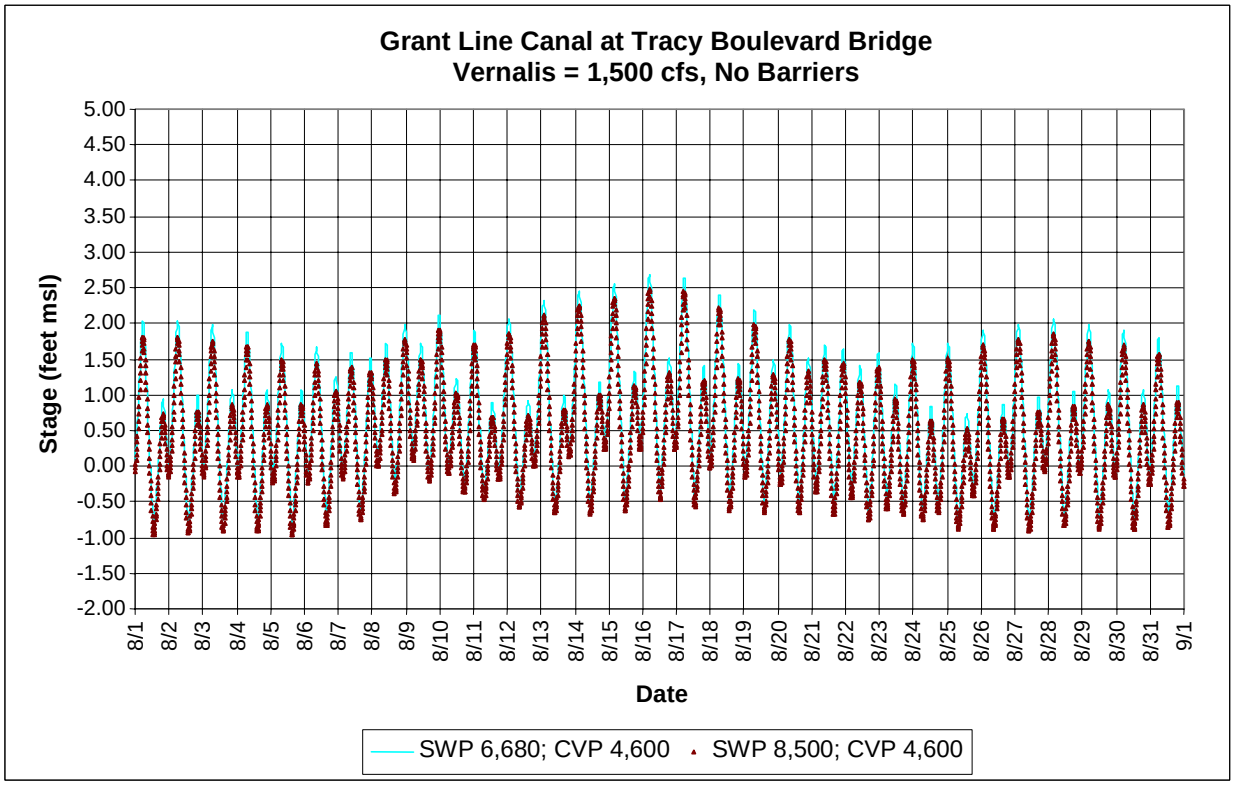
Figure D-99

Simulated Water Surface Elevation (Stage) in Grant Line Canal at Tracy Boulevard Bridge with CVP Pumping



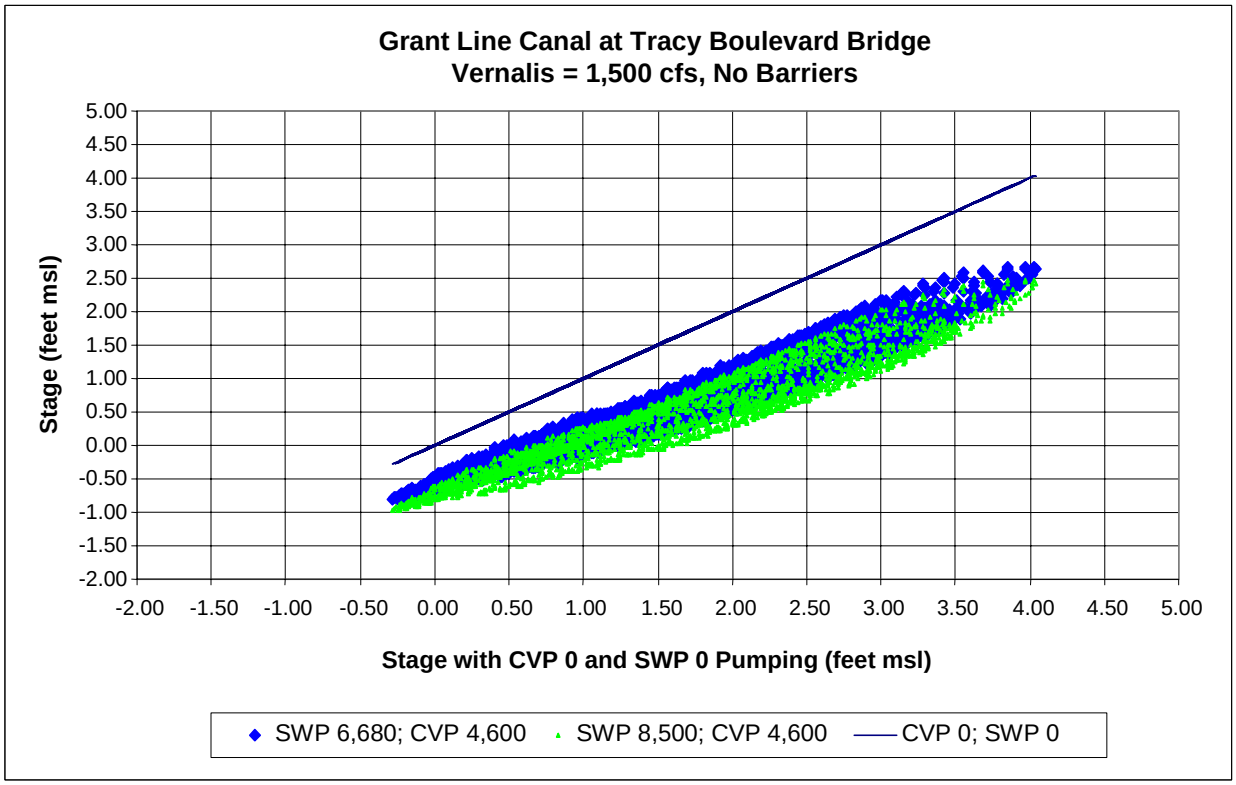


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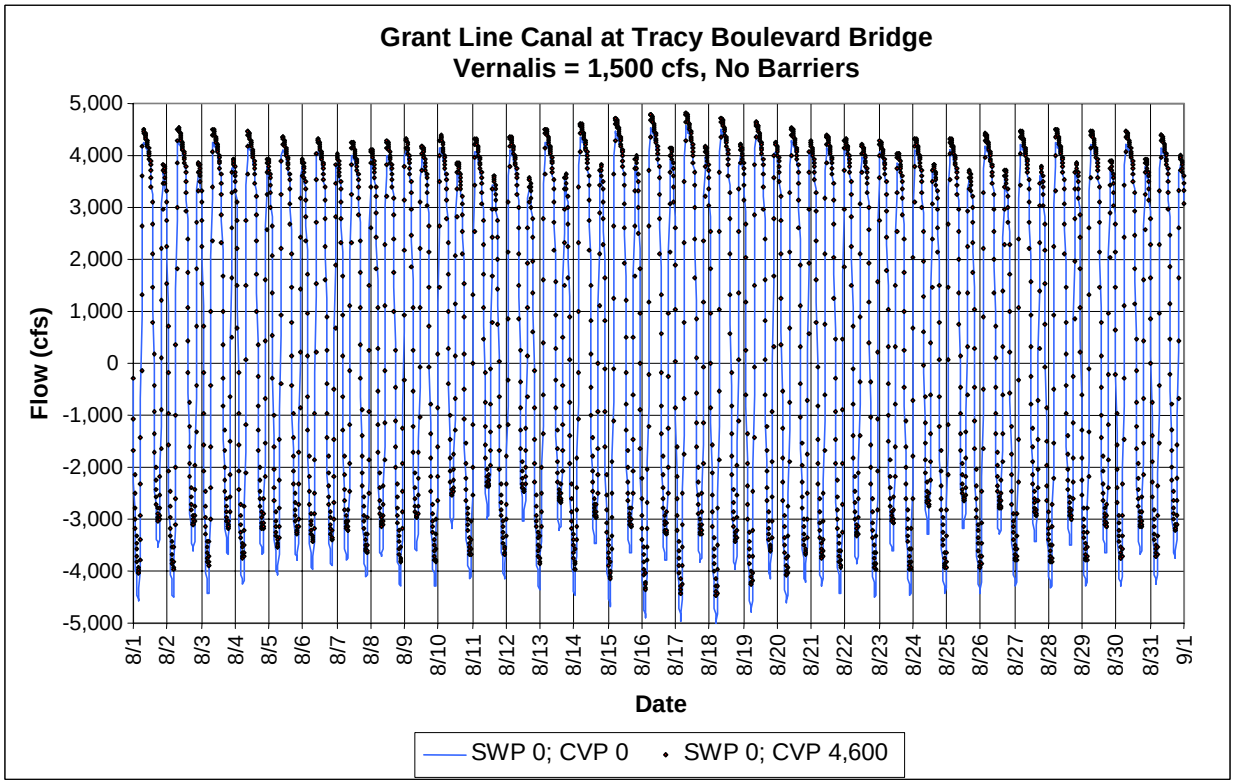
Figure D-100

Simulated Water Surface Elevation (Stage) in Grant Line Canal at Tracy Boulevard Bridge with CVP and SWP Pumping



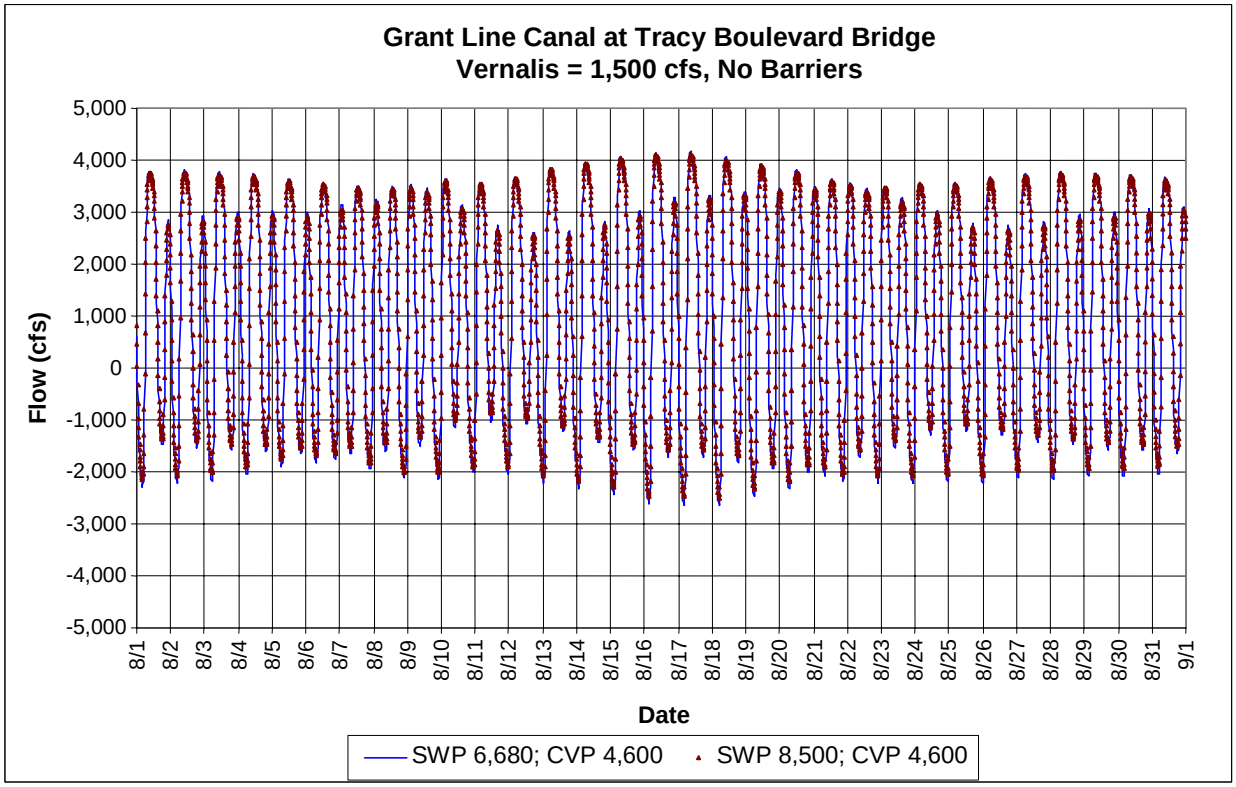


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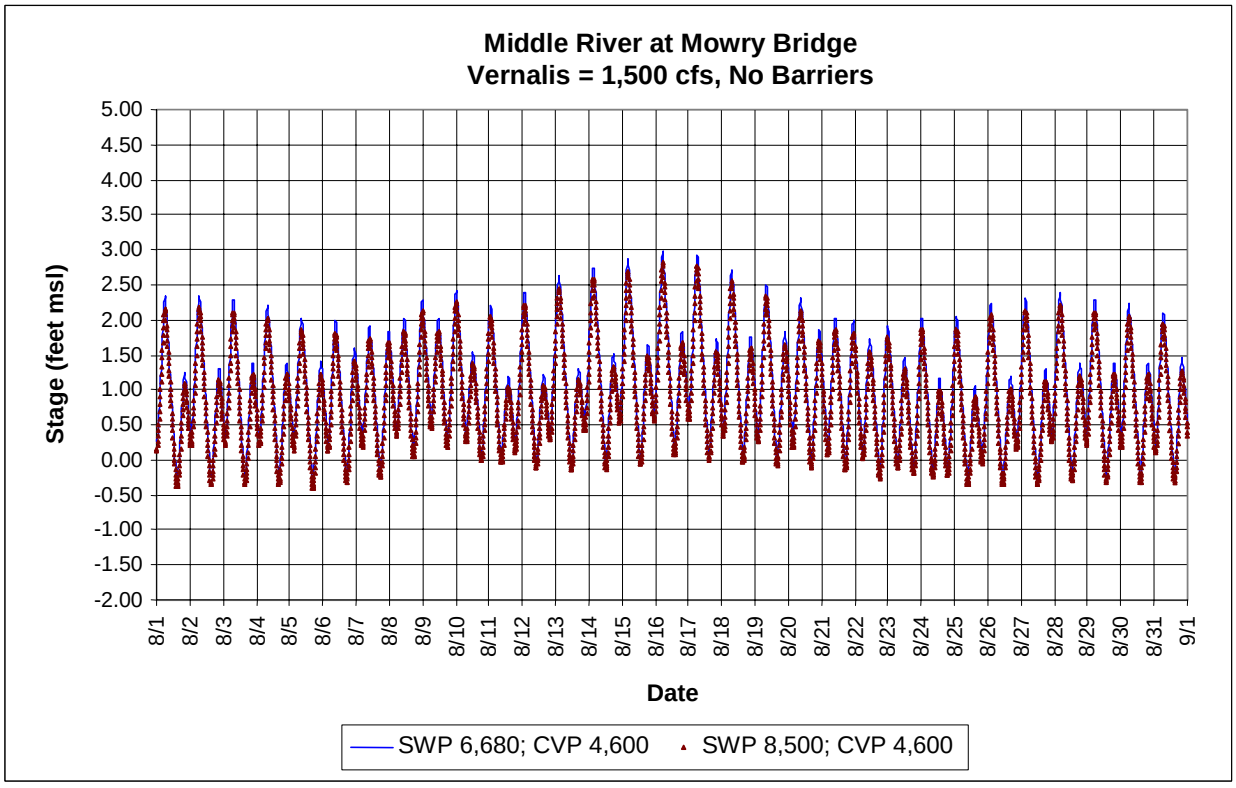
Figure D-101

Simulated Flow in Grant Line Canal at Tracy Boulevard Bridge with CVP and SWP Pumping



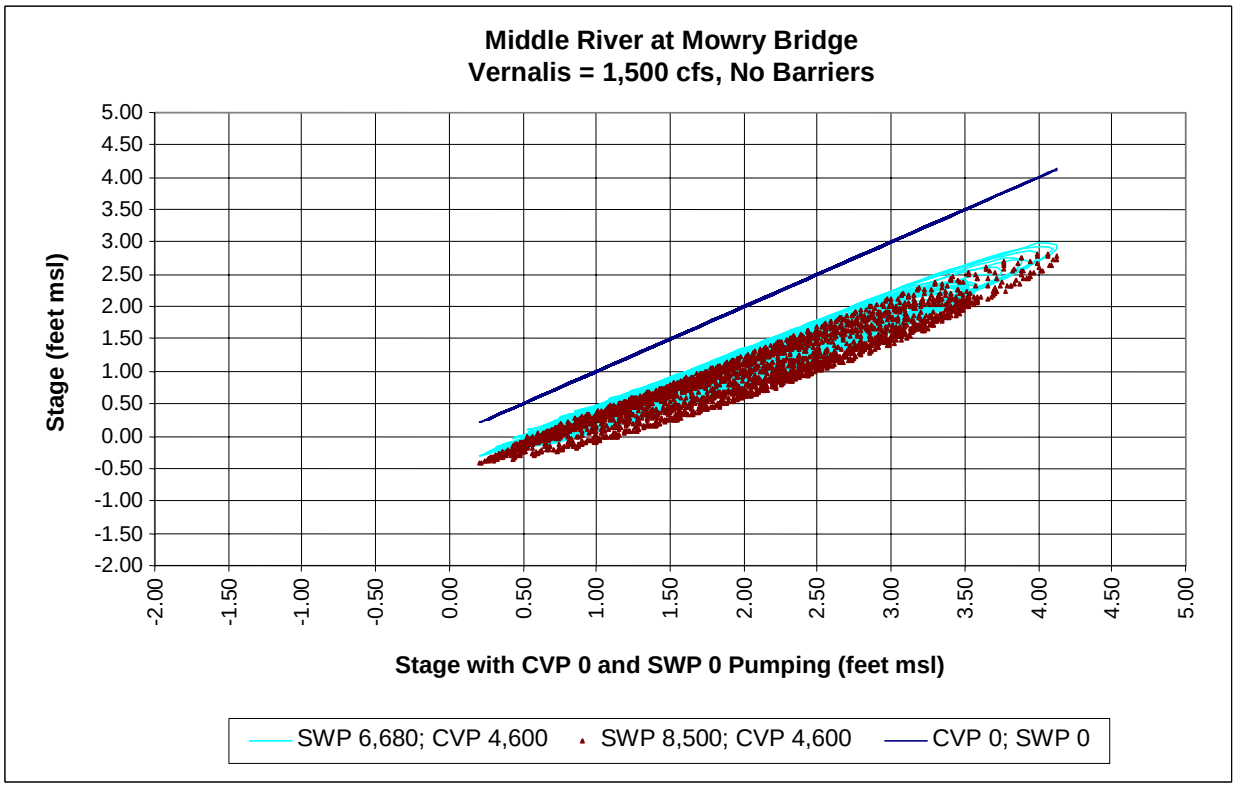


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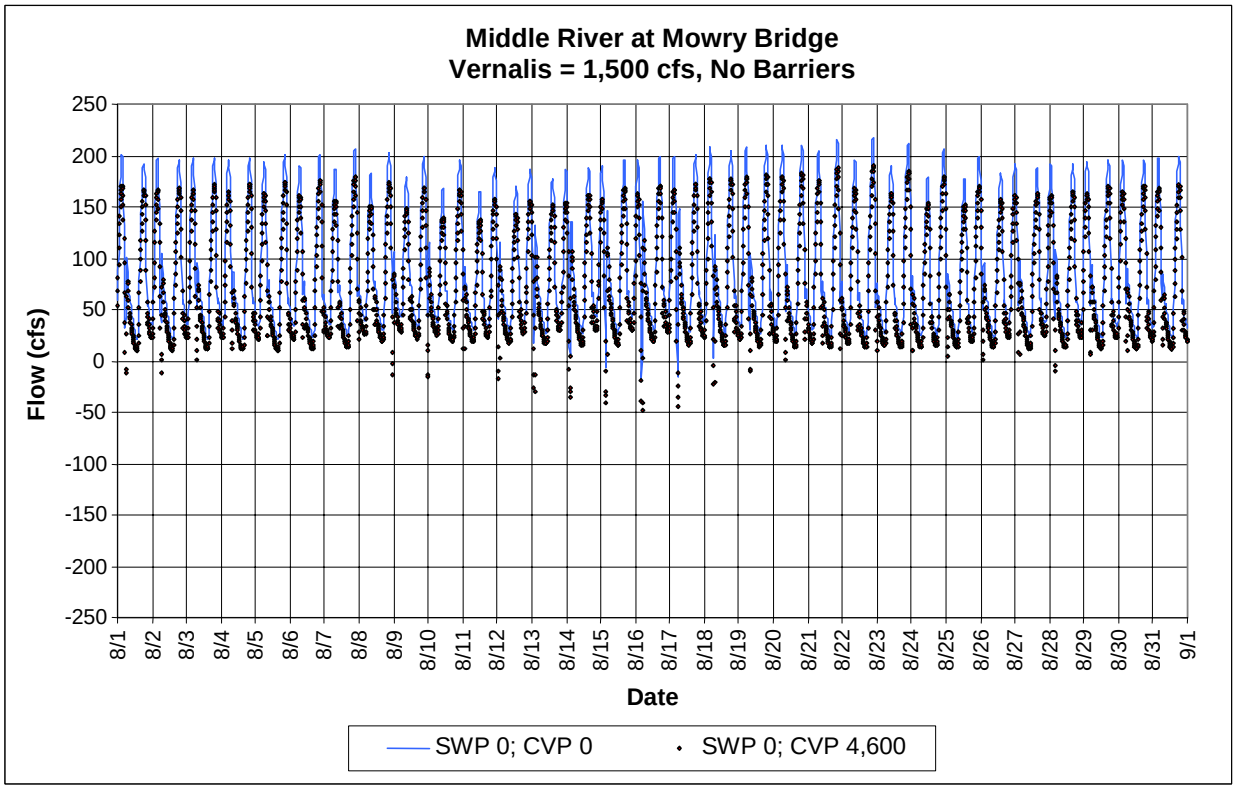
Figure D-102

Simulated Water Surface Elevation (Stage) in Middle River at Mowry Bridge with CVP and SWP Pumping



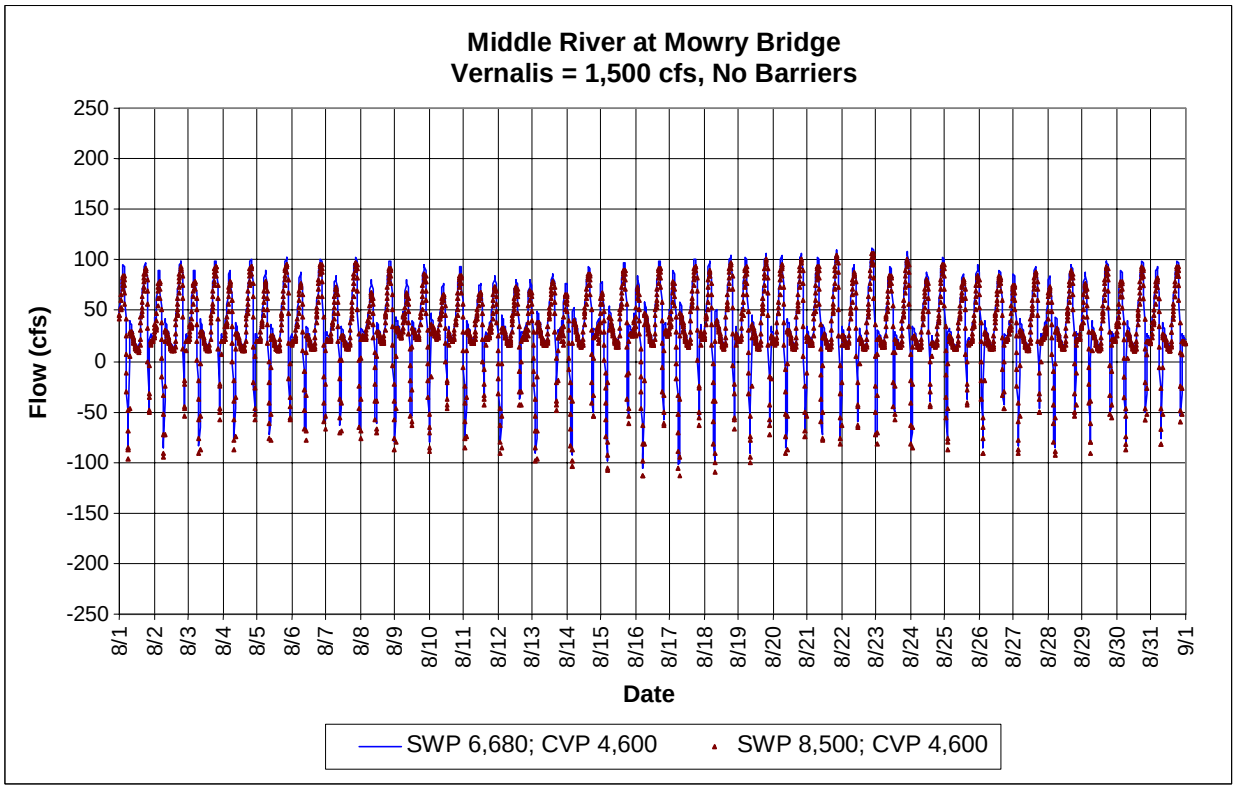


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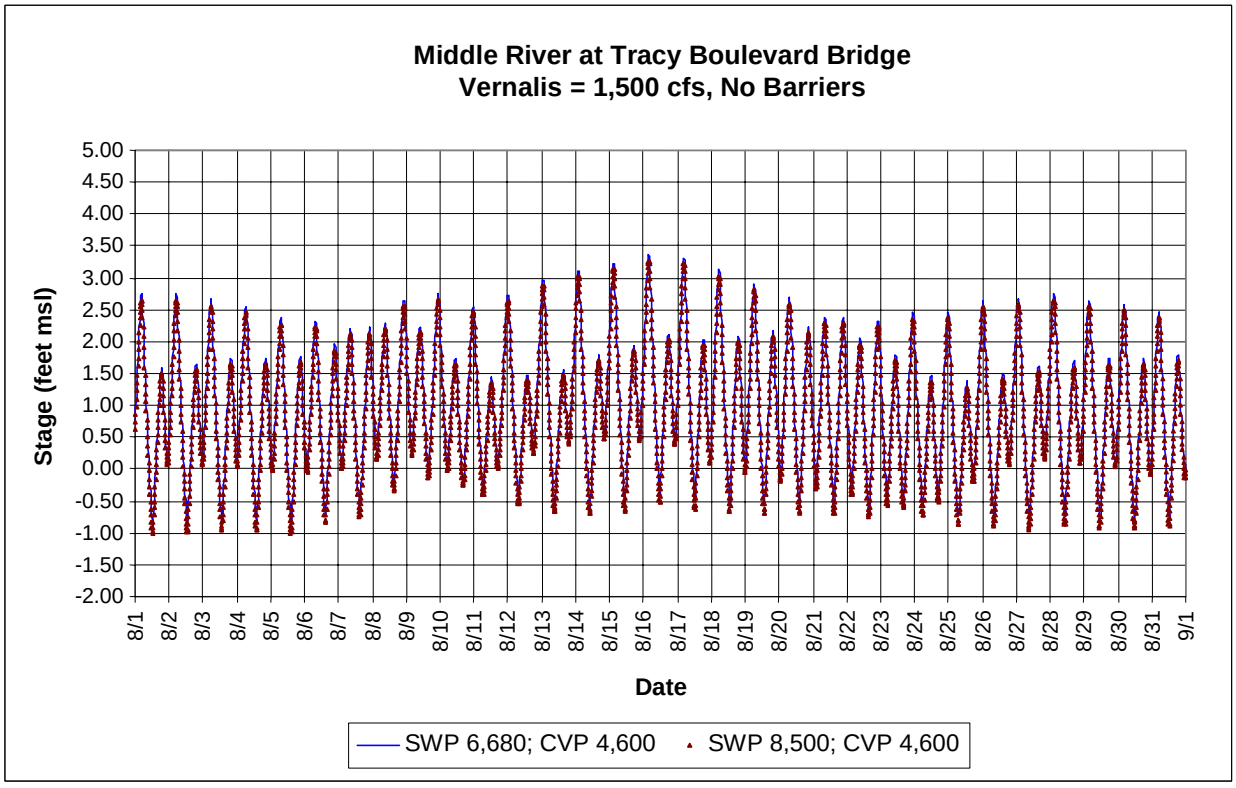
Figure D-103

Simulated Flow in Middle River at Mowry Bridge with CVP and SWP Pumping



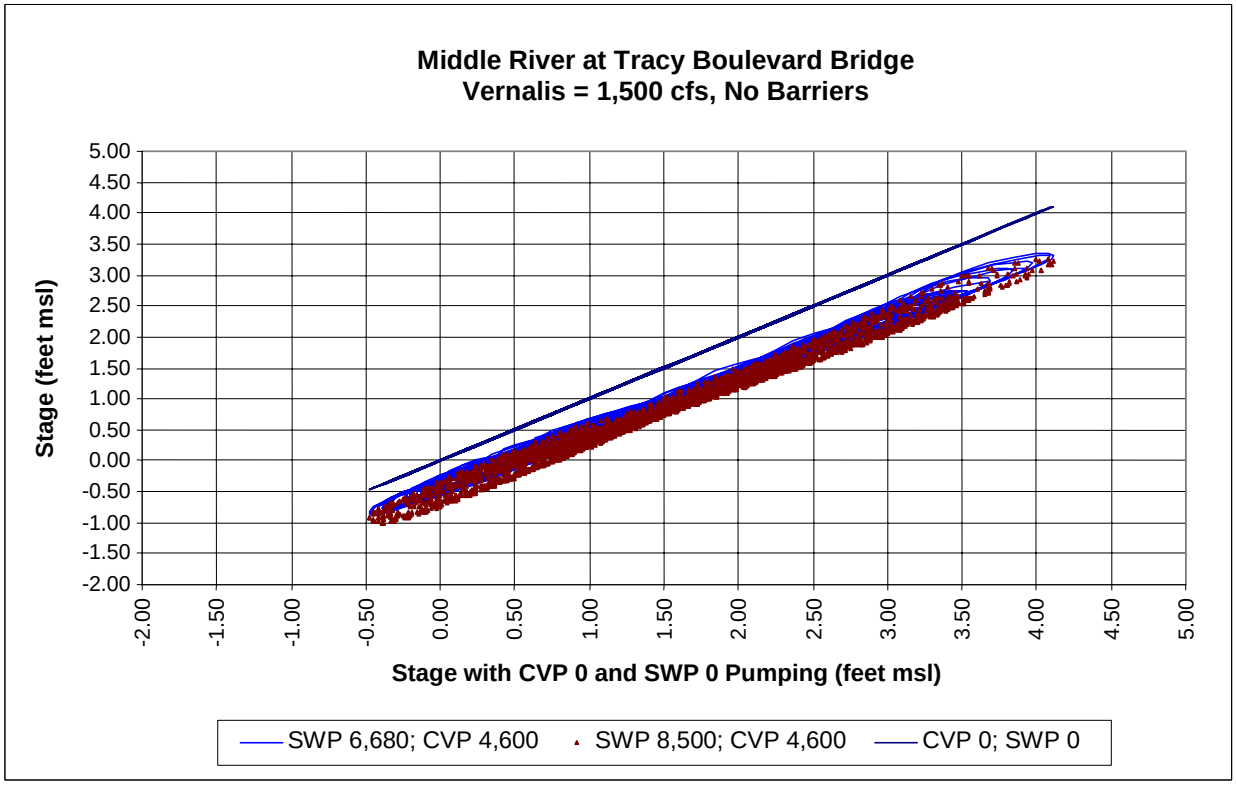


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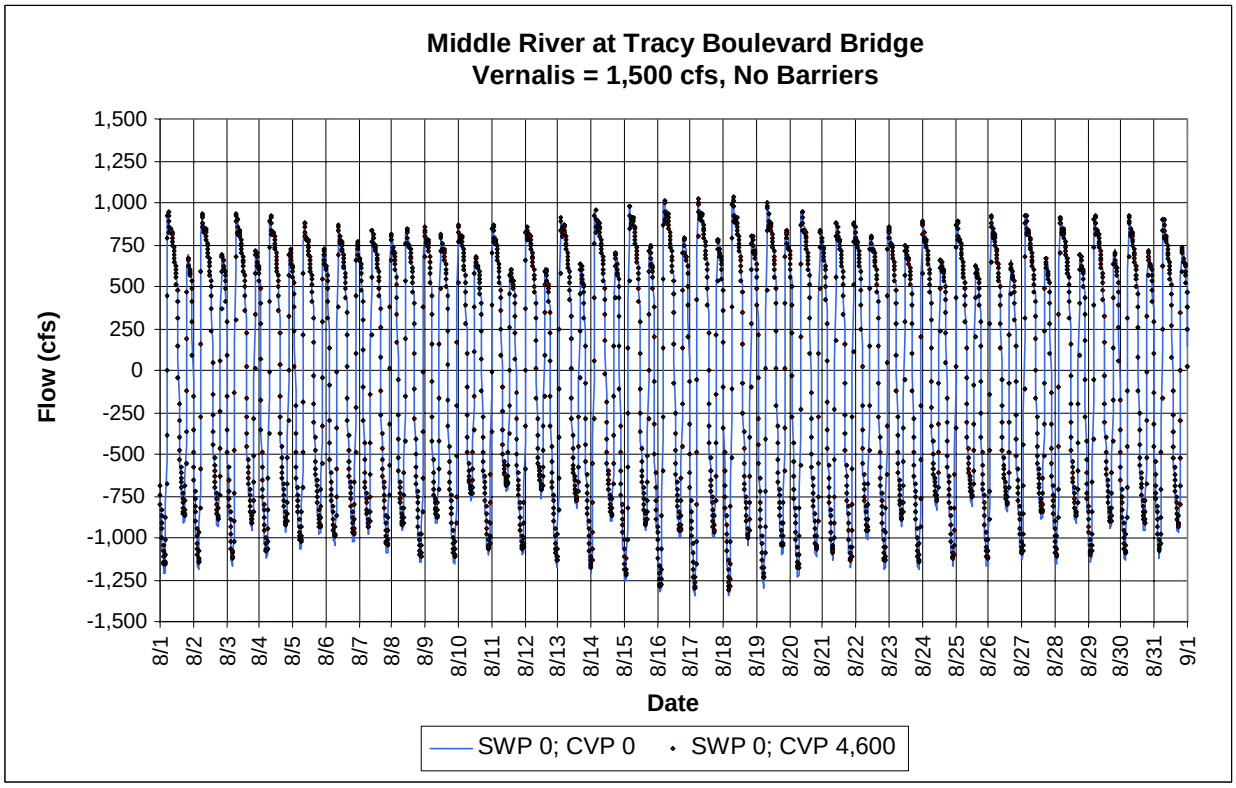
Figure D-104

Simulated Water Surface Elevation (Stage) in Middle River at Tracy Boulevard Bridge with CVP and SWP Pumping



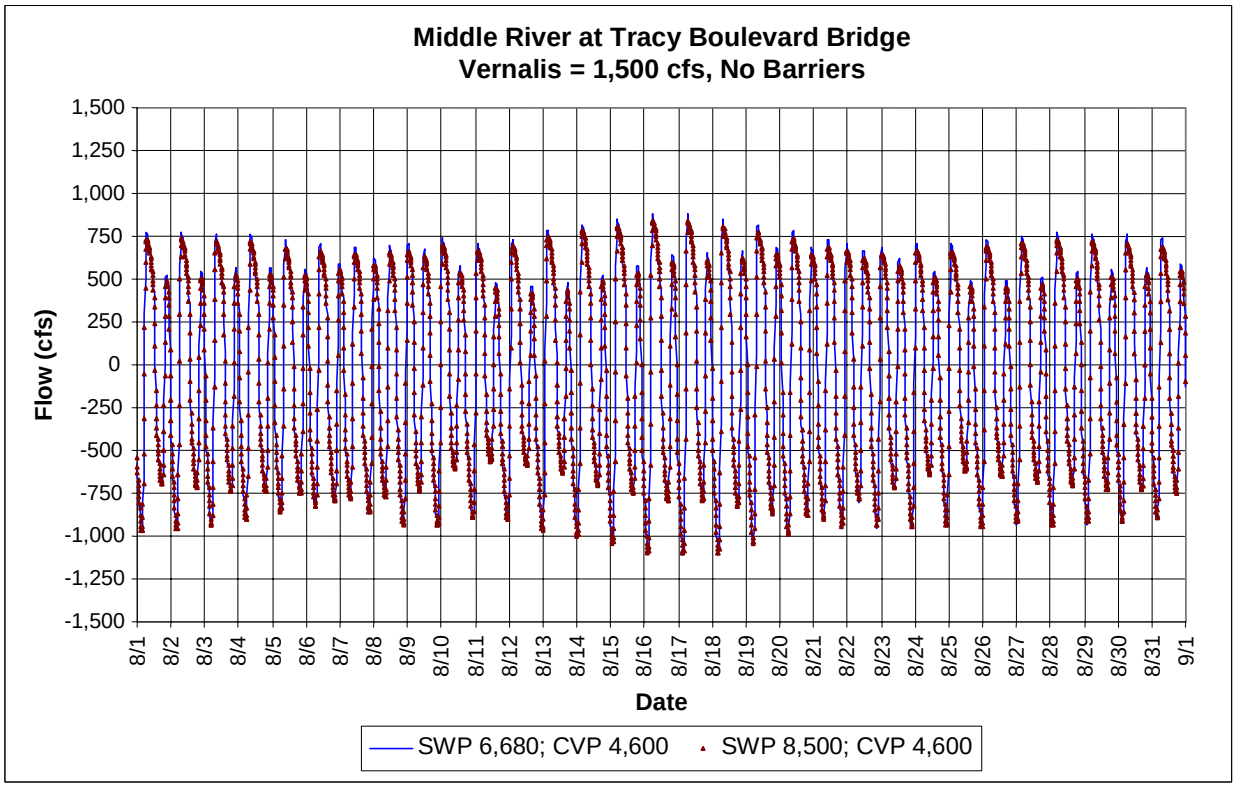


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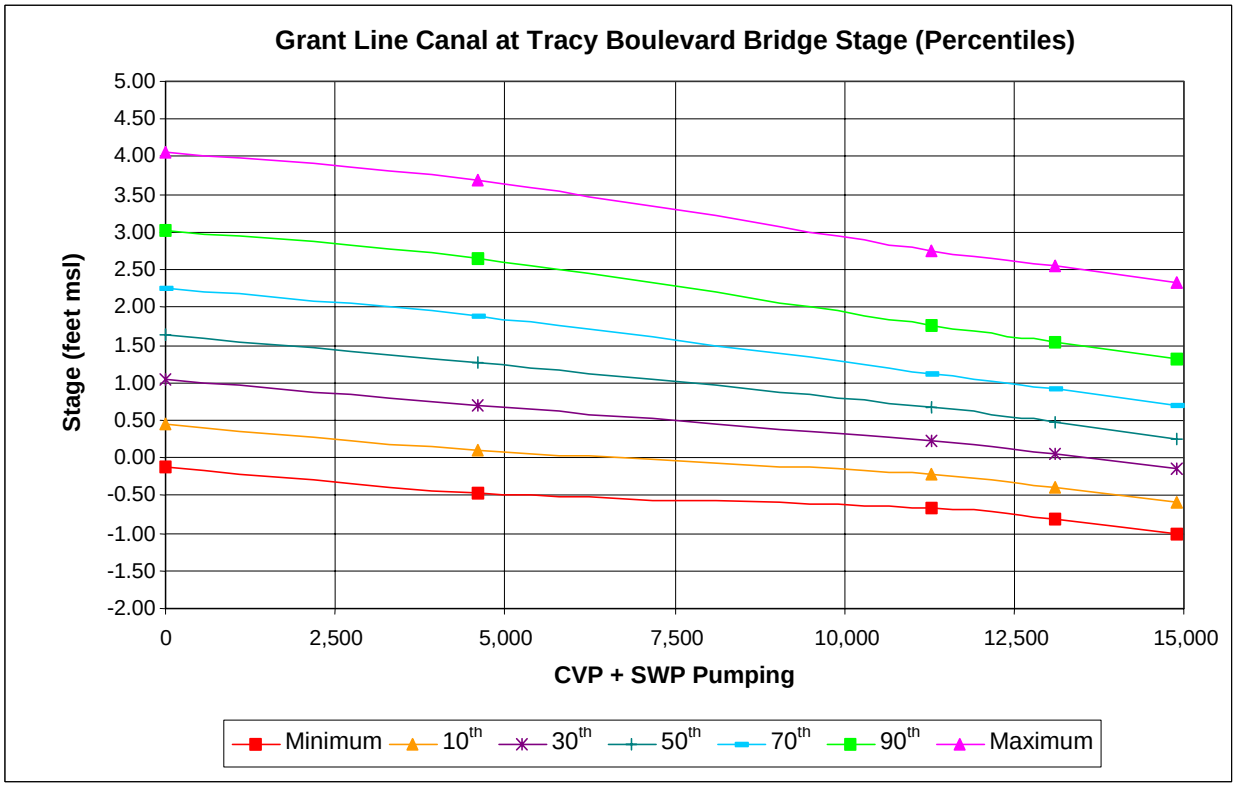
Figure D-105

Simulated Flow in Middle River at Tracy Boulevard Bridge with CVP and SWP Pumping



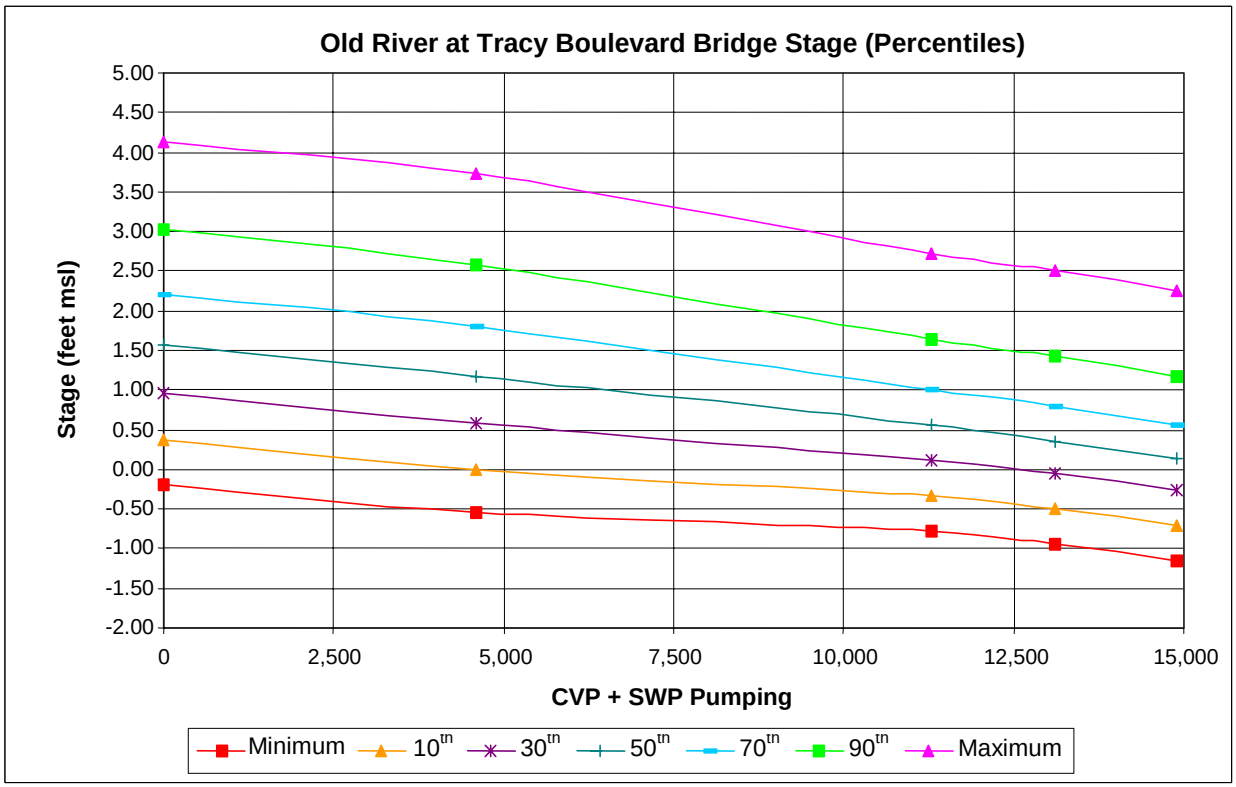


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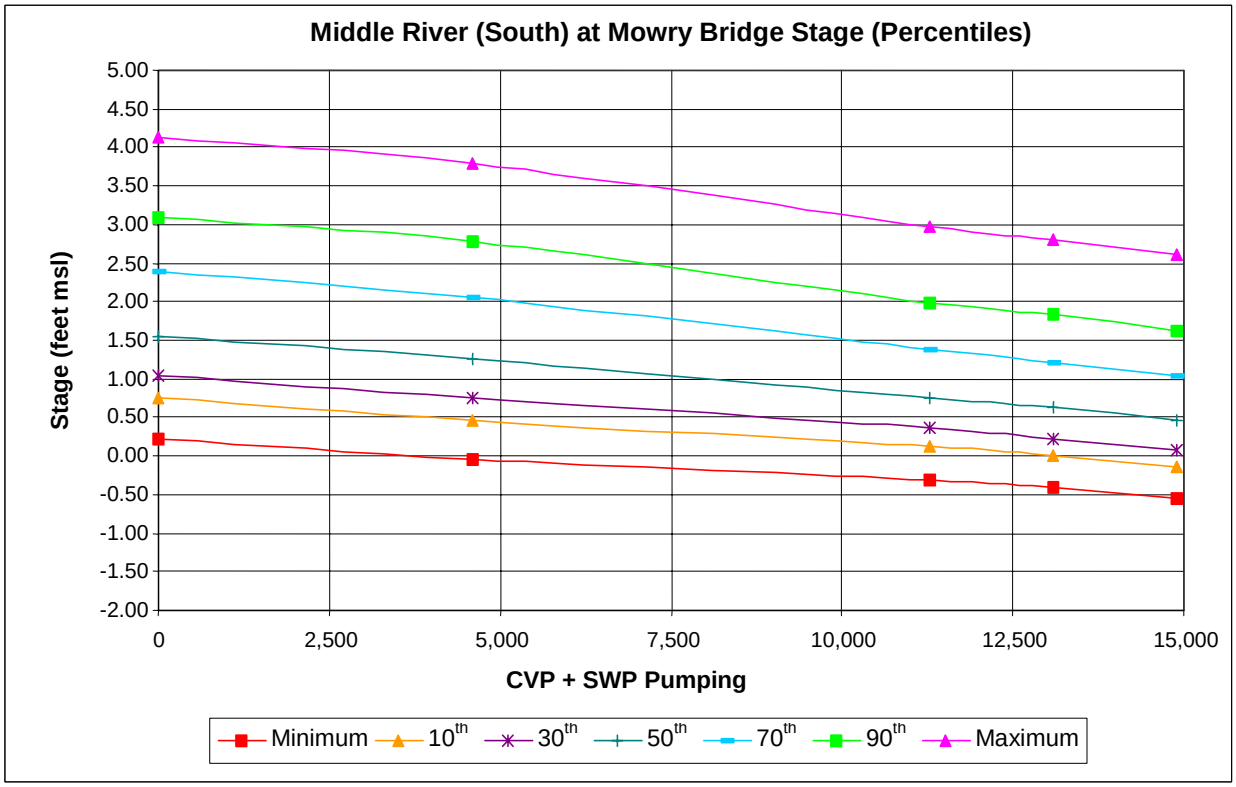
Figure D-106

Simulated Monthly Water-Surface Elevation (Stage) in Grant Line Canal and Old River at Tracy Boulevard Bridge for Combined CVP and SWP Pumping



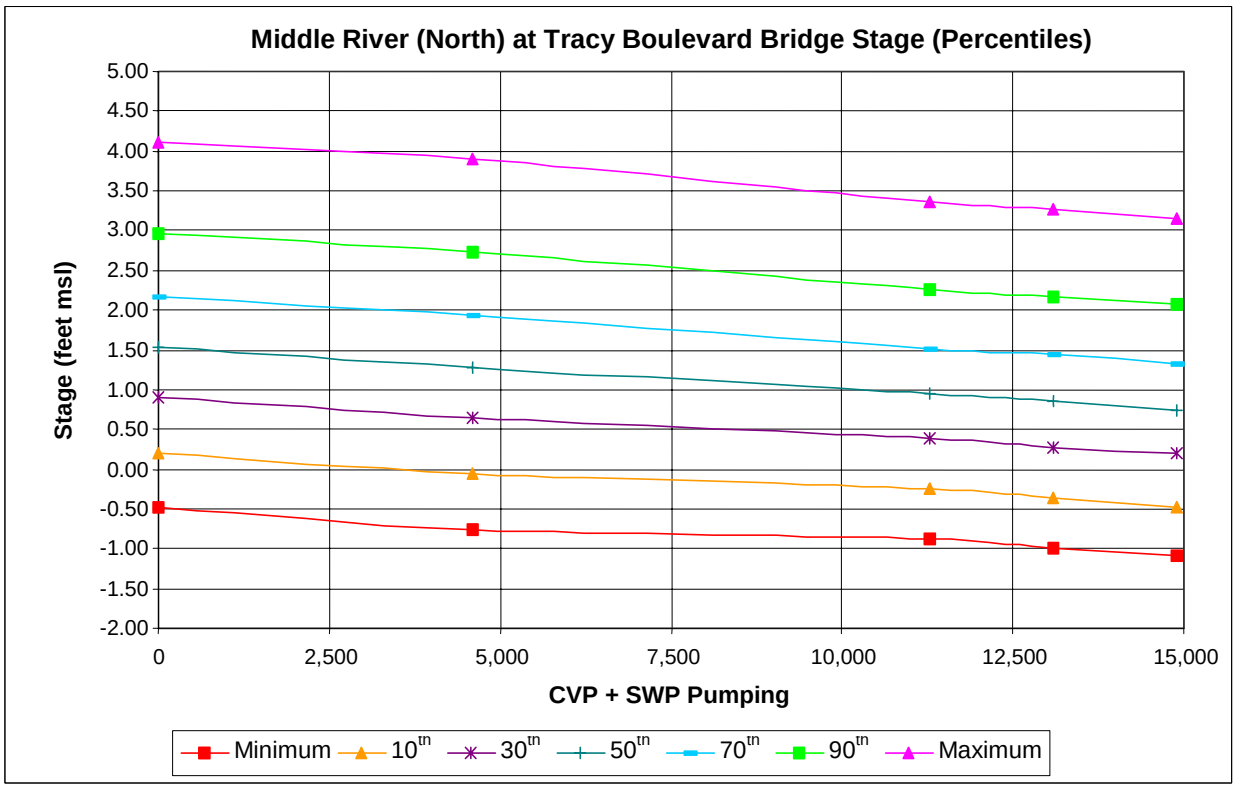


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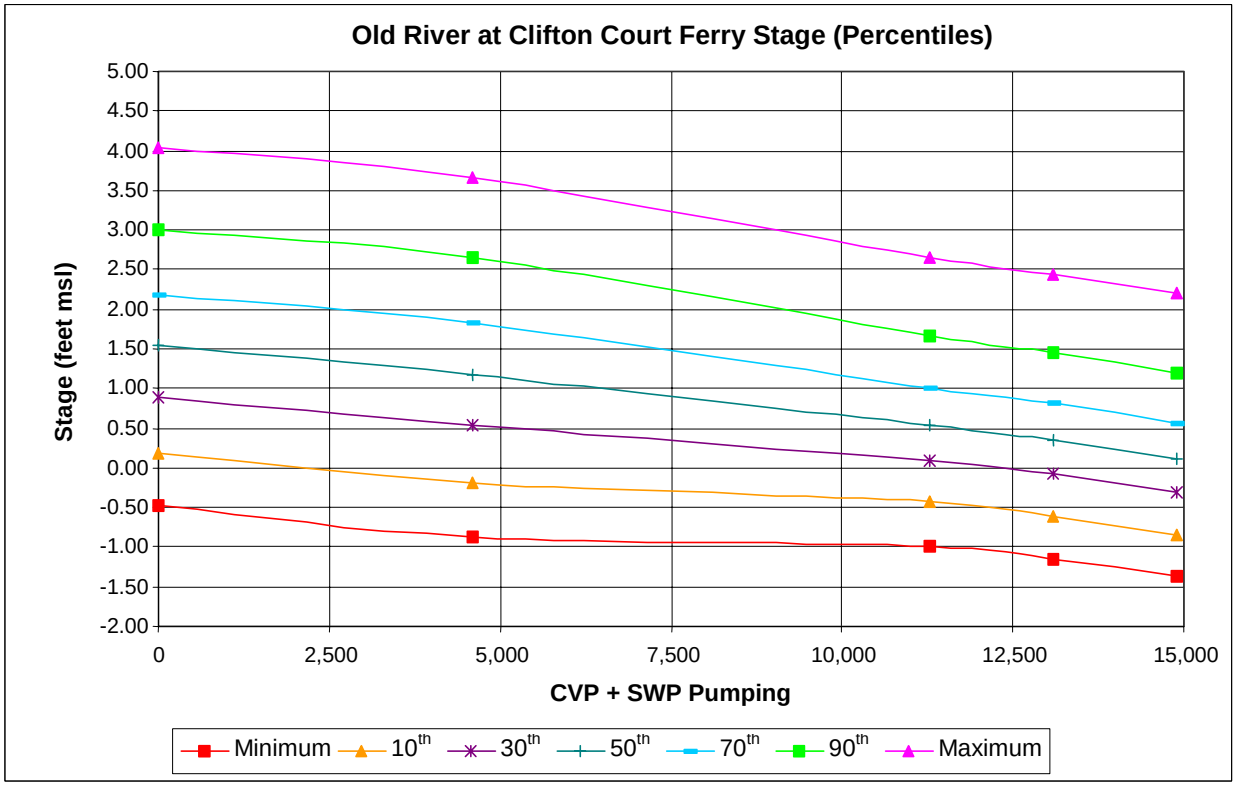
Figure D-107

Simulated Monthly Water-Surface Elevation (Stage) in Middle River at Mowry and Tracy Boulevard Bridges for Combined CVP and SWP Pumping



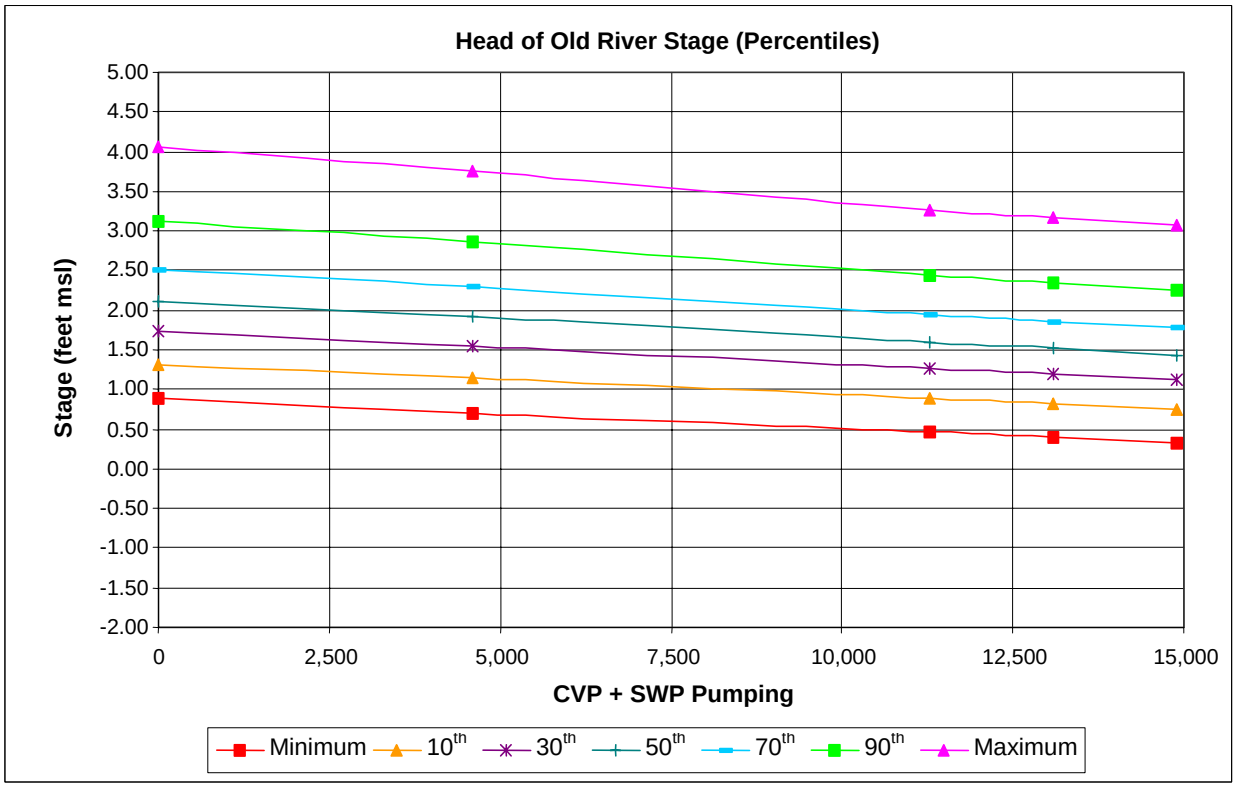


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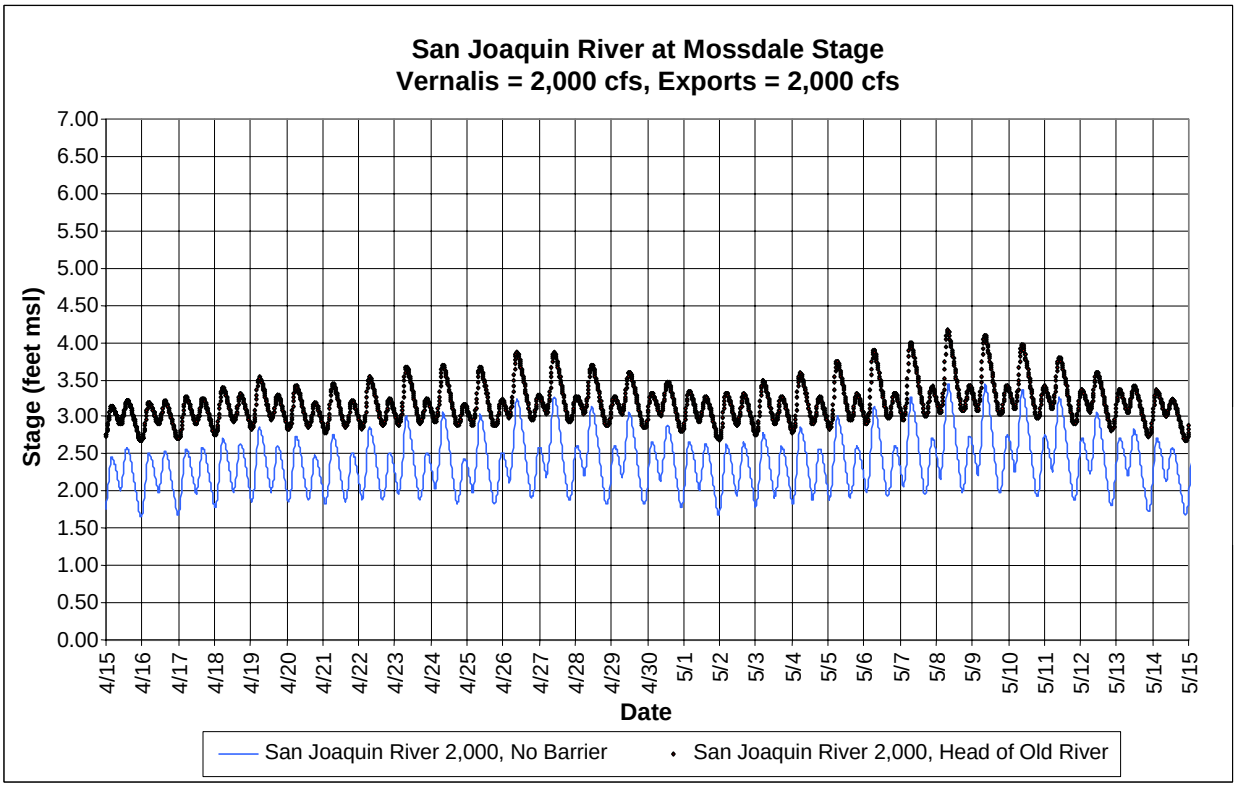
Figure D-108

Simulated Monthly Water-Surface Elevation (Stage) in Old River at Clifton Court Ferry and at Head of Old River for Combined CVP and SWP Pumping



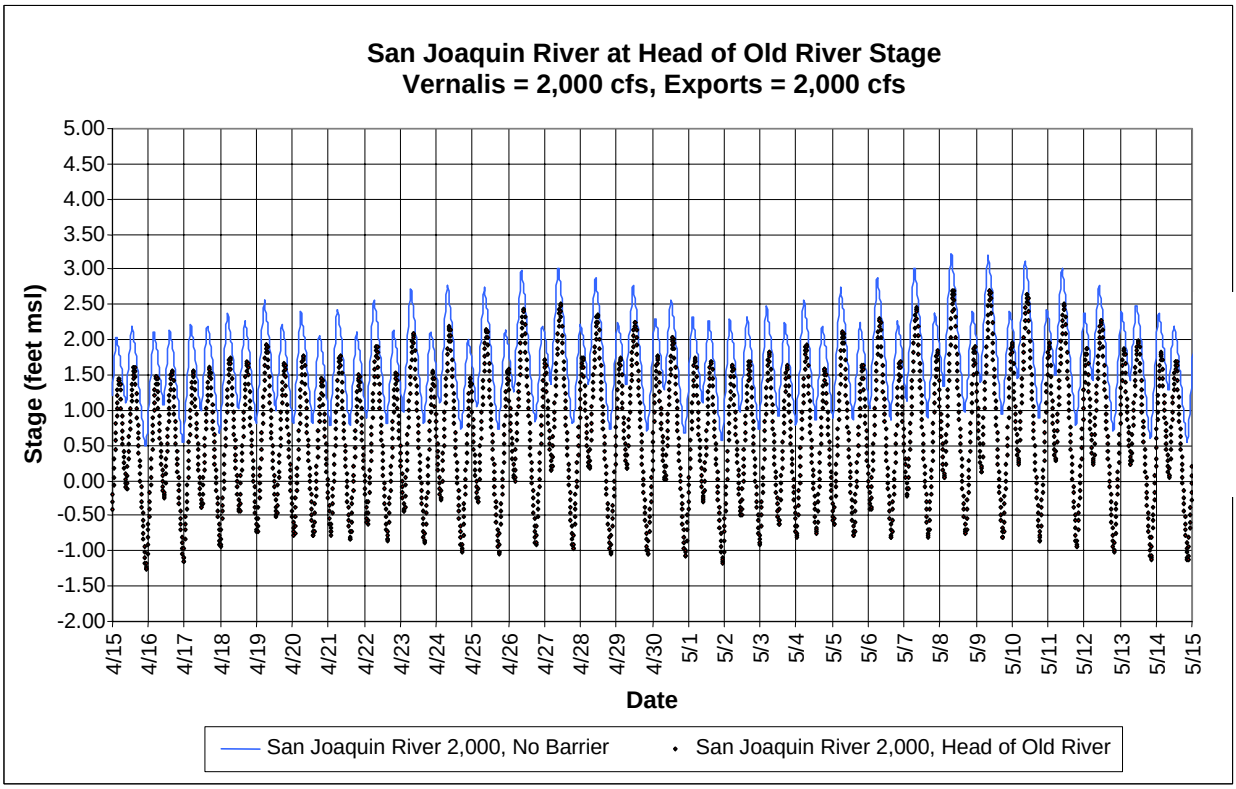


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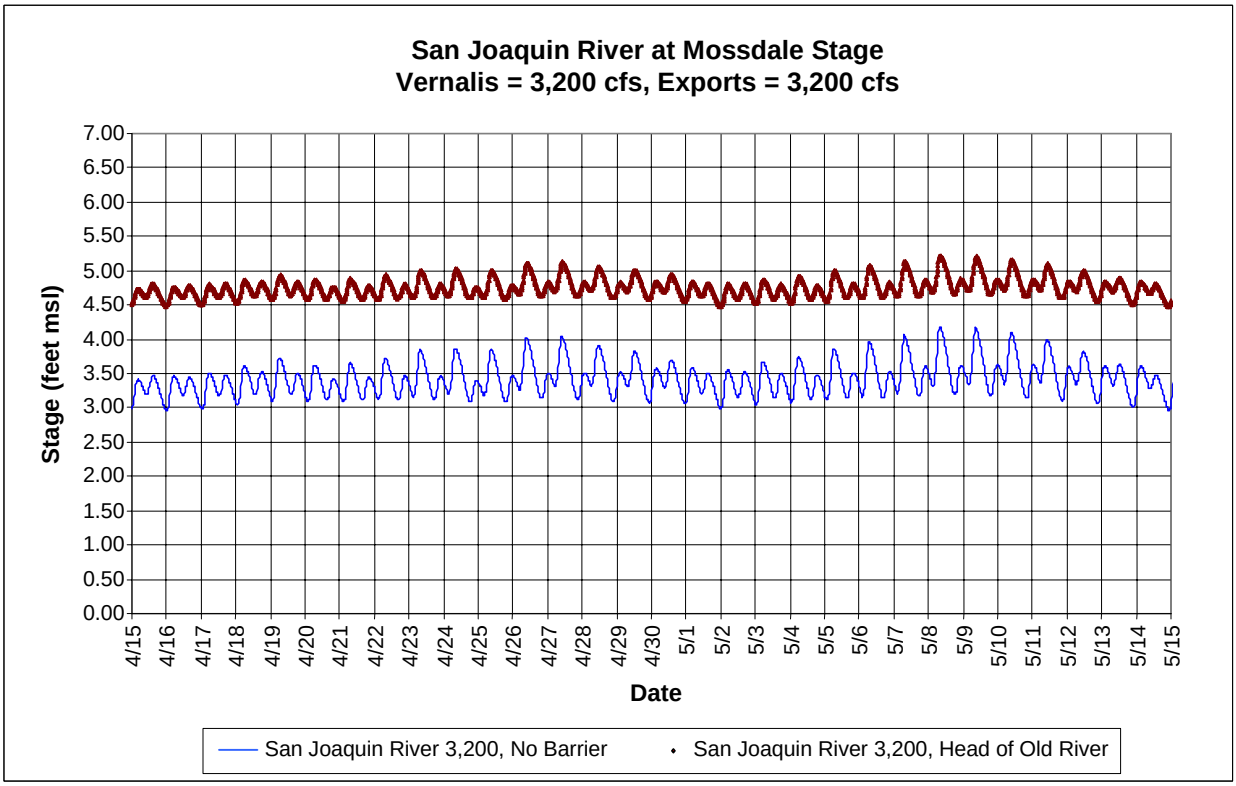
Figure D-109

Simulated Water-Surface Elevation (Stage) in the San Joaquin River at Mossdale and at Head of Old River with VAMP Flows at 2,000 cubic feet per second (cfs)



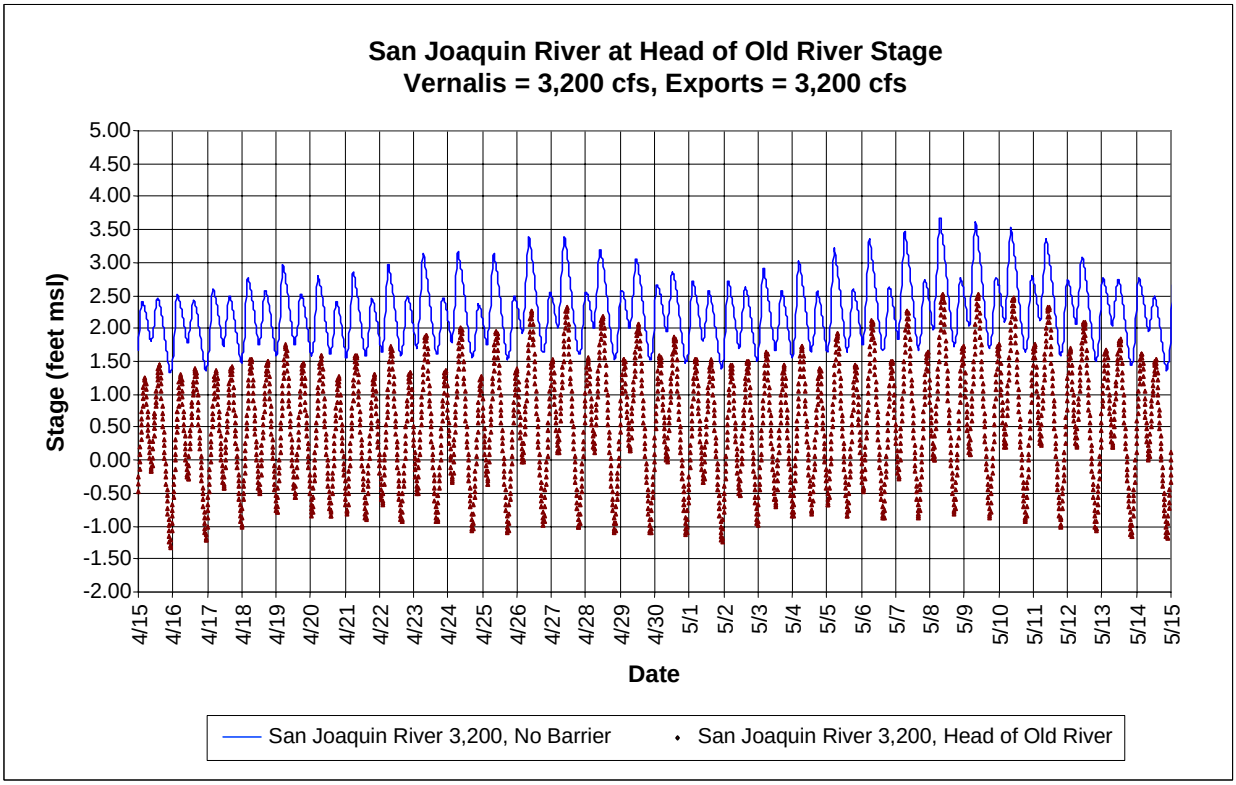


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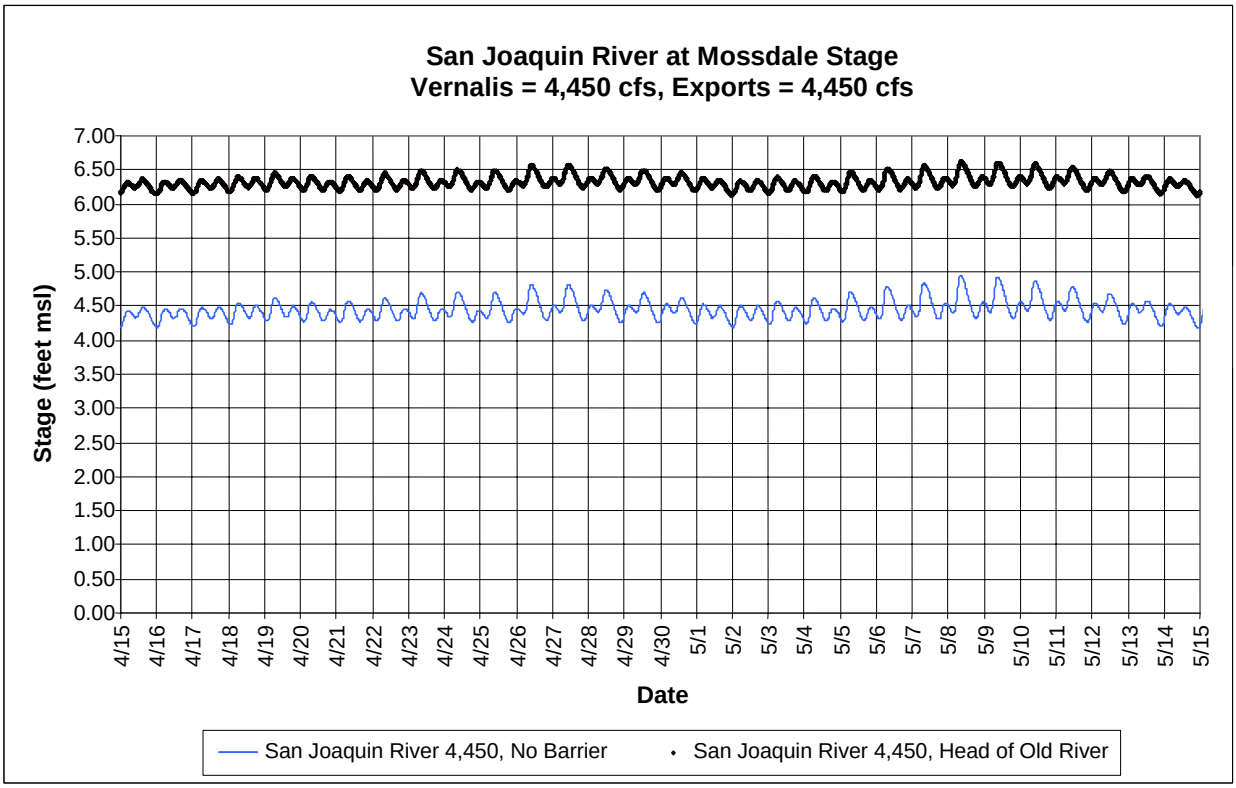
Figure D-110

Simulated Water-Surface Elevation (Stage) in the San Joaquin River at Mossdale and at Head of Old River with VAMP Flows at 3,200 cubic feet per second (cfs)



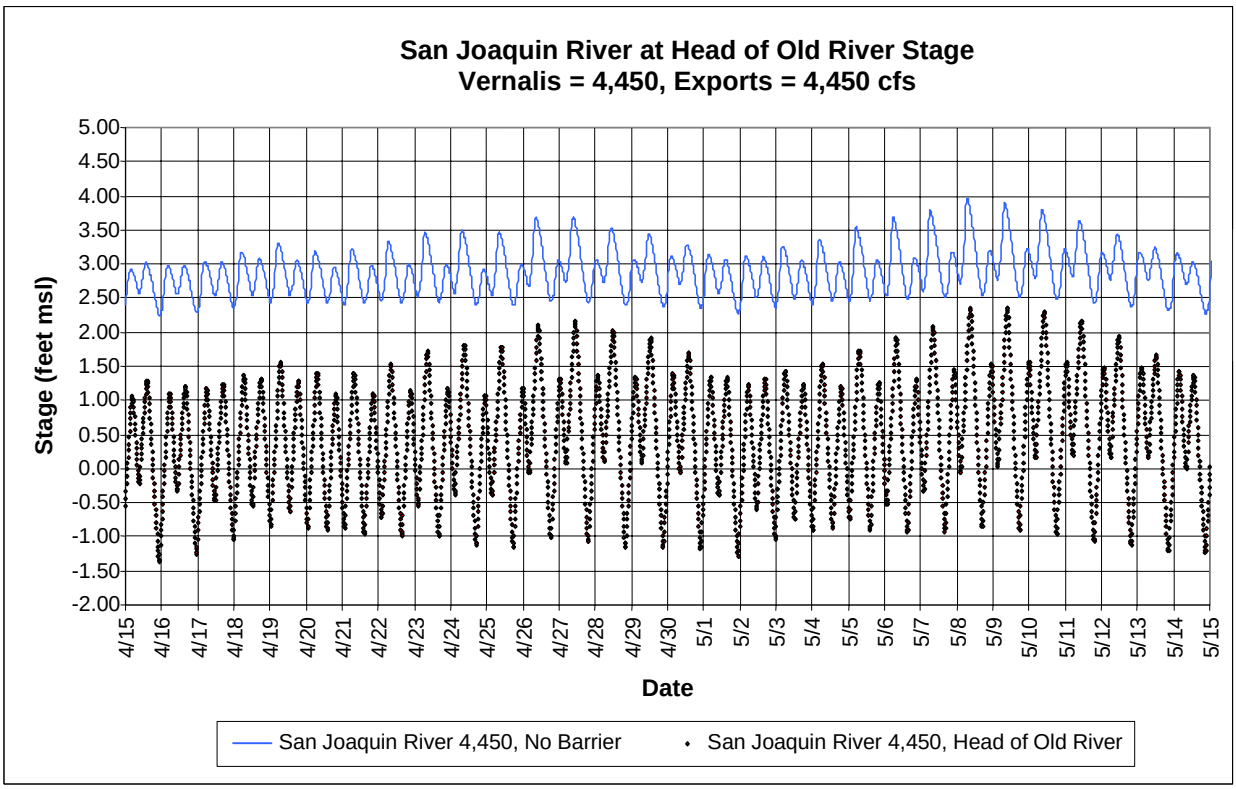


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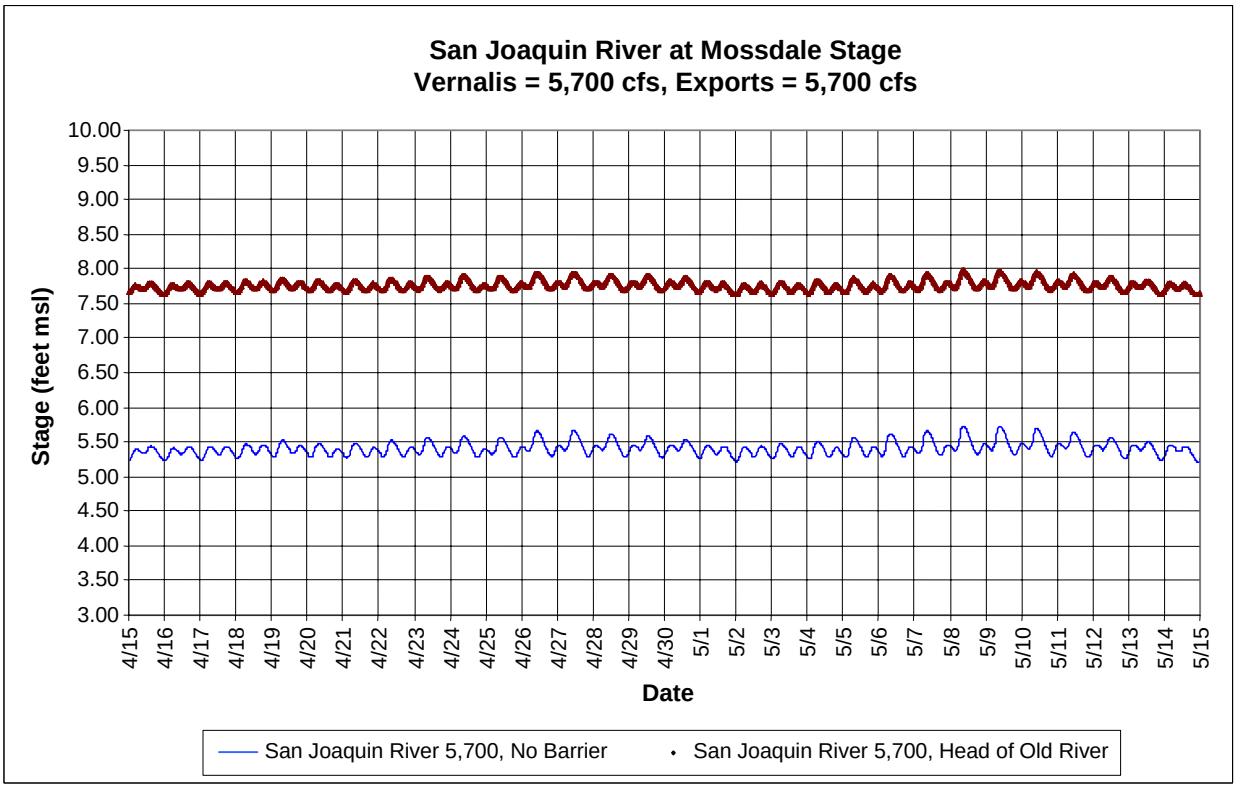
Figure D-111

Simulated Water-Surface Elevation (Stage) in the San Joaquin River at Mossdale and at Head of Old River with VAMP Flows at 4,450 cubic feet per second (cfs)



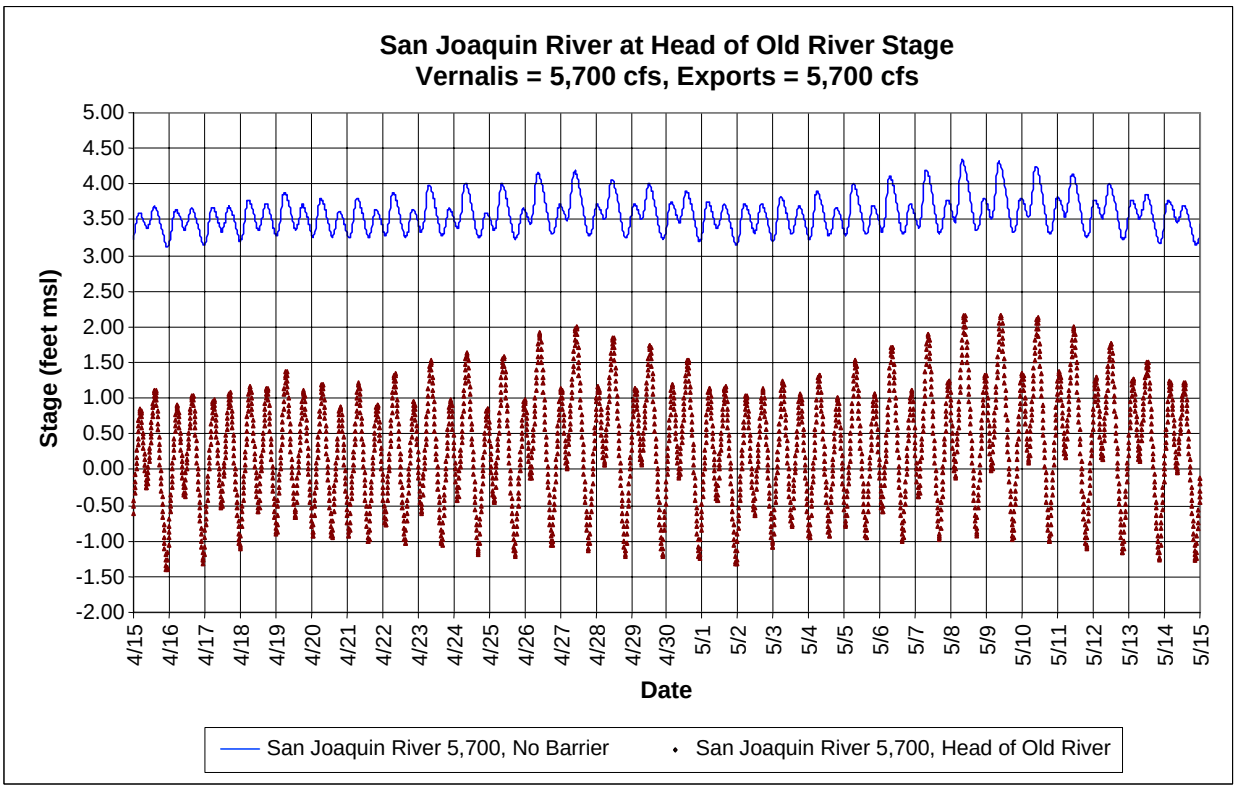


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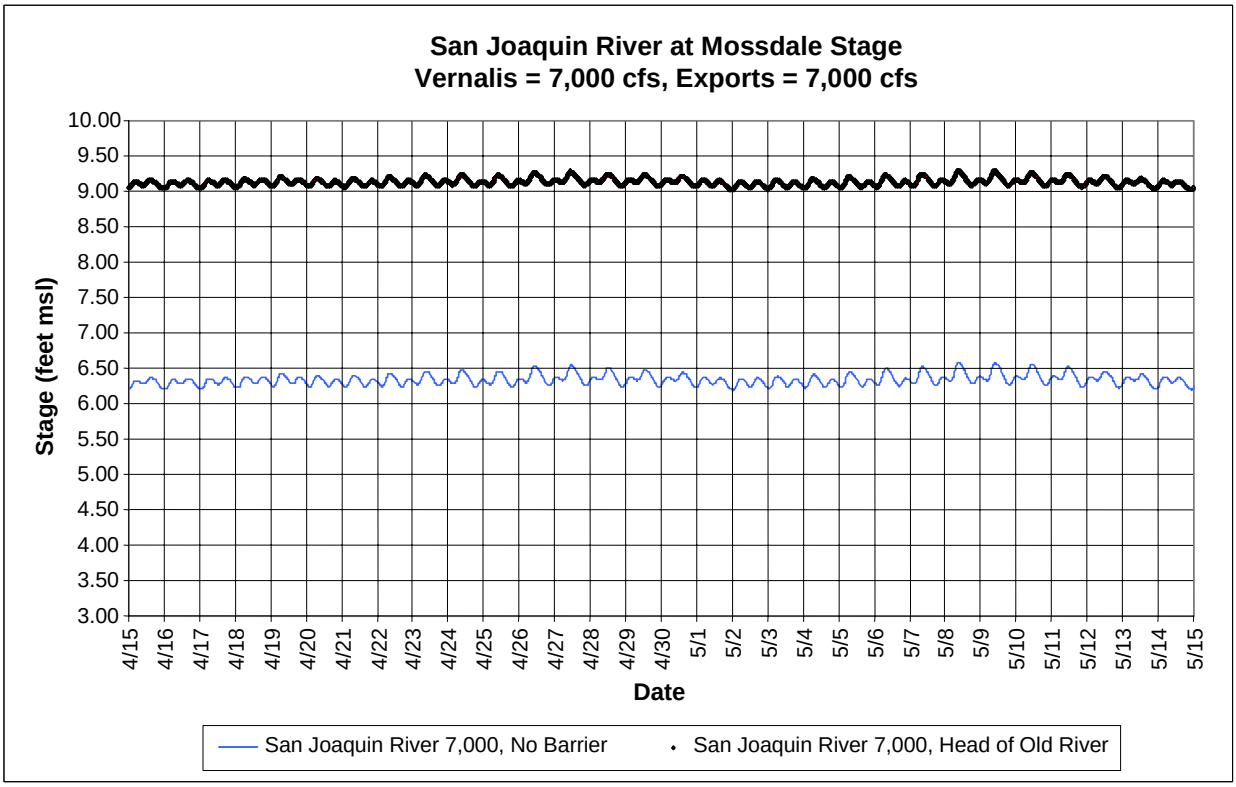
Figure D-112

Simulated Water-Surface Elevation (Stage) in the San Joaquin River at Mossdale and at Head of Old River with VAMP Flows at 5,700 cubic feet per second (cfs)



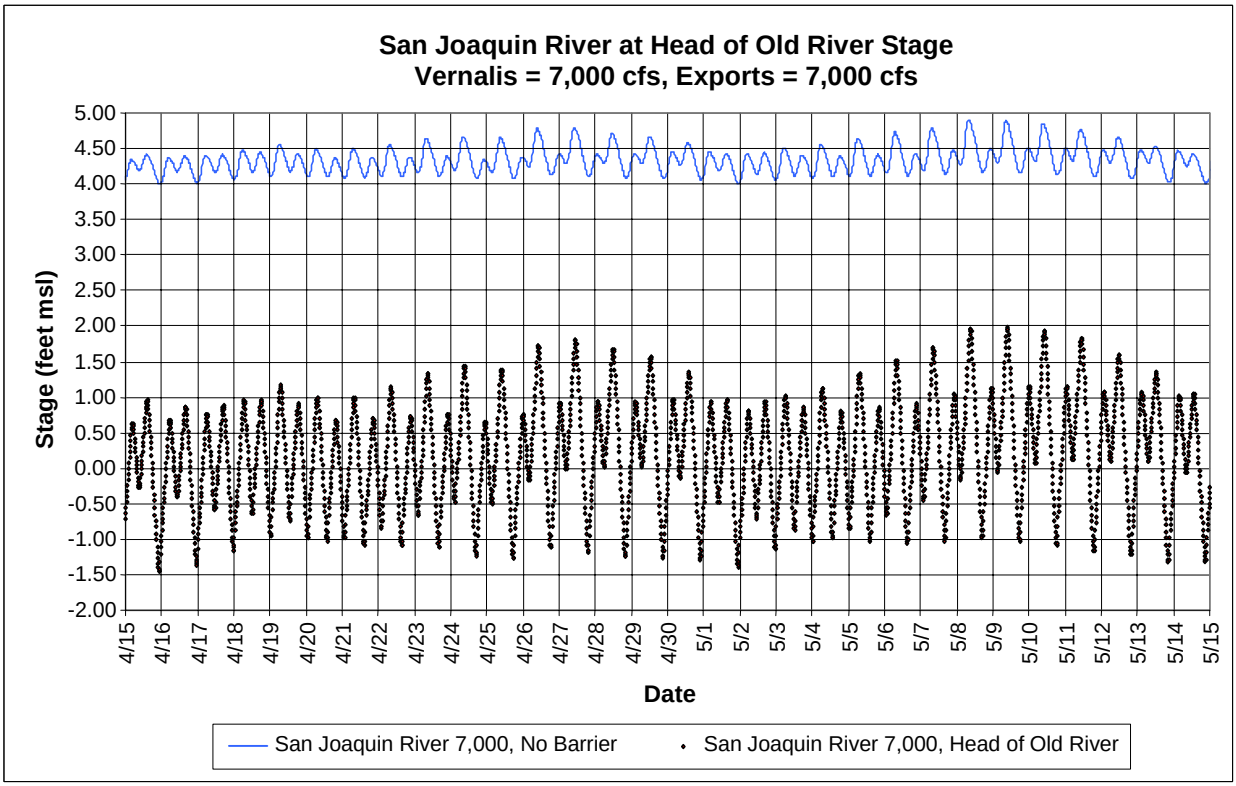


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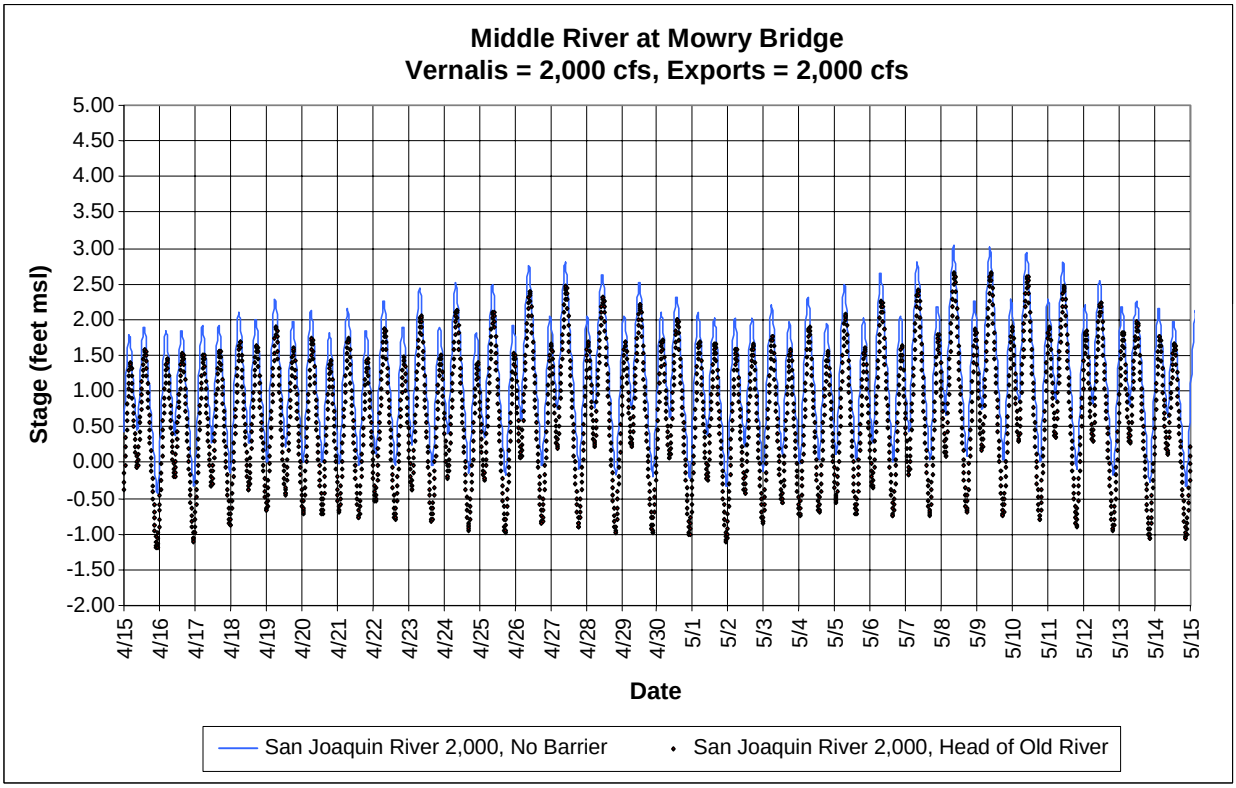
Figure D-113

Simulated Water-Surface Elevation (Stage) in the San Joaquin River at Mossdale and at Head of Old River with VAMP Flows at 7,000 cubic feet per second (cfs)



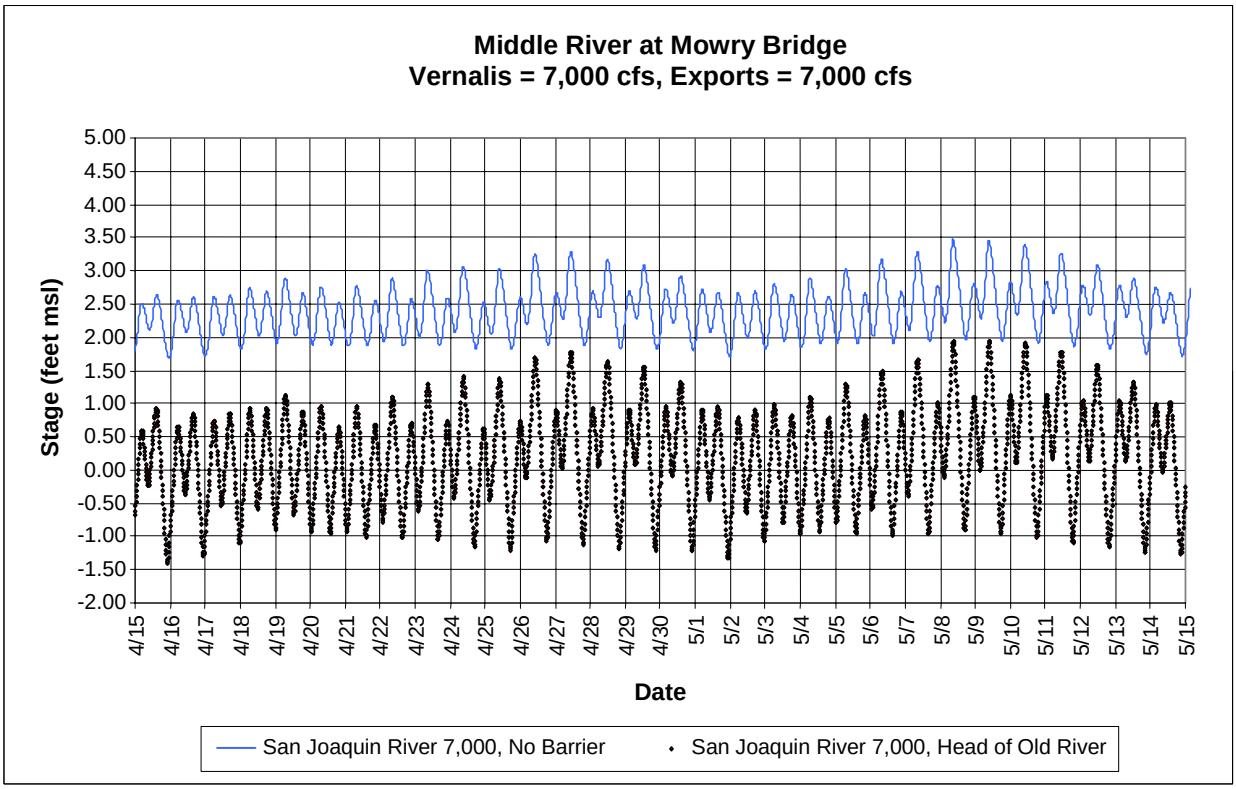


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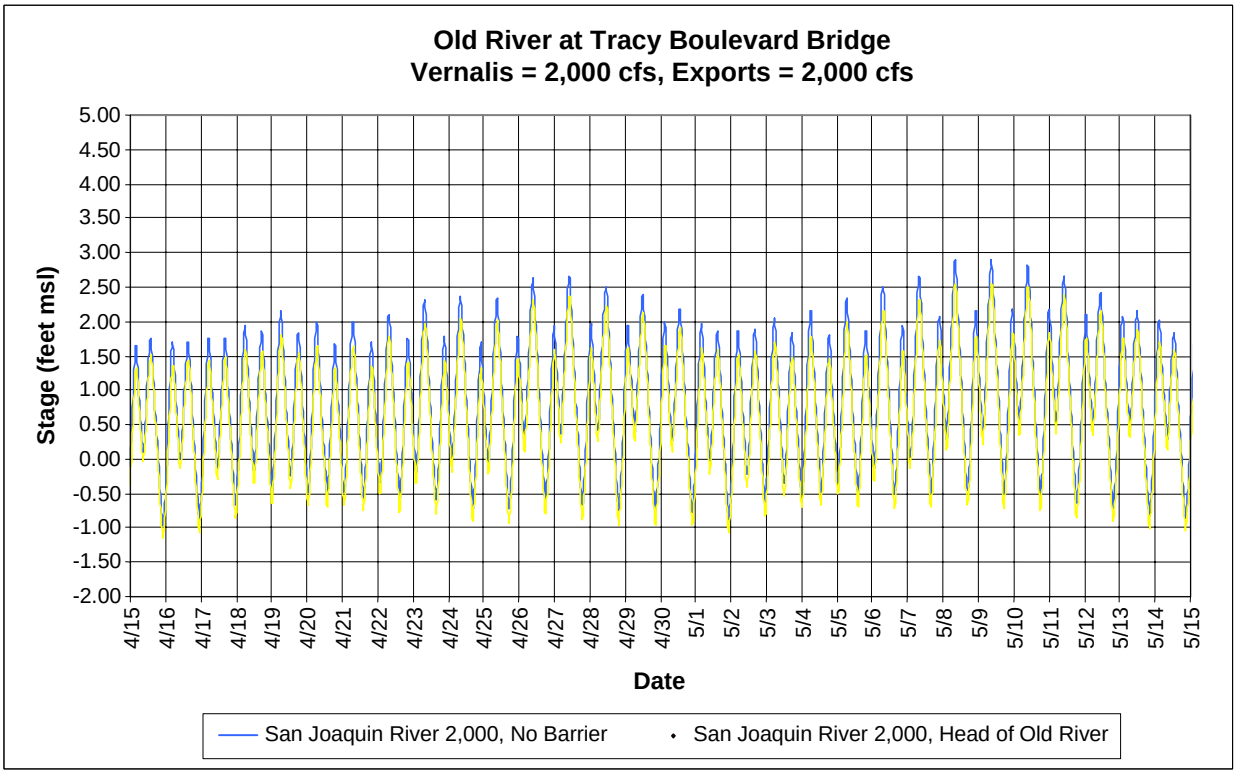
Figure D-114

Simulated Water-Surface Elevation (Stage) in Middle River at Mowry Bridge



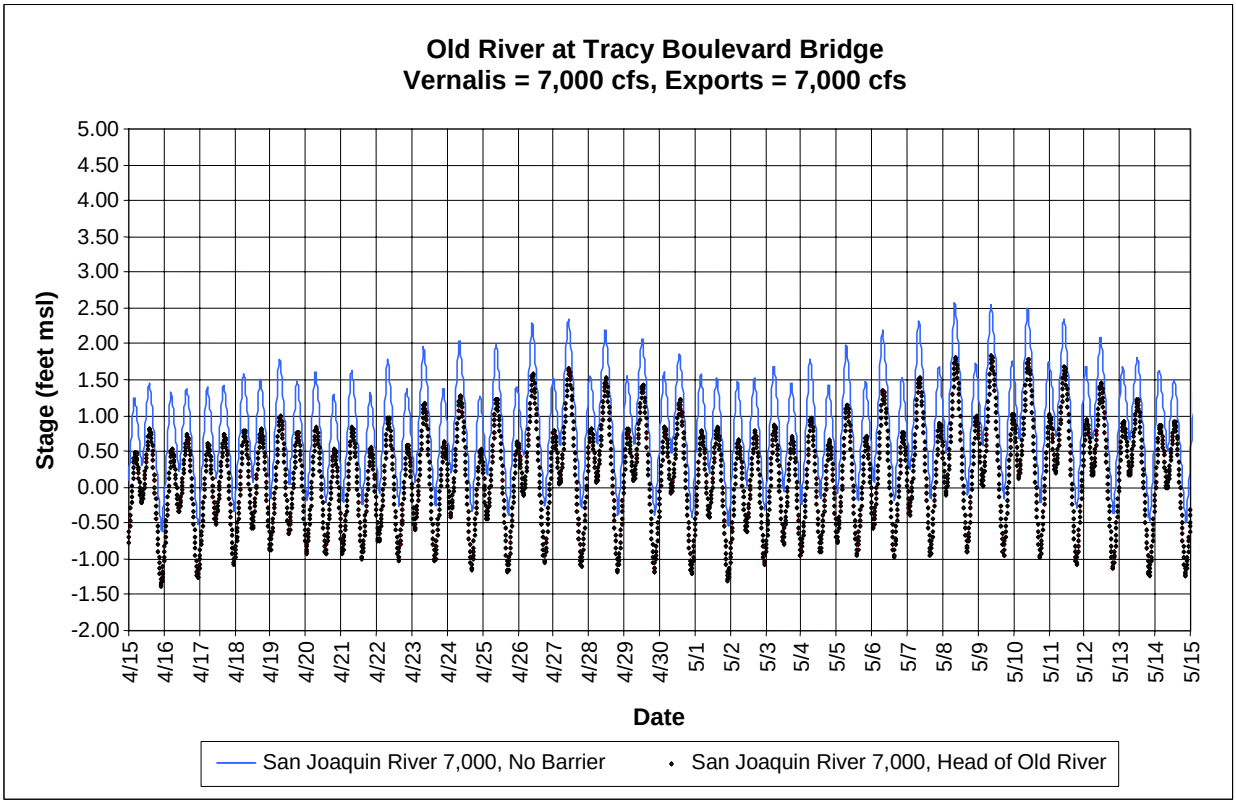


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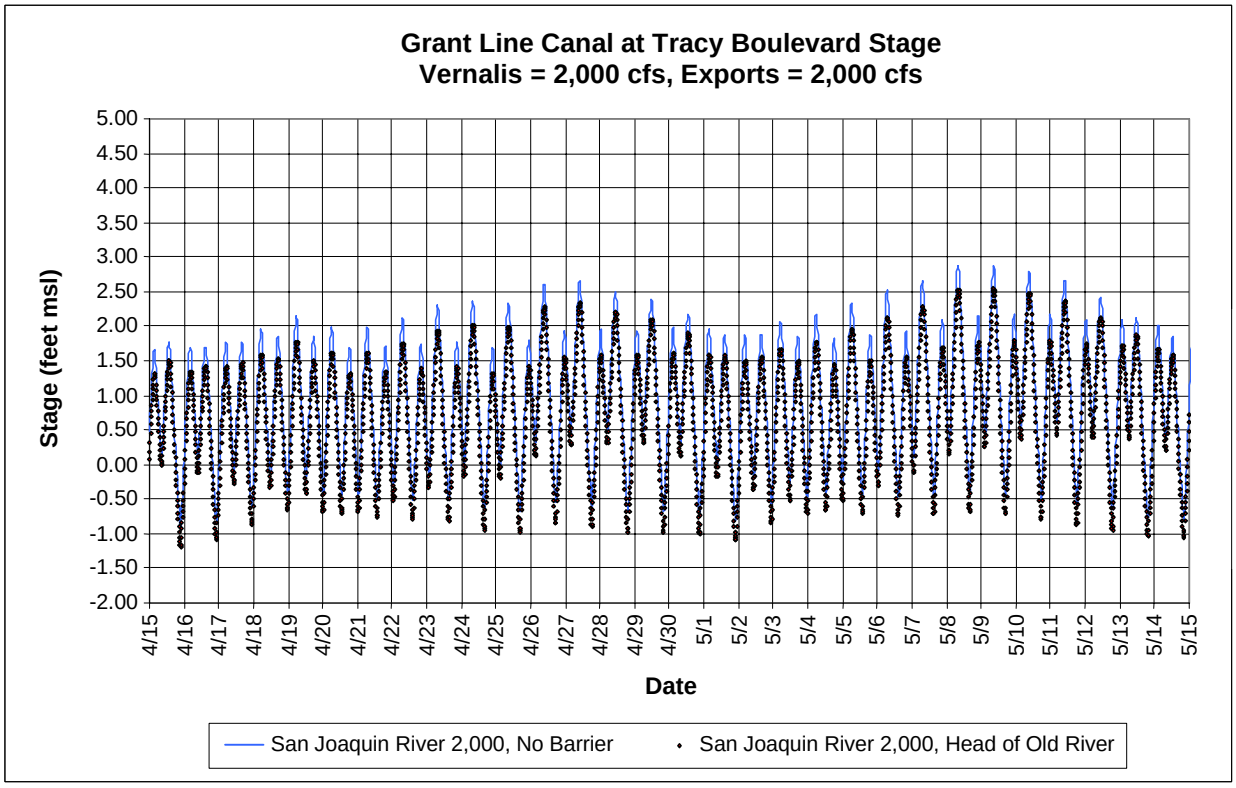
Figure D-115

Simulated Water-Surface Elevation (Stage) in Old River at Tracy Boulevard Bridge



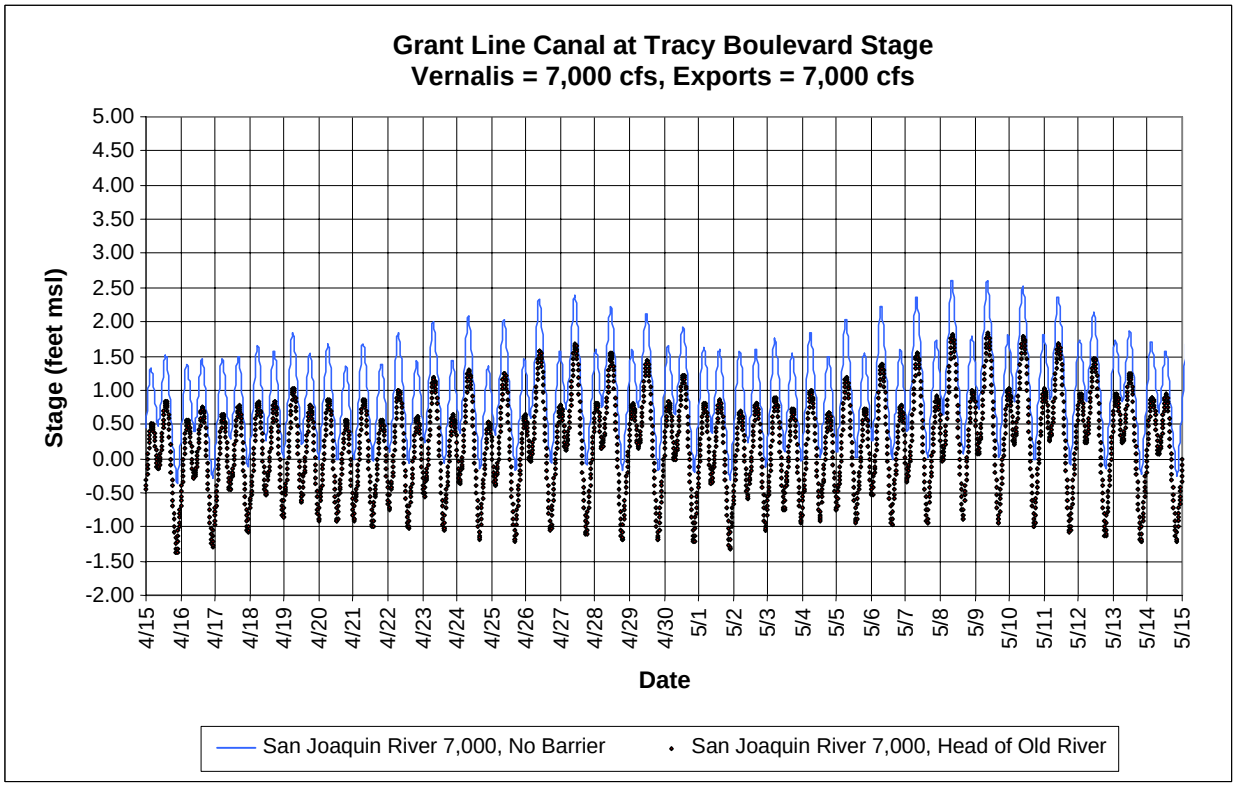


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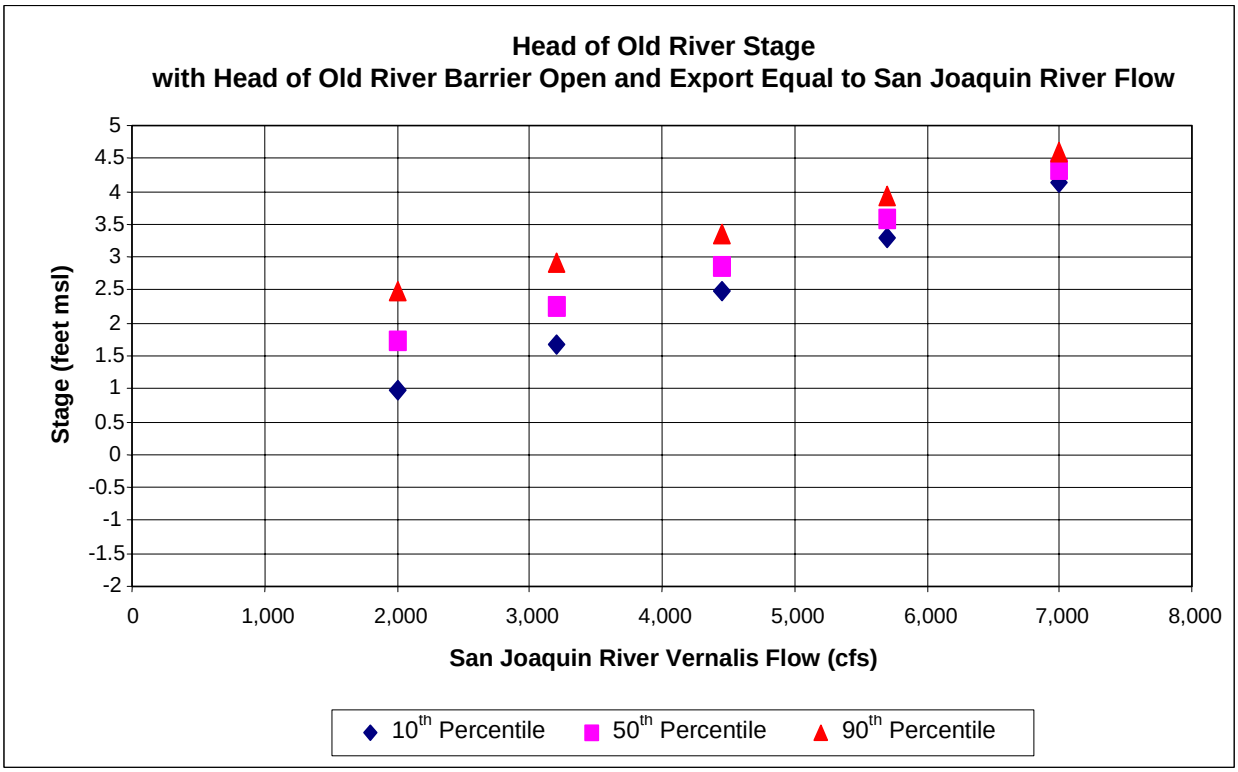
Figure D-116

Simulated Water-Surface Elevation (Stage) in Grant Line Canal at Tracy Boulevard Bridge



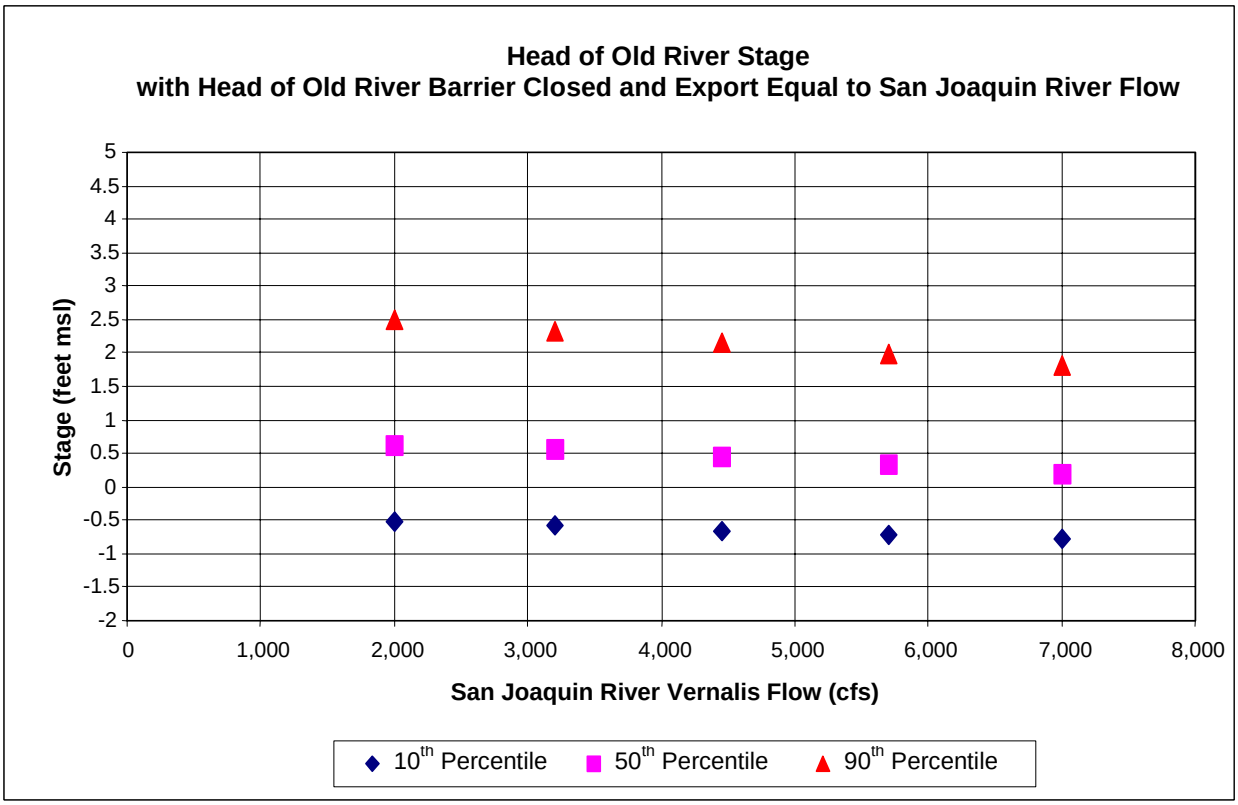


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Figure D-117a

Simulated Water-Surface Elevation (Stage) at Head of Old River with Various VAMP Flows

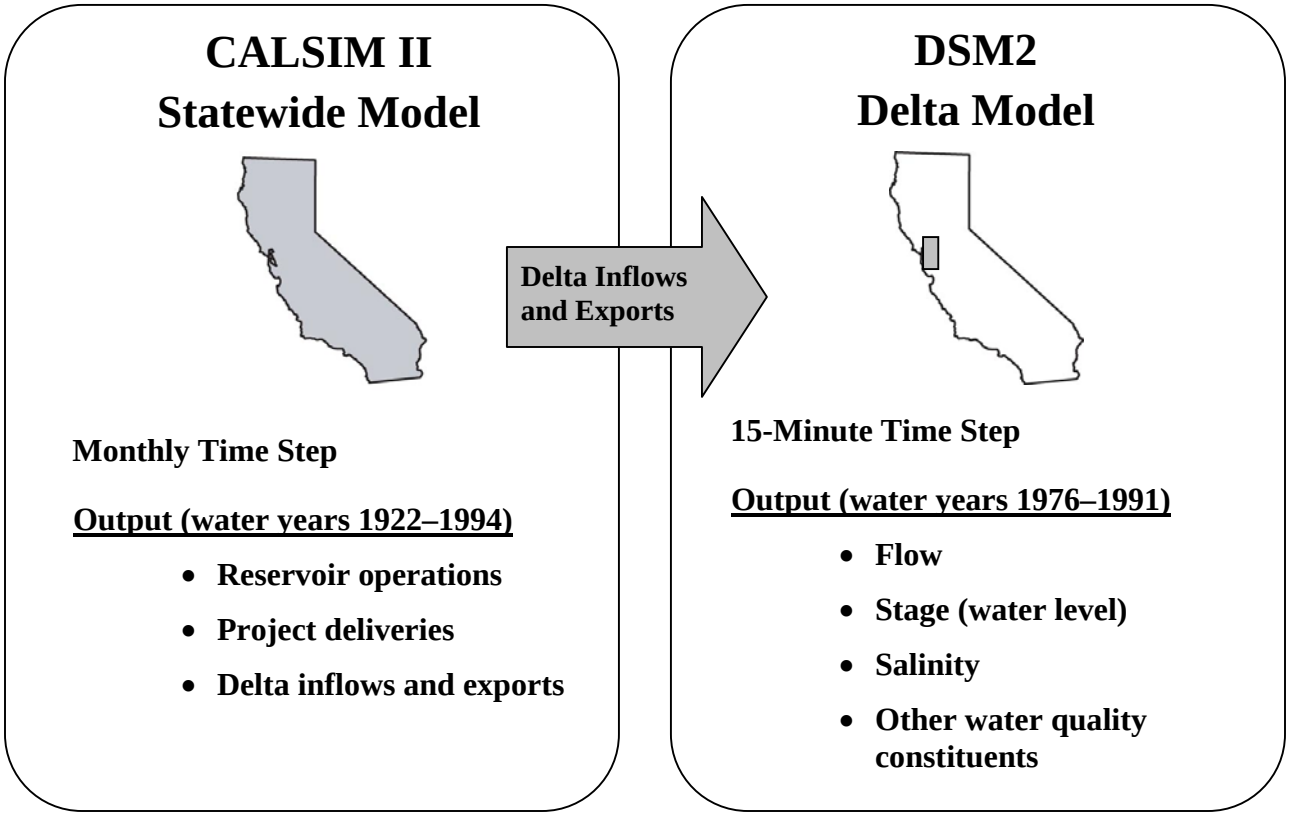

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Figure D-118

Relationship between CALSIM II and DSM2

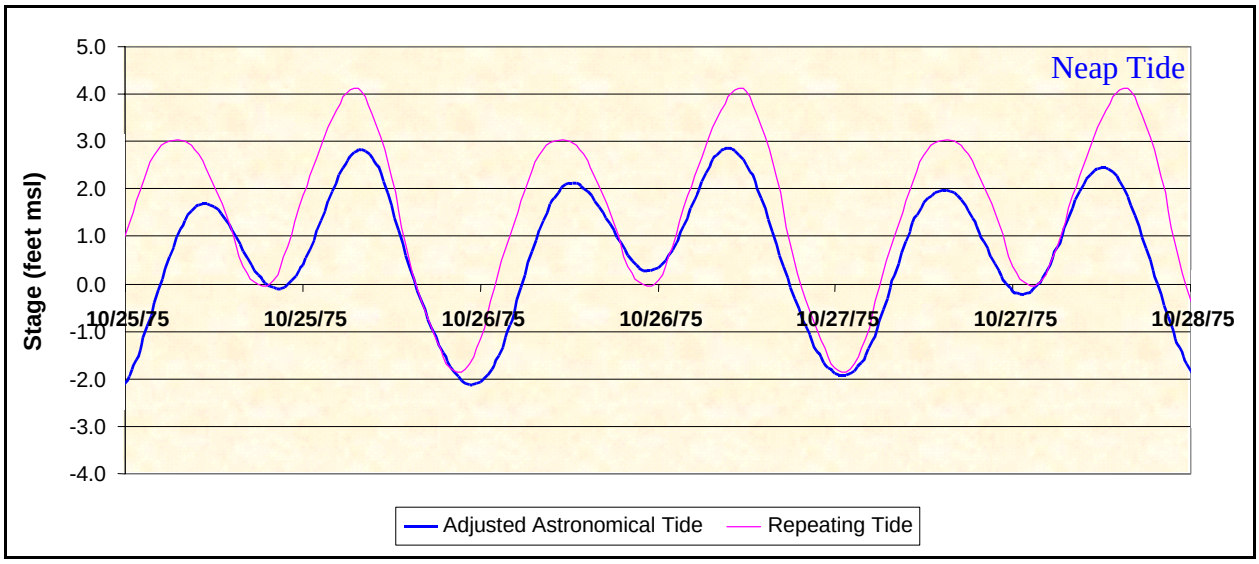

Figure D-119a. Three-Day Sequence of Adjusted Astronomical and 25-Hour-Repeating 19-Year Mean Tides

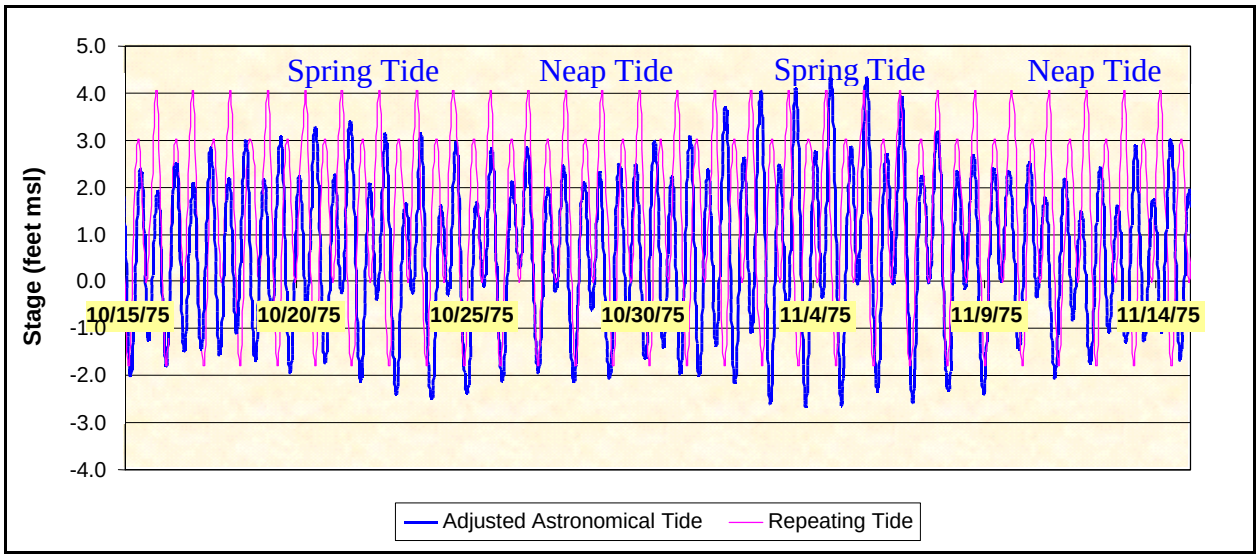

Figure D-119b. Two-Week Sequence of Adjusted Astronomical and 25-Hour-Repeating 19-Year Mean Tides

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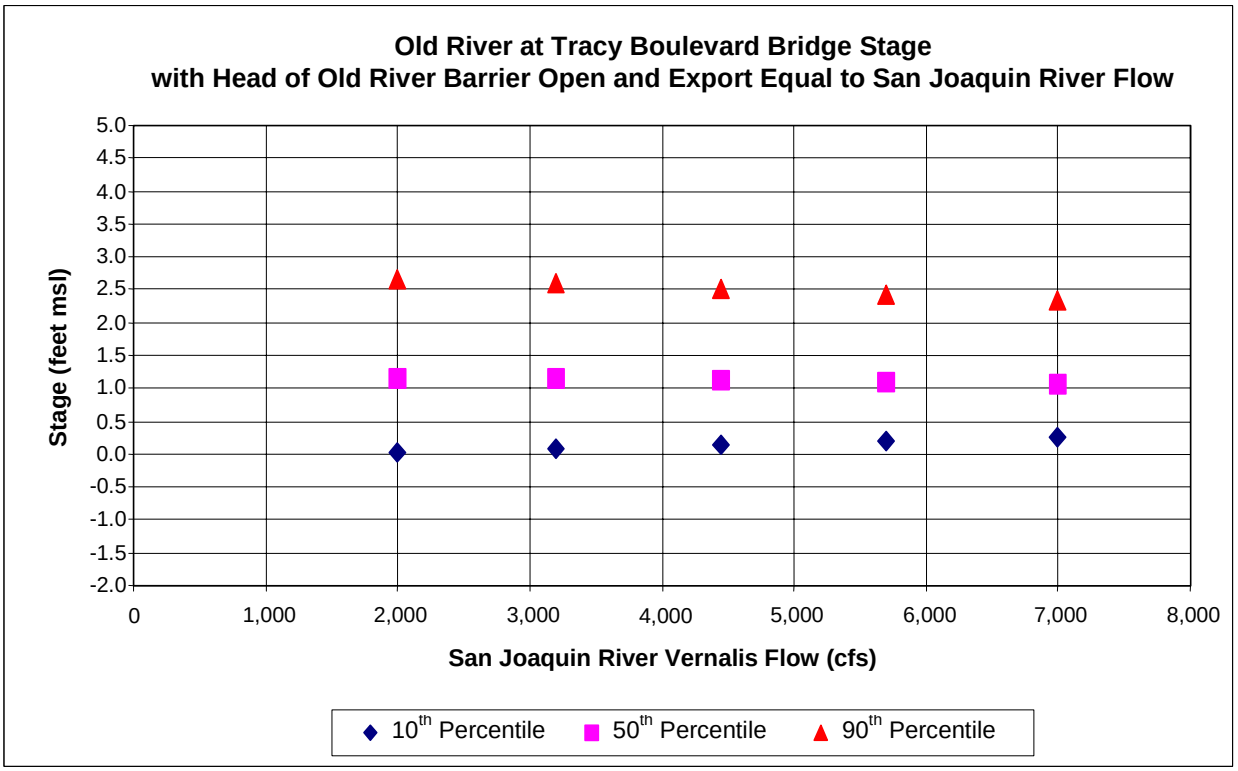
Figures D-119a and D-119b
Adjusted Astronomical Tides



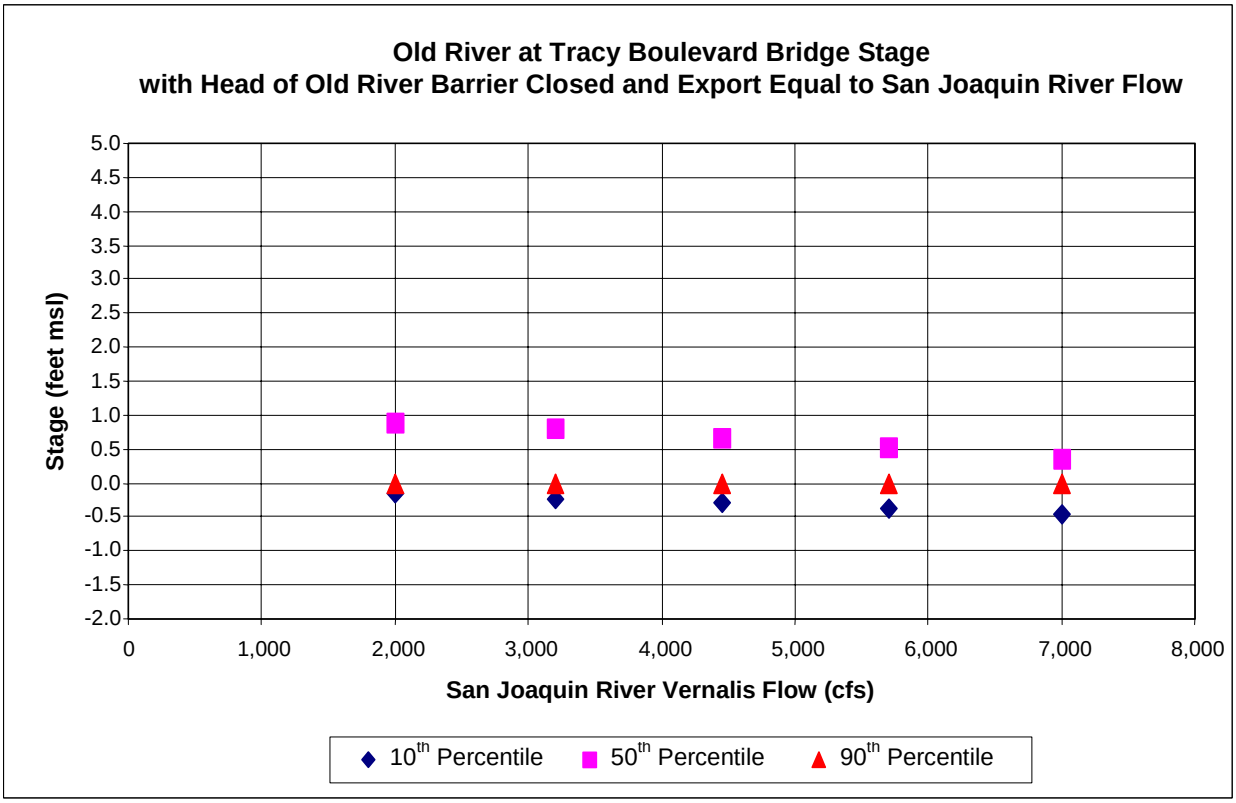


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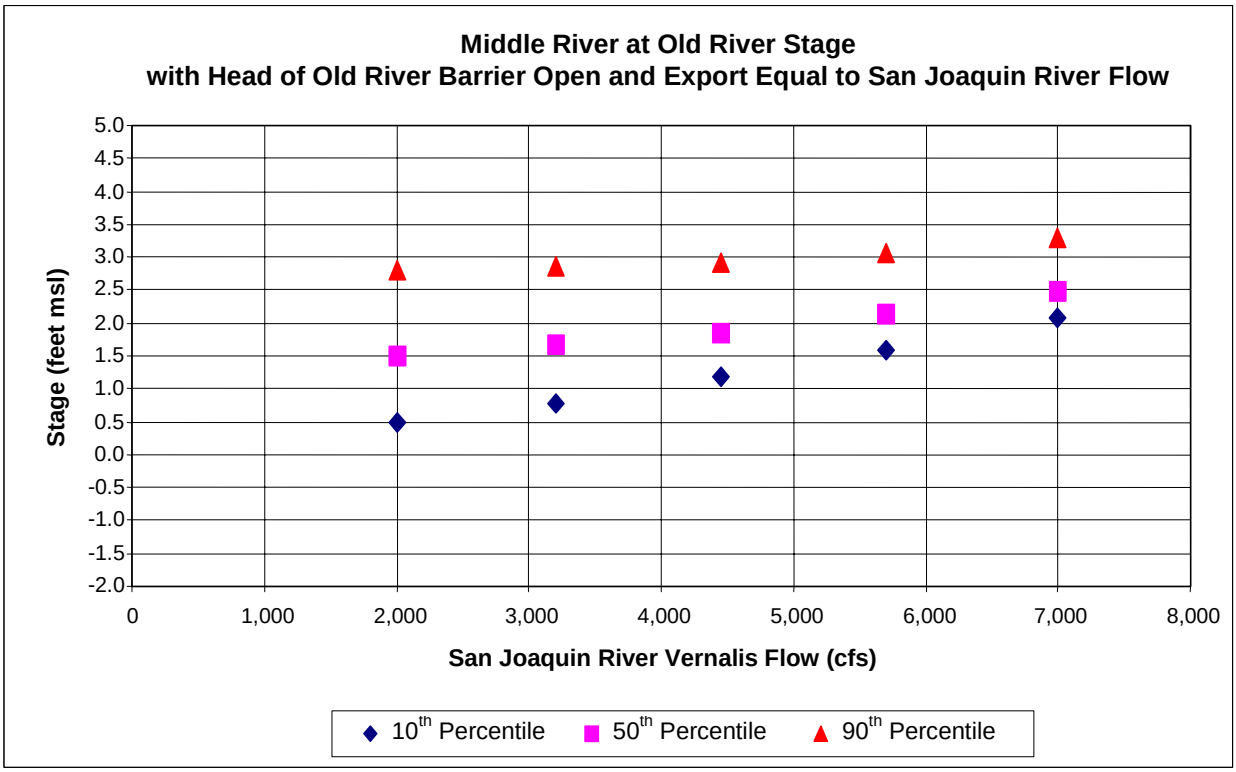
Figure D-117b

Simulated Water-Surface Elevation (Stage) in Old River at Tracy Boulevard Bridge with Various VAMP Flows



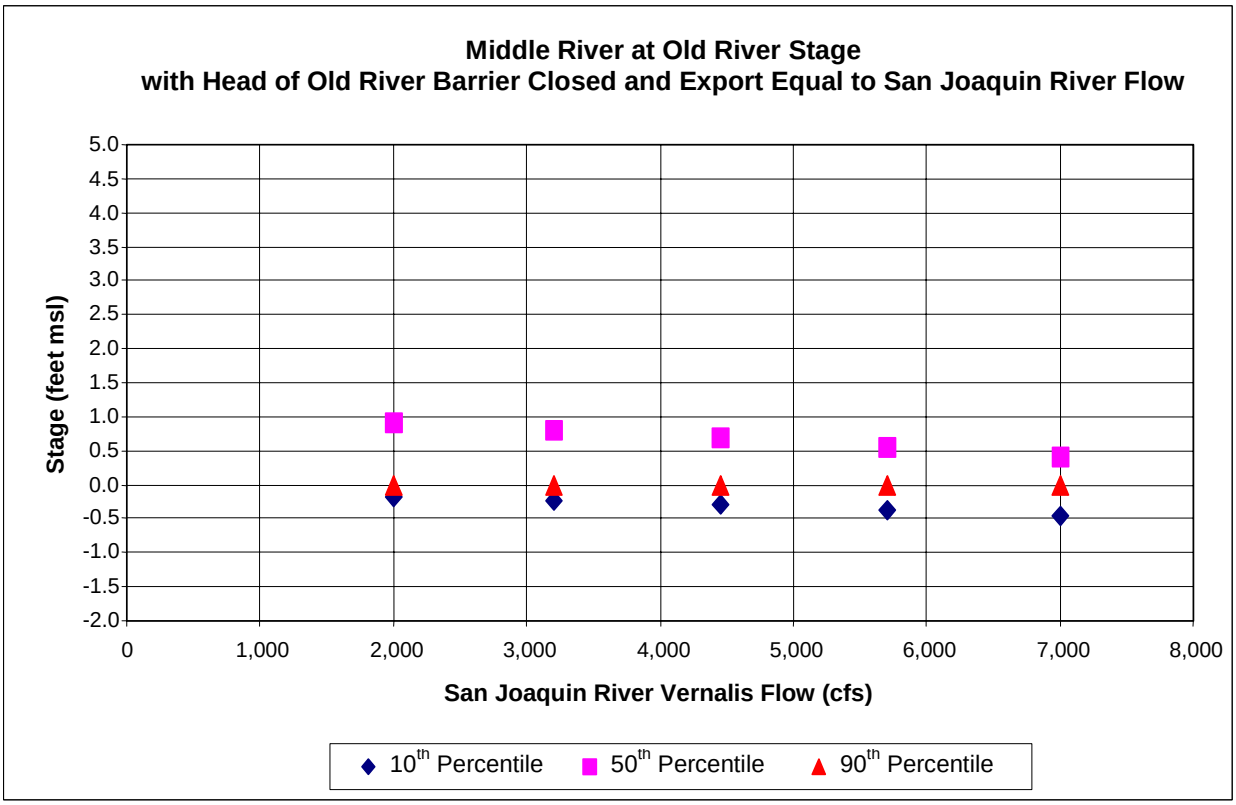


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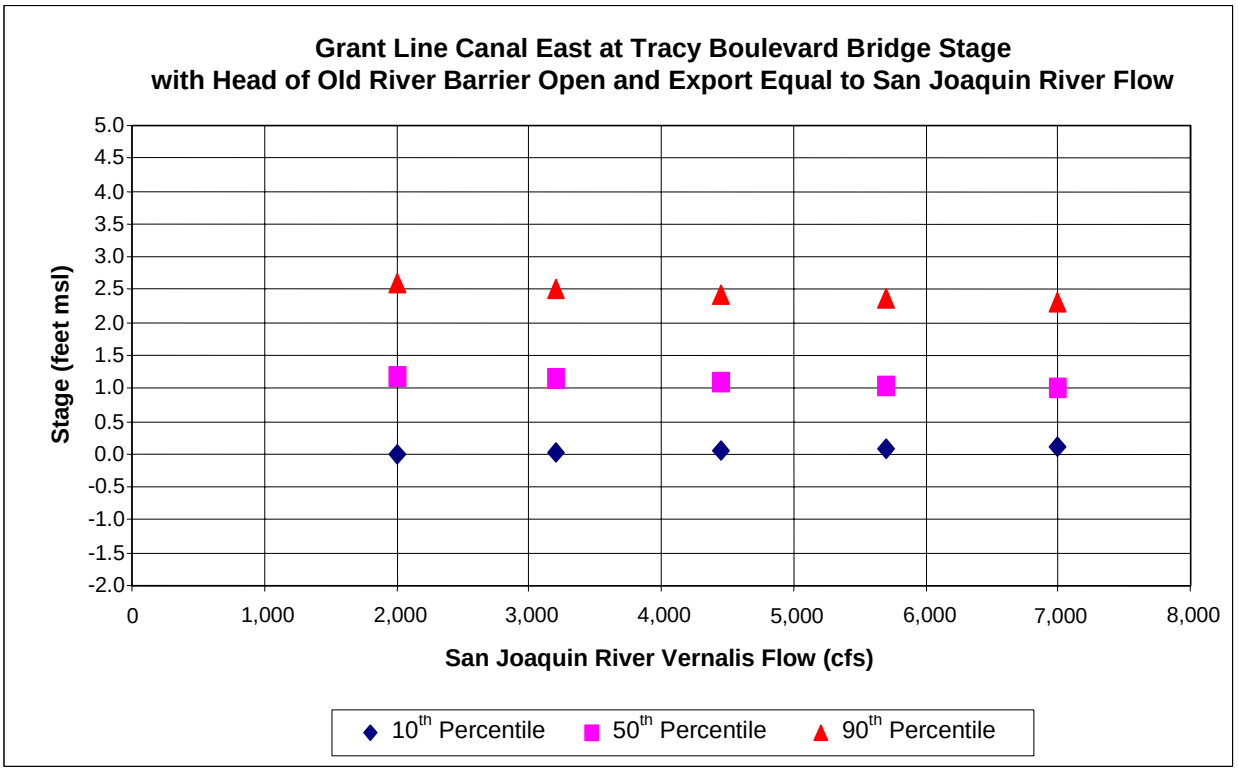
Figure D-117c

**Simulated Water-Surface Elevation (Stage)
in Middle River at Old River with Various VAMP Flows**



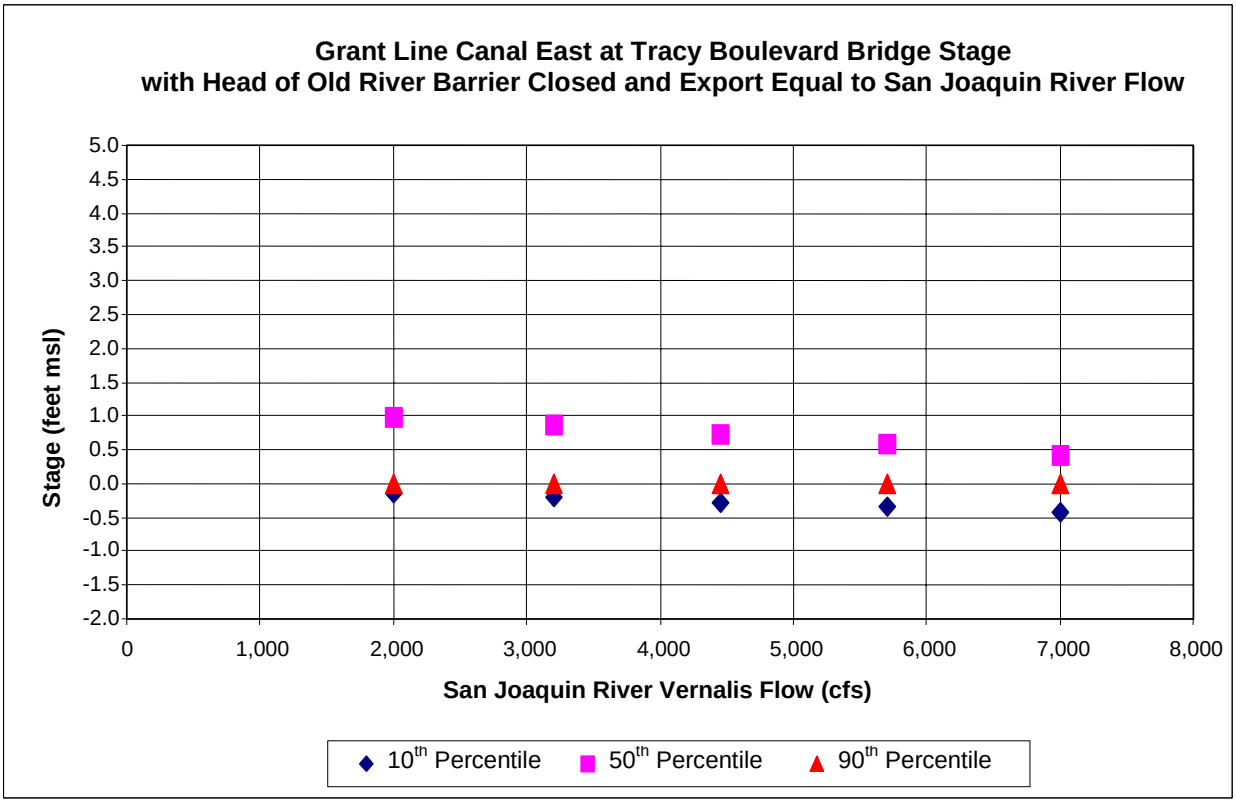


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Figure D-117d

Simulated Water-Surface Elevation (Stage) in Grant Line Canal at Tracy Boulevard Bridge with Various VAMP Flows

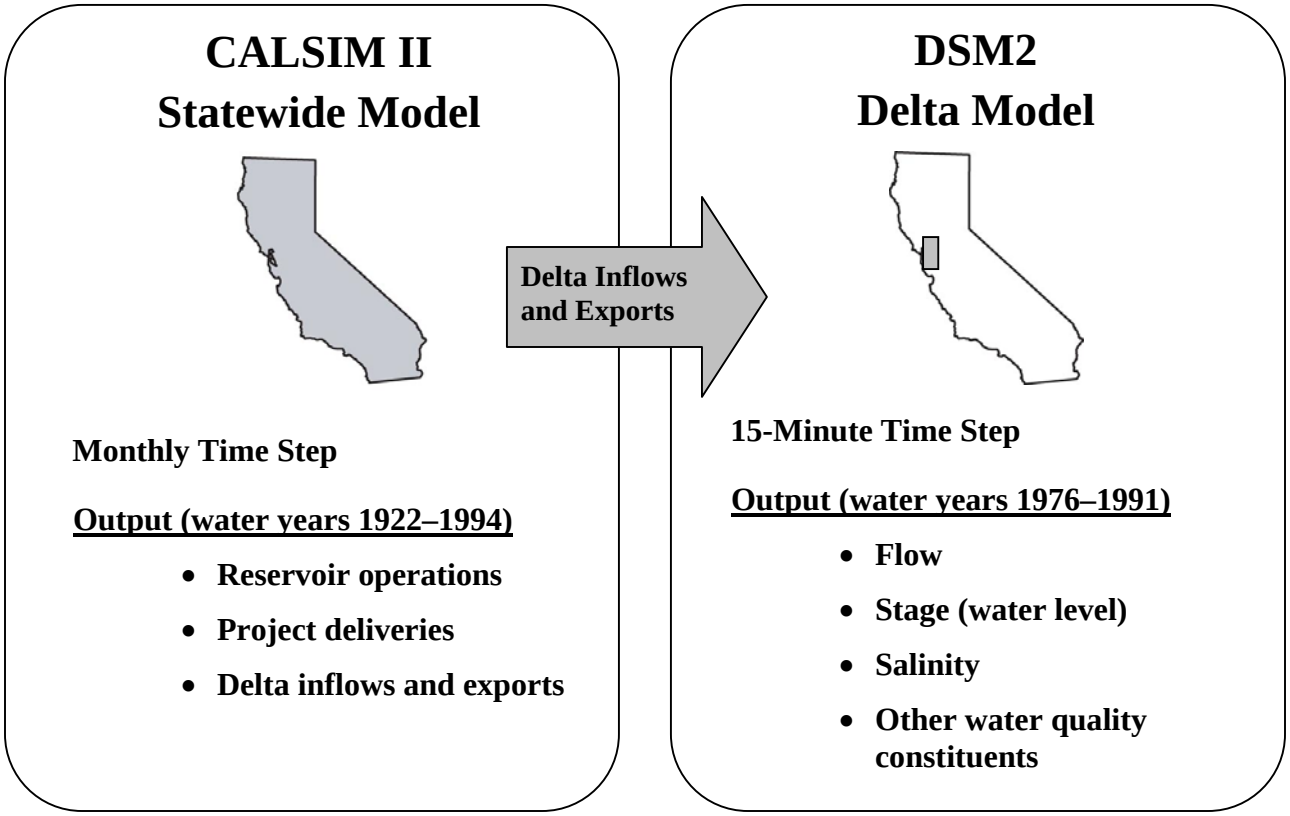

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Figure D-118

Relationship between CALSIM II and DSM2

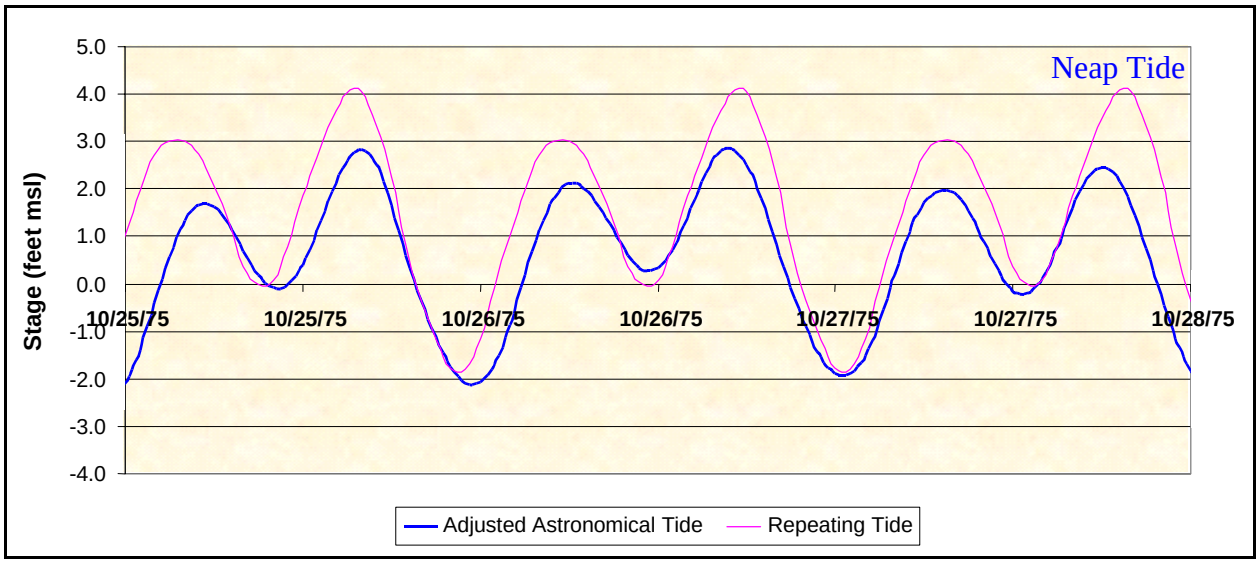

Figure D-119a. Three-Day Sequence of Adjusted Astronomical and 25-Hour-Repeating 19-Year Mean Tides

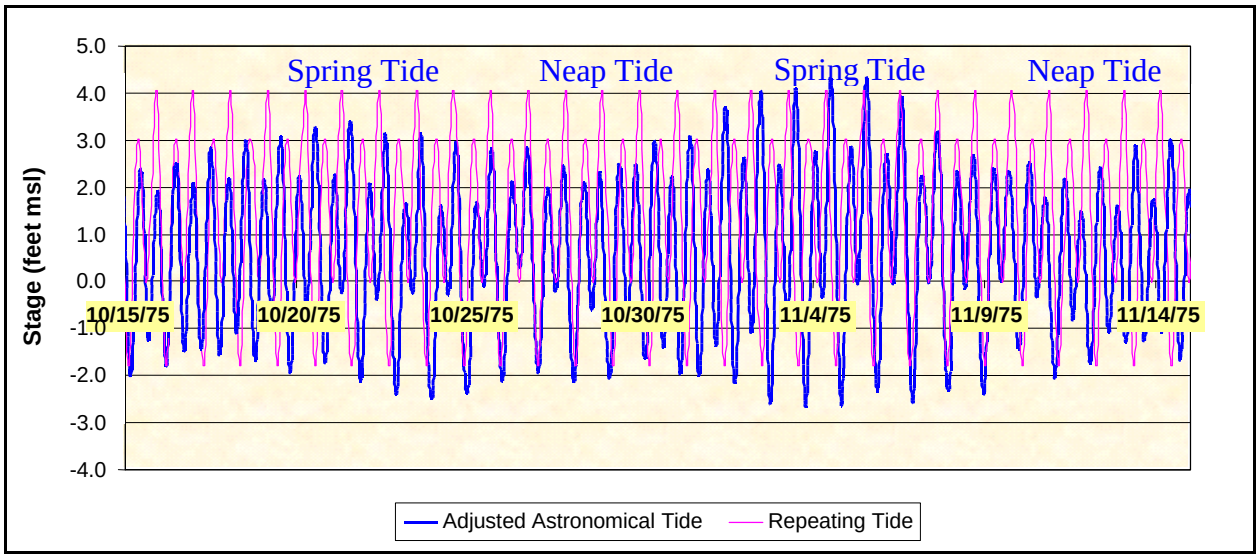

Figure D-119b. Two-Week Sequence of Adjusted Astronomical and 25-Hour-Repeating 19-Year Mean Tides

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Figures D-119a and D-119b
Adjusted Astronomical Tides

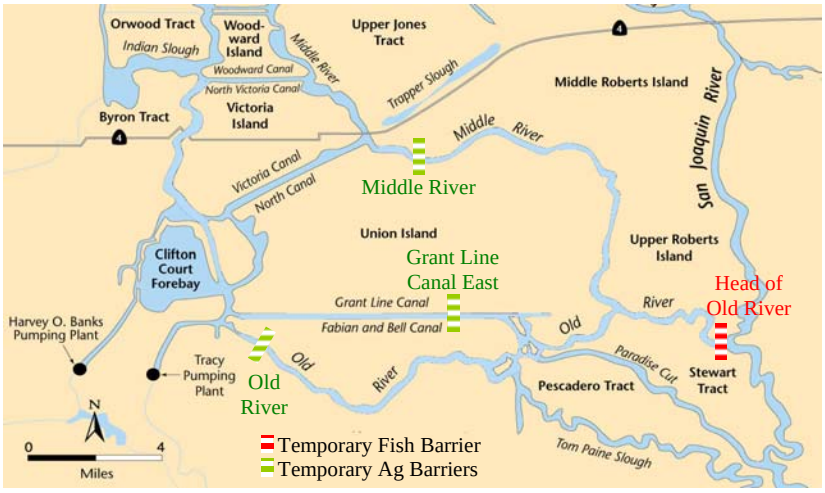

Figure D-120a. Temporary Barriers: One Fish and Two Agricultural Barriers

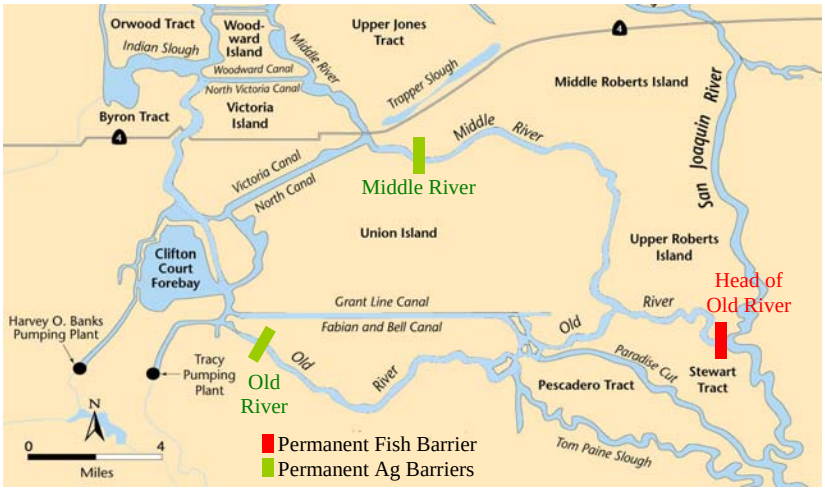

Figure D-210b. Permanent Barriers: One Fish and Two Agricultural Barriers

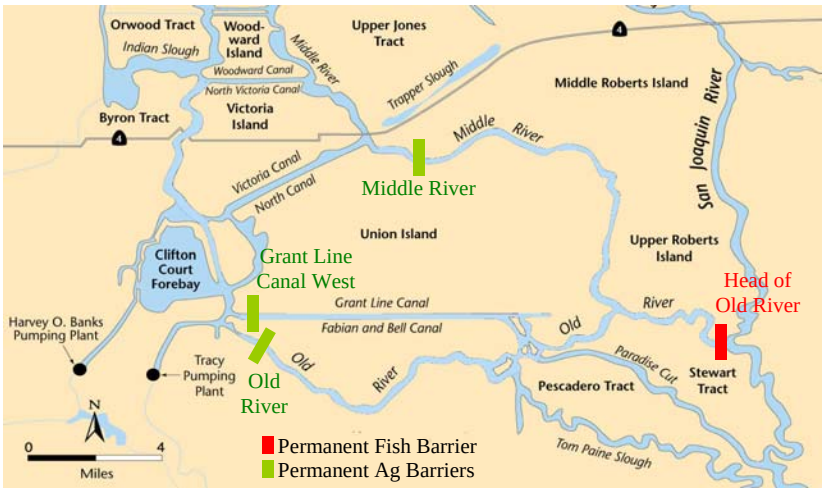

Figure D-120c. Permanent Barriers: One Fish and Three Agricultural Barriers

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Figures D-120a, D-120b, and D-120c

Locations of Temporary and Permanent Barriers

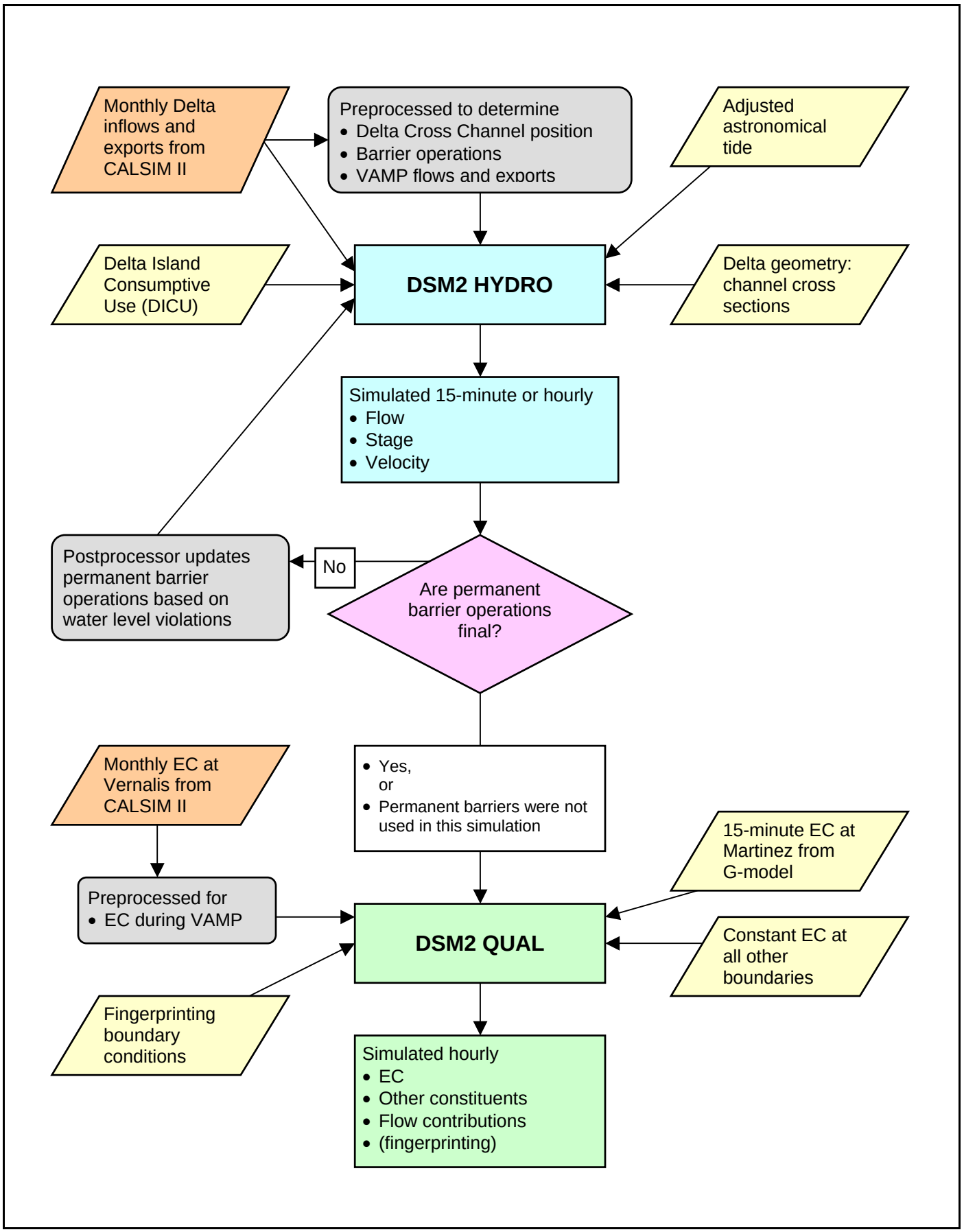

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Figure D-121

Flow Chart of DSM2 Modeling Process

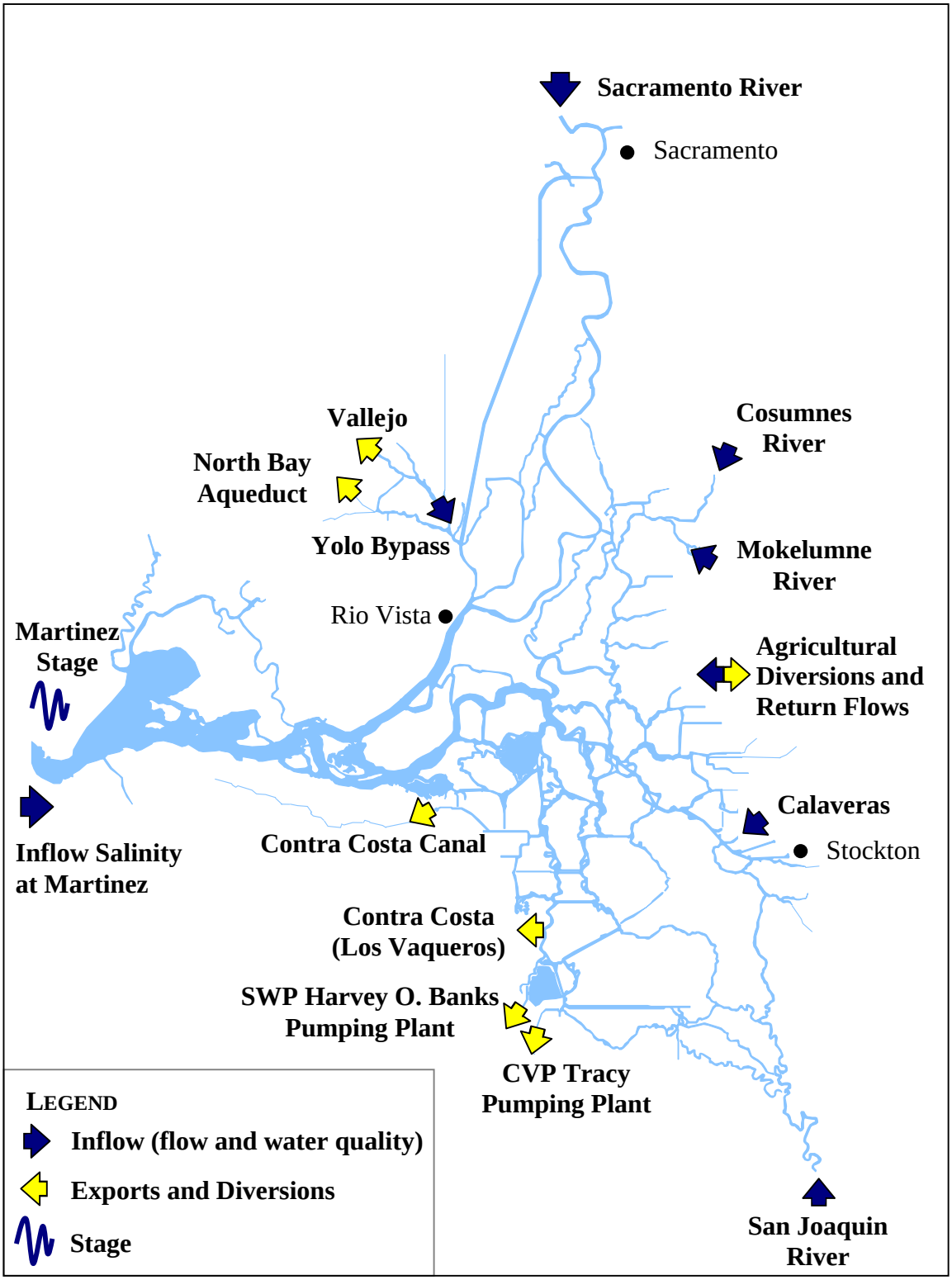

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Figure D-122

DSM2 Hydrodynamic and Water Quality Boundary Conditions

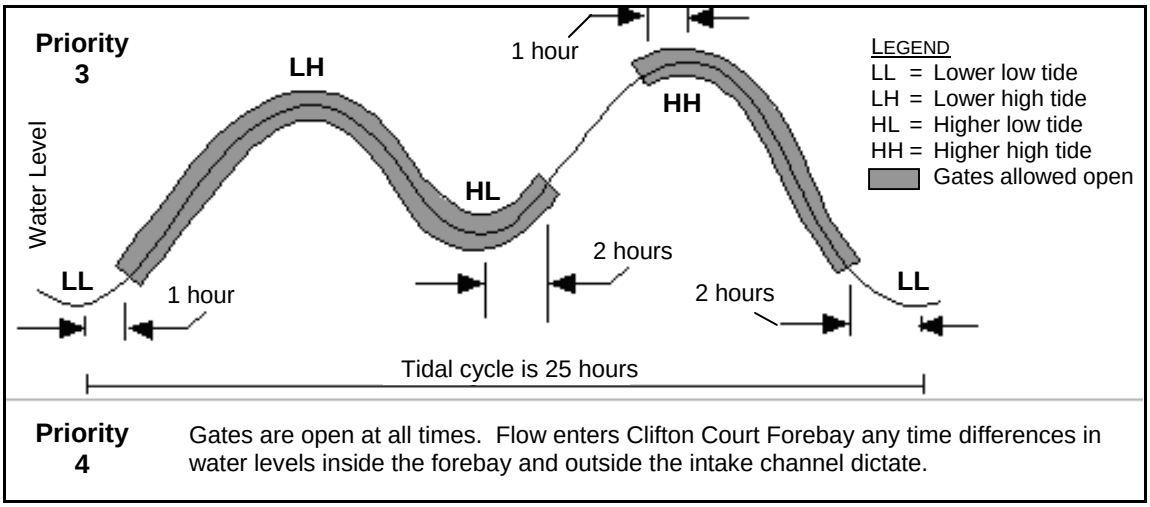

Figure D-123. Clifton Court Forebay Gate Operating Priorities in DSM2

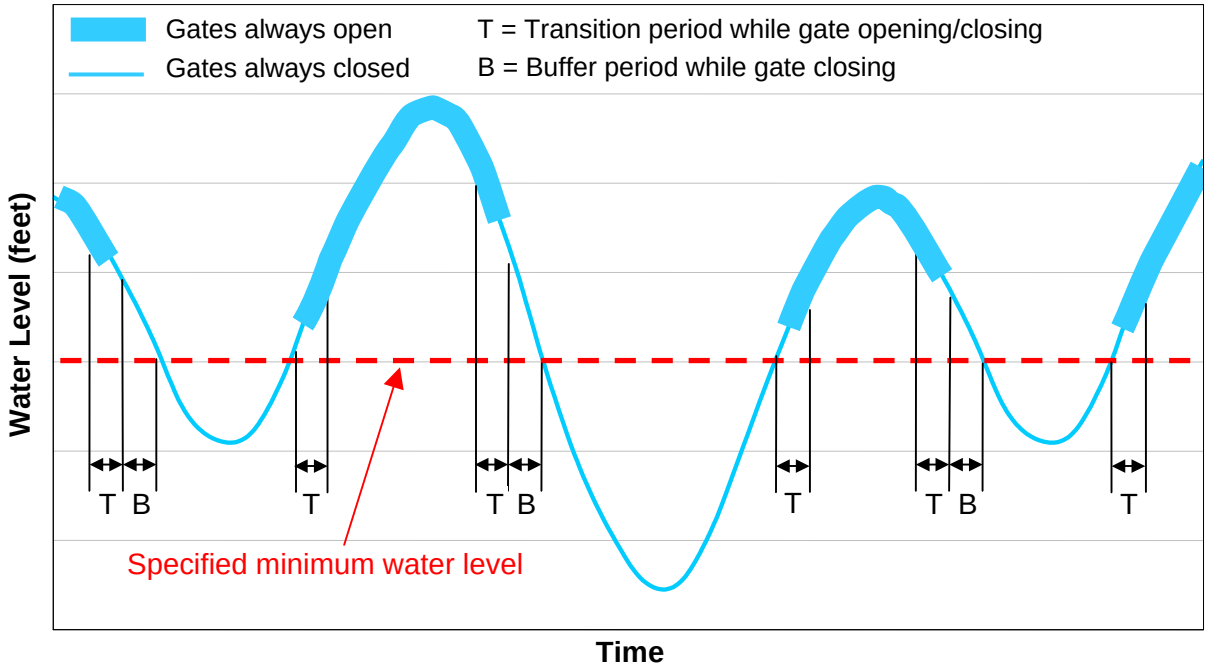

Figure D-124. Conceptualization of Permanent Barrier Operations

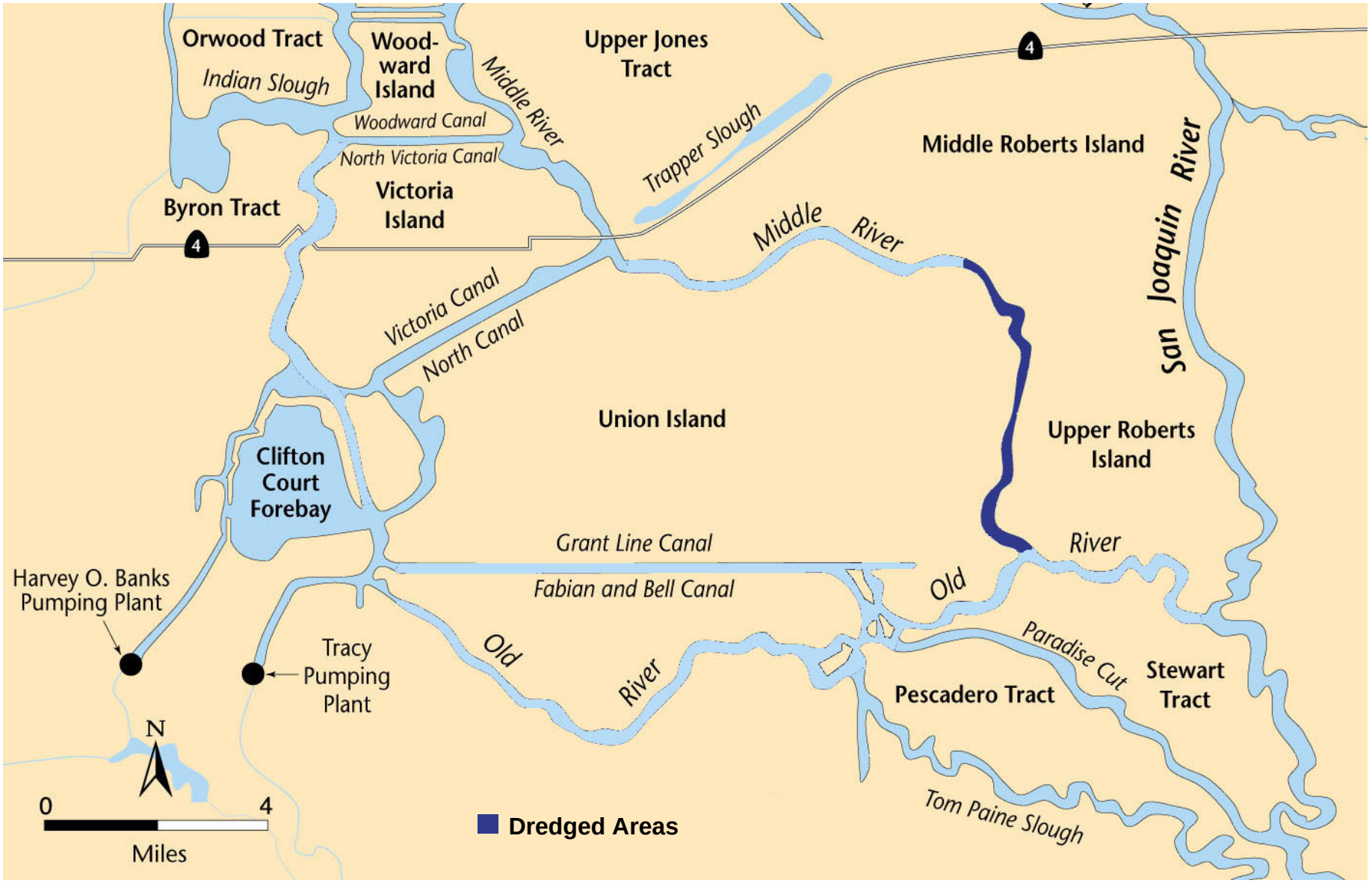

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Figure D-125

Location of Dredging in DSM2 16-Year Planning Simulations for SDIP

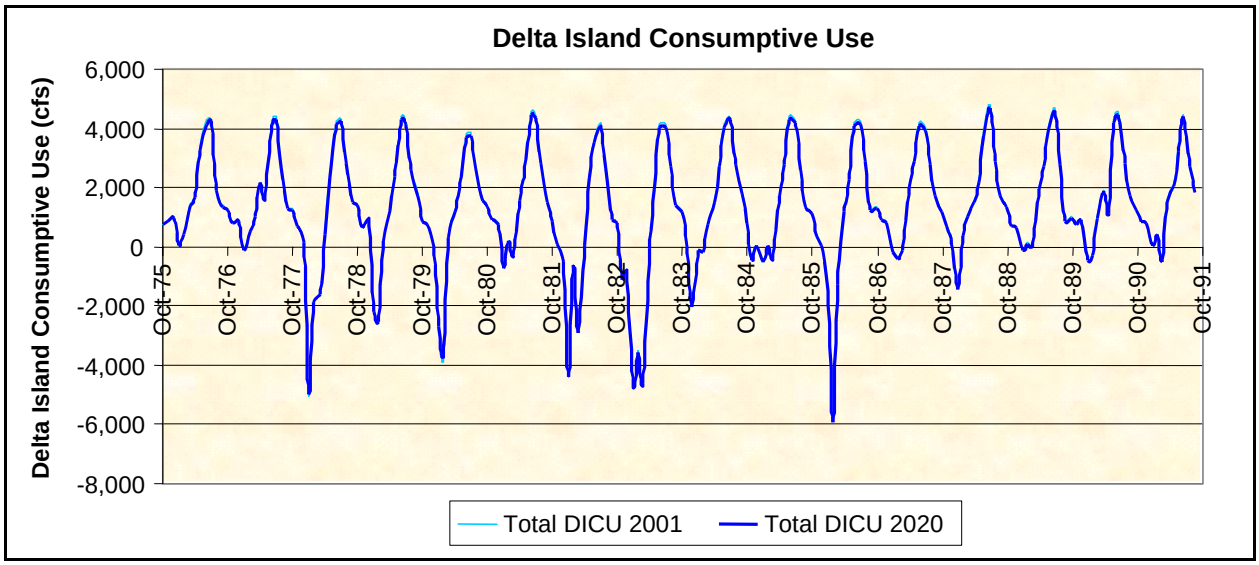

Figure D-126. Delta Island Consumptive Use for the DSM2 16-Year Planning Studies

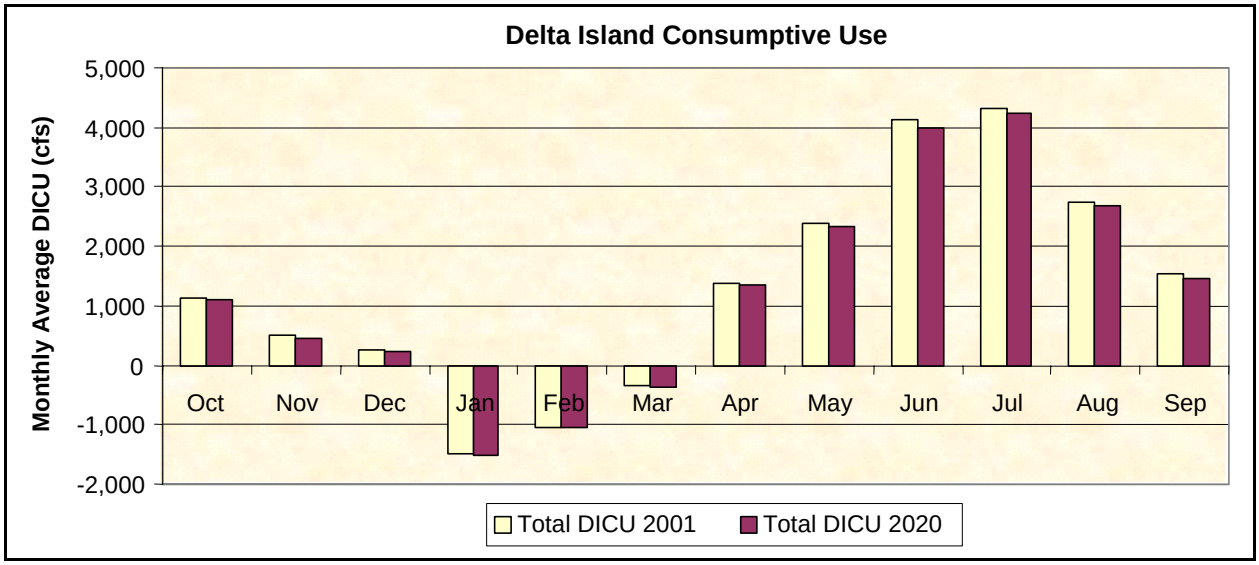

Figure D-127. Monthly Average Delta Island Consumptive Use for the DSM2 16-Year Planning Studies

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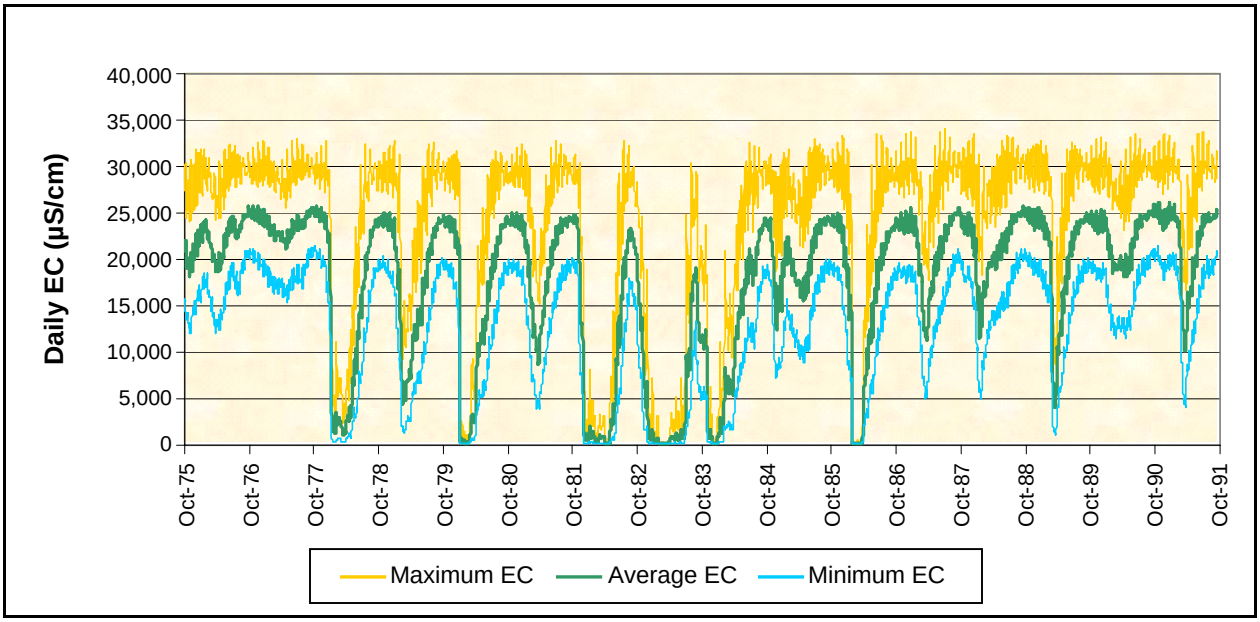

Figure D-128. Martinez Electrical Conductivity (EC) from G-model for 2020 Baseline Conditions with Temporary Barriers

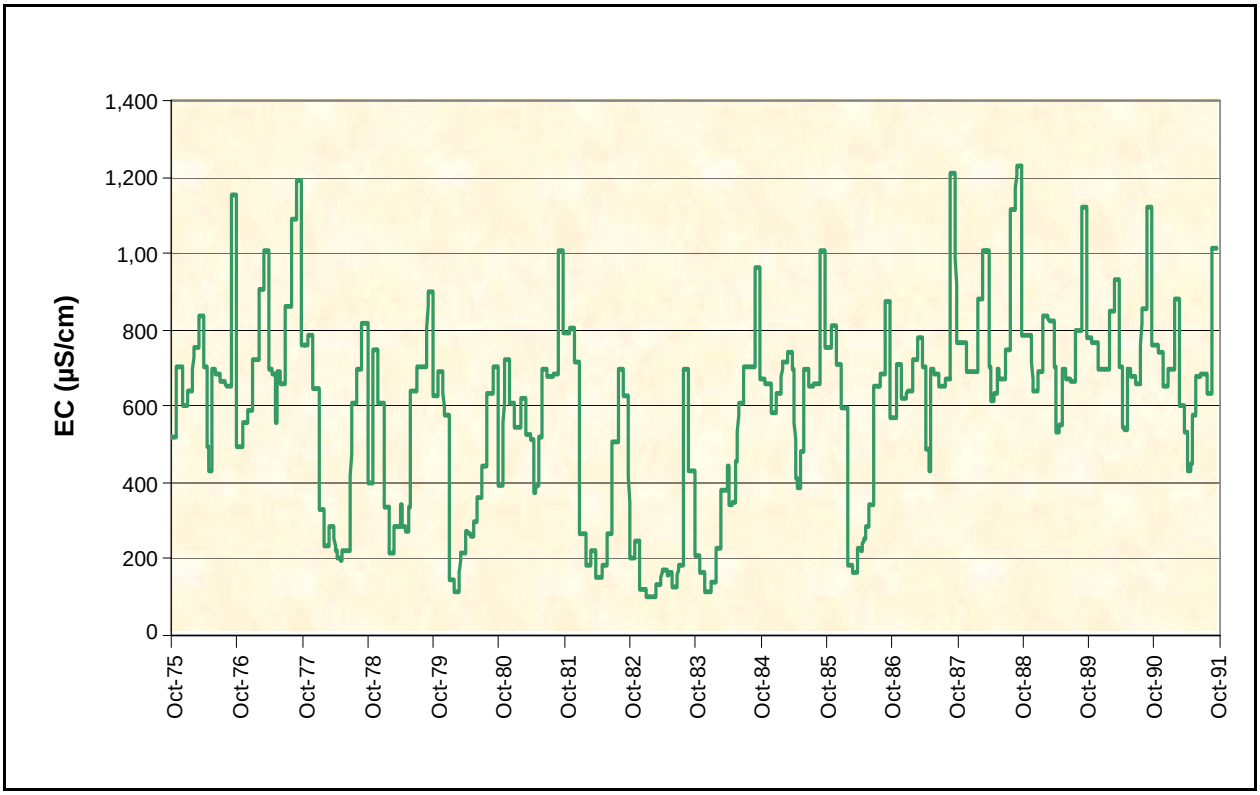

Figure D-129. Vernalis Electrical Conductivity (EC) from CALSIM II for 2020 Baseline Conditions with Temporary Barriers

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Figure D-130. Delta Regions for Drainage and Return Flow Electrical Conductivity

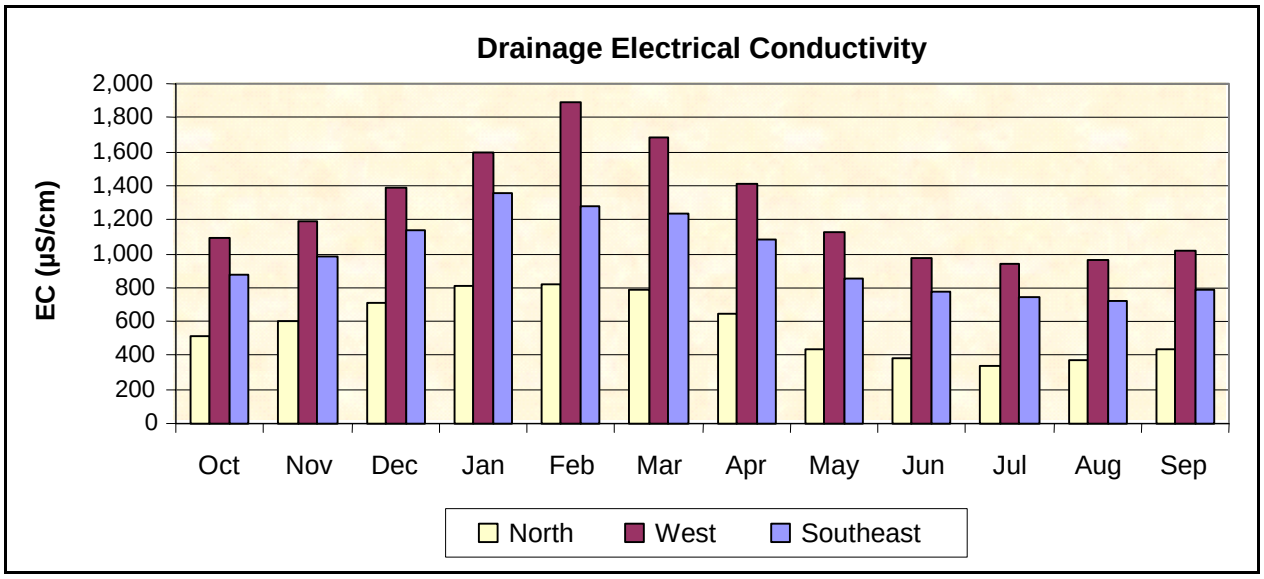

Figure D-131. Drainage and Return Flow Electrical Conductivity by Region for DSM2 Simulations

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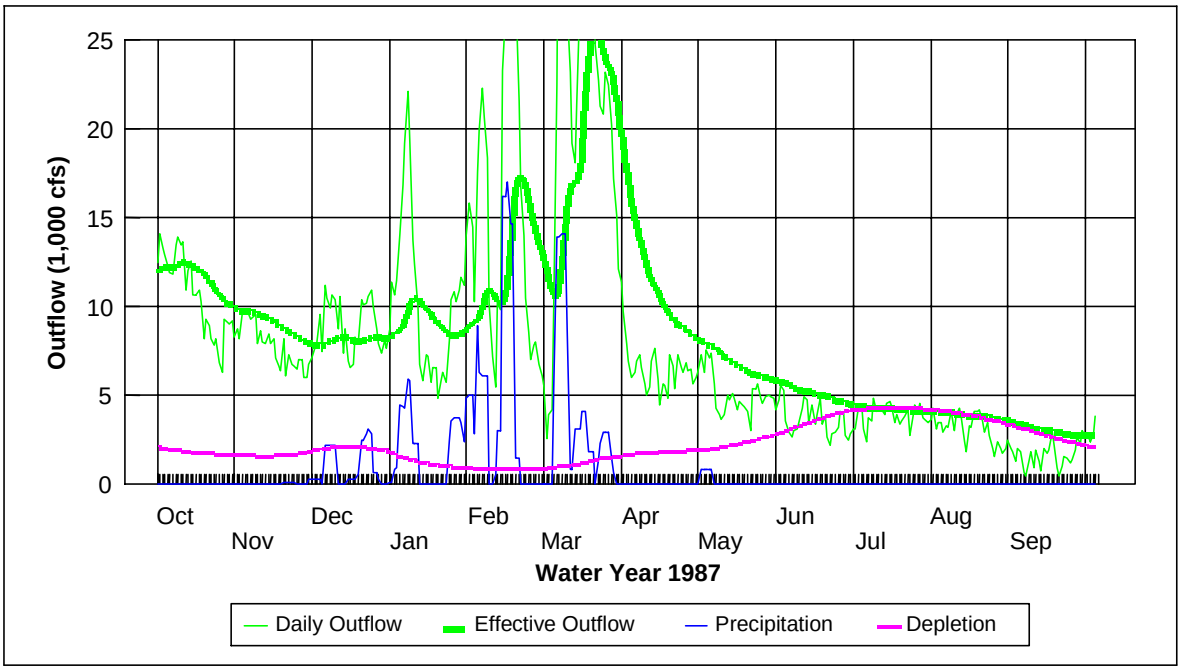

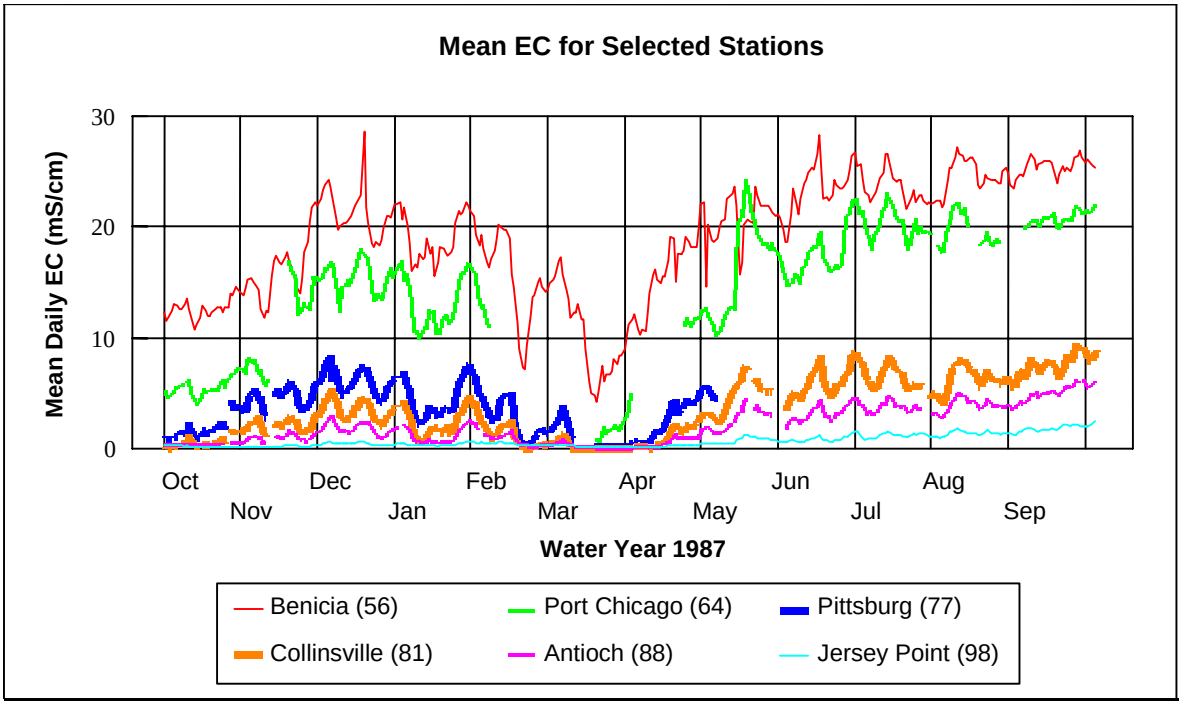

Note: The measured response of electrical conductivity appears to follow the effective outflow, which is a lagged moving average of the daily outflow estimates.

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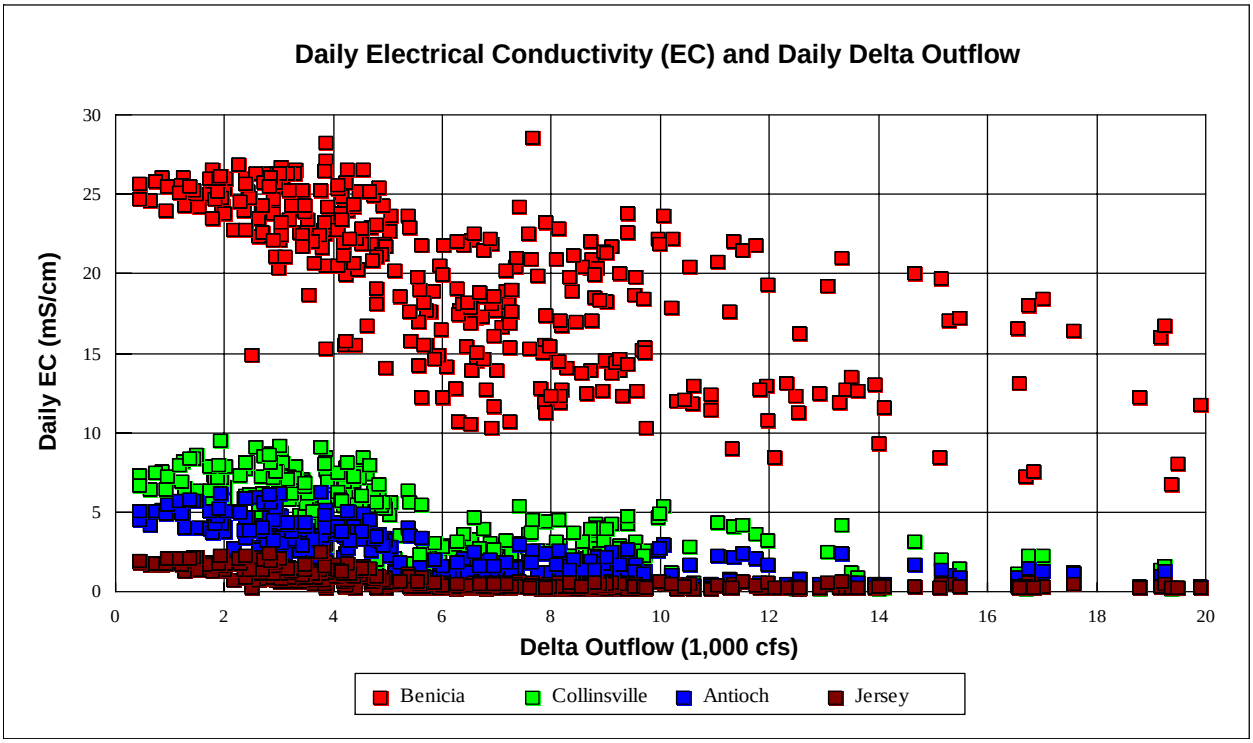
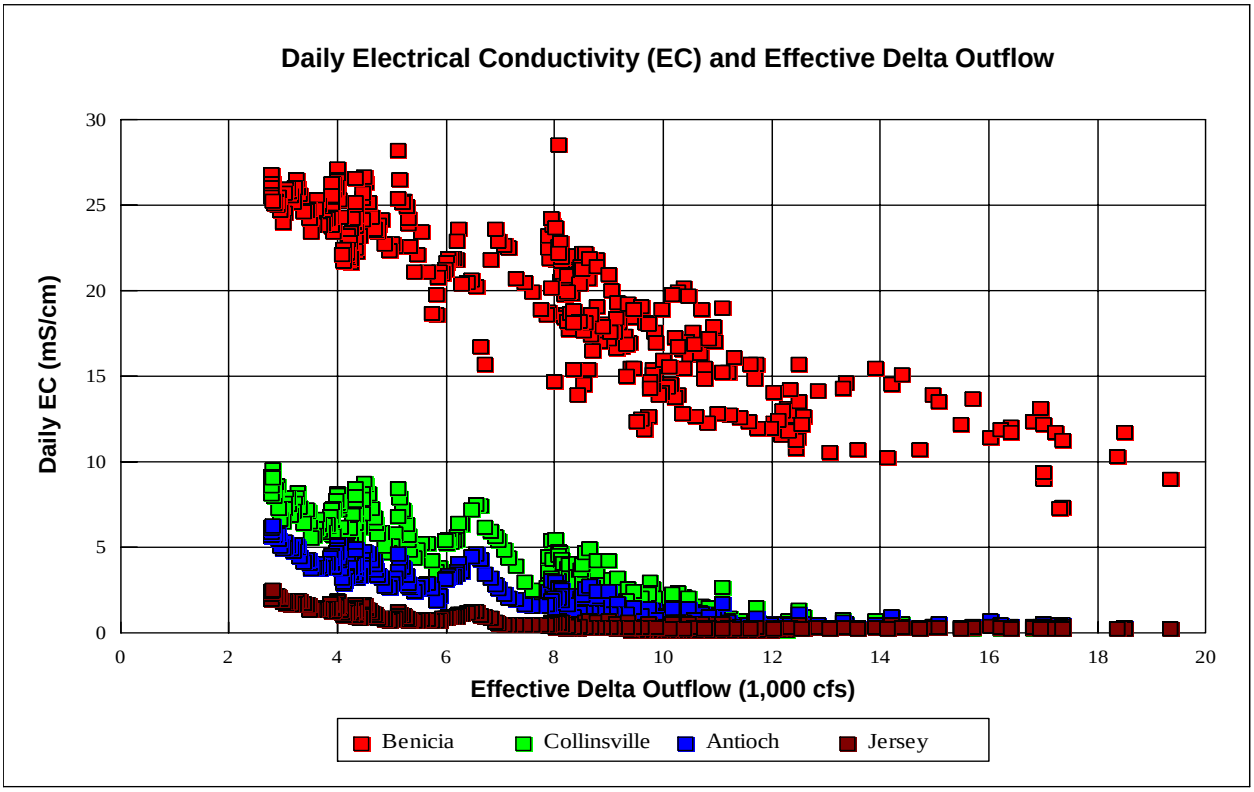
Figure D-132

Estimates of Effective Delta Outflow for Water Year 1987 with Corresponding Electrical Conductivity Measurements during 1987





Note: Electrical conductivity at each station is reduced at higher effective outflow. A negative exponential relationship was proposed by Contra Costa Water District staff as the expected relationship for salinity intrusion.

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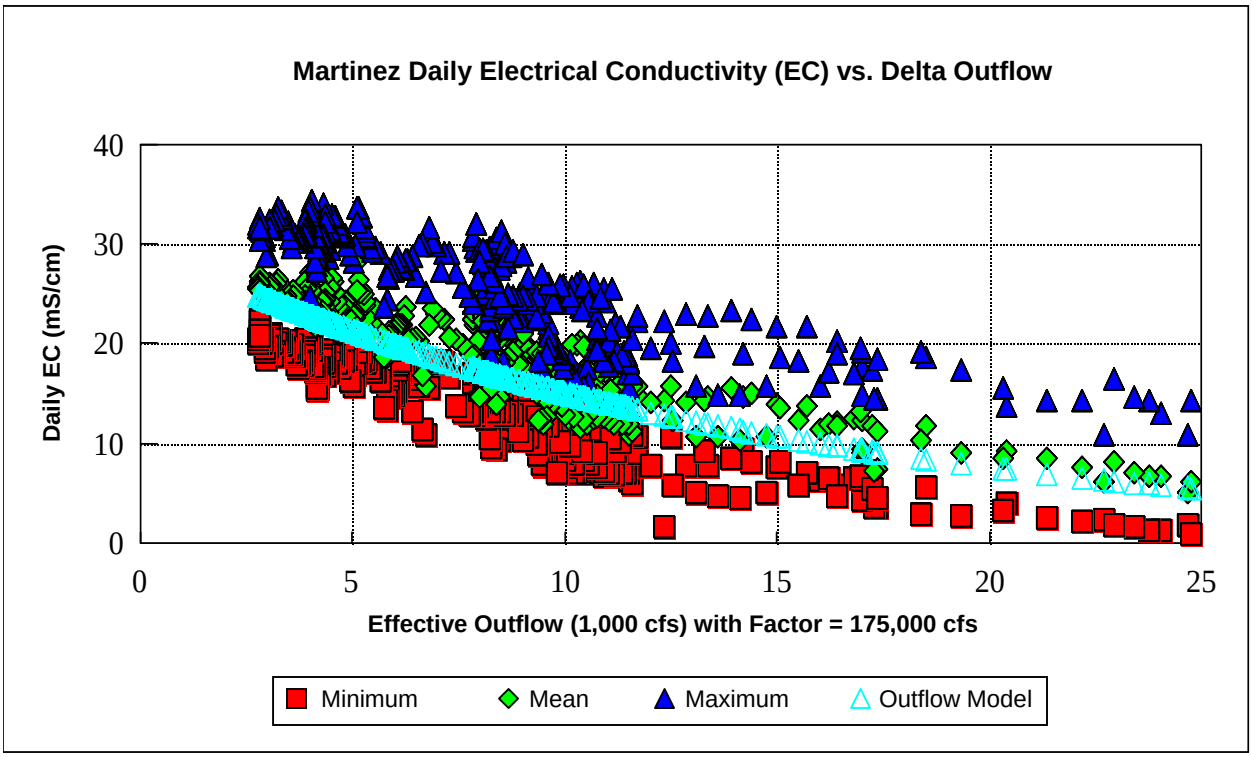
Figure D-133

Measured Daily Electrical Conductivity from Western Delta Stations vs. Daily Delta Outflow and Effective Delta Outflow for Water Year 1987



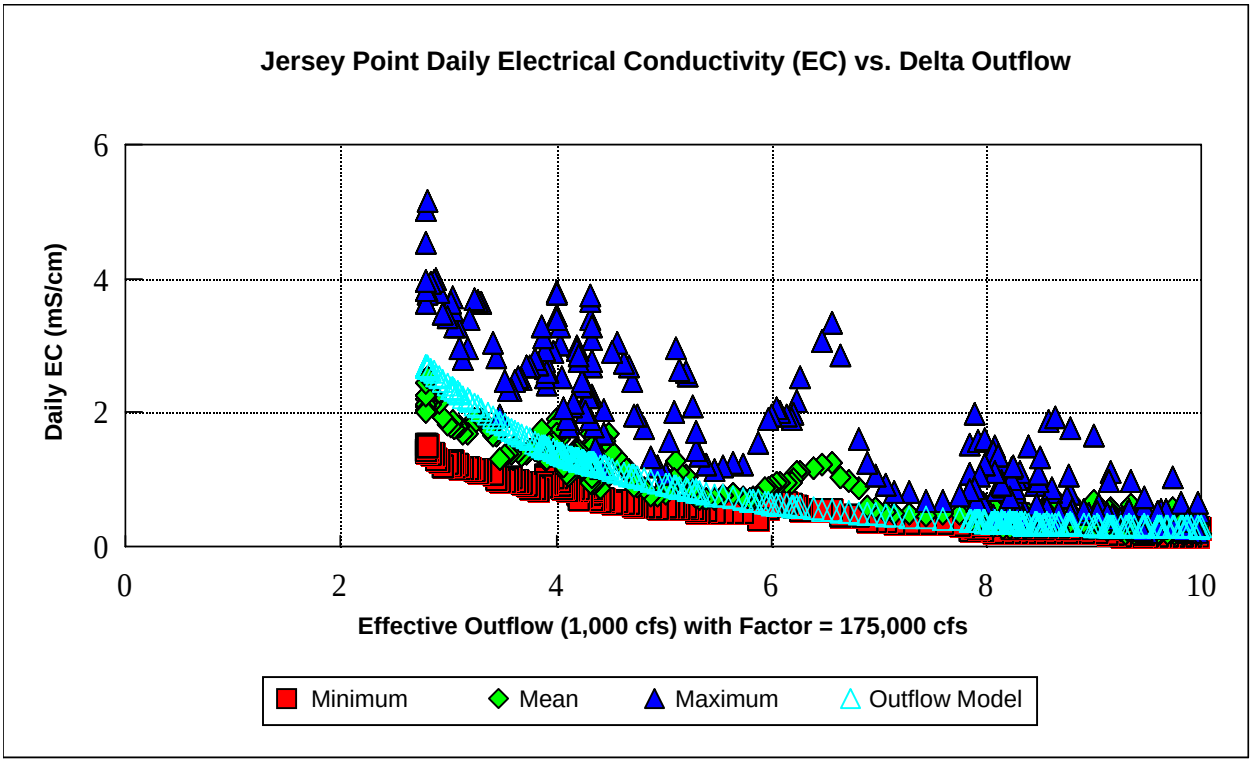


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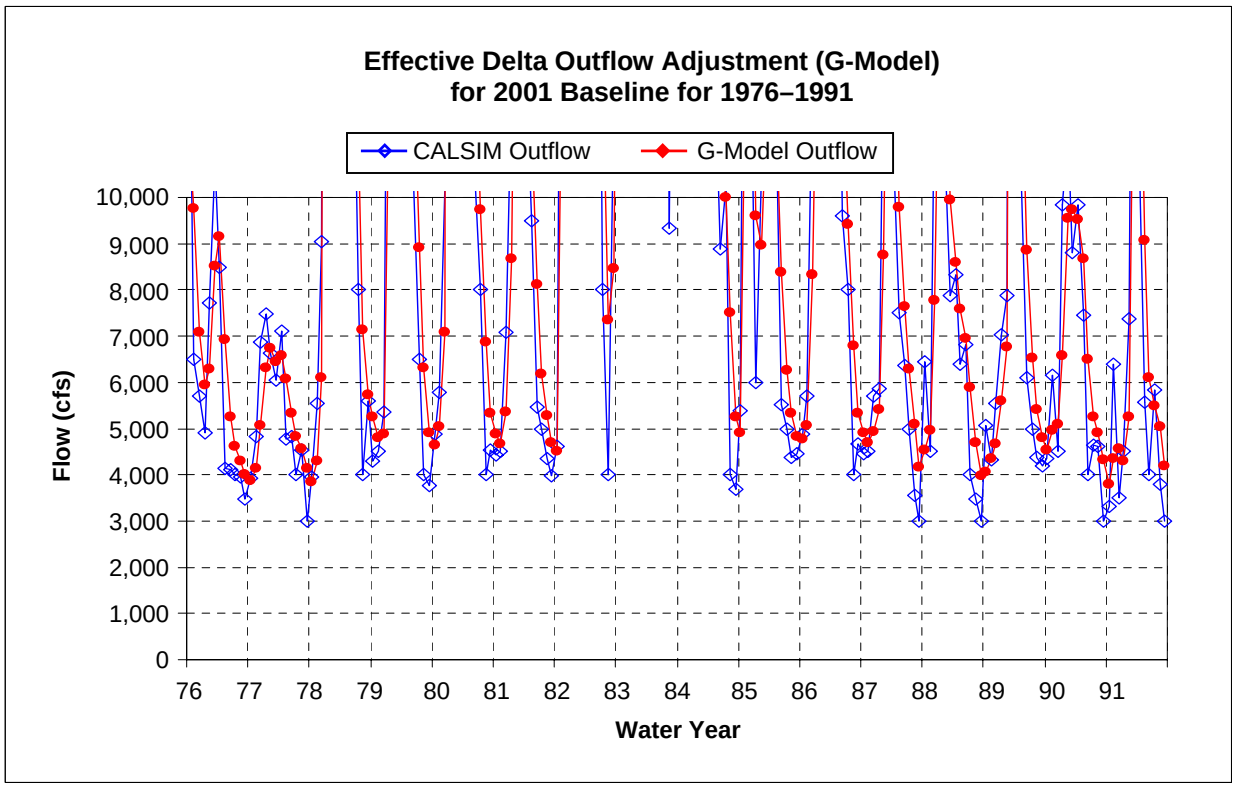
Figure D-134

Relationship (Negative Exponential) between Effective Delta Outflow (cfs) and Electrical Conductivity (mS/cm) at Martinez and Jersey Point for Water Year 1987



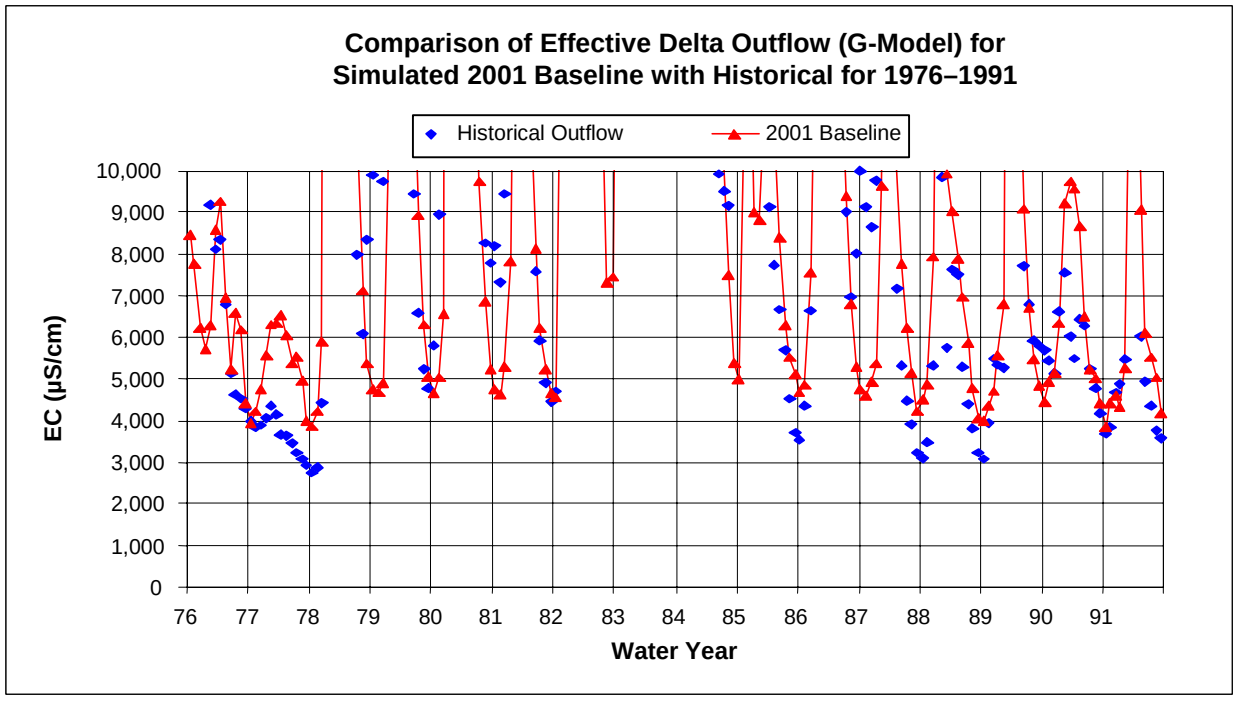


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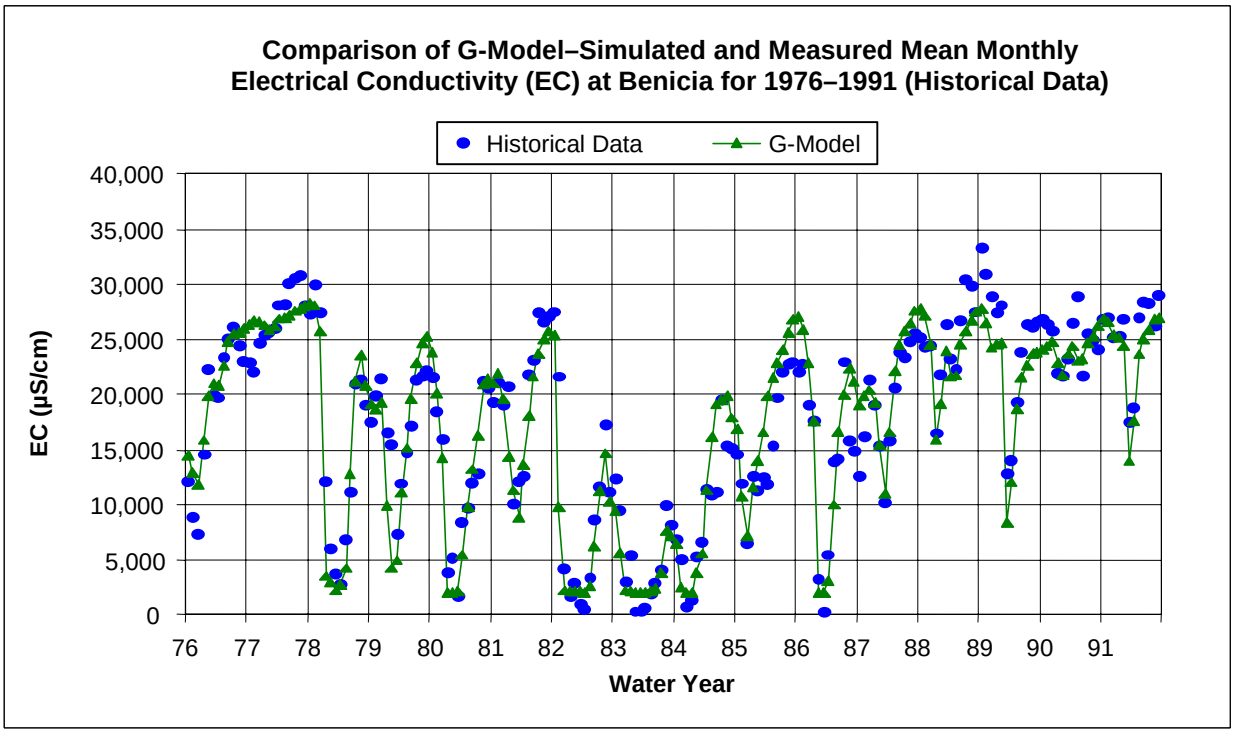
Figure D-135

Adjustments between Monthly CALSIM II Outflow and Effective Outflow for 2001 Baseline and Comparison of the Monthly Historical and 2001 Baseline Effective Outflows for 1976–1991



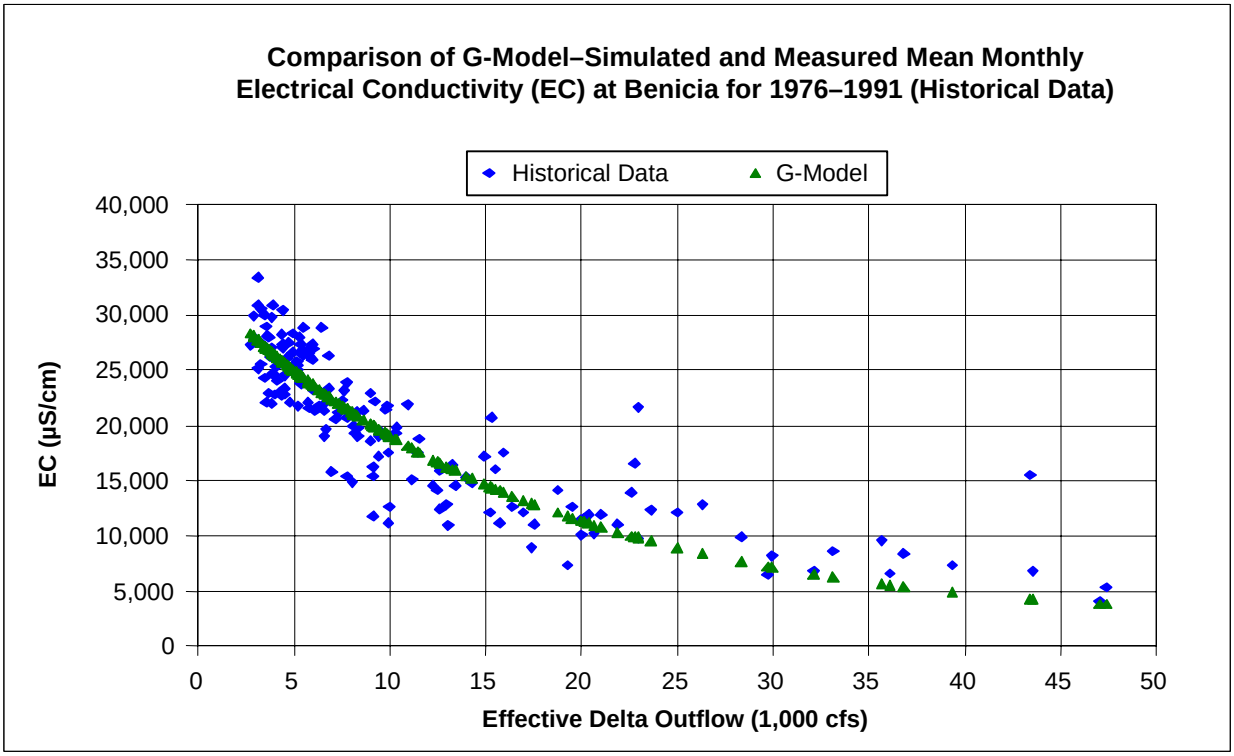


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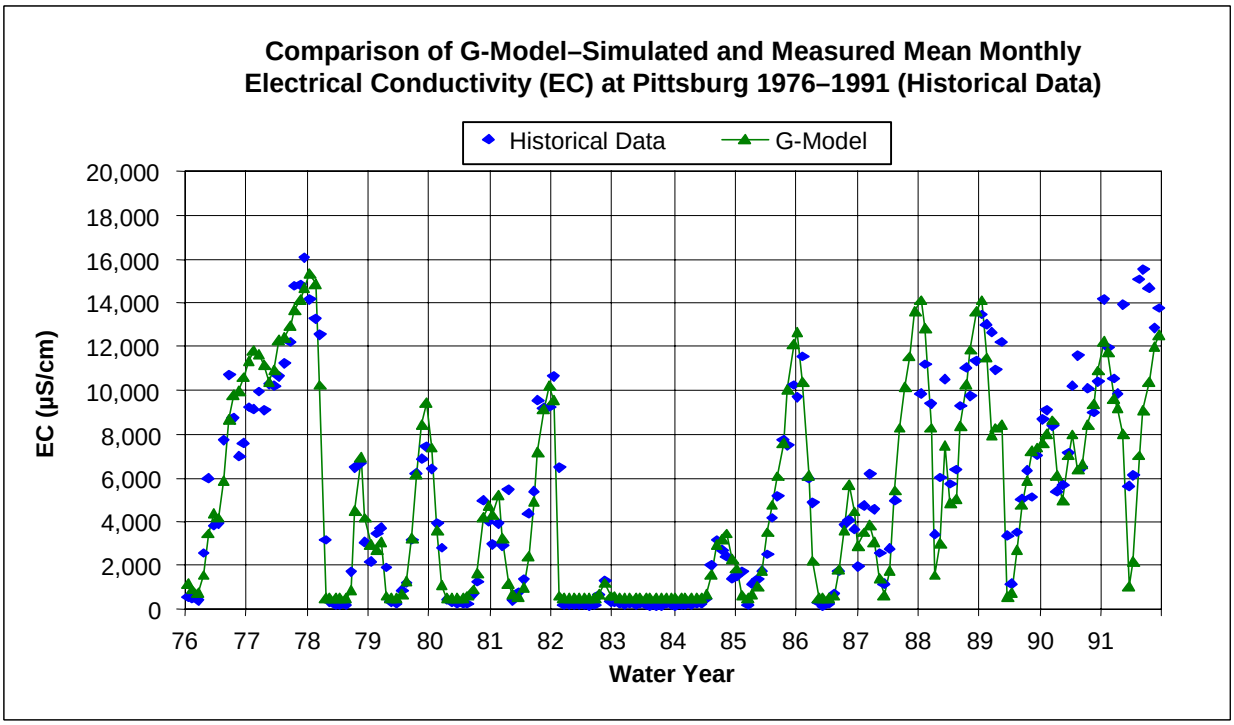
Figure D-136

Comparison of Historical Electrical Conductivity Measurements and Effective Outflow Electrical Conductivity Estimates at Benicia for 1976–1991



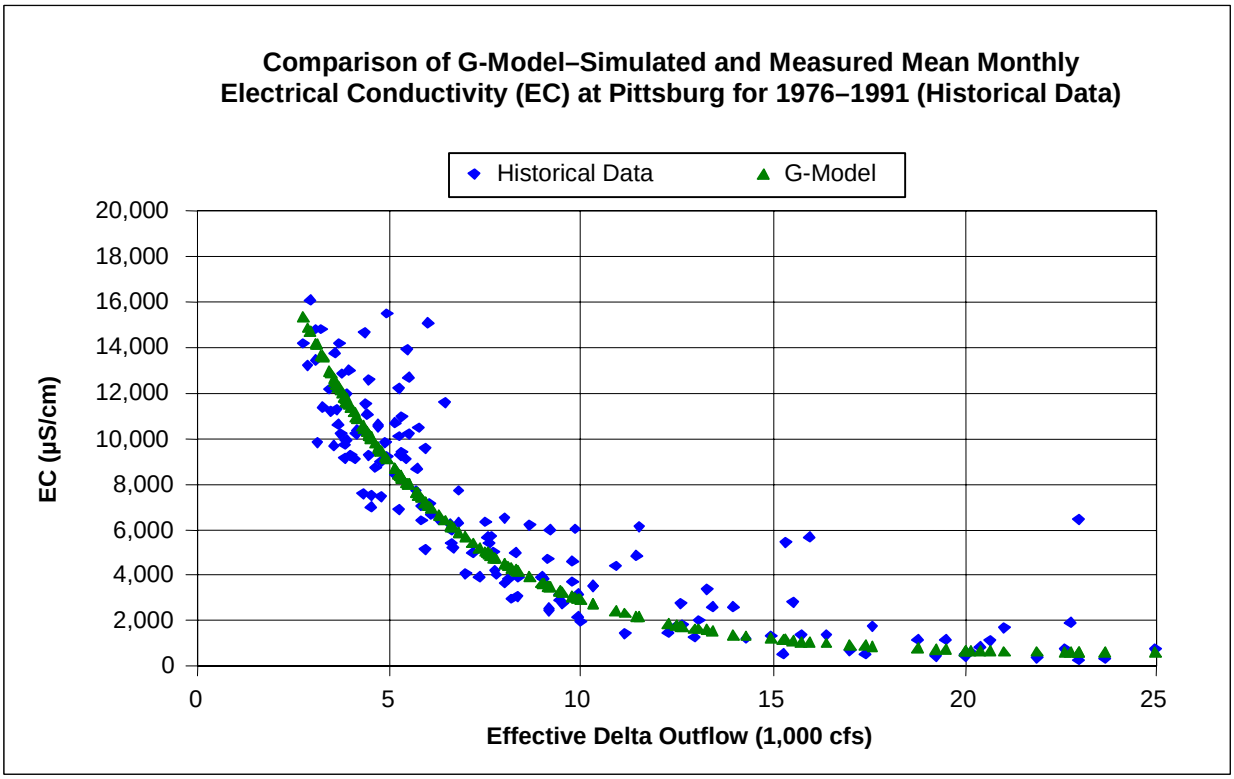


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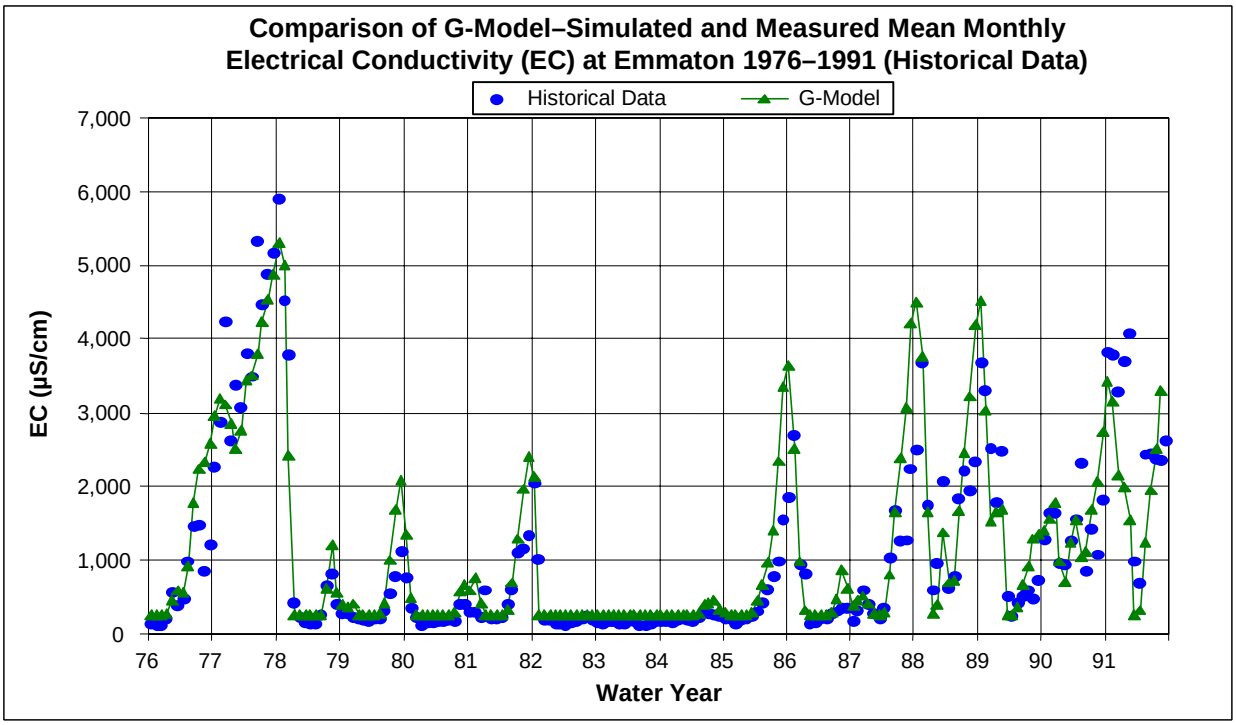
Figure D-137

Comparison of Historical Electrical Conductivity Measurements and Effective Outflow Electrical Conductivity Estimates at Pittsburg (Upstream of Chipps Island) for 1976–1991



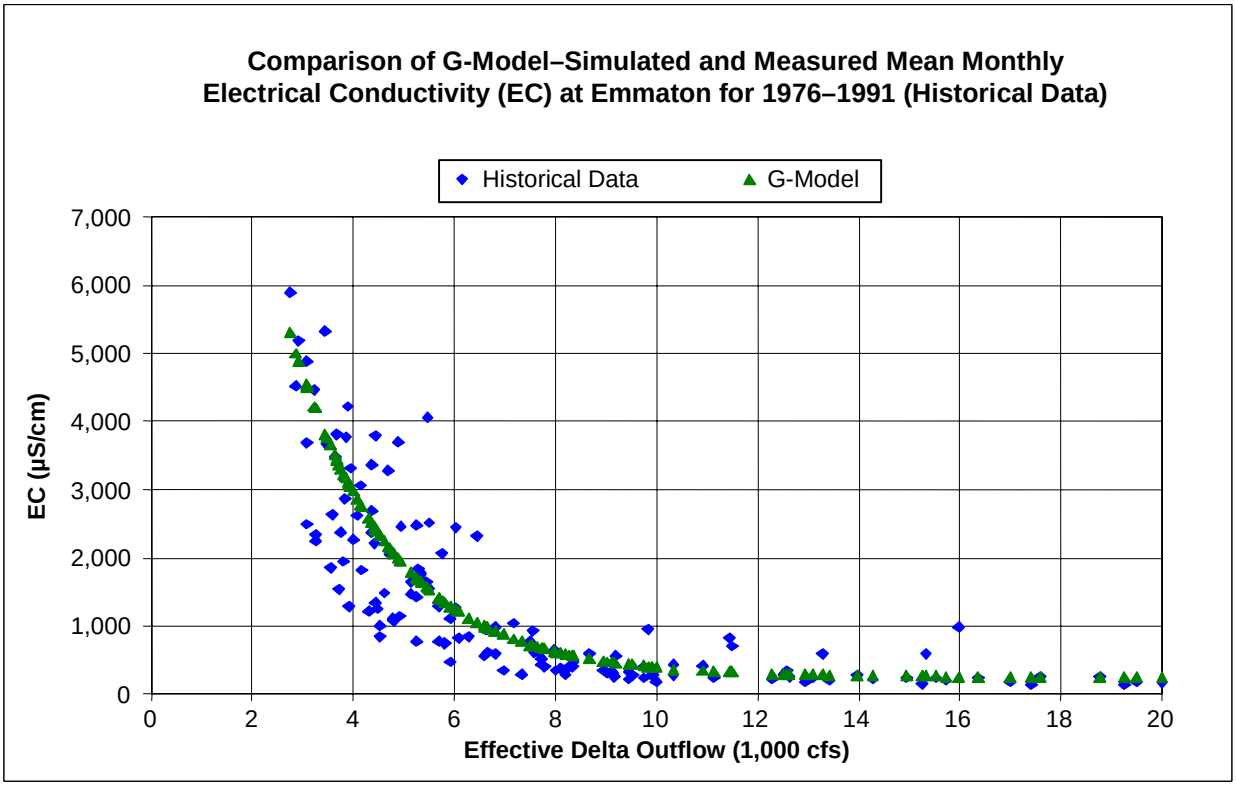


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Figure D-138

Comparison of Historical Electrical Conductivity Measurements and Effective Outflow Electrical Conductivity Estimates at Emmaton for 1976–1991