Appendix 5C

Revised Second Basis of Comparison

A CalSim II model error was identified in New Melones operations in the Second Basis of Comparison simulation. The model error is due to use of an incorrect lookup table for one month and causes New Melones to release increased fishery flows in May. This appendix provides findings from an analysis of potential effects of this model error.

5C.1 Methodology

CalSim II model simulation representing the Second Basis of Comparison is rerun with the corrected New Melones Operations. The results are analyzed in two different sections. First, the Revised Second Basis of Comparison (SBC_R) is compared against the Second Basis of Comparison (SBC) to identify the extent of the effects of this model error. As presented in the next section, the results show that the effects of this model error is contained within the Stanislaus River. Secondly, the No Action Alternative (model results same as Alternative 2), Alternative 3, and Alternative 5 are compared against the Revised Second Basis of Comparison (SBC_R) and the Alternative 1 (same as Revised Second Basis of Comparison (SBC_R) is compared against the No Action Alternative. Results analysis in this appendix identifies between similar results (less than 5%) and results with noticeable changes (greater than 5%).

5C.2 Analysis

5C.2.1 Revised Second Basis of Comparison Compared to the Second Basis of Comparison

Model results comparing Revised Second Basis of Comparison (SBC_R) to the Second Basis of Comparison (SBC) presented in Section 5C.3.1 of this document show that the effect of the CalSim II model error is confined to Stanislaus River basin and do not cause any significant change in the overall system operations.

5C.2.2 Revised Second Basis of Comparison Compared to the Alternatives

This section provides analysis of effects of the identified CalSim II model error on the Stanislaus River Basin. The section is organized by alternative comparison and by each parameter that is likely to change.

The changes described in this section are due to increased storage in New Melones and decrease and change in patter of flows in Stanislaus River downstream of New Melones under the Revised Second Basis of Comparison (Revised Alternative 1) compared to the Second Basis of Comparison (Alternative 1).

5C.2.2.1 Revised Alternative 1 Compared to the No Action Alternative

5C.2.2.1.1 New Melones Storage

Alternative 1 showed increased storage in October and November of above normal years (up to 6%), October and April of below normal years (slightly above 5%), October of dry years (slightly above 5%), and October through June of critically dry years (up to 7%) when compared to the No Action Alternative. Revised Alternative 1 shows increased storage in all months of all water year types when compared to the No Action Alternative (from approximately 6 to 44%).

5C.2.2.1.2 New Melones Elevation

Alternative 1 showed similar elevation (within 5% change) in all months of all water year types when compared to the No Action Alternative. Revised Alternative 1 shows increased reservoir elevation in all months of all water year types (from approximately 8 to 13%) when compared to the No Action Alternative.

5C.2.2.1.3 Stanislaus River Flow below Goodwin

Flow patterns are different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in patterns.

- In wet years, Alternative 1 showed lower flows (from approximately 5 to 54%) in October, March, May, July, and August, higher flows (from approximately 6 to 103%) in November, December, January, June, and September), and similar flows (within 5% change) in February and April when compared to the No Action Alternative.

  Revised Alternative 1 shows lower flows (from approximately 8 to 57%) in October, March, and May, higher flows (from approximately 12 to 59%) in November, December, February, June, July, August, and September, and similar flows (within 5% change) in January and April when compared to the No Action Alternative.

- In above normal years, Alternative 1 showed lower flows (from approximately 19 to 58%) in October, March, and April months, higher flows (from approximately 7 to 54%) in November, December, January, February, May, and June), and similar flows (within 5% change) in July through September when compared to the No Action Alternative.

  Revised Alternative 1 shows lower flows (from approximately 7 to 65%) in October, March, April, and May, higher flows (from approximately 5 to 25%) in November, December, and February, and similar flows (within 5% change) in January and June through September when compared to the No Action Alternative.

- In below normal years, Alternative 1 showed lower flows (from approximately 14 to 61%) in October, March, and April months, higher flows

(from approximately 5 to 66%) in November through February, May, June, and September), and similar flows (within 5% change) in July and August when compared to the No Action Alternative.

Revised Alternative 1 shows lower flows (from approximately 13 to 66%) in October, March, April, May, and June, higher flows (from approximately 19 to 54%) in November through February, and similar flows (within 5% change) in July through September when compared to the No Action Alternative.

- In dry years, Alternative 1 showed lower flows (approximately 61 and 44%) in October and April months, higher flows (from approximately 7 to 56%) in November through March, May, and June), and similar flows (within 5% change) in July through September when compared to the No Action Alternative.

  Revised Alternative 1 shows lower flows (from approximately 7 to 65%) in October, March, April, May, and June, higher flows (from approximately 8 to 36%) in November through February, and similar flows (within 5% change) in July through September when compared to the No Action Alternative.

- In critically dry years, Alternative 1 showed lower flows (approximately 66 and 37%) in October and April months, higher flows (from approximately 5 to 41%) in November through March, May, and July), and similar flows (within 5% change) in June, August, and September when compared to the No Action Alternative.

  Revised Alternative 1 shows lower flows (from approximately 10 to 74%) in October, January, March, April, and May, higher flows (from approximately 6 to 18%) in November, December, July, and August, and similar flows (within 5% change) in February, June, and September when compared to the No Action Alternative.

5C.2.2.1.4 Stanislaus River Flow at Mouth

- In wet years, Alternative 1 showed higher flows (from approximately 5 to 81%) in November, December, January, and June, lower flows (from approximately 7 to 44%) in October, March, May, and August, and similar flows (within 5% change) in February, April, July, and September when compared to the No Action Alternative.

  Revised Alternative 1 shows lower flows (from approximately 7 to 47%) in October, March, and May, higher flows (from approximately 11 to 46%) in November, December, February, June, July, August, and September, and similar flows (within 5% change) in January and April when compared to the No Action Alternative.

- In above normal years, Alternative 1 showed higher flows (from approximately 6 to 33%) in November through February, May, and June, lower flows (from approximately 15 to 46%) in October, March, and April,

and similar flows (within 5% change) in July through September when compared to the No Action Alternative.

Revised Alternative 1 shows lower flows (from approximately 7 to 51%) in October, March, April, and May, higher flows (from approximately 14 to 15%) in November and December, and similar flows (within 5% change) in January, February, and June through September when compared to the No Action Alternative.

- In below normal years, Alternative 1 showed higher flows (from approximately 5 to 42%) in November through February and June, lower flows (from approximately 9 to 49%) in October, March, and April, and similar flows (within 5% change) in May, July, August, and September when compared to the No Action Alternative.

  Revised Alternative 1 shows lower flows (from approximately 9 to 52%) in October and March through June, higher flows (from approximately 13 to 36%) in November through February, and similar flows (within 5% change) in July through September when compared to the No Action Alternative.

- In dry years, Alternative 1 showed higher flows (approximately 14 and 38%) in November through March and May, lower flows (approximately 47% and 42%) in October and April, and similar flows (within 5% change) in June through September when compared to the No Action Alternative.

  Revised Alternative 1 shows lower flows (from approximately 5 to 50%) in October, April, May, and June, higher flows (from approximately 5 to 25%) in November through February, and similar flows (within 5% change) in March and July through September when compared to the No Action Alternative.

- In critically dry years, Alternative 1 showed higher flows (approximately 8 and 30%) in November through March and May, lower flows (approximately 54% and 37%) in October and April, and similar flows (within 5% change) in June through September when compared to the No Action Alternative.

  Revised Alternative 1 shows lower flows (from approximately 7 to 60%) in October, January, March, April, and May, higher flows (from approximately 7 to 14%) in November, December, and July, and similar flows (within 5% change) in February, June, August, and September when compared to the No Action Alternative.

5C.2.2.1.5 Stanislaus River Water Temperature below Goodwin Dam

Alternative 1 showed similar temperatures at Goodwin except for higher temperatures in November of critically dry years (average increase of 0.7 °F) and lower temperatures in June and September of critically dry years (up to 1.3 °F) when compared to the No Action Alternative. Difference in temperature threshold exceedances were all within 5% (varied from 2% less to 3% more exceedances in January through May).

Revised Alternative 1 shows similar temperatures at Goodwin except for lower temperatures (from approximately 0.5 to 1.1 °F) in October and September of above normal years, August and September of dry years, and October, June, July, and September of critically dry years. Difference in temperature threshold exceedances are mostly within 5% (3% to 4% more in January through April) and 5% more in May.

In general, Revised Alternative 1 shows higher temperatures for Steelhead smolts in Stanislaus when compared to the No Action Alternative.

5C.2.2.1.6 Stanislaus River Water Temperature at Orange Blossom Bridge

Alternative 1 showed similar temperatures at Orange Blossom Bridge except for higher temperatures in October of wet years, October and April of above normal, below normal, dry, and critically dry years (from approximately 0.6 to 1.9°F) and lower temperatures in June of wet years, March and June of below normal years, and May and July of critically dry years (approximately from 0.6 to 0.7°F) when compared to the No Action Alternative. Difference in temperature threshold exceedances showed 28% more exceedance in October (adult migration threshold), 6% more exceedance in April (smoltification threshold), 17% more exceedance in April (spawning threshold), 8% less exceedance in May (smoltification threshold), and 5% less in November (adult migration threshold) and March and May (spawning threshold).

Revised Alternative 1 shows similar temperatures at Orange Blossom Bridge except for higher temperatures (from approximately 0.5 to 2.1°F) in October and March of wet years, October and April of above normal years, October and June of below normal years, October, April, and May of dry years, and October, March, and April of critically dry years; and lower temperatures (from approximately 0.5 to 1.2°F) in September of wet years, August and September of dry years, and July, August, and September of critically dry years when compared to the No Action Alternative. Difference in temperature threshold exceedances showed 29% more exceedance in October (adult migration threshold), 10% more exceedance in March (smoltification threshold), 5% more exceedance in April (smoltification threshold), 14% more exceedance in March and April (spawning threshold), 9% more exceedance in May (spawning threshold), and 6% less in November (adult migration threshold) , 8% less in August (rearing threshold).

In general, Revised Alternative 1 shows higher temperatures for Steelhead lifestages in Stanislaus when compared to the No Action Alternative.

5C.2.2.1.7 CVP Stanislaus Deliveries

Under Alternative 1, annual CVP service contract deliveries were increased by 4.5 TAF and annual water rights deliveries were increased by 2.3 TAF when compared to the No Action Alternative.

Under Revised Alternative 1, annual CVP service contract deliveries are increased by 14.8 TAF and annual water rights deliveries are increased by 6.2 TAF when compared to the No Action Alternative.

In general, Revised Alternative 1 shows increased CVP Stanislaus deliveries when compared to the No Action Alternative.

5C.2.2.1.8 CVP Power Generation

Long-term average power capacity and energy generation under Alternative 1 were 3% and 1% higher than the No Action Alternative. The energy use at the CVP pumping facilities was 16% higher than the No Action Alternative; which resulted in a 4% lower net generation.

In dry and critical years, long-term average power capacity and energy generation under Alternative 1 were 6% and 3% higher than the No Action Alternative. The energy use at the CVP pumping facilities was 11% higher than the No Action Alternative; which resulted in similar net generation.

Under the revised Alternative 1, long-term average power capacity and energy generation are 4% and 1% higher than the No Action Alternative. The energy use at the CVP pumping facilities is 15% higher than the No Action Alternative; which results in a 3% lower net generation.

In dry and critical years, long-term average power capacity and energy generation under Revised Alternative 1 are 10% and 5% higher than the No Action Alternative. The energy use at the CVP pumping facilities is 15% higher than the No Action Alternative; which results 3% higher net generation.

5C.2.2.1.9 New Melones Large Mouth Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, Alternative 1 showed lower percentage of nest survival in June (approximately 13%), higher percentage of nest survival (48% and 11%) in October and April when compared to the No Action Alternative.

  The Revised Alternative 1 shows lower percentage of nest survival (from approximately 7 to 14%) in July through September, higher percentage of nest survival (approximately 49 and 10%) in October and April when compared to the No Action Alternative.

- In above normal years, Alternative 1 showed lower percentage of nest survival in June (approximately 5%), higher percentage of nest survival (29% and 9%) in October and April when compared to the No Action Alternative.

  The Revised Alternative 1 shows higher percentage of nest survival (from approximately 6 to 31%) in October, April, July, and August when compared to the No Action Alternative.

- In below normal years, Alternative 1 showed lower percentage of nest survival (approximately 9%) in June; and higher percentage of nest survival (from approximately 5% and 55%) in October, March, April, and July when compared to the No Action Alternative.

The Revised Alternative 1 shows higher percentage of nest survival (from approximately 5 to 59%) in October and March through August when compared to the No Action Alternative.

- In dry years, Alternative 1 showed lower percentage of nest survival (approximately 9%) in May; and higher percentage of nest survival (from approximately 12% and 44%) in October, April, and July when compared to the No Action Alternative.

  The Revised Alternative 1 shows higher percentage of nest survival (from approximately 7 to 51%) in October and April through September when compared to the No Action Alternative.

- In critically dry years, Alternative 1 showed lower percentage of nest survival (from approximately 12 to 23%) in May, July, and August; and higher percentage of nest survival (from approximately 7% and 53%) in October, April, and September when compared to the No Action Alternative.

  The Revised Alternative 1 shows lower percentage of nest survival (from approximately 7 to 45%) in June through August; and higher percentage of nest survival (from approximately 34 to 53%) in October, April, and May when compared to the No Action Alternative.

In general, Revised Alternative 1 shows higher percentage of nest survival for the New Melones Large Mouth Bass when compared to the No Action Alternative.

5C.2.2.1.10 New Melones Small Mouth Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, Alternative 1 showed lower percentage of nest survival in June (approximately 15%), higher percentage of nest survival (59% and 9%) in October and April when compared to the No Action Alternative.

  The Revised Alternative 1 shows lower percentage of nest survival (from approximately 6 to 14%) in July through September, higher percentage of nest survival (approximately 61 and 9%) in October and April when compared to the No Action Alternative.

- In above normal years, Alternative 1 showed higher percentage of nest survival (41% and 10%) in October and April when compared to the No Action Alternative.

  The Revised Alternative 1 shows higher percentage of nest survival (from approximately 8 to 44%) in October, April, July, and August when compared to the No Action Alternative.

- In below normal years, Alternative 1 showed lower percentage of nest survival (approximately 10 and 14%) in June and July; and higher percentage of nest survival (from approximately 6% to 57%) in October, March, and April when compared to the No Action Alternative.

The Revised Alternative 1 shows higher percentage of nest survival (from approximately 5 to 61%) in October and March through August when compared to the No Action Alternative.

- In dry years, Alternative 1 showed lower percentage of nest survival (approximately 8% and 5%) in May and November; and higher percentage of nest survival (from approximately 11% to 52%) in October, April, and July when compared to the No Action Alternative.

  The Revised Alternative 1 shows higher percentage of nest survival (from approximately 6 to 59%) in October and April through September when compared to the No Action Alternative.

- In critically dry years, Alternative 1 showed lower percentage of nest survival (from approximately 5 to 22%) in November, May, July, and August; and higher percentage of nest survival (from approximately 6% to 58%) in October, April, and September when compared to the No Action Alternative.

  The Revised Alternative 1 shows lower percentage of nest survival (from approximately 7 to 50%) in June through September; and higher percentage of nest survival (from approximately 44 to 69%) in October, and April when compared to the No Action Alternative.

In general, Revised Alternative 1 shows higher percentage of nest survival for the New Melones Small Mouth Bass when compared to the No Action Alternative except for the summer months of critically dry years.

5C.2.2.1.11 New Melones Spotted Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, Alternative 1 showed higher percentage of nest survival (from approximately 6% to 13%) in October, April, July and August when compared to the No Action Alternative.

  The Revised Alternative 1 shows higher percentage of nest survival (from approximately 11% to 13%) in October, April, and July when compared to the No Action Alternative.

- In above normal years, Alternative 1 showed similar percentage of nest survival when compared to the No Action Alternative.

  The Revised Alternative 1 shows higher percentage of nest survival (from approximately 6% to 8%) in July and August when compared to the No Action Alternative.

- In below normal years, Alternative 1 showed higher percentage of nest survival (from approximately 5% to 11%) in October, April, and July when compared to the No Action Alternative.

The Revised Alternative 1 shows higher percentage of nest survival (from approximately 6 to 10%) in October, April, and August when compared to the No Action Alternative.

- In dry years, Alternative 1 showed lower percentage of nest survival (approximately 5%) in May when compared to the No Action Alternative.

  The Revised Alternative 1 shows higher percentage of nest survival (from approximately 5% to 13%) in May, July and August when compared to the No Action Alternative.

- In critically dry years, Alternative 1 showed lower percentage of nest survival (from approximately 10% to 17%) in May and July; and higher percentage of nest survival (approximately 20% to 9%) in April and June when compared to the No Action Alternative.

  The Revised Alternative 1 shows lower percentage of nest survival (approximately 7%) in July; and higher percentage of nest survival (from approximately 5% to 21%) in April through June, and September when compared to the No Action Alternative.

In general, Revised Alternative 1 shows higher percentage of nest survival for the New Melones Spotted Bass when compared to the No Action Alternative.

5C.2.2.2 No Action Alternative Compared to the Revised Second Basis of Comparison

5C.2.2.2.1 New Melones Storage

No Action Alternative showed decreased storage in October and November of above normal years (up to 6%), October and April of below normal years (slightly above 5%), October of dry years (slightly above 5%), and October through June of critically dry years (up to 7%) when compared to the Second Basis of Comparison. When compared to the Revised Second Basis of Comparison, the No Action Alternative shows decreased storage (from approximately 6 to 44%) in all months of all water year types.

5C.2.2.2.2 New Melones Elevation

No Action Alternative showed similar reservoir elevation (within 5% change) in all months of all water year types when compared to the Second Basis of Comparison. When compared to the Revised Second Basis of Comparison, the No Action Alternative shows decreased reservoir elevation in all months of all water year types (from approximately 8 to 13%).

5C.2.2.2.3 Stanislaus River Flow below Goodwin

Flow patterns are different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in patterns.

- In wet years, the No Action Alternative showed lower flows (from approximately 5 to 51%) in November, December, January, June, and

September months, higher flows (from approximately 10 to 117%) in October, March, May, July, and August, and similar flows (within 5% change) in February and April when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower flows (from approximately 11 to 37%) in November, December, February, June, July, August, and September, higher flows (from approximately 9 to 134%) in October, March, and May, and similar flows (within 5% change) in January and April when compared to the No Action Alternative.

- In above normal years, the No Action Alternative showed lower flows (from approximately 6 to 35%) in November, December, January, February, May, and June months, higher flows (from approximately 23 to 137%) in October, March, and April, and similar flows (within 5% change) in July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower flows (from approximately 5 to 20%) in November, December, and February, higher flows (from approximately 8 to 188%) in October, March, April, and May, and similar flows (within 5% change) in January and June through September when compared to the No Action Alternative.

- In below normal years, the No Action Alternative showed lower flows (from approximately 5 to 40%) in November through February, May, June, and September) months, higher flows (from approximately 16 to 157%) in October, March, and April, and similar flows (within 5% change) in July and August when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower flows (from approximately 16 to 35%) in November through February, higher flows (from approximately 15 to 192%) in October, March, April, May, and June, and similar flows (within 5% change) in July through September.

- In dry years, the No Action Alternative showed lower flows (approximately 6 to 36%) in November through March, May, and June, higher flows (from approximately 154 and 77%) in October and April months, and similar flows (within 5% change) in July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower flows (from approximately 8 to 26%) in November through February, higher flows (from approximately 8 to 189%) in October, March, April, May, and June, and similar flows (within 5% change) in July through September.

- In critically dry years, the No Action Alternative showed lower flows (approximately 9 to 29%) in November through March, and May, higher flows (approximately 197 and 60%) in October and April months, and similar

flows (within 5% change) in June through September when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower flows (from approximately 6 to 15%) in November, December, July, and August, higher flows (from approximately 12 to 277%) in October, January, March, April, and May, and similar flows (within 5% change) in February, June, and September.

5C.2.2.2.4 Stanislaus River Flow at Mouth

Flow patterns are different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in patterns.

- In wet years, No Action Alternative showed lower flows (from approximately 5 to 45%) in November, December, January, and June, higher flows (from approximately 8 to 79%) in October, March, May, and August, and similar flows (within 5% change) in February, April, July, and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, No Action Alternative shows lower flows (from approximately 10 to 32%) in November, December, February, and June through September, higher flows (from approximately 8 to 88%) in October, March, and May, and similar flows (within 5% change) in January and April when compared to No Action Alternative.

- In above normal years, No Action Alternative showed lower flows (from approximately 6 to 25%) in November through February and May and June, higher flows (from approximately 18 to 84%) in October, March, and April, and similar flows (within 5% change) in July, August, and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, No Action Alternative shows lower flows (approximately 13 and 12%) in November and December, higher flows (from approximately 7 to 106%) in October, March, April, and May, and similar flows (within 5% change) in January, February, and June through September when compared to the No Action Alternative.

- In below normal years, No Action Alternative showed lower flows (from approximately 12 to 29%) in November through February and June, higher flows (from approximately 10 to 94%) in October, March, and April, and similar flows (within 5% change) in May, and July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, No Action Alternative shows lower flows (from approximately 11 to 26%) in November through February, higher flows (from approximately 10 to 109%) in October and March through June, and similar flows (within 5% change) in July through September.

- In dry years, No Action Alternative showed lower flows (approximately 5 to 28%) in, November through March and May and June, higher flows (approximately 88% and 73%) in October and April, and similar flows (within 5% change) in June through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, No Action Alternative shows lower flows (approximately 5 to 20%) in November through February, higher flows (from approximately 6 to 102%) in October, April, May, and June, and similar flows (within 5% change) in March and July through September.

- In critically dry years, No Action Alternative showed lower flows (approximately 7 to 23%) in November through March, and May, higher flows (approximately 118 and 58%) in October and April and similar flows (within 5% change) in June through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, No Action Alternative shows lower flows (from approximately 6 to 12%) in November, December, and July, higher flows (from approximately 27 to 149%) in October, January, March, April, May, and July, and similar flows (within 5% change) in February, June, August, and September.

5C.2.2.2.5 Stanislaus River Water Temperature below Goodwin Dam

No Action Alternative showed similar temperatures at Goodwin except for higher temperatures in June and September critically dry years (average increase of 0.8 and 1.3°F) and lower temperatures in November of critically dry years (up to 0.7°F) when compared to the Second Basis of Comparison. Difference in temperature threshold exceedances were all within 5% (varied from 3% less to 2% more exceedances in January through May).

No Action Alternative shows similar temperatures at Goodwin except for higher temperatures (from approximately 0.5 to 1.1 °F) in October and September of above normal years, August and September of dry years, and October, June, July, and September of critically dry years when compared to the Revised Second Basis of Comparison. Difference in temperature threshold exceedances are mostly within 5% (2% to 4% less in January through April) and 5% less in May.

In general, No Action Alternative shows lower temperatures for Steelhead smolts in Stanislaus when compared to the Revised Second Basis of Comparison.

5C.2.2.2.6 Stanislaus River Water Temperature at Orange Blossom Bridge

No Action Alternative showed similar temperatures at Orange Blossom Bridge except for lower temperatures in October of wet years, October and April of above normal, below normal, dry, and critically dry years (from approximately 0.6 to 1.9°F) and higher temperatures in June of wet years, March and June of below normal years, and May and July of critically dry years (approximately from 0.6 to 0.7°F) when compared to the Second Basis of Comparison. Difference in

temperature threshold exceedances showed 28% less exceedance in October (adult migration threshold), 6% less exceedance in April (smoltification threshold), 17% less exceedance in April (spawning threshold), 8% more exceedance in May (smoltification threshold), and 5% more in November (adult migration threshold) and March and May (spawning threshold).

No Action Alternative shows similar temperatures at Orange Blossom Bridge except for lower temperatures (from approximately 0.5 to 2.1°F) in October and March of wet years, October and April of above normal years, October and June of below normal years, October, April, and May of dry years, and October, March, and April of critically dry years; and higher temperatures (from approximately 0.5 to 1.2°F) in September of wet years, August and September of dry years, and July, August, and September of critically dry years when compared to the Revised Second Basis of Comparison. Difference in temperature threshold exceedances showed 29% less exceedance in October (adult migration threshold), 10% less exceedance in March (smoltification threshold), 5% less exceedance in April (smoltification threshold), 14% less exceedance in March and April (spawning threshold), 9% less exceedance in May (spawning threshold), and 6% more in November (adult migration threshold) , 8% more in August (rearing threshold).

In general, No Action Alternative shows lower temperatures for Steelhead lifestages in Stanislaus when compared to the Revised Second Basis of Comparison.

5C.2.2.2.7 CVP Stanislaus Deliveries

Under the No Action Alternative, annual CVP service contract deliveries were decreased by 4.5 TAF and annual water rights deliveries were decreased by 2.3 TAF when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, annual CVP service contract deliveries are decreased by 14.8 TAF and annual water rights deliveries are decreased by 6.2 TAF under the No Action Alternative.

In general, the No Action Alternative shows decreased CVP Stanislaus deliveries when compared to the Revised Second Basis of Comparison.

5C.2.2.2.8 CVP Power Generation

Long-term average power capacity and energy generation under the No Action Alternative were 3% and 1% lower than the Second Basis of Comparison. The energy use at the CVP pumping facilities was 14% lower than the Second Basis of Comparison; which resulted in a 4% higher net generation.

In dry and critical years, long-term average power capacity and energy generation under the No Action Alternative were 6% and 3% lower than the Second Basis of Comparison. The energy use at the CVP pumping facilities was 10% lower than the Second Basis of Comparison; which resulted in similar net generation.

When compares to the Revised Second Basis of Comparison, long-term average power capacity and energy generation are 4% and 1% lower under the No Action

Alternative. The energy use at the CVP pumping facilities is 13% lower than the Revised Second Basis of Comparison; which results in a 3% higher net generation.

In dry and critical years, long-term average power capacity and energy generation under the No Action Alternative are 9% and 4% lower than the Revised Second Basis of Comparison. The energy use at the CVP pumping facilities is 9% lower than the Revised Second Basis of Comparison; which results 3% lower net generation.

5C.2.2.2.9 New Melones Large Mouth Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, the No Action Alternative showed higher percentage of nest survival in June (approximately 16%); and lower percentage of nest survival (32% and 10%) in October and April when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows higher percentage of nest survival (from approximately 8 to 16%) in July through September; and lower percentage of nest survival (approximately 33 and 9%) in October and April.

- In above normal years, the No Action Alternative showed higher percentage of nest survival in June (approximately 5%); and lower percentage of nest survival (22% and 8%) in October and April when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower percentage of nest survival (from approximately 6 to 23%) in October, April, July, and August.

- In below normal years, the No Action Alternative showed higher percentage of nest survival (approximately 10%) in June; and lower percentage of nest survival (from approximately 5% and 35%) in October, March, April, and July when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower percentage of nest survival (from approximately 5 to 37%) in October and March through August.

- In dry years, the No Action Alternative showed higher percentage of nest survival (approximately 10%) in May; and lower percentage of nest survival (from approximately 11% and 31%) in October, April, May, July and August when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower percentage of nest survival (from approximately 7 to 34%) in October and April through September.

- In critically dry years, the No Action Alternative showed higher percentage of nest survival (from approximately 13 to 30%) in May, July, and August; and lower percentage of nest survival (from approximately 6% and 35%) in October, April, and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows higher percentage of nest survival (from approximately 7 to 81%) in June through August; and lower percentage of nest survival (from approximately 25 to 35%) in October, April, and May.

In general, the No Action Alternative shows lower percentage of nest survival for the New Melones Large Mouth Bass when compared to the Revised Second Basis of Comparison.

5C.2.2.2.10 New Melones Small Mouth Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, the No Action Alternative showed higher percentage of nest survival in June (approximately 17%); and lower percentage of nest survival (37% and 9%) in October and April when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows higher percentage of nest survival (from approximately 8 to 16%) in July through September; and lower percentage of nest survival (approximately 38 and 8%) in October and April.

- In above normal years, the No Action Alternative showed lower percentage of nest survival (29% and 9%) in October and April when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower percentage of nest survival (from approximately 7 to 30%) in October, April, July, and August.

- In below normal years, the No Action Alternative showed higher percentage of nest survival (approximately 11%) in June; and lower percentage of nest survival (from approximately 6% to 37%) in October, March, April, and July when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower percentage of nest survival (from approximately 6 to 38%) in October, March through May, July, and August.

- In dry years, the No Action Alternative showed higher percentage of nest survival (approximately 5% and 8%) in November and May; and lower percentage of nest survival (from approximately 10% to 34%) in October, April, and July when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower percentage of nest survival (from approximately 6 to 37%) in October and April through.

- In critically dry years, the No Action Alternative showed higher percentage of nest survival (from approximately 5 to 28%) in November, May, July, and August; and lower percentage of nest survival (from approximately 6% to 37%) in October, April, and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows higher percentage of nest survival (from approximately 8 to 100%) in June through September; and lower percentage of nest survival (from approximately 23 to 41%) in October, April, and May.

In general, the No Action Alternative shows lower percentage of nest survival for the New Melones Small Mouth Bass when compared to the Revised Second Basis of Comparison except for the summer months of critically dry years.

5C.2.2.2.11 New Melones Spotted Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, the No Action Alternative showed lower percentage of nest survival (from approximately 5% to 12%) in October, April, July, and August when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower percentage of nest survival (from approximately 10% to 12%) in October, April, and July.

- In above normal years, the No Action Alternative showed similar percentage of nest survival when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower percentage of nest survival (from approximately 5 to 7%) in July and August.

- In below normal years, the No Action Alternative showed lower percentage of nest survival (from approximately 5% to 10%) in October, April, and July when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower percentage of nest survival (from approximately 5 to 9%) in October, April, and August.

- In dry years, the No Action Alternative showed higher percentage of nest survival (approximately 5%) in May when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, the No Action Alternative shows lower percentage of nest survival (from approximately 8% to 12%) in July and August.

- In critically dry years, the No Action Alternative showed higher percentage of nest survival (from approximately 11% to 21%) in May and July; and lower percentage of nest survival (from approximately 8% to 17%) in April and June when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the No Action Alternative shows higher percentage of nest survival (from approximately 5% to 8%) in July and August; and lower percentage of nest survival (from approximately 5% to 18%) in April through June, and September.

In general, the No Action Alternative shows lower percentage of nest survival for the New Melones Spotted Bass when compared to the Revised Second Basis of Comparison.

5C.2.2.3 Alternative 3 Compared to the Revised Second Basis of Comparison

5C.2.2.3.1 New Melones Storage

Alternative 3 showed increased storage (from approximately 8 to 32%) almost all months of all water year types except for February through May of wet years (less than 5% increase). When compared to the Revised Second Basis of Comparison, Alternative 3 shows similar storage in all months of all water year types (changes within 5%).

5C.2.2.3.2 New Melones Elevation

Alternative 3 showed similar reservoir elevation in all months of all water year types (changes within 5%). When compared to the Revised Second Basis of Comparison, Alternative 3 still shows similar reservoir elevation in all months of all water year types (changes within 5%).

5C.2.2.3.3 Stanislaus River Flow below Goodwin

Flow patterns are different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in patterns.

- In wet years, Alternative 3 showed lower flows (from approximately 40 to 45%) in May and June, higher flows (from approximately 9 to 67%) in December, February, March, July, August, and September, and similar flows (within 5% change) in October, November, January, and April when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower flows (from approximately 17 to 30%) in May and June, higher flows (from approximately 5 to 19%) in October, December, February, and

July, and similar flows (within 5% change) in November, January, March, April, August, and September when compared to Alternative 3.

- In above normal years, Alternative 3 showed lower flows (from approximately 14 to 79%) in November, May, June, and July months, higher flows (from approximately 5 to 23%) in October, March, and April, and similar flows (within 5% change) in December, January, February, August, and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower flows (from approximately 10 to 74%) in May through July, higher flows (from approximately 6 to 30%) in October through January, March, and April, and similar flows (within 5% change) in February, August, and September when compared to Alternative 3.

- In below normal years, Alternative 3 showed lower flows (from approximately 7 to 58%) in October, November, December, March, May, June, and September, higher flows (from approximately 18 to 32%) in January, February, and April, and similar flows (within 5% change) in August and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower flows (from approximately 7 to 38%) in November, December, March, May, and June, higher flows (from approximately 6 to 44%) in October and January, and similar flows (within 5% change) in February, April, July, August, and September.

- In dry years, Alternative 3 showed lower flows (approximately 5 to 36%) in, November through March, May, and June, higher flows (approximately 40%) in April, and similar flows (within 5% change) in October and July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower flows (approximately 26%) in June, higher flows (from approximately 8 to 19%) in October, March, and April, and similar flows (within 5% change) in November through February, May, and July through September.

- In critically dry years, Alternative 3 showed lower flows (approximately 8 to 31%) in November through March and May through July, higher flows (approximately 5 to 47%) in October, April, and September, and similar flows (within 5% change) in August when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower flows (from approximately 6 to 19%) in January, February, June, and July, higher flows (from approximately 9 to 36%) in October, November, December, March, April, and May, and similar flows (within 5% change) in August and September.

5C.2.2.3.4 Stanislaus River Flow at Mouth

- In wet years, Alternative 3 showed lower flows (from approximately 12 to 39%) in May and June, higher flows (from approximately 8 to 58%) in December, February, March, July, August, and September, and similar flows (within 5% change) in October, November, January, and April when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower flows (from approximately 15 to 25%) in May and June, higher flows (from approximately 6 to 17%) in October, December, February, and July, and similar flows (within 5% change) in November, January, March, April, August, and September when compared to Alternative 3.

- In above normal years, Alternative 3 showed lower flows (from approximately 10 to 63%) in November, May, June, and July, higher flows (approximately 19%) in April, and similar flows (within 5% change) in October, December, January, February, March, August, and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower flows (from approximately 9 to 57%) in May through July, higher flows (from approximately 8 to 17%) in October, December, March, and April, and similar flows (within 5% change) in November, February, August, and September when compared to Alternative 3.

- In below normal years, Alternative 3 showed lower flows (from approximately 9 to 44%) in November, December, March, May, June, and September, higher flows (from approximately 16 to 23%) in January, February, and April, and similar flows (within 5% change) in July, August, and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower flows (from approximately 7 to 26%) in November, December, May, and June, higher flows (approximately 30%) in January, and similar flows (within 5% change) in October, February, March, April, July, August, and September.

- In dry years, Alternative 3 showed lower flows (approximately 9 to 26%) in, November December, January, March, May, and June, higher flows (approximately 38%) in April, and similar flows (within 5% change) in October, February, and July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower flows (approximately 18%) in June, higher flows (from approximately 9 to 18%) in October and April, and similar flows (within 5% change) in November through March, May, and July through September.

- In critically dry years, Alternative 3 showed lower flows (approximately 6 to 28%) in November through March and May through July, higher flows

(approximately 45%) in April, and similar flows (within 5% change) in October, August, and September when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower flows (from approximately 10 to 15%) in February, June, and July, higher flows (from approximately 6 to 32%) in October, November, December, March, April, and May, and similar flows (within 5% change) in January, August, and September.

5C.2.2.3.5 Stanislaus River Water Temperature below Goodwin Dam

Alternative 3 showed similar temperatures at Goodwin except for lower temperatures in October of above normal years, October and November of below normal years, September of dry years, and October, November, May, and July through September of critically dry years (varied from 0.5 to 1.5°F)when compared to the Second Basis of Comparison. Difference in temperature threshold exceedances were all within 5% (varied from 3% less to 3% more exceedances in March through May).

Alternative 3 shows similar temperatures at Goodwin except for higher temperatures in June (approximately 0.6°F) and lower temperatures in September (approximately 0.6°F) of critically dry years when compared to the Revised Second Basis of Comparison. Difference in temperature threshold exceedances are mostly within 5% (1% to 4% less in January, February, and April) and 5% less in May.

In general, Alternative 3 shows lower temperatures for Steelhead smolts in Stanislaus when compared to the Revised Second Basis of Comparison.

5C.2.2.3.6 Stanislaus River Water Temperature at Orange Blossom Bridge

Alternative 3 showed similar temperatures at Orange Blossom Bridge except for higher temperatures in June of wet years, May through July of above normal, March and June of below normal years, March, May, and June of dry years, and February and June of critically dry years (from approximately 0.5 to 4.3°F) and lower temperatures in August wet years, April of below normal and dry years, and October, November, April, August, and September of critically dry years (approximately from 0.5 to 1.2°F) when compared to the Second Basis of Comparison. Difference in temperature threshold exceedances showed 16% less exceedance in April (spawning threshold), 7% more exceedance in May (smoltification threshold), and 8% more in March (spawning threshold) and 10% more in May (spawning threshold).

Alternative 3 showed similar temperatures at Orange Blossom Bridge except for higher temperatures in June of wet years, June and July of above normal, June of below normal and dry years, and June and July of critically dry years (from approximately 0.6 to 5.1°F) and lower temperatures in October of wet and above normal years, October and April of dry years, and October, March, April, and September of critically dry years (approximately from 0.5 to 1.2°F) when compared to the Revised Second Basis of Comparison. Difference in temperature

threshold exceedances showed 10% less exceedance in March (smoltification threshold), 5% less exceedance in May (smoltification threshold), 11 and 12% less in March and April (spawning threshold), and 5% more exceedance in July (rearing threshold).

In general, Alternative 3 shows lower temperatures for Steelhead lifestages in Stanislaus when compared to the Revised Second Basis of Comparison.

5C.2.2.3.7 CVP Stanislaus Deliveries

Under Alternative 3, annual CVP service contract deliveries were increased by 15.1 TAF and annual water rights deliveries were increased by 2.6 TAF when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, annual CVP service contract deliveries are increased by 4.8 TAF; however annual water rights deliveries are decreased by 1.2 TAF under Alternative 3.

In general, the Alternative 3 shows increased Stanislaus deliveries to CVP service contractors and similar (slightly decreased) deliveries to water right holders when compared to the Revised Second Basis of Comparison.

5C.2.2.3.8 CVP Power Generation

Under Alternative 3, long-term average power capacity was 1% higher and energy generation was similar when compared to the Second Basis of Comparison. The energy use at the CVP pumping facilities was 4% lower than the Second Basis of Comparison; which resulted in a 1% higher net generation.

In dry and critical years, long-term average power capacity and energy generation under Alternative 3 were both 1% lower than the Second Basis of Comparison. The energy use at the CVP pumping facilities was 8% lower than the Second Basis of Comparison; which resulted in 4% higher net generation.

When compared to the Revised Second Basis of Comparison, long-term average power capacity and energy generation are both 1% lower under Alternative 3. The energy use at the CVP pumping facilities is 4% lower than the Revised Second Basis of Comparison; which results in similar net generation.

In dry and critical years, long-term average power capacity and energy generation under Alternative 3 are 3% and 1% lower than the Revised Second Basis of Comparison. The energy use at the CVP pumping facilities is 7% lower than the Revised Second Basis of Comparison; which results 1% higher net generation.

5C.2.2.3.9 New Melones Large Mouth Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, Alternative 3 showed higher percentage of nest survival in July through September (from approximately 5% and 45%); and lower percentage

of nest survival (7% and 6%) in May and June when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, Alternative 3 shows higher percentage of nest survival (from approximately 12 to 62%) in July through September; and lower percentage of nest survival (approximately 7 and 20%) in May and June.

- In above normal years, Alternative 3 showed higher percentage of nest survival in June through August (from approximately 10% to 38 when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower percentage of nest survival in June (approximately 6 %) in August; and higher percentage of nest survival (approximately 24% and 17%) in June and July.

- In below normal years, Alternative 3 showed higher percentage of nest survival (approximately 15%) in May and June; and lower percentage of nest survival (from approximately 9% and 21%) in December, April, and July when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower percentage of nest survival (from approximately 7 to 18%) in December, April, July, and August.

- In dry years, Alternative 3 showed higher percentage of nest survival (from approximately 5% to 21%) in February, June, and August; and lower percentage of nest survival (approximately 20% and 17%) in April and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower percentage of nest survival (from approximately 7 to 23%) in October, April, May, July, and September.

- In critically dry years, Alternative 3 showed higher percentage of nest survival (approximately 7% to 56%) in February and May; and lower percentage of nest survival (from approximately 5% and 37%) in, April, and June through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows higher percentage of nest survival (approximately 25%) in August; and lower percentage of nest survival (from approximately 10 to 28%) in April, May, July, and September.

In general, the Alternative 3 shows lower percentage of nest survival for the New Melones Large Mouth Bass when compared to the Revised Second Basis of Comparison except for summer months of wet years.

5C.2.2.3.10 New Melones Small Mouth Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, Alternative 3 showed higher percentage of nest survival in July and August (approximately 53% and 24%); and lower percentage of nest survival (approximately 7%) in May when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows higher percentage of nest survival (from approximately 12 to 72%) in July through September; and lower percentage of nest survival (approximately 8 and 18%) in May and June.

- In above normal years, Alternative 3 showed higher percentage of nest survival in June through August (from approximately 8% to 35%) when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower percentage of nest survival (approximately 7%) in August; and higher percentage of nest survival (approximately 28% and 16%) in June and July.

- In below normal years, the Alternative 3 showed higher percentage of nest survival (from approximately 7% to 16%) in November, May, and June; and lower percentage of nest survival (from approximately 9% to 23%) in December, April, and July when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the Alternative 3 shows lower percentage of nest survival (from approximately 8 to 18%) in December, April, July, and August.

- In dry years, the Alternative 3 showed higher percentage of nest survival (from approximately 5% to 19%) in February, June, and August; and lower percentage of nest survival (approximately 20% and 16%) in April, and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the Alternative 3 shows lower percentage of nest survival (from approximately 7 to 22%) in October, April, May, July, and September.

- In critically dry years, the Alternative 3 showed higher percentage of nest survival (from approximately 8 to 51%) in February and May; and lower percentage of nest survival (from approximately 8% to 40%) in April, and June through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the Alternative 3 shows higher percentage of nest survival (from approximately 5 to 31%) in February and August; and lower percentage of nest survival

(from approximately 8% to 27%) in October, April, May, July, and September.

In general, the Alternative 3 shows lower percentage of nest survival for the New Melones Small Mouth Bass when compared to the Revised Second Basis of Comparison.

5C.2.2.3.11 New Melones Spotted Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, Alternative 3 showed lower percentage of nest survival (from approximately 8% to 22%) in May and June when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows higher percentage of nest survival (from approximately 5% to 8%) in August and September; and lower percentage of nest survival (approximately 8% and 23%) in May and June.

- In above normal years, Alternative 3 showed lower percentage of nest survival (from approximately 8% to 35%) in August and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 3 shows lower percentage of nest survival (from approximately 8% to 18%) in August and September.

- In below normal years, the Alternative 3 showed higher percentage of nest survival (from approximately 5% to 6%) in May and June; and lower percentage of nest survival (from approximately 9% to 18%) in December, April, July, and August when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the Alternative 3 shows lower percentage of nest survival (from approximately 9% to 18%) in December, April, July, and August.

- In dry years, the Alternative 3 showed lower percentage of nest survival (from approximately 6% to 21%) in April, May, July and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the Alternative 3 shows lower percentage of nest survival (from approximately 7 to 24%) in April, May, and July through September.

- In critically dry years, the Alternative 3 showed higher percentage of nest survival (from approximately 5% to 26%) in May and June; and lower percentage of nest survival (from approximately 7% to 10%) in March, April, and September when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, the Alternative 3 shows lower percentage of nest survival (from approximately 6% to 10%) in March through May, July, and September.

In general, the Alternative 3 shows lower percentage of nest survival for the New Melones Spotted Bass when compared to the Revised Second Basis of Comparison.

5C.2.2.4 Alternative 5 Compared to the Revised Second Basis of Comparison

5C.2.2.4.1 New Melones Storage

Alternative 5 showed decreased storage (from approximately 6 to 23%) almost all months of all water year types except for June through September of wet years (less than 5% decrease). When compared to the Revised Second Basis of Comparison, Alternative 5 shows further decreased storage (from approximately 8 to 43%) in all months of all water year types.

5C.2.2.4.2 New Melones Elevation

Alternative 5 showed similar reservoir elevation (changes within 5%) in all months of all water year types. When compared to the Revised Second Basis of Comparison, Alternative 5 shows decreased storage in all months of all water year types (from approximately 9 to 13%).

5C.2.2.4.3 Stanislaus River Flow below Goodwin

Flow patterns are different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in patterns.

- In wet years, Alternative 5 showed lower flows (from approximately 6 to 53%) in November, December, January, and June through September, higher flows (from approximately 16 to 113%) in October, March, and May, and similar flows (within 5% change) in February and April when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower flows (from approximately 14 to 40%) in November, December, February, and June through September, higher flows (from approximately 11 to 129%) in October, March, and May, and similar flows (within 5% change) in January and April when compared to Alternative 5.

- In above normal years, Alternative 5 showed lower flows (from approximately 7 to 37%) in November through February and June, higher flows (from approximately 23 to 134%) in October, March, April, and May, and similar flows (within 5% change) in July, August, and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower flows (from approximately 7 to 22%) in November, December,

and February, higher flows (from approximately 11 to 185%) in October, March, April, and May, and similar flows (within 5% change) in January and June through September when compared to Alternative 5.

- In below normal years, Alternative 5 showed lower flows (from approximately 5 to 40%) in November through February, June, and September, higher flows (from approximately 16 to 155%) in October, March, and April, and similar flows (within 5% change) in May, July, and August when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower flows (from approximately 16 to 35%) in November through February, higher flows (from approximately 11 to 189%) in October and March through June, and similar flows (within 5% change) in July through September.

- In dry years, Alternative 5 showed lower flows (approximately 8 to 36%) in, November through March and June, higher flows (approximately 25 to 148%) in October, April, and May, and similar flows (within 5% change) in July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower flows (approximately 8 to 26%) in November through February, higher flows (from approximately 8 to 182%) in October and March through June, and similar flows (within 5% change) in July through September.

- In critically dry years, Alternative 5 showed lower flows (approximately 8 to 30%) in November through March, Jun, and July, higher flows (approximately 7 to 193%) in October, April, and May, and similar flows (within 5% change) in August and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower flows (from approximately 5 to 17%) in November, December, February, June, July, and August, higher flows (from approximately 8 to 272%) in October, January, March, April, and May, and similar flows (within 5% change) in September.

5C.2.2.4.4 Stanislaus River Flow at Mouth

Flow patterns are different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in patterns.

- In wet years, Alternative 5 showed lower flows (from approximately 5 to 47%) in November, December, January, and June through September, higher flows (from approximately 14 to 77%) in October, March, and May, and similar flows (within 5% change) in February and April when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower flows (from approximately 12 to 34%) in November, December,

February, and June through September, higher flows (from approximately 10 to 86%) in October, March, and May, and similar flows (within 5% change) in January and April when compared to Alternative 5.

- In above normal years, Alternative 5 showed lower flows (from approximately 6 to 26%) in November through February and June, higher flows (from approximately 18 to 82%) in October, March, April, and May, and similar flows (within 5% change) in July, August, and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower flows (from approximately 6 to 15%) in November, December, and February, higher flows (from approximately 8 to 104%) in October, March, April, and May, and similar flows (within 5% change) in January and June through September when compared to Alternative 5.

- In below normal years, Alternative 5 showed lower flows (from approximately 12 to 34%) in November through February and June, higher flows (from approximately 10 to 93%) in October, March, and April, and similar flows (within 5% change) in May, July, August, and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower flows (from approximately 11 to 27%) in November through February, higher flows (from approximately 8 to 108%) in October and March through June, and similar flows (within 5% change) in July through September.

- In dry years, Alternative 5 showed lower flows (approximately 6 to 28%) in, November through March and June, higher flows (approximately 23 to 142%) in October, April, and May, and similar flows (within 5% change) in July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower flows (approximately 6 to 20%) in November through February, higher flows (from approximately 77 to 107%) in October, April, and May, and similar flows (within 5% change) in March and June through September.

- In critically dry years, Alternative 5 showed lower flows (approximately 7 to 24%) in November through March, Jun, and July, higher flows (approximately 7 to 149%) in October, April, and May, and similar flows (within 5% change) in August and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower flows (from approximately 6 to 13%) in November, December, June, July, and August, higher flows (from approximately 6 to 147%) in October, January, March, April, and May, and similar flows (within 5% change) in February and September.

5C.2.2.4.5 Stanislaus River Water Temperature below Goodwin Dam

Alternative 5 showed similar temperatures at Goodwin except for higher temperatures in October of wet years, October, July, August, and September of below normal years, October, November, July, August, and September of dry years, October, April, May, August, and September of critically dry years (varied from 0.5 to 1.9°F), and lower temperatures in December and February of critically dry years (approximately 0.5°F) when compared to the Second Basis of Comparison. Difference in temperature threshold exceedances were within 5% (varied from 1% less to 2% more exceedances in February, March, and May) and higher (approximately 6%) in April.

Alternative 5 shows similar temperatures at Goodwin except for higher temperatures in October of wet years, October, November, August and September of above normal years, October, August, and September of below normal years, October through December and July through September of dry years, October, November, May, and July through September of critically dry years (varied from 0.5 to 2.5°F) when compared to the Revised Second Basis of Comparison. Difference in temperature threshold exceedances are within 5% (varied from 4% less to 3% more exceedances in January through April).

In general, Alternative 5 shows lower temperatures for Steelhead smolts in Stanislaus when compared to the Revised Second Basis of Comparison.

5C.2.2.4.6 Stanislaus River Water Temperature at Orange Blossom Bridge

Alternative 5 showed similar temperatures at Orange Blossom Bridge except for lower temperatures in October of wet years, October and April of above normal, below normal, dry, and critically dry years (from approximately 0.7 to 1.6°F) and higher temperatures in November and June of wet years, June and September of below normal years, August and September of dry years, and June through September of critically dry years (approximately from 0.5 to 1.3°F) when compared to the Second Basis of Comparison. Difference in temperature threshold exceedances showed 27% less exceedance in October (adult migration threshold), 8% less exceedance in April (smoltification threshold), 26% less exceedance in April (spawning threshold), 8% more exceedance in November (adult migration threshold), 6% more exceedance in April (smoltification threshold), and 6 % more exceedance in July (rearing threshold), and 8% more in August and September (rearing threshold).

Alternative 5 shows similar temperatures at Orange Blossom Bridge except for lower temperatures (from approximately 0.5 to 1.7°F) in October and March of wet years, October, March, and May of above normal years, October of below normal years, October, April, and May of dry years, and October, March, April, and May of critically dry years; and higher temperatures (from approximately 0.6 to 1.7°F) in July through September of wet years, November and September of above normal years, September of below normal years, November, and July through September of dry years, and November and June through September of critically dry years when compared to the Revised Second Basis of Comparison. Difference in temperature threshold exceedances showed 28% less exceedance in

October (adult migration threshold), 10% less exceedance in March (smoltification threshold), 7% less exceedance in April (smoltification threshold), 15% less exceedance in May (smoltification threshold), 15, 23, and 17% less exceedance in March, April, and May respectively (spawning threshold), and 9% more in November (adult migration threshold) , and 7, 13, and 11% more in July, August, and September respectively (rearing threshold).

In general, Alternative 5 shows lower temperatures for Steelhead lifestages in Stanislaus except for higher temperatures when Steelhead is rearing in summer; when compared to the Revised Second Basis of Comparison.

5C.2.2.4.7 CVP Stanislaus Deliveries

Under Alternative 5, annual CVP service contract deliveries were decreased by 8.4 TAF and annual water rights deliveries were decreased by 8.1 TAF when compared to the Second Basis of Comparison.

When compared to the Revised Second Basis of Comparison, annual CVP service contract deliveries are decreased by 18.6 TAF and annual water rights deliveries are decreased by 11.9 TAF under Alternative 5.

In general, the Alternative 5 shows decreased CVP Stanislaus deliveries when compared to the Revised Second Basis of Comparison.

5C.2.2.4.8 CVP Power Generation

Under Alternative 5, long-term average power capacity and energy generation were 4% and 1% lower when compared to the Second Basis of Comparison. The energy use at the CVP pumping facilities was 14% lower than the Second Basis of Comparison; which resulted in a 4% higher net generation.

In dry and critical years, long-term average power capacity and energy generation under Alternative 5 were both 1% lower than the Second Basis of Comparison. The energy use at the CVP pumping facilities was 8% lower than the Second Basis of Comparison; which resulted in 4% higher net generation.

When compared to the Revised Second Basis of Comparison, long-term average power capacity and energy generation are 5% and 1% lower under Alternative 5. The energy use at the CVP pumping facilities is 14% lower than the Revised Second Basis of Comparison; which results in 3% higher net generation.

In dry and critical years, long-term average power capacity and energy generation under Alternative 5 are 12% and 5% lower than the Revised Second Basis of Comparison. The energy use at the CVP pumping facilities is 9% lower than the Revised Second Basis of Comparison; which results 3% lower net generation.

5C.2.2.4.9 New Melones Large Mouth Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, Alternative 5 showed higher percentage of nest survival in June (approximately 19%); and lower percentage of nest survival (from approximately 5% through 28%) in October, April, May, and July through August when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower percentage of nest survival (from approximately 5% to 28%) in October, May, and August.

- In above normal years, the Alternative 5 showed lower percentage of nest survival (from 6% to 23%) in October and April through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the Alternative 5 shows lower percentage of nest survival (from approximately 6 to 29%) in October and April through September.

- In below normal years, the Alternative 5 showed higher percentage of nest survival (approximately 6%) in June; and lower percentage of nest survival (from approximately 5% and 38%) in October, March, April, May, and July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the Alternative 5 shows lower percentage of nest survival (from approximately 5 to 40%) in October and March through September.

- In dry years, the Alternative 5 showed higher percentage of nest survival (approximately 5%) in February; and lower percentage of nest survival (from approximately 11% and 47%) in October, April, May, and July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower percentage of nest survival (from approximately 9 to 45%) in October and April through September.

- In critically dry years, Alternative 5 showed higher percentage of nest survival (from approximately 5 to 82%) in February, and June through September and lower percentage of nest survival (approximately 21% and 69%) in October, and April when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows higher percentage of nest survival (from approximately 17 to 148%) in June through September; and lower percentage of nest survival (from approximately 26 to 67%) in October, April, and May.

In general, the Alternative 5 shows lower percentage of nest survival for the New Melones Large Mouth Bass when compared to the Revised Second Basis of Comparison except for summer months of the critically dry years.

5C.2.2.4.10 New Melones Small Mouth Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, Alternative 5 showed higher percentage of nest survival in June (approximately 19%); and lower percentage of nest survival (from approximately 7% through 34%) in October, May, and July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower percentage of nest survival (from approximately 5% to 35%) in October, May, and August.

- In above normal years, the Alternative 5 showed lower percentage of nest survival (from 7% to 28%) in October and April through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the Alternative 5 shows lower percentage of nest survival (from approximately 7 to 29%) in October and April through September.

- In below normal years, the Alternative 5 showed higher percentage of nest survival (approximately 8%) in June; and lower percentage of nest survival (from approximately 6% and 39%) in October, March, April, May, and July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the Alternative 5 shows lower percentage of nest survival (from approximately 6 to 41%) in October and March through September.

- In dry years, the Alternative 5 showed higher percentage of nest survival (approximately 5%) in November and February; and lower percentage of nest survival (from approximately 11% and 45%) in October, April, May, and July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower percentage of nest survival (from approximately 9 to 48%) in October, and April through September.

- In critically dry years, Alternative 5 showed higher percentage of nest survival (from approximately 5 to 92%) in November, February, and May through September and lower percentage of nest survival (approximately 26% and 67%) in October and April when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows higher percentage of nest survival (from approximately 28 to 179%) in June through September; and lower percentage of nest survival (from approximately 31 to 65%) in October, April and May.

In general, the Alternative 5 shows lower percentage of nest survival for the New Melones Small Mouth Bass when compared to the Revised Second Basis of Comparison except for summer months of the critically dry years.

5C.2.2.4.11 New Melones Spotted Bass Nest Survival Percentage

Monthly pattern of reservoir storage is different between the Second Basis of Comparison and the Revised Second Basis of Comparison and the changes between alternatives reflect the change in this pattern.

- In wet years, Alternative 5 showed lower percentage of nest survival (approximately 8%) in August when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower percentage of nest survival (approximately 6%) in August.

- In above normal years, the Alternative 5 showed lower percentage of nest survival (from 8% to 21%) in April, June, July and September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the Alternative 5 shows lower percentage of nest survival (from approximately 8% to 24%) in April, and June through September.

- In below normal years, the Alternative 5 showed lower percentage of nest survival (from approximately 13% and 22%) in October, April, May, and July through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, the Alternative 5 shows lower percentage of nest survival (from approximately 6% to 22%) in October, and April through September.

- In dry years, the Alternative 5 showed lower percentage of nest survival (from approximately 6% and 22%) in October, and April through September when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows lower percentage of nest survival (from approximately 6% to 28%) in October, and April through September.

- In critically dry years, Alternative 5 showed higher percentage of nest survival (from approximately 13% to 18%) in July and August; and lower percentage of nest survival (approximately 31% and 57%) in April and May when compared to the Second Basis of Comparison.

  When compared to the Revised Second Basis of Comparison, Alternative 5 shows higher percentage of nest survival (from approximately 5% to 13%) in July and August; and lower percentage of nest survival (from approximately 7% to 56%) in April, May, and September.

In general, the Alternative 5 shows lower percentage of nest survival for the New Melones Spotted Bass when compared to the Revised Second Basis of Comparison except for summer months of the critically dry years.

5C.3 Results

5C.3.1 Revised Second Basis of Comparison vs. Second Basis of Comparison Results

5C.3.1.1 Trinity Storage

5C.3.1.2 Shasta Storage

5C.3.1.3 Oroville Storage

5C.3.1.4 Folsom Storage

5C.3.1.5 New Melones Storage

5C.3.1.6 Trinity Elevation

5C.3.1.7 Shasta Elevation

5C.3.1.8 Oroville Elevation

5C.3.1.9 Folsom Elevation

5C.3.1.10 New Melones Elevation

5C.3.1.11 Delta Outflow

5C.3.1.12 Exports through Jones and Banks Pumping Plants

5C.3.1.13 Trinity River below Lewiston Dam

5C.3.1.14 Clear Creek below Whiskeytown Dam

5C.3.1.15 Sacramento River downstream of Keswick Reservoir

5C.3.1.16 Feather River downstream of Thermalito Afterbay

5C.3.1.17 Fremont Weir Spills

5C.3.1.18 American River below Nimbus Dam

5C.3.1.19 Sacramento River at Freeport

5C.3.1.20 Yolo Bypass Flow

5C.3.1.21 San Joaquin River at Vernalis Flow

5C.3.1.22 San Joaquin River at Vernalis Salinity

5C.3.1.23 Stanislaus River below Goodwin Flow

5C.3.1.24 Stanislaus River at Mouth Flow

5C.3.2 Revised Second Basis of Comparison vs. Second Basis of Comparison Results

5C.3.2.1 New Melones Storage

5C.3.2.2 New Melones Elevation

5C.3.2.3 Stanislaus River below Goodwin Flow

5C.3.2.4 Stanislaus River at Mouth Flow

5C.3.2.5 Stanislaus River below New Melones Reservoir Temperature

5C.3.2.6 Stanislaus River below Tulloch Reservoir Temperature

5C.3.2.7 Stanislaus River below Goodwin Dam Temperature

5C.3.2.8 Stanislaus River at Orange Blossom Bridge Temperature

5C.3.2.9 Stanislaus River at Mouth Temperature

5C.3.2.10 San Joaquin River at Vernalis Flow

5C.3.2.11 Delta Outflow

5C.3.2.12 X2 Position

5C.3.2.13 Old and Middle River Flow

5C.3.2.14 Exports through Jones and Banks Pumping Plant

5C.3.2.15 CVP Deliveries

5C.3.2.16 CVP Total Capacity

5C.3.2.17 CVP Total Generation

5C.3.2.18 CVP Total Energy Use

5C.3.2.19 CVP Net Generation

5C.3.2.20 Salmon Mortality

5C.3.2.21 New Melones Large Mouth Bass Nest Survival Percentage

5C.3.2.22 New Melones Small Mouth Bass Nest Survival Percentage

5C.3.2.23 New Melones Spotted Bass Nest Survival Percentage

5C.3.2.24 Temperature Threshold Exceedances

5C.3.2.25 CVP Annual Power Generation Summary

5C.3.3 Second Basis of Comparison vs. No Action Alternative, Alternative 3, and Alternative 5 Results

5C.3.3.1 New Melones Storage

5C.3.3.2 New Melones Elevation

5C.3.3.3 Stanislaus River below Goodwin Flow

5C.3.3.4 Stanislaus River at Mouth Flow

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Table 5C.3.1.1 Trinity Lake, End of Month Storage

Second Basis of Comparison

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,850	1,850	1,850	1,900	2,000	2,100	2,298	2,345	2,302	2,253	2,143	1,975
20%	1,804	1,840	1,850	1,900	2,000	2,100	2,255	2,276	2,193	2,055	1,920	1,822
30%	1,576	1,594	1,740	1,816	1,981	2,091	2,222	2,159	2,074	1,924	1,793	1,645
40%	1,391	1,446	1,568	1,705	1,855	2,019	2,131	2,030	1,918	1,767	1,582	1,426
50%	1,267	1,266	1,396	1,567	1,685	1,818	2,012	1,912	1,773	1,601	1,416	1,304
60%	1,174	1,201	1,230	1,335	1,535	1,709	1,778	1,749	1,677	1,497	1,330	1,218
70%	1,106	1,099	1,179	1,216	1,362	1,484	1,645	1,599	1,537	1,400	1,225	1,111
80%	948	954	983	1,052	1,132	1,274	1,453	1,434	1,338	1,168	1,055	976
90%	634	645	672	724	810	921	1,051	975	917	802	689	651
Long Term												
Full Simulation Period[b]	1,269	1,288	1,352	1,431	1,554	1,678	1,819	1,796	1,727	1,583	1,434	1,319
Water Year Types[c]												
Wet (32%)	1,501	1,535	1,644	1,767	1,931	2,055	2,224	2,250	2,194	2,068	1,939	1,805
Above Normal (16%)	1,208	1,245	1,363	1,524	1,718	1,901	2,079	2,053	1,955	1,815	1,647	1,513
Below Normal (13%)	1,451	1,472	1,492	1,554	1,641	1,729	1,872	1,799	1,696	1,515	1,337	1,204
Dry (24%)	1,178	1,184	1,210	1,230	1,322	1,453	1,586	1,536	1,466	1,302	1,152	1,055
Critical (15%)	819	803	813	825	868	949	999	962	929	811	667	598

Revised Second Basis of Comparison

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,850	1,850	1,850	1,900	2,000	2,100	2,298	2,345	2,303	2,253	2,143	1,975
20%	1,805	1,840	1,850	1,900	2,000	2,100	2,257	2,276	2,199	2,059	1,922	1,822
30%	1,577	1,591	1,725	1,816	1,979	2,084	2,222	2,159	2,074	1,924	1,791	1,643
40%	1,386	1,446	1,567	1,701	1,865	2,023	2,131	2,029	1,919	1,767	1,588	1,422
50%	1,265	1,284	1,398	1,563	1,694	1,820	2,024	1,915	1,777	1,599	1,419	1,307
60%	1,173	1,200	1,226	1,341	1,538	1,709	1,778	1,749	1,671	1,497	1,329	1,218
70%	1,105	1,092	1,183	1,209	1,356	1,483	1,643	1,592	1,533	1,398	1,221	1,106
80%	942	958	979	1,053	1,143	1,267	1,442	1,429	1,332	1,166	1,054	972
90%	633	630	640	720	808	921	1,064	994	939	816	690	640
Long Term												
Full Simulation Period[b]	1,270	1,288	1,352	1,431	1,554	1,678	1,819	1,796	1,727	1,583	1,435	1,319
Water Year Types[c]												
Wet (32%)	1,502	1,536	1,645	1,768	1,931	2,055	2,224	2,250	2,194	2,068	1,939	1,804
Above Normal (16%)	1,207	1,245	1,363	1,524	1,718	1,902	2,082	2,056	1,959	1,819	1,650	1,517
Below Normal (13%)	1,446	1,467	1,486	1,551	1,638	1,726	1,868	1,796	1,692	1,510	1,334	1,203
Dry (24%)	1,178	1,184	1,210	1,230	1,322	1,452	1,585	1,536	1,466	1,299	1,151	1,055
Critical (15%)	825	806	817	827	870	951	1,002	966	933	814	673	600

Revised Second Basis of Comparison minus Second Basis of Comparison

	End of Month Storage (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
50%	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
80%	-1%	0%	0%	0%	1%	-1%	-1%	0%	0%	0%	0%	0%
90%	0%	-2%	-5%	-1%	0%	0%	1%	2%	2%	2%	0%	-2%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.2 Shasta Lake, End of Month Storage

Second Basis of Comparison

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	3,250	3,252	3,359	3,632	3,911	4,222	4,499	4,552	4,434	3,902	3,563	3,400
20%	3,247	3,252	3,333	3,552	3,771	4,118	4,448	4,552	4,283	3,767	3,380	3,330
30%	3,127	3,199	3,304	3,513	3,673	4,018	4,384	4,532	4,155	3,546	3,174	3,096
40%	2,924	3,028	3,254	3,382	3,569	3,978	4,290	4,375	3,913	3,291	2,980	2,935
50%	2,689	2,753	3,134	3,314	3,487	3,916	4,175	4,245	3,712	3,139	2,781	2,738
60%	2,520	2,594	2,922	3,170	3,354	3,727	4,064	3,971	3,493	2,942	2,636	2,592
70%	2,345	2,467	2,643	2,891	3,252	3,513	3,886	3,757	3,332	2,790	2,527	2,453
80%	2,099	2,145	2,178	2,609	2,978	3,409	3,640	3,525	2,951	2,410	2,127	2,125
90%	1,414	1,350	1,524	2,050	2,383	2,760	2,722	2,958	2,604	1,986	1,584	1,526
Long Term												
Full Simulation Period[b]	2,530	2,578	2,753	3,020	3,285	3,639	3,913	3,907	3,539	3,007	2,674	2,607
Water Year Types[c]												
Wet (32%)	2,817	2,926	3,154	3,406	3,597	3,841	4,301	4,453	4,228	3,733	3,362	3,252
Above Normal (16%)	2,499	2,578	2,808	3,313	3,515	4,038	4,416	4,417	3,979	3,347	2,975	2,921
Below Normal (13%)	2,826	2,846	2,977	3,299	3,646	3,966	4,164	4,042	3,599	3,010	2,601	2,574
Dry (24%)	2,409	2,431	2,578	2,755	3,168	3,644	3,861	3,774	3,333	2,800	2,539	2,496
Critical (15%)	1,873	1,826	1,911	2,050	2,222	2,460	2,386	2,270	1,861	1,409	1,151	1,086

Revised Second Basis of Comparison

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	3,250	3,252	3,359	3,632	3,911	4,220	4,499	4,552	4,434	3,902	3,563	3,400
20%	3,247	3,252	3,333	3,552	3,771	4,118	4,448	4,552	4,283	3,766	3,379	3,354
30%	3,117	3,191	3,302	3,513	3,674	4,020	4,384	4,532	4,155	3,550	3,183	3,095
40%	2,931	3,015	3,253	3,380	3,569	3,980	4,290	4,364	3,907	3,289	2,969	2,942
50%	2,687	2,782	3,116	3,320	3,492	3,917	4,175	4,238	3,704	3,139	2,777	2,749
60%	2,505	2,583	2,937	3,167	3,356	3,713	4,064	3,961	3,482	2,960	2,646	2,599
70%	2,364	2,479	2,619	2,922	3,252	3,513	3,906	3,729	3,335	2,793	2,536	2,456
80%	2,096	2,142	2,178	2,617	2,973	3,390	3,643	3,536	2,977	2,449	2,139	2,114
90%	1,404	1,374	1,488	2,077	2,347	2,775	2,720	2,950	2,583	1,968	1,590	1,536
Long Term												
Full Simulation Period[b]	2,534	2,582	2,755	3,023	3,287	3,641	3,916	3,907	3,539	3,009	2,677	2,613
Water Year Types[c]												
Wet (32%)	2,819	2,925	3,153	3,405	3,597	3,841	4,301	4,453	4,225	3,732	3,362	3,255
Above Normal (16%)	2,513	2,592	2,819	3,326	3,521	4,038	4,415	4,415	3,977	3,347	2,974	2,926
Below Normal (13%)	2,822	2,840	2,972	3,293	3,642	3,963	4,163	4,042	3,599	3,012	2,604	2,576
Dry (24%)	2,411	2,434	2,579	2,756	3,170	3,647	3,866	3,774	3,333	2,804	2,543	2,501
Critical (15%)	1,881	1,835	1,920	2,065	2,234	2,471	2,397	2,275	1,864	1,418	1,162	1,102

Revised Second Basis of Comparison minus Second Basis of Comparison

	End of Month Storage (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%
70%	1%	0%	-1%	1%	0%	0%	1%	-1%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	2%	1%	-1%
90%	-1%	2%	-2%	1%	-2%	1%	0%	0%	-1%	-1%	0%	1%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	1%	1%	0%	0%	0%	0%	1%	1%	1%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.3 Lake Oroville, End of Month Storage

Second Basis of Comparison

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,616	2,550	2,788	2,807	2,948	3,052	3,352	3,538	3,538	3,037	2,854	2,707
20%	2,272	2,304	2,464	2,788	2,838	2,990	3,298	3,538	3,531	2,965	2,590	2,473
30%	1,937	2,035	2,166	2,556	2,788	2,937	3,268	3,474	3,285	2,772	2,415	2,135
40%	1,699	1,784	2,024	2,366	2,788	2,841	3,209	3,278	2,983	2,367	2,000	1,795
50%	1,429	1,445	1,715	2,187	2,579	2,788	3,067	3,028	2,658	2,145	1,795	1,609
60%	1,145	1,101	1,402	1,723	2,140	2,641	2,888	2,792	2,438	1,915	1,601	1,365
70%	1,037	1,001	1,079	1,306	1,871	2,230	2,527	2,480	2,064	1,754	1,422	1,239
80%	998	974	999	1,109	1,544	1,806	1,996	2,050	1,769	1,436	1,232	1,052
90%	913	877	889	1,003	1,200	1,472	1,563	1,575	1,325	1,133	995	917
Long Term												
Full Simulation Period[b]	1,588	1,585	1,742	1,978	2,258	2,474	2,735	2,796	2,571	2,160	1,897	1,725
Water Year Types[c]												
Wet (32%)	1,936	1,984	2,354	2,636	2,871	2,942	3,300	3,477	3,402	2,976	2,728	2,569
Above Normal (16%)	1,465	1,523	1,702	2,173	2,648	2,937	3,271	3,357	3,081	2,493	2,087	1,827
Below Normal (13%)	1,823	1,783	1,831	2,037	2,361	2,627	2,875	2,836	2,461	1,930	1,637	1,424
Dry (24%)	1,371	1,324	1,344	1,473	1,764	2,120	2,363	2,357	2,031	1,688	1,427	1,261
Critical (15%)	1,117	1,044	1,041	1,125	1,235	1,406	1,423	1,407	1,219	1,027	911	839

Revised Second Basis of Comparison

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,613	2,547	2,788	2,807	2,948	3,052	3,352	3,538	3,538	3,037	2,860	2,729
20%	2,277	2,324	2,490	2,788	2,831	2,990	3,298	3,538	3,532	2,959	2,592	2,458
30%	1,932	1,996	2,165	2,565	2,788	2,937	3,268	3,474	3,274	2,756	2,385	2,112
40%	1,687	1,759	2,023	2,372	2,780	2,844	3,209	3,275	2,945	2,340	1,988	1,789
50%	1,406	1,421	1,705	2,204	2,574	2,788	3,084	3,022	2,634	2,121	1,785	1,601
60%	1,143	1,078	1,383	1,682	2,133	2,621	2,885	2,777	2,418	1,913	1,588	1,376
70%	1,034	1,001	1,047	1,307	1,868	2,209	2,499	2,470	2,053	1,723	1,392	1,228
80%	998	959	985	1,109	1,538	1,789	1,938	2,034	1,805	1,443	1,255	1,097
90%	913	876	851	1,003	1,198	1,471	1,575	1,584	1,335	1,113	994	891
Long Term												
Full Simulation Period[b]	1,584	1,580	1,736	1,972	2,253	2,470	2,732	2,792	2,561	2,152	1,891	1,721
Water Year Types[c]												
Wet (32%)	1,940	1,983	2,353	2,633	2,869	2,942	3,300	3,478	3,392	2,969	2,730	2,571
Above Normal (16%)	1,465	1,521	1,697	2,166	2,644	2,939	3,274	3,359	3,079	2,491	2,085	1,823
Below Normal (13%)	1,831	1,796	1,839	2,046	2,376	2,642	2,892	2,844	2,460	1,933	1,635	1,413
Dry (24%)	1,354	1,306	1,327	1,456	1,745	2,101	2,345	2,339	2,012	1,668	1,409	1,248
Critical (15%)	1,101	1,028	1,032	1,119	1,227	1,398	1,415	1,398	1,210	1,018	904	840

Revised Second Basis of Comparison minus Second Basis of Comparison

	End of Month Storage (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
20%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
30%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
40%	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%
50%	-2%	-2%	-1%	1%	0%	0%	1%	0%	-1%	-1%	-1%	-1%
60%	0%	-2%	-1%	-2%	0%	-1%	0%	-1%	-1%	0%	-1%	1%
70%	0%	0%	-3%	0%	0%	-1%	-1%	0%	-1%	-2%	-2%	-1%
80%	0%	-2%	-1%	0%	0%	-1%	-3%	-1%	2%	0%	2%	4%
90%	0%	0%	-4%	0%	0%	0%	1%	1%	1%	-2%	0%	-3%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	1%	0%	0%	1%	1%	1%	0%	0%	0%	0%	-1%
Dry (24%)	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Critical (15%)	-1%	-2%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.4 Folsom Lake, End of Month Storage

Second Basis of Comparison

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	689	567	567	567	567	661	792	967	967	906	792	750
20%	582	561	567	567	567	657	792	967	967	817	684	625
30%	552	528	566	563	559	653	792	967	965	728	638	608
40%	469	499	525	556	555	646	792	967	908	641	569	522
50%	400	430	500	523	537	633	792	959	807	546	468	433
60%	351	391	456	470	498	621	790	858	745	504	442	408
70%	336	356	405	430	457	601	733	761	630	433	387	366
80%	291	333	352	388	437	563	634	654	544	371	325	318
90%	253	259	266	311	392	455	489	471	426	309	244	233
Long Term												
Full Simulation Period[b]	431	424	457	475	494	592	715	823	757	579	503	471
Water Year Types[c]												
Wet (32%)	483	470	522	524	515	632	785	951	937	793	688	646
Above Normal (16%)	390	412	467	537	538	640	787	946	857	591	522	485
Below Normal (13%)	506	489	502	514	541	626	761	847	739	475	408	387
Dry (24%)	405	399	423	437	486	585	698	769	664	486	432	408
Critical (15%)	339	317	323	325	369	436	469	482	430	352	288	258

Revised Second Basis of Comparison

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	692	567	567	567	567	661	792	967	967	903	792	750
20%	580	558	567	567	567	657	792	967	967	816	685	631
30%	548	520	566	563	559	653	792	967	965	725	634	608
40%	472	498	523	554	555	646	792	967	908	639	567	526
50%	396	429	493	523	541	633	792	955	797	546	461	424
60%	349	394	456	470	498	621	790	858	731	497	438	403
70%	329	353	405	428	457	600	733	760	631	432	386	360
80%	285	337	358	388	432	563	635	655	545	376	329	315
90%	253	260	267	304	392	453	484	471	428	311	244	233
Long Term												
Full Simulation Period[b]	430	422	456	474	494	592	715	823	755	577	502	469
Water Year Types[c]												
Wet (32%)	483	469	522	524	515	632	785	951	936	793	687	646
Above Normal (16%)	388	410	465	537	538	640	787	946	851	584	517	479
Below Normal (13%)	505	488	501	514	541	626	762	848	739	476	404	385
Dry (24%)	402	396	421	437	486	585	699	768	662	486	432	407
Critical (15%)	336	315	322	323	367	433	467	479	429	349	290	257

Revised Second Basis of Comparison minus Second Basis of Comparison

	End of Month Storage (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
30%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
40%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
50%	-1%	0%	-1%	0%	1%	0%	0%	0%	-1%	0%	-1%	-2%
60%	-1%	1%	0%	0%	0%	0%	0%	0%	-2%	-2%	-1%	-1%
70%	-2%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	-2%
80%	-2%	1%	2%	0%	-1%	0%	0%	0%	0%	1%	1%	-1%
90%	0%	0%	0%	-2%	0%	0%	-1%	0%	0%	1%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	-1%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%
Dry (24%)	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	-1%	-1%	-1%	-1%	0%	-1%	0%	-1%	0%	-1%	1%	-1%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.5 New Melones Reservoir, End of Month Storage

Second Basis of Comparison

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,801	1,782	1,827	1,875	1,952	2,030	2,017	2,134	2,071	1,977	1,869	1,805
20%	1,657	1,655	1,665	1,690	1,847	1,928	1,884	1,963	1,884	1,830	1,719	1,663
30%	1,575	1,582	1,614	1,627	1,697	1,743	1,751	1,836	1,836	1,743	1,635	1,577
40%	1,366	1,372	1,472	1,556	1,621	1,675	1,649	1,601	1,619	1,510	1,415	1,362
50%	1,200	1,211	1,248	1,348	1,472	1,541	1,484	1,511	1,467	1,357	1,258	1,200
60%	1,089	1,093	1,124	1,209	1,259	1,341	1,373	1,379	1,317	1,224	1,134	1,089
70%	956	989	1,040	1,084	1,099	1,099	1,146	1,179	1,147	1,064	982	940
80%	711	712	730	753	825	932	914	945	903	837	758	712
90%	508	517	515	555	666	664	608	619	697	619	547	507
Long Term												
Full Simulation Period[b]	1,192	1,194	1,226	1,279	1,345	1,397	1,402	1,433	1,420	1,336	1,245	1,194
Water Year Types[c]												
Wet (32%)	1,443	1,446	1,502	1,606	1,709	1,794	1,833	1,962	1,994	1,917	1,803	1,731
Above Normal (16%)	1,092	1,116	1,175	1,261	1,360	1,455	1,481	1,543	1,516	1,419	1,321	1,274
Below Normal (13%)	1,364	1,366	1,378	1,397	1,453	1,479	1,461	1,447	1,415	1,322	1,228	1,183
Dry (24%)	1,149	1,143	1,149	1,161	1,191	1,221	1,210	1,176	1,131	1,039	956	912
Critical (15%)	667	663	674	680	696	690	646	585	557	498	449	426

Revised Second Basis of Comparison

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,879	1,859	1,935	1,954	1,970	2,030	2,043	2,167	2,141	2,080	1,971	1,911
20%	1,775	1,776	1,788	1,823	1,966	1,979	1,955	1,999	2,045	1,947	1,838	1,781
30%	1,666	1,660	1,703	1,764	1,807	1,896	1,885	1,955	1,912	1,817	1,712	1,661
40%	1,508	1,514	1,596	1,693	1,771	1,801	1,788	1,756	1,711	1,634	1,541	1,496
50%	1,364	1,362	1,396	1,478	1,611	1,671	1,625	1,668	1,621	1,512	1,417	1,360
60%	1,257	1,260	1,320	1,353	1,393	1,474	1,492	1,532	1,474	1,381	1,300	1,249
70%	1,074	1,086	1,146	1,224	1,231	1,230	1,250	1,343	1,299	1,204	1,111	1,055
80%	843	824	852	894	999	1,049	1,078	1,094	1,039	975	902	861
90%	705	711	716	724	802	806	749	817	842	775	722	718
Long Term												
Full Simulation Period[b]	1,316	1,321	1,355	1,411	1,470	1,522	1,522	1,564	1,559	1,470	1,373	1,319
Water Year Types[c]												
Wet (32%)	1,534	1,539	1,596	1,700	1,784	1,864	1,901	2,027	2,087	2,001	1,880	1,802
Above Normal (16%)	1,225	1,252	1,315	1,405	1,501	1,594	1,613	1,686	1,664	1,566	1,468	1,420
Below Normal (13%)	1,479	1,484	1,500	1,522	1,576	1,605	1,579	1,581	1,555	1,457	1,359	1,313
Dry (24%)	1,285	1,280	1,287	1,303	1,335	1,369	1,351	1,338	1,291	1,197	1,112	1,067
Critical (15%)	845	843	858	869	887	885	837	789	751	682	617	587

Revised Second Basis of Comparison minus Second Basis of Comparison

	End of Month Storage (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	4%	4%	6%	4%	1%	0%	1%	2%	3%	5%	5%	6%
20%	7%	7%	7%	8%	6%	3%	4%	2%	9%	6%	7%	7%
30%	6%	5%	5%	8%	6%	9%	8%	6%	4%	4%	5%	5%
40%	10%	10%	8%	9%	9%	8%	8%	10%	6%	8%	9%	10%
50%	14%	12%	12%	10%	9%	8%	10%	10%	10%	11%	13%	13%
60%	16%	15%	17%	12%	11%	10%	9%	11%	12%	13%	15%	15%
70%	12%	10%	10%	13%	12%	12%	9%	14%	13%	13%	13%	12%
80%	18%	16%	17%	19%	21%	13%	18%	16%	15%	17%	19%	21%
90%	39%	37%	39%	31%	20%	22%	23%	32%	21%	25%	32%	42%
Long Term												
Full Simulation Period[b]	10%	11%	11%	10%	9%	9%	9%	9%	10%	10%	10%	10%
Water Year Types[c]												
Wet (32%)	6%	6%	6%	6%	4%	4%	4%	3%	5%	4%	4%	4%
Above Normal (16%)	12%	12%	12%	11%	10%	10%	9%	9%	10%	10%	11%	11%
Below Normal (13%)	8%	9%	9%	9%	8%	9%	8%	9%	10%	10%	11%	11%
Dry (24%)	12%	12%	12%	12%	12%	12%	12%	14%	14%	15%	16%	17%
Critical (15%)	27%	27%	27%	28%	27%	28%	29%	35%	35%	37%	37%	38%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.6 Trinity Lake, End of Month Elevation

Second Basis of Comparison

	End of Month Elevation (Feet)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,332	2,332	2,332	2,337	2,345	2,350	2,361	2,364	2,361	2,358	2,353	2,343
20%	2,328	2,331	2,332	2,337	2,345	2,350	2,359	2,360	2,355	2,348	2,338	2,330
30%	2,309	2,310	2,323	2,329	2,343	2,350	2,357	2,353	2,349	2,339	2,327	2,315
40%	2,293	2,298	2,308	2,320	2,333	2,346	2,352	2,347	2,338	2,325	2,309	2,296
50%	2,283	2,283	2,294	2,308	2,318	2,330	2,346	2,338	2,326	2,311	2,296	2,286
60%	2,273	2,276	2,279	2,289	2,306	2,320	2,326	2,324	2,318	2,302	2,288	2,278
70%	2,267	2,266	2,274	2,278	2,291	2,301	2,315	2,311	2,306	2,294	2,279	2,267
80%	2,249	2,250	2,253	2,261	2,269	2,283	2,299	2,297	2,289	2,273	2,261	2,252
90%	2,207	2,208	2,212	2,220	2,232	2,246	2,261	2,252	2,245	2,230	2,215	2,209
Long Term												
Full Simulation Period[b]	2,275	2,277	2,283	2,291	2,303	2,314	2,325	2,322	2,317	2,305	2,291	2,280
Water Year Types[c]												
Wet (32%)	2,301	2,305	2,314	2,325	2,339	2,347	2,357	2,358	2,355	2,347	2,338	2,328
Above Normal (16%)	2,270	2,273	2,286	2,303	2,320	2,335	2,347	2,346	2,339	2,329	2,315	2,304
Below Normal (13%)	2,295	2,296	2,298	2,305	2,313	2,320	2,331	2,326	2,318	2,303	2,287	2,274
Dry (24%)	2,266	2,269	2,272	2,274	2,284	2,296	2,309	2,304	2,298	2,284	2,269	2,259
Critical (15%)	2,218	2,216	2,217	2,222	2,229	2,243	2,250	2,246	2,243	2,227	2,204	2,191

Revised Second Basis of Comparison

	End of Month Elevation (Feet)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	2,332	2,332	2,332	2,337	2,345	2,350	2,361	2,364	2,361	2,358	2,353	2,343
20%	2,328	2,331	2,332	2,337	2,345	2,350	2,359	2,360	2,356	2,348	2,338	2,330
30%	2,309	2,310	2,322	2,329	2,343	2,350	2,357	2,353	2,349	2,339	2,327	2,315
40%	2,293	2,298	2,308	2,320	2,334	2,346	2,352	2,347	2,338	2,325	2,310	2,296
50%	2,282	2,284	2,294	2,308	2,319	2,330	2,346	2,338	2,326	2,311	2,296	2,286
60%	2,273	2,276	2,279	2,289	2,306	2,320	2,326	2,324	2,317	2,302	2,288	2,278
70%	2,266	2,265	2,274	2,277	2,290	2,301	2,315	2,310	2,305	2,294	2,278	2,267
80%	2,248	2,250	2,253	2,261	2,270	2,283	2,298	2,297	2,288	2,273	2,261	2,252
90%	2,207	2,206	2,208	2,219	2,231	2,246	2,262	2,254	2,248	2,233	2,215	2,208
Long Term												
Full Simulation Period[b]	2,275	2,277	2,283	2,291	2,303	2,314	2,325	2,323	2,317	2,305	2,291	2,280
Water Year Types[c]												
Wet (32%)	2,301	2,305	2,314	2,325	2,339	2,347	2,357	2,358	2,355	2,347	2,338	2,328
Above Normal (16%)	2,270	2,273	2,286	2,303	2,320	2,335	2,347	2,346	2,339	2,329	2,315	2,304
Below Normal (13%)	2,294	2,296	2,298	2,305	2,313	2,320	2,331	2,326	2,318	2,302	2,286	2,274
Dry (24%)	2,266	2,269	2,272	2,274	2,284	2,296	2,309	2,304	2,298	2,283	2,269	2,259
Critical (15%)	2,221	2,217	2,219	2,223	2,230	2,243	2,251	2,247	2,243	2,228	2,205	2,191

Revised Second Basis of Comparison minus Second Basis of Comparison

	End of Month Elevation (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.7 Shasta Lake, End of Month Elevation

Second Basis of Comparison

	End of Month Elevation (Feet)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,017	1,017	1,022	1,033	1,044	1,055	1,065	1,067	1,063	1,044	1,030	1,023
20%	1,017	1,017	1,020	1,030	1,039	1,051	1,063	1,067	1,057	1,039	1,023	1,020
30%	1,012	1,015	1,019	1,028	1,035	1,048	1,061	1,066	1,053	1,030	1,014	1,010
40%	1,003	1,007	1,017	1,023	1,031	1,046	1,058	1,061	1,044	1,019	1,005	1,003
50%	993	995	1,012	1,020	1,027	1,044	1,054	1,056	1,037	1,012	997	995
60%	985	988	1,003	1,013	1,021	1,037	1,050	1,046	1,027	1,004	990	988
70%	975	982	991	1,001	1,017	1,028	1,043	1,039	1,020	997	986	982
80%	961	964	966	989	1,005	1,024	1,034	1,029	1,004	979	963	963
90%	918	913	926	959	978	996	994	1,004	989	955	931	926
Long Term												
Full Simulation Period[b]	979	981	990	1,004	1,016	1,031	1,042	1,041	1,026	1,002	986	983
Water Year Types[c]												
Wet (32%)	997	1,002	1,012	1,024	1,032	1,041	1,058	1,063	1,055	1,037	1,022	1,017
Above Normal (16%)	974	978	992	1,019	1,028	1,048	1,062	1,062	1,046	1,021	1,005	1,003
Below Normal (13%)	997	998	1,004	1,019	1,034	1,046	1,053	1,049	1,031	1,006	987	986
Dry (24%)	972	974	982	992	1,012	1,032	1,041	1,038	1,020	997	984	982
Critical (15%)	938	935	941	950	961	977	974	967	943	910	889	884

Revised Second Basis of Comparison

	End of Month Elevation (Feet)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,017	1,017	1,022	1,033	1,044	1,055	1,065	1,067	1,063	1,044	1,030	1,023
20%	1,017	1,017	1,020	1,030	1,039	1,051	1,063	1,067	1,057	1,039	1,022	1,021
30%	1,011	1,014	1,019	1,028	1,035	1,048	1,061	1,066	1,053	1,030	1,014	1,010
40%	1,003	1,007	1,017	1,023	1,031	1,047	1,058	1,060	1,044	1,019	1,005	1,004
50%	992	997	1,011	1,020	1,027	1,044	1,054	1,056	1,037	1,012	996	995
60%	984	988	1,003	1,013	1,021	1,037	1,050	1,046	1,027	1,004	991	989
70%	976	983	989	1,003	1,017	1,028	1,044	1,038	1,021	997	986	982
80%	961	964	966	989	1,005	1,023	1,034	1,029	1,005	981	964	962
90%	917	915	923	960	975	996	994	1,004	988	954	931	927
Long Term												
Full Simulation Period[b]	979	981	990	1,004	1,016	1,031	1,042	1,041	1,026	1,002	986	983
Water Year Types[c]												
Wet (32%)	997	1,002	1,012	1,024	1,032	1,041	1,058	1,063	1,055	1,037	1,022	1,017
Above Normal (16%)	975	979	993	1,020	1,028	1,048	1,062	1,062	1,046	1,021	1,005	1,003
Below Normal (13%)	997	998	1,004	1,019	1,033	1,046	1,053	1,049	1,031	1,006	987	986
Dry (24%)	972	974	982	992	1,012	1,032	1,042	1,038	1,020	997	985	983
Critical (15%)	939	936	942	951	962	978	975	968	943	911	890	885

Revised Second Basis of Comparison minus Second Basis of Comparison

	End of Month Elevation (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.8 Lake Oroville, End of Month Elevation

Second Basis of Comparison

	End of Month Elevation (Feet)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	837	832	849	850	860	867	887	900	900	866	853	843
20%	811	814	827	849	852	863	884	900	900	861	835	827
30%	776	786	800	833	849	859	882	896	883	848	823	797
40%	752	761	785	820	849	852	877	882	862	820	783	762
50%	719	721	754	802	834	849	868	865	840	798	762	741
60%	685	679	716	754	797	839	856	849	825	774	740	712
70%	672	667	677	704	770	807	831	828	789	758	719	696
80%	666	662	666	680	733	763	782	788	759	720	695	673
90%	651	644	647	667	691	725	736	737	707	683	666	652
Long Term												
Full Simulation Period[b]	730	729	746	771	799	818	838	842	823	788	762	744
Water Year Types[c]												
Wet (32%)	768	773	810	837	854	859	884	896	891	861	844	831
Above Normal (16%)	717	723	745	796	838	859	882	888	869	826	790	763
Below Normal (13%)	757	752	757	779	812	834	854	852	823	775	743	719
Dry (24%)	706	701	705	721	755	791	814	813	784	748	718	698
Critical (15%)	677	668	668	680	694	715	716	714	691	664	647	636

Revised Second Basis of Comparison

	End of Month Elevation (Feet)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	837	832	849	850	860	867	887	900	900	866	854	845
20%	811	816	828	849	852	863	884	900	900	860	835	826
30%	776	782	800	834	849	859	882	896	882	847	821	794
40%	751	758	785	820	848	853	877	882	859	818	782	761
50%	717	718	753	804	834	849	869	865	838	795	761	740
60%	684	676	714	750	797	837	855	848	823	774	739	713
70%	671	667	673	704	769	804	829	827	788	754	715	695
80%	666	659	664	680	733	761	776	786	763	721	698	679
90%	651	644	640	667	691	725	737	738	708	681	666	647
Long Term												
Full Simulation Period[b]	729	728	745	771	798	818	838	842	822	787	762	744
Water Year Types[c]												
Wet (32%)	768	773	809	836	854	859	884	896	890	861	844	831
Above Normal (16%)	717	723	745	796	838	859	882	888	869	826	790	763
Below Normal (13%)	757	753	758	780	814	836	855	853	823	775	743	717
Dry (24%)	704	698	703	719	753	790	812	812	782	746	716	697
Critical (15%)	675	666	666	680	693	714	716	713	690	662	646	636

Revised Second Basis of Comparison minus Second Basis of Comparison

	End of Month Elevation (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
80%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	1%
90%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.9 Folsom Lake, End of Month Elevation

Second Basis of Comparison

	End of Month Elevation (Feet)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	439	424	424	424	424	436	449	467	467	460	449	445
20%	426	424	424	424	424	436	449	467	467	451	439	432
30%	423	419	424	424	423	435	449	467	467	443	433	429
40%	412	416	419	423	423	434	449	467	460	434	425	419
50%	404	407	416	419	421	433	449	465	450	422	412	408
60%	396	402	410	412	416	431	449	455	444	417	409	405
70%	394	397	404	407	411	429	443	446	432	408	402	399
80%	386	393	396	402	408	424	433	435	422	400	392	391
90%	379	380	382	390	403	410	415	412	407	389	377	375
Long Term												
Full Simulation Period[b]	404	404	410	412	415	427	440	451	444	423	413	409
Water Year Types[c]												
Wet (32%)	412	412	419	419	418	432	448	465	464	449	438	433
Above Normal (16%)	397	400	410	421	421	433	448	465	456	427	419	414
Below Normal (13%)	415	414	416	417	421	432	446	455	443	410	401	398
Dry (24%)	401	401	405	407	414	427	439	446	435	413	406	403
Critical (15%)	389	386	390	391	397	406	410	411	404	391	378	372

Revised Second Basis of Comparison

	End of Month Elevation (Feet)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	439	424	424	424	424	436	449	467	467	460	449	445
20%	426	423	424	424	424	436	449	467	467	451	439	432
30%	422	418	424	424	423	435	449	467	467	443	433	429
40%	413	416	419	423	423	434	449	467	460	433	424	419
50%	403	407	415	419	421	433	449	465	449	422	411	407
60%	396	403	410	412	416	431	449	455	443	416	408	404
70%	393	397	404	407	411	428	443	446	432	408	402	398
80%	385	394	397	402	408	424	433	435	422	400	393	390
90%	379	381	382	389	403	410	414	412	407	390	377	375
Long Term												
Full Simulation Period[b]	404	404	409	412	415	427	440	451	444	423	413	409
Water Year Types[c]												
Wet (32%)	412	412	419	419	418	432	448	465	464	448	437	433
Above Normal (16%)	396	400	410	421	421	433	448	465	455	426	418	413
Below Normal (13%)	415	414	415	417	421	432	446	455	443	410	400	397
Dry (24%)	401	401	405	407	414	427	439	446	435	413	406	403
Critical (15%)	388	386	390	391	396	406	410	411	403	390	378	372

Revised Second Basis of Comparison minus Second Basis of Comparison

	End of Month Elevation (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.10 New Melones Reservoir, End of Month Elevation

Second Basis of Comparison

	End of Month Elevation (Feet)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,032	1,031	1,035	1,040	1,048	1,055	1,054	1,064	1,058	1,050	1,039	1,033
20%	1,018	1,018	1,019	1,021	1,037	1,045	1,041	1,049	1,041	1,035	1,024	1,019
30%	1,010	1,010	1,014	1,015	1,022	1,027	1,027	1,036	1,036	1,027	1,016	1,010
40%	988	988	999	1,008	1,014	1,020	1,017	1,012	1,014	1,003	994	987
50%	966	968	972	985	999	1,006	1,001	1,003	999	986	974	966
60%	952	952	956	967	974	984	989	989	981	969	957	952
70%	934	939	945	951	953	953	959	963	959	948	938	932
80%	892	892	896	901	915	931	929	933	927	918	902	892
90%	851	852	852	860	883	883	871	873	889	873	859	850
Long Term												
Full Simulation Period[b]	952	953	957	965	974	981	981	984	982	971	959	953
Water Year Types[c]												
Wet (32%)	989	990	997	1,009	1,021	1,030	1,034	1,047	1,050	1,043	1,032	1,025
Above Normal (16%)	941	944	951	966	979	992	995	1,003	1,001	990	978	972
Below Normal (13%)	977	977	979	982	991	994	994	993	991	980	968	962
Dry (24%)	951	950	950	953	957	962	963	960	954	941	929	922
Critical (15%)	866	866	870	872	878	879	871	856	850	835	823	817

Revised Second Basis of Comparison

	End of Month Elevation (Feet)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,040	1,038	1,046	1,048	1,050	1,055	1,056	1,066	1,064	1,059	1,050	1,044
20%	1,030	1,030	1,031	1,035	1,049	1,050	1,048	1,052	1,056	1,047	1,036	1,030
30%	1,019	1,018	1,023	1,029	1,033	1,042	1,041	1,048	1,044	1,034	1,024	1,018
40%	1,003	1,004	1,012	1,022	1,029	1,033	1,031	1,028	1,023	1,016	1,006	1,002
50%	987	987	992	1,000	1,013	1,019	1,015	1,019	1,014	1,003	994	987
60%	974	974	982	986	991	1,000	1,001	1,005	1,000	990	979	972
70%	950	951	959	969	970	970	973	985	979	967	954	947
80%	919	915	921	926	940	946	950	952	945	937	927	922
90%	891	892	893	895	911	912	900	914	919	905	894	894
Long Term												
Full Simulation Period[b]	972	973	977	984	992	998	997	1,001	1,000	990	978	972
Water Year Types[c]												
Wet (32%)	1,001	1,002	1,009	1,020	1,029	1,038	1,041	1,053	1,059	1,051	1,039	1,032
Above Normal (16%)	958	962	970	984	996	1,007	1,010	1,019	1,017	1,007	996	990
Below Normal (13%)	993	993	995	998	1,006	1,010	1,007	1,009	1,006	996	984	979
Dry (24%)	971	971	972	974	978	982	981	980	975	964	952	946
Critical (15%)	905	905	908	911	915	916	907	899	892	878	865	859

Revised Second Basis of Comparison minus Second Basis of Comparison

	End of Month Elevation (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1%	1%	1%	1%	0%	0%	0%	0%	1%	1%	1%	1%
20%	1%	1%	1%	1%	1%	0%	1%	0%	1%	1%	1%	1%
30%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
40%	2%	2%	1%	1%	1%	1%	1%	2%	1%	1%	1%	1%
50%	2%	2%	2%	1%	1%	1%	1%	2%	2%	2%	2%	2%
60%	2%	2%	3%	2%	2%	2%	1%	2%	2%	2%	2%	2%
70%	2%	1%	1%	2%	2%	2%	1%	2%	2%	2%	2%	2%
80%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	3%	3%
90%	5%	5%	5%	4%	3%	3%	3%	5%	3%	4%	4%	5%
Long Term												
Full Simulation Period[b]	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Water Year Types[c]												
Wet (32%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Above Normal (16%)	2%	2%	2%	2%	2%	2%	1%	2%	2%	2%	2%	2%
Below Normal (13%)	2%	2%	2%	2%	2%	2%	1%	2%	2%	2%	2%	2%
Dry (24%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%
Critical (15%)	4%	5%	4%	4%	4%	4%	4%	5%	5%	5%	5%	5%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.11 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Second Basis of Comparison

	Monthly Outflow Volume (TAF)												
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance[a]													
10%	357	895	4,054	6,567	8,061	5,795	3,950	2,541	1,167	670	268	260	30,938
20%	283	383	2,007	4,470	4,927	4,380	2,580	1,582	679	593	251	240	24,148
30%	264	327	950	2,828	3,382	2,653	1,494	954	588	515	246	234	18,780
40%	251	291	635	1,564	2,894	2,062	1,215	801	556	492	246	227	14,389
50%	246	268	477	1,080	1,904	1,621	855	734	507	475	246	219	9,739
60%	246	268	382	833	1,179	1,104	724	674	485	400	246	181	8,033
70%	246	268	314	673	908	901	597	563	433	307	246	179	6,520
80%	246	268	277	518	698	752	567	535	422	307	232	179	5,882
90%	211	208	277	405	562	601	528	437	377	246	215	179	4,991
Long Term													
Full Simulation Period[b]	286	506	1,408	2,595	3,126	2,682	1,611	1,161	705	458	252	237	15,027
Water Year Types[c]													
Wet (32%)	340	791	3,011	5,453	5,779	5,081	3,010	2,178	1,209	605	271	319	28,046
Above Normal (16%)	253	566	1,391	2,845	3,822	3,311	1,615	1,026	562	601	249	224	16,467
Below Normal (13%)	291	433	545	879	2,062	1,078	813	719	533	437	255	206	8,251
Dry (24%)	260	296	439	815	1,269	1,236	879	635	454	310	242	191	7,026
Critical (15%)	240	244	364	670	690	680	525	386	346	248	231	179	4,802

Revised Second Basis of Comparison

	Monthly Outflow Volume (TAF)												
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance[a]													
10%	373	895	4,048	6,551	8,106	5,795	3,956	2,541	1,141	670	271	259	30,929
20%	286	384	2,029	4,469	4,884	4,375	2,589	1,579	658	581	247	240	24,158
30%	269	329	947	2,826	3,377	2,686	1,466	952	591	508	246	234	18,772
40%	257	291	635	1,561	2,882	2,060	1,215	790	559	492	246	229	14,349
50%	246	269	464	1,078	1,898	1,614	859	715	512	461	246	221	9,721
60%	246	268	371	829	1,168	1,103	726	675	495	400	246	184	8,015
70%	246	268	312	665	918	899	599	560	439	307	246	179	6,505
80%	246	268	277	501	720	751	565	533	422	307	236	179	5,871
90%	232	208	277	405	596	601	528	437	369	246	215	179	5,025
Long Term													
Full Simulation Period[b]	289	508	1,407	2,590	3,140	2,678	1,609	1,159	704	457	252	238	15,030
Water Year Types[c]													
Wet (32%)	345	794	3,009	5,453	5,819	5,073	3,004	2,182	1,199	607	271	321	28,075
Above Normal (16%)	252	566	1,394	2,837	3,821	3,313	1,620	1,021	569	599	250	223	16,464
Below Normal (13%)	294	433	540	878	2,078	1,075	812	715	532	429	254	208	8,248
Dry (24%)	267	297	433	821	1,268	1,232	879	627	455	310	244	191	7,025
Critical (15%)	241	244	367	640	692	680	525	385	346	247	229	179	4,774

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Outflow Volume (Percent Change)												
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance[a]													
10%	5%	0%	0%	0%	1%	0%	0%	0%	-2%	0%	1%	-1%	0%
20%	1%	0%	1%	0%	-1%	0%	0%	0%	-3%	-2%	-2%	0%	0%
30%	2%	1%	0%	0%	0%	1%	-2%	0%	0%	-1%	0%	0%	0%
40%	2%	0%	0%	0%	0%	0%	0%	-1%	1%	0%	0%	1%	0%
50%	0%	0%	-3%	0%	0%	0%	0%	-3%	1%	-3%	0%	1%	0%
60%	0%	0%	-3%	0%	-1%	0%	0%	0%	2%	0%	0%	2%	0%
70%	0%	0%	-1%	-1%	1%	0%	0%	0%	1%	0%	0%	0%	0%
80%	0%	0%	0%	-3%	3%	0%	0%	0%	0%	0%	2%	0%	0%
90%	10%	0%	0%	0%	6%	0%	0%	0%	-2%	0%	0%	0%	1%
Long Term													
Full Simulation Period[b]	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]													
Wet (32%)	1%	0%	0%	0%	1%	0%	0%	0%	-1%	0%	0%	1%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	-1%	0%
Below Normal (13%)	1%	0%	-1%	0%	1%	0%	0%	-1%	0%	-2%	0%	1%	0%
Dry (24%)	3%	0%	-1%	1%	0%	0%	0%	-1%	0%	0%	1%	0%	0%
Critical (15%)	1%	0%	1%	-4%	0%	0%	0%	0%	0%	0%	-1%	0%	-1%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.12 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Second Basis of Comparison

	Monthly Export Volume (TAF)												
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance[a]													
10%	694	671	739	803	727	703	526	515	555	694	694	671	7,362
20%	680	671	724	769	686	608	503	420	455	694	694	671	6,940
30%	627	652	719	747	668	560	477	387	425	680	694	671	6,751
40%	553	623	718	741	614	542	427	351	412	624	634	669	6,572
50%	489	591	683	730	552	509	390	319	389	551	515	635	6,309
60%	433	513	601	635	519	486	321	281	361	474	446	545	5,942
70%	318	464	553	565	465	461	258	242	320	404	369	420	5,012
80%	273	352	500	499	416	374	188	181	176	300	281	340	4,594
90%	209	288	378	391	335	304	109	80	128	160	161	226	3,470
Long Term													
Full Simulation Period[b]	471	525	612	638	538	489	351	308	352	494	489	528	5,793
Water Year Types[c]													
Wet (32%)	549	619	716	724	609	543	476	430	456	632	655	660	7,068
Above Normal (16%)	428	521	641	716	584	570	453	363	415	572	647	651	6,560
Below Normal (13%)	548	595	623	674	497	500	337	304	414	629	517	539	6,176
Dry (24%)	435	475	546	579	518	493	259	228	274	403	325	438	4,971
Critical (15%)	340	345	455	433	406	266	134	121	132	139	203	249	3,222

Revised Second Basis of Comparison

	Monthly Export Volume (TAF)												
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance[a]													
10%	694	671	738	803	722	707	530	515	526	694	694	671	7,327
20%	681	671	723	769	684	619	508	417	450	694	694	671	6,944
30%	626	659	719	746	666	563	481	369	429	691	694	671	6,761
40%	551	622	717	738	602	542	433	351	408	609	621	668	6,571
50%	488	590	683	724	552	512	391	314	392	555	529	628	6,266
60%	426	502	609	645	512	489	336	277	353	474	468	549	5,943
70%	327	460	554	562	461	459	264	228	316	390	364	408	5,000
80%	249	349	492	499	393	373	189	169	176	306	281	338	4,572
90%	196	286	382	371	309	301	109	81	128	146	183	228	3,458
Long Term													
Full Simulation Period[b]	467	524	613	638	528	491	355	302	349	494	487	526	5,775
Water Year Types[c]													
Wet (32%)	544	620	717	724	587	554	485	428	451	632	653	660	7,055
Above Normal (16%)	419	520	641	719	590	568	455	359	411	574	647	648	6,553
Below Normal (13%)	544	595	629	670	471	498	342	296	413	631	525	543	6,156
Dry (24%)	434	472	550	567	516	491	262	221	273	401	323	431	4,941
Critical (15%)	336	340	444	451	405	264	135	110	132	138	195	249	3,199

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Export Volume (Percent Change)												
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	TOT
Probability of Exceedance[a]													
10%	0%	0%	0%	0%	-1%	1%	1%	0%	**-5%**	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	2%	1%	-1%	-1%	0%	0%	0%	0%
30%	0%	1%	0%	0%	0%	1%	1%	-5%	1%	2%	0%	0%	0%
40%	0%	0%	0%	0%	-2%	0%	1%	0%	-1%	-2%	-2%	0%	0%
50%	0%	0%	0%	-1%	0%	0%	0%	-1%	1%	1%	3%	-1%	-1%
60%	-2%	-2%	1%	2%	-1%	1%	5%	-1%	-2%	0%	5%	1%	0%
70%	3%	-1%	0%	-1%	-1%	0%	2%	**-6%**	-1%	-3%	-1%	-3%	0%
80%	**-9%**	-1%	-2%	0%	**-6%**	-1%	1%	**-7%**	0%	2%	0%	-1%	0%
90%	**-6%**	-1%	1%	**-5%**	**-8%**	-1%	0%	1%	0%	**-8%**	**14%**	1%	0%
Long Term													
Full Simulation Period[b]	-1%	0%	0%	0%	-2%	0%	1%	-2%	-1%	0%	0%	0%	0%
Water Year Types[c]													
Wet (32%)	-1%	0%	0%	0%	-4%	2%	2%	0%	-1%	0%	0%	0%	0%
Above Normal (16%)	-2%	0%	0%	0%	1%	0%	1%	-1%	-1%	0%	0%	0%	0%
Below Normal (13%)	-1%	0%	1%	-1%	**-5%**	0%	1%	-2%	0%	0%	1%	1%	0%
Dry (24%)	0%	-1%	1%	-2%	0%	0%	1%	-3%	0%	-1%	-1%	-2%	-1%
Critical (15%)	-1%	-1%	-2%	4%	0%	-1%	1%	**-8%**	0%	-1%	-4%	0%	-1%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.13 Trinity River below Lewiston Reservoir, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	373	300	300	1,448	2,106	527	600	4,709	4,626	1,102	450	450
20%	373	300	300	300	300	300	540	4,709	2,526	1,102	450	450
30%	373	300	300	300	300	300	540	4,570	2,526	1,102	450	450
40%	373	300	300	300	300	300	521	4,570	2,526	1,102	450	450
50%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
60%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
70%	373	300	300	300	300	300	460	2,924	783	450	450	450
80%	373	300	300	300	300	300	460	2,924	783	450	450	450
90%	373	300	300	300	300	300	427	1,498	783	450	450	450
Long Term												
Full Simulation Period[b]	367	358	660	739	741	670	557	3,753	2,210	890	450	445
Water Year Types[c]												
Wet (32%)	373	504	1,437	1,646	1,300	1,386	639	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	374	801	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	630	303	517	3,585	1,755	924	450	450
Dry (24%)	354	300	300	300	300	300	528	3,250	1,271	678	450	450
Critical (15%)	364	257	300	300	300	300	575	2,092	783	450	450	413

Revised Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	373	300	300	1,448	2,151	387	600	4,709	4,626	1,102	450	450
20%	373	300	300	300	300	300	540	4,709	2,526	1,102	450	450
30%	373	300	300	300	300	300	540	4,570	2,526	1,102	450	450
40%	373	300	300	300	300	300	521	4,570	2,526	1,102	450	450
50%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
60%	373	300	300	300	300	300	493	4,189	2,120	1,102	450	450
70%	373	300	300	300	300	300	460	2,924	783	450	450	450
80%	373	300	300	300	300	300	460	2,924	783	450	450	450
90%	373	300	300	300	300	300	427	1,498	783	450	450	450
Long Term												
Full Simulation Period[b]	366	361	659	738	747	668	555	3,753	2,210	890	450	445
Water Year Types[c]												
Wet (32%)	373	504	1,432	1,645	1,319	1,380	632	4,556	3,413	1,136	450	450
Above Normal (16%)	373	300	300	374	801	462	457	4,597	2,948	1,102	450	450
Below Normal (13%)	373	300	300	300	630	303	517	3,585	1,755	924	450	450
Dry (24%)	354	300	300	300	300	300	528	3,250	1,271	678	450	450
Critical (15%)	357	275	300	300	300	300	575	2,092	783	450	450	413

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Flow (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	2%	-26%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	1%	0%	-1%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	-2%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.14 Clear Creek below Whiskeytown, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	200	200	200	200	200	200	200	200	200	85	85	150
20%	200	200	200	200	200	200	200	200	200	85	85	150
30%	200	200	200	200	200	200	200	200	200	85	85	150
40%	200	200	200	200	200	200	200	200	200	85	85	150
50%	200	200	200	200	200	200	200	200	200	85	85	150
60%	200	200	200	200	200	200	200	200	200	85	85	150
70%	200	200	200	200	200	200	200	200	200	85	85	150
80%	200	200	200	200	200	200	200	200	150	85	85	150
90%	150	150	150	150	150	150	150	150	150	85	85	150
Long Term												
Full Simulation Period[b]	185	188	190	225	241	214	191	192	181	85	85	148
Water Year Types[c]												
Wet (32%)	200	200	200	309	356	272	200	200	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	200	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	195	191	85	85	150
Dry (24%)	178	184	188	190	190	190	190	190	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	167	111	85	85	133

Revised Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	200	200	200	200	200	200	200	200	200	85	85	150
20%	200	200	200	200	200	200	200	200	200	85	85	150
30%	200	200	200	200	200	200	200	200	200	85	85	150
40%	200	200	200	200	200	200	200	200	200	85	85	150
50%	200	200	200	200	200	200	200	200	200	85	85	150
60%	200	200	200	200	200	200	200	200	200	85	85	150
70%	200	200	200	200	200	200	200	200	200	85	85	150
80%	200	200	200	200	200	200	200	200	150	85	85	150
90%	150	150	150	150	150	150	150	150	150	85	85	150
Long Term												
Full Simulation Period[b]	185	188	190	225	241	214	191	192	181	85	85	148
Water Year Types[c]												
Wet (32%)	200	200	200	309	356	272	200	200	200	85	85	150
Above Normal (16%)	181	182	188	192	196	196	196	200	200	85	85	150
Below Normal (13%)	195	195	195	195	195	195	195	195	191	85	85	150
Dry (24%)	178	184	188	190	190	190	190	190	183	85	85	150
Critical (15%)	163	167	167	167	167	167	167	167	111	85	85	133

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Flow (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.15 Sacramento River d/s of Keswick Reservoir, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,508	7,576	19,509	20,146	30,874	18,571	10,177	10,192	14,534	15,000	12,723	8,971
20%	7,890	6,794	11,462	15,160	21,412	12,718	8,220	9,232	13,041	15,000	11,885	6,409
30%	7,356	5,587	6,088	8,978	13,139	8,359	6,971	8,471	12,242	15,000	11,209	6,029
40%	6,136	5,210	4,329	4,737	5,375	4,500	6,320	7,928	11,433	14,639	10,726	5,666
50%	5,715	4,858	4,000	4,333	4,500	4,500	5,731	7,458	11,014	14,084	10,347	5,475
60%	5,257	4,364	3,949	3,798	3,735	3,668	5,202	7,098	10,374	13,509	9,891	5,246
70%	4,871	4,181	3,674	3,251	3,250	3,250	4,500	6,497	9,974	13,051	9,282	4,637
80%	4,389	4,000	3,275	3,250	3,250	3,250	4,500	6,095	9,209	11,861	8,985	4,312
90%	4,000	3,501	3,250	3,250	3,250	3,250	3,713	5,503	8,402	10,691	8,150	4,147
Long Term												
Full Simulation Period[b]	6,028	5,615	7,660	9,366	11,718	8,569	6,754	7,708	11,203	13,462	10,417	5,836
Water Year Types[c]												
Wet (32%)	6,391	6,705	14,039	18,191	20,773	16,037	8,687	8,398	10,243	13,254	11,143	7,306
Above Normal (16%)	5,940	5,801	7,417	9,024	17,709	8,800	6,317	7,789	12,028	14,804	11,351	6,065
Below Normal (13%)	6,491	5,680	4,134	4,805	7,156	5,076	6,127	8,129	12,334	14,533	11,988	5,429
Dry (24%)	6,092	4,768	3,855	4,123	3,591	3,716	5,107	7,240	11,737	13,465	8,939	4,794
Critical (15%)	4,806	4,404	3,675	3,533	3,335	3,431	6,355	6,519	10,465	11,474	8,854	4,513

Revised Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	8,508	7,567	19,509	20,470	31,560	18,571	10,172	10,229	14,458	15,000	12,700	8,243
20%	7,898	6,796	11,485	15,018	21,412	12,718	8,215	9,227	13,000	15,000	11,702	6,412
30%	7,349	5,700	6,189	8,978	12,892	8,359	6,962	8,481	12,266	15,000	11,187	5,953
40%	6,205	5,230	4,374	4,500	5,302	4,500	6,305	8,011	11,426	14,606	10,732	5,680
50%	5,651	4,873	4,016	4,184	4,500	4,500	5,732	7,437	11,089	14,001	10,234	5,500
60%	5,260	4,407	3,976	3,798	3,656	3,872	5,144	7,099	10,345	13,365	9,823	5,180
70%	4,873	4,180	3,680	3,251	3,250	3,250	4,500	6,543	9,975	12,759	9,256	4,650
80%	4,295	4,000	3,274	3,250	3,250	3,250	4,500	6,091	9,205	11,861	9,034	4,318
90%	4,000	3,502	3,250	3,250	3,250	3,250	3,713	5,573	8,400	10,741	8,139	4,013
Long Term												
Full Simulation Period[b]	6,057	5,625	7,681	9,345	11,729	8,578	6,745	7,749	11,210	13,425	10,387	5,801
Water Year Types[c]												
Wet (32%)	6,381	6,742	14,046	18,182	20,764	16,037	8,702	8,399	10,291	13,215	11,128	7,264
Above Normal (16%)	5,874	5,793	7,473	8,992	17,811	8,881	6,317	7,819	11,981	14,792	11,359	5,970
Below Normal (13%)	6,540	5,702	4,124	4,784	7,119	5,064	6,094	8,130	12,326	14,507	11,942	5,416
Dry (24%)	6,237	4,756	3,898	4,123	3,573	3,701	5,074	7,334	11,725	13,439	8,903	4,782
Critical (15%)	4,808	4,399	3,682	3,463	3,382	3,440	6,347	6,608	10,486	11,383	8,776	4,501

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Flow (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	2%	2%	0%	0%	0%	-1%	0%	0%	**-8%**
20%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	-2%	0%
30%	0%	2%	2%	0%	-2%	0%	0%	0%	0%	0%	0%	-1%
40%	1%	0%	1%	-5%	-1%	0%	0%	1%	0%	0%	0%	0%
50%	-1%	0%	0%	-3%	0%	0%	0%	0%	1%	-1%	-1%	0%
60%	0%	1%	1%	0%	-2%	**6%**	-1%	0%	0%	-1%	-1%	-1%
70%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-2%	0%	0%
80%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
90%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	-3%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	-1%
Water Year Types[c]												
Wet (32%)	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
Above Normal (16%)	-1%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	-2%
Below Normal (13%)	1%	0%	0%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%
Dry (24%)	2%	0%	1%	0%	-1%	0%	-1%	1%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	-2%	1%	0%	0%	1%	0%	-1%	-1%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.16 Feather River d/s of Thermalito, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	4,000	2,500	5,073	13,890	19,393	14,789	8,389	8,275	7,910	9,420	7,729	5,580
20%	4,000	2,500	3,420	2,988	11,501	11,022	3,686	6,352	6,635	9,054	6,656	5,247
30%	4,000	2,054	2,218	1,700	6,252	7,843	2,757	5,334	6,248	8,621	5,681	4,554
40%	3,974	1,700	1,700	1,700	2,379	5,528	1,853	3,369	5,222	8,022	4,745	3,796
50%	3,439	1,700	1,700	1,700	1,700	2,535	1,254	2,495	4,272	6,164	3,646	2,481
60%	2,492	1,700	1,700	1,700	1,700	1,700	1,000	1,956	3,834	4,837	2,691	1,904
70%	1,846	1,700	1,700	1,200	1,700	1,700	1,000	1,334	3,356	3,641	2,363	1,244
80%	1,700	1,200	1,374	1,200	1,200	1,000	1,000	1,000	2,525	3,030	1,955	1,051
90%	1,200	900	948	900	900	800	968	1,000	1,714	2,044	1,223	1,000
Long Term												
Full Simulation Period[b]	2,883	1,956	3,113	4,812	5,841	6,488	3,136	4,013	4,637	6,050	4,145	3,045
Water Year Types[c]												
Wet (32%)	3,068	2,585	5,476	11,696	12,740	13,784	6,587	7,101	4,333	6,920	4,346	3,254
Above Normal (16%)	2,660	1,600	2,519	2,477	5,166	8,173	2,259	3,058	4,823	8,866	6,433	4,449
Below Normal (13%)	3,311	1,913	1,687	1,582	3,161	2,066	1,405	3,388	6,145	7,681	4,260	3,333
Dry (24%)	2,736	1,615	1,966	1,360	1,497	1,321	1,203	2,431	4,961	4,326	3,639	2,574
Critical (15%)	2,577	1,582	1,853	1,139	1,317	1,520	1,414	1,569	3,170	2,495	1,969	1,595

Revised Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	4,000	2,500	4,835	14,314	19,368	14,789	8,396	8,275	7,856	9,422	7,708	5,582
20%	4,000	2,500	3,418	3,405	11,381	11,022	3,686	6,274	6,941	9,008	6,567	5,294
30%	4,000	2,154	2,155	1,700	6,094	7,843	2,757	5,155	6,254	8,564	5,571	4,549
40%	3,846	1,700	1,700	1,700	2,096	5,528	1,853	3,512	5,303	7,944	4,680	3,736
50%	3,257	1,700	1,700	1,700	1,700	2,556	1,251	2,546	4,170	6,005	3,576	2,541
60%	2,524	1,700	1,700	1,700	1,700	1,700	1,000	2,029	3,830	4,794	2,735	1,630
70%	1,907	1,700	1,700	1,200	1,700	1,700	1,000	1,368	3,414	3,703	2,365	1,194
80%	1,700	1,200	1,233	960	1,200	1,000	1,000	1,000	2,670	3,289	1,809	1,044
90%	1,200	900	947	900	900	800	853	1,000	1,896	2,030	1,206	1,000
Long Term												
Full Simulation Period[b]	2,883	1,975	3,118	4,822	5,809	6,464	3,131	4,034	4,728	6,028	4,104	3,030
Water Year Types[c]												
Wet (32%)	3,088	2,647	5,483	11,721	12,717	13,752	6,587	7,095	4,508	6,870	4,216	3,247
Above Normal (16%)	2,619	1,600	2,558	2,517	5,107	8,076	2,259	3,064	4,892	8,869	6,442	4,473
Below Normal (13%)	3,268	1,918	1,782	1,582	3,049	2,066	1,394	3,522	6,283	7,619	4,328	3,469
Dry (24%)	2,761	1,611	1,960	1,360	1,497	1,323	1,191	2,421	4,994	4,330	3,640	2,475
Critical (15%)	2,572	1,582	1,754	1,108	1,317	1,523	1,410	1,609	3,159	2,495	1,898	1,521

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Flow (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	-5%	3%	0%	0%	0%	0%	-1%	0%	0%	0%
20%	0%	0%	0%	**14%**	-1%	0%	0%	-1%	5%	-1%	-1%	1%
30%	0%	5%	-3%	0%	-3%	0%	0%	-3%	0%	-1%	-2%	0%
40%	-3%	0%	0%	0%	**-12%**	0%	0%	4%	2%	-1%	-1%	-2%
50%	**-5%**	0%	0%	0%	0%	1%	0%	2%	-2%	-3%	-2%	2%
60%	1%	0%	0%	0%	0%	0%	0%	4%	0%	-1%	2%	**-14%**
70%	3%	0%	0%	0%	0%	0%	0%	3%	2%	2%	0%	-4%
80%	0%	0%	**-10%**	**-20%**	0%	0%	0%	0%	**6%**	**9%**	**-7%**	-1%
90%	0%	0%	0%	0%	0%	0%	**-12%**	0%	**11%**	-1%	-1%	0%
Long Term												
Full Simulation Period[b]	0%	1%	0%	0%	-1%	0%	0%	1%	2%	0%	-1%	0%
Water Year Types[c]												
Wet (32%)	1%	2%	0%	0%	0%	0%	0%	0%	4%	-1%	-3%	0%
Above Normal (16%)	-2%	0%	2%	2%	-1%	-1%	0%	0%	1%	0%	0%	1%
Below Normal (13%)	-1%	0%	**6%**	0%	-4%	0%	-1%	4%	2%	-1%	2%	4%
Dry (24%)	1%	0%	0%	0%	0%	0%	-1%	0%	1%	0%	0%	-4%
Critical (15%)	0%	0%	**-5%**	-3%	0%	0%	0%	3%	0%	0%	-4%	-5%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.17 Fremont Weir, Monthly Spills

Second Basis of Comparison

	Monthly Spills (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	100	100	10,543	30,193	44,709	18,331	5,859	100	100	0	0	100
20%	100	100	3,673	10,516	13,894	7,379	4,169	100	100	0	0	100
30%	100	100	1,561	5,231	8,342	5,266	966	100	100	0	0	100
40%	100	100	533	2,826	5,470	3,433	341	100	100	0	0	100
50%	100	100	186	1,630	3,269	2,065	119	100	100	0	0	100
60%	100	100	100	851	2,291	1,101	100	100	100	0	0	100
70%	100	100	100	153	1,008	481	100	100	100	0	0	100
80%	100	100	100	100	184	201	100	100	100	0	0	100
90%	100	100	100	100	100	100	100	100	100	0	0	100
Long Term												
Full Simulation Period[b]	115	384	3,697	9,549	13,200	7,942	2,211	160	104	0	0	100
Water Year Types[c]												
Wet (32%)	147	996	9,888	25,442	30,547	18,997	5,602	289	113	0	0	100
Above Normal (16%)	100	100	2,659	6,349	15,114	8,566	1,765	100	100	0	0	100
Below Normal (13%)	100	100	262	1,256	4,057	1,166	292	100	100	0	0	100
Dry (24%)	100	100	342	932	2,032	1,411	411	100	100	0	0	100
Critical (15%)	100	100	149	542	533	408	106	100	100	0	0	100

Revised Second Basis of Comparison

	Monthly Spills (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	100	100	10,536	30,202	45,235	18,332	5,859	100	100	0	0	100
20%	100	100	3,758	10,563	13,794	7,393	4,170	100	100	0	0	100
30%	100	100	1,561	5,232	8,155	5,246	957	100	100	0	0	100
40%	100	100	532	2,826	5,590	3,433	341	100	100	0	0	100
50%	100	100	188	1,638	3,268	2,065	119	100	100	0	0	100
60%	100	100	100	851	2,291	1,093	100	100	100	0	0	100
70%	100	100	100	153	1,142	482	100	100	100	0	0	100
80%	100	100	100	100	184	201	100	100	100	0	0	100
90%	100	100	100	100	100	100	100	100	100	0	0	100
Long Term												
Full Simulation Period[b]	113	386	3,702	9,547	13,182	7,929	2,213	160	104	0	0	100
Water Year Types[c]												
Wet (32%)	142	1,002	9,898	25,426	30,534	18,973	5,611	289	113	0	0	100
Above Normal (16%)	100	100	2,664	6,376	15,112	8,541	1,765	100	100	0	0	100
Below Normal (13%)	100	100	262	1,251	3,971	1,167	292	100	100	0	0	100
Dry (24%)	100	100	346	931	2,024	1,405	410	100	100	0	0	100
Critical (15%)	100	100	149	542	536	407	106	100	100	0	0	100

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Spills (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
20%	0%	0%	2%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	-2%	0%	-1%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	13%	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	-3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.18 American River d/s of Nimbus Dam, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,967	3,834	9,336	12,160	14,655	9,754	6,737	7,450	4,650	5,000	3,236	1,837
20%	1,500	3,218	4,325	7,873	10,806	6,805	5,083	4,486	3,799	5,000	2,678	1,604
30%	1,500	2,070	2,528	5,813	7,391	5,044	4,483	3,543	3,623	4,957	2,299	1,533
40%	1,500	1,925	2,000	3,587	5,755	4,172	3,491	2,836	3,223	4,250	1,912	1,533
50%	1,500	1,818	2,000	1,776	3,753	3,039	2,499	2,021	2,835	3,591	1,750	1,533
60%	1,500	1,683	1,936	1,700	2,602	2,015	2,089	1,750	2,245	2,935	1,750	1,533
70%	1,449	1,500	1,701	1,700	1,445	1,747	1,750	1,625	1,832	2,589	1,681	1,493
80%	991	1,136	1,146	1,440	1,264	921	1,162	1,074	1,727	2,373	957	800
90%	800	800	800	819	1,032	800	800	800	1,061	1,327	800	780
Long Term												
Full Simulation Period[b]	1,461	2,386	3,826	5,109	6,030	4,279	3,395	3,077	2,987	3,454	1,899	1,404
Water Year Types[c]												
Wet (32%)	1,664	3,300	7,242	10,514	10,615	7,209	5,521	5,541	4,226	3,591	2,597	1,756
Above Normal (16%)	1,274	2,549	3,614	5,670	7,969	6,116	3,572	2,527	2,860	4,782	1,913	1,553
Below Normal (13%)	1,661	2,262	2,660	2,370	5,181	2,187	2,477	1,907	2,881	4,610	1,666	1,236
Dry (24%)	1,329	1,698	1,619	1,587	2,322	2,377	2,222	1,925	2,413	3,028	1,446	1,222
Critical (15%)	1,263	1,492	1,400	1,171	951	1,027	1,391	1,327	1,496	1,368	1,336	935

Revised Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1,967	3,951	9,359	12,160	14,655	9,754	6,737	7,450	4,652	5,000	3,200	1,766
20%	1,500	3,208	4,325	7,873	10,804	6,804	5,084	4,486	3,799	5,000	2,779	1,546
30%	1,500	2,078	2,528	5,706	7,391	5,044	4,483	3,543	3,623	4,965	2,299	1,533
40%	1,500	1,925	2,000	3,592	5,756	4,172	3,491	2,851	3,235	4,227	1,968	1,533
50%	1,500	1,827	2,000	1,750	3,739	3,042	2,499	2,060	2,954	3,616	1,750	1,533
60%	1,500	1,683	1,921	1,700	2,602	2,015	2,084	1,750	2,267	2,923	1,750	1,533
70%	1,389	1,438	1,676	1,700	1,445	1,747	1,750	1,614	1,916	2,515	1,659	1,493
80%	994	1,116	1,172	1,359	1,264	1,012	1,146	1,079	1,715	2,373	1,003	800
90%	800	800	800	819	978	800	800	800	1,070	1,377	800	800
Long Term												
Full Simulation Period[b]	1,461	2,384	3,819	5,098	6,026	4,282	3,390	3,085	3,012	3,445	1,905	1,407
Water Year Types[c]												
Wet (32%)	1,666	3,308	7,234	10,515	10,615	7,209	5,522	5,541	4,239	3,582	2,611	1,749
Above Normal (16%)	1,269	2,552	3,616	5,637	7,965	6,117	3,572	2,527	2,973	4,780	1,902	1,553
Below Normal (13%)	1,656	2,274	2,654	2,356	5,177	2,187	2,471	1,914	2,895	4,586	1,752	1,205
Dry (24%)	1,321	1,682	1,603	1,572	2,313	2,377	2,209	1,947	2,426	3,001	1,466	1,223
Critical (15%)	1,279	1,469	1,400	1,171	950	1,047	1,383	1,340	1,479	1,395	1,249	1,002

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Flow (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-4%
20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	-4%
30%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-1%	3%	0%
50%	0%	1%	0%	-1%	0%	0%	0%	2%	4%	1%	0%	0%
60%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
70%	-4%	-4%	-1%	0%	0%	0%	0%	-1%	5%	-3%	-1%	0%
80%	0%	-2%	2%	**-6%**	0%	**10%**	-1%	0%	-1%	0%	5%	0%
90%	0%	0%	0%	0%	**-5%**	0%	0%	0%	1%	4%	0%	3%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Above Normal (16%)	0%	0%	0%	-1%	0%	0%	0%	0%	4%	0%	-1%	0%
Below Normal (13%)	0%	1%	0%	-1%	0%	0%	0%	0%	0%	-1%	**5%**	-3%
Dry (24%)	-1%	-1%	-1%	-1%	0%	0%	-1%	1%	1%	-1%	1%	0%
Critical (15%)	1%	-1%	0%	0%	0%	2%	-1%	1%	-1%	2%	**-7%**	**7%**

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.19 Sacramento River at Freeport, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	14,535	22,483	54,532	64,835	70,451	63,654	46,241	38,579	21,089	23,075	16,647	15,053
20%	14,097	14,990	34,381	56,263	62,040	51,425	32,543	27,633	18,924	21,676	15,939	14,645
30%	13,025	13,727	22,366	41,579	51,549	41,505	22,929	17,142	17,961	20,420	15,394	14,129
40%	11,580	13,241	18,580	26,629	45,721	29,974	20,054	15,174	16,521	19,429	14,779	13,931
50%	10,818	12,087	15,606	23,009	33,290	24,771	16,394	13,624	15,588	18,340	13,795	13,397
60%	10,029	11,225	14,369	18,466	24,734	20,966	12,916	12,737	14,567	16,653	12,006	11,957
70%	9,019	10,194	12,581	15,005	19,838	18,448	11,708	11,915	13,085	14,599	10,893	9,897
80%	8,009	8,857	10,799	13,486	16,580	15,217	11,229	10,874	12,353	12,878	9,767	8,646
90%	6,709	7,537	9,360	11,871	14,217	11,487	10,200	8,922	11,289	10,339	8,546	7,115
Long Term												
Full Simulation Period[b]	11,135	14,147	23,180	31,236	37,980	31,862	22,179	18,663	16,752	17,326	13,094	12,141
Water Year Types[c]												
Wet (32%)	12,828	18,463	38,689	50,375	56,977	48,450	35,060	30,181	20,772	19,106	15,038	14,726
Above Normal (16%)	10,150	15,450	24,122	39,692	47,763	42,758	24,410	18,064	16,533	21,746	15,907	14,192
Below Normal (13%)	12,254	14,318	15,586	19,280	31,808	19,442	14,599	14,690	17,758	20,643	13,951	12,000
Dry (24%)	10,354	10,984	13,633	17,418	23,789	21,475	15,084	12,519	14,646	14,838	10,740	10,387
Critical (15%)	8,809	8,499	11,430	14,601	15,535	12,818	10,626	8,240	10,863	9,787	8,969	7,370

Revised Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	14,551	22,359	54,045	64,879	70,451	63,654	46,240	38,579	20,776	23,195	16,663	15,098
20%	14,090	15,039	34,473	56,266	61,709	51,427	32,544	27,639	18,975	21,635	15,939	14,531
30%	13,193	13,786	22,326	41,578	51,524	41,506	22,932	17,452	18,150	20,277	15,193	14,129
40%	11,535	13,341	18,577	26,629	45,616	29,974	19,982	15,203	16,964	19,565	14,570	13,918
50%	10,865	12,102	15,606	23,009	33,290	24,772	16,394	13,797	15,808	18,216	13,980	13,211
60%	10,117	11,213	14,404	18,460	24,623	20,971	12,918	12,876	14,539	16,370	12,432	12,035
70%	9,064	10,188	12,929	15,002	19,808	18,571	11,683	12,087	13,047	14,608	10,714	9,785
80%	8,007	8,873	10,823	13,487	16,579	15,219	11,109	11,037	12,359	13,049	9,752	8,533
90%	7,029	7,552	9,350	11,866	14,216	11,491	10,200	9,036	11,481	9,999	8,703	7,301
Long Term												
Full Simulation Period[b]	11,166	14,169	23,197	31,223	37,970	31,864	22,160	18,740	16,877	17,261	13,039	12,099
Water Year Types[c]												
Wet (32%)	12,847	18,563	38,684	50,414	56,964	48,443	35,068	30,178	21,009	19,004	14,907	14,667
Above Normal (16%)	10,044	15,450	24,213	39,681	47,790	42,769	24,411	18,103	16,671	21,742	15,918	14,124
Below Normal (13%)	12,260	14,350	15,660	19,252	31,672	19,432	14,555	14,839	17,909	20,529	14,052	12,119
Dry (24%)	10,515	10,941	13,654	17,397	23,786	21,469	15,030	12,638	14,681	14,800	10,736	10,279
Critical (15%)	8,820	8,470	11,351	14,500	15,588	12,846	10,613	8,393	10,858	9,733	8,780	7,353

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Flow (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	-1%	-1%	0%	0%	0%	0%	0%	-1%	1%	0%	0%
20%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%
30%	1%	0%	0%	0%	0%	0%	0%	2%	1%	-1%	-1%	0%
40%	0%	1%	0%	0%	0%	0%	0%	0%	3%	1%	-1%	0%
50%	0%	0%	0%	0%	0%	0%	0%	1%	1%	-1%	1%	-1%
60%	1%	0%	0%	0%	0%	0%	0%	1%	0%	-2%	4%	1%
70%	1%	0%	3%	0%	0%	1%	0%	1%	0%	0%	-2%	-1%
80%	0%	0%	0%	0%	0%	0%	-1%	1%	0%	1%	0%	-1%
90%	5%	0%	0%	0%	0%	0%	0%	1%	2%	-3%	2%	3%
Long Term												
Full Simulation Period[b]	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	0%	1%	0%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%
Above Normal (16%)	-1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	0%	0%	0%	1%	1%	-1%	1%	1%
Dry (24%)	2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	-1%
Critical (15%)	0%	0%	-1%	-1%	0%	0%	0%	2%	0%	-1%	-2%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.20 Yolo Bypass, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	164	575	15,113	37,297	53,013	25,747	10,346	335	168	48	183	240
20%	162	245	6,239	16,046	22,314	11,069	7,372	178	168	48	55	159
30%	160	146	2,510	8,216	12,519	8,557	2,043	173	168	48	55	159
40%	154	110	802	5,019	10,224	5,190	498	170	168	48	55	159
50%	147	108	495	2,405	5,513	2,987	272	168	167	48	55	159
60%	142	105	259	970	3,258	1,402	229	165	167	48	55	159
70%	132	100	146	470	1,068	754	211	163	166	48	55	157
80%	116	100	109	167	332	225	186	159	164	48	55	155
90%	106	100	100	122	152	149	173	153	162	48	54	152
Long Term												
Full Simulation Period[b]	187	572	5,169	12,745	17,130	10,720	3,653	311	185	48	101	175
Water Year Types[c]												
Wet (32%)	231	1,348	13,405	32,933	38,563	25,293	8,874	560	227	48	147	173
Above Normal (16%)	137	344	4,156	9,639	19,777	11,623	3,242	273	166	48	92	165
Below Normal (13%)	246	299	470	1,973	5,998	1,664	546	169	166	48	130	192
Dry (24%)	156	131	583	1,579	3,404	2,190	910	175	167	48	61	170
Critical (15%)	145	124	376	856	905	687	210	167	165	48	55	188

Revised Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	164	575	15,106	37,291	53,011	25,260	10,346	335	168	48	183	240
20%	162	245	6,371	16,098	21,931	11,070	7,372	178	168	48	55	159
30%	160	146	2,509	8,217	12,355	8,556	2,043	173	168	48	55	159
40%	154	110	803	5,020	10,223	5,190	499	170	168	48	55	159
50%	147	108	496	2,405	5,513	2,988	272	168	167	48	55	159
60%	142	105	259	970	3,254	1,402	229	165	167	48	55	159
70%	132	100	146	470	1,202	754	211	163	166	48	55	157
80%	116	100	107	167	345	225	186	159	164	48	55	155
90%	106	100	100	123	129	149	173	153	162	48	54	152
Long Term												
Full Simulation Period[b]	186	574	5,171	12,736	17,111	10,707	3,656	311	185	48	101	175
Water Year Types[c]												
Wet (32%)	227	1,354	13,411	32,911	38,549	25,268	8,882	560	227	48	147	173
Above Normal (16%)	137	345	4,161	9,622	19,789	11,595	3,242	273	166	48	92	165
Below Normal (13%)	246	299	470	1,969	5,903	1,665	546	169	166	48	130	192
Dry (24%)	156	131	585	1,582	3,393	2,185	908	175	167	48	61	170
Critical (15%)	145	124	365	857	900	687	210	167	165	48	55	188

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Flow (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%
20%	0%	0%	2%	0%	-2%	0%	0%	0%	0%	0%	0%	0%
30%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
70%	0%	0%	0%	0%	**12%**	0%	0%	0%	0%	0%	0%	0%
80%	0%	0%	-3%	0%	4%	0%	0%	0%	0%	0%	0%	0%
90%	0%	0%	0%	1%	**-16%**	0%	0%	0%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Water Year Types[c]												
Wet (32%)	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal (16%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal (13%)	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%
Dry (24%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical (15%)	0%	0%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.1.21 San Joaquin River at Vernalis, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	3,015	3,156	4,932	11,157	14,594	15,467	14,666	14,360	10,139	5,612	2,740	3,146
20%	2,692	2,843	2,953	4,819	10,200	9,482	10,169	8,291	5,696	2,636	2,600	2,658
30%	2,520	2,663	2,541	3,655	6,300	7,933	8,421	5,676	3,488	1,990	1,897	2,503
40%	2,331	2,500	2,341	2,692	4,268	5,393	7,435	4,617	3,188	1,742	1,676	2,142
50%	2,157	2,386	2,257	2,544	3,420	3,883	6,016	4,043	2,349	1,506	1,500	1,944
60%	1,952	2,244	2,165	2,343	2,774	3,511	4,349	3,276	1,895	1,379	1,415	1,842
70%	1,752	2,141	2,027	2,153	2,443	2,963	3,119	2,891	1,485	1,170	1,321	1,743
80%	1,597	1,984	1,903	1,923	2,174	2,414	2,442	2,362	1,274	1,088	1,211	1,611
90%	1,411	1,793	1,699	1,733	1,945	2,230	1,779	1,890	1,085	941	1,071	1,478
Long Term												
Full Simulation Period[b]	2,241	2,721	3,492	5,136	6,700	7,131	7,255	6,101	4,547	2,625	1,838	2,238
Water Year Types[c]												
Wet (23%)	2,497	3,627	6,644	11,506	15,763	16,308	15,374	14,433	12,512	6,641	3,078	3,456
Above Normal (24%)	2,288	2,532	2,757	4,947	6,946	7,415	8,260	5,348	3,525	1,999	1,977	2,352
Below Normal (10%)	2,086	2,397	3,810	3,608	3,723	4,101	5,842	4,213	2,225	1,481	1,457	1,856
Dry (16%)	2,339	2,684	2,347	2,487	2,628	3,304	3,551	2,976	1,714	1,267	1,362	1,789
Critical (27%)	1,974	2,251	1,998	1,927	2,138	2,311	2,031	2,122	1,116	943	1,059	1,485

Revised Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	3,058	3,088	4,931	11,054	17,256	15,467	14,774	14,101	9,720	6,052	2,996	3,315
20%	2,699	2,813	2,924	4,859	10,259	9,401	10,359	8,202	4,768	2,636	2,599	2,659
30%	2,470	2,631	2,462	3,635	6,228	7,841	8,536	5,452	3,364	1,988	1,896	2,484
40%	2,326	2,448	2,299	2,606	4,252	5,343	7,507	4,488	2,947	1,742	1,675	2,152
50%	2,089	2,342	2,226	2,481	3,420	3,825	6,018	3,916	2,205	1,503	1,499	1,934
60%	1,895	2,218	2,100	2,247	2,681	3,460	4,432	2,913	1,824	1,384	1,415	1,837
70%	1,697	2,100	1,988	2,070	2,379	2,870	3,224	2,493	1,420	1,170	1,322	1,743
80%	1,511	1,954	1,866	1,827	2,153	2,327	2,452	1,994	1,271	1,087	1,211	1,611
90%	1,338	1,753	1,671	1,638	1,931	2,115	1,813	1,564	1,085	941	1,099	1,503
Long Term												
Full Simulation Period[b]	2,200	2,673	3,455	5,082	6,806	7,116	7,330	5,903	4,350	2,668	1,876	2,266
Water Year Types[c]												
Wet (23%)	2,472	3,596	6,642	11,484	16,260	16,444	15,398	14,493	12,009	6,823	3,227	3,582
Above Normal (24%)	2,234	2,469	2,712	4,887	6,916	7,376	8,371	5,184	3,310	1,997	1,976	2,348
Below Normal (10%)	2,052	2,330	3,742	3,561	3,837	4,077	5,974	3,968	2,025	1,478	1,455	1,847
Dry (16%)	2,305	2,644	2,306	2,421	2,623	3,227	3,656	2,625	1,661	1,266	1,362	1,783
Critical (27%)	1,926	2,205	1,952	1,854	2,092	2,228	2,079	1,780	1,114	951	1,077	1,490

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Flow (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	1%	-2%	0%	-1%	**18%**	0%	1%	-2%	-4%	**8%**	**9%**	**5%**
20%	0%	-1%	-1%	1%	1%	-1%	2%	-1%	**-16%**	0%	0%	0%
30%	-2%	-1%	-3%	-1%	-1%	-1%	1%	-4%	-4%	0%	0%	-1%
40%	0%	-2%	-2%	-3%	0%	-1%	1%	-3%	**-8%**	0%	0%	0%
50%	-3%	-2%	-1%	-2%	0%	-1%	0%	-3%	**-6%**	0%	0%	0%
60%	-3%	-1%	-3%	-4%	-3%	-1%	2%	**-11%**	-4%	0%	0%	0%
70%	-3%	-2%	-2%	-4%	-3%	-3%	3%	**-14%**	-4%	0%	0%	0%
80%	**-5%**	-1%	-2%	-5%	-1%	-4%	0%	**-16%**	0%	0%	0%	0%
90%	**-5%**	-2%	-2%	**-5%**	-1%	**-5%**	2%	**-17%**	0%	0%	3%	2%
Long Term												
Full Simulation Period[b]	-2%	-2%	-1%	-1%	2%	0%	1%	-3%	-4%	2%	2%	1%
Water Year Types[c]												
Wet (23%)	-1%	-1%	0%	0%	3%	1%	0%	0%	-4%	3%	5%	4%
Above Normal (24%)	-2%	-2%	-2%	-1%	0%	-1%	1%	-3%	**-6%**	0%	0%	0%
Below Normal (10%)	-2%	-3%	-2%	-1%	3%	-1%	2%	**-6%**	**-9%**	0%	0%	0%
Dry (16%)	-1%	-2%	-2%	-3%	0%	-2%	3%	**-12%**	-3%	0%	0%	0%
Critical (27%)	-2%	-2%	-2%	-4%	-2%	-4%	2%	**-16%**	0%	1%	2%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.1.22 San Joaquin River at Vernalis, Monthly Salinity

Second Basis of Comparison

	Monthly Salinity (EC)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	715	631	791	775	938	836	584	539	649	649	635	603
20%	685	599	772	749	882	796	528	527	644	648	603	586
30%	657	576	756	725	831	722	455	486	619	648	580	568
40%	626	563	740	713	789	679	387	431	568	640	571	550
50%	592	546	729	688	693	606	331	374	540	629	556	537
60%	571	527	716	676	624	493	308	358	490	617	542	519
70%	542	512	704	642	468	350	282	346	437	607	526	489
80%	522	487	676	569	321	307	261	294	384	587	451	478
90%	477	456	613	380	281	258	202	192	334	503	433	435
Long Term												
Full Simulation Period[b]	598	537	700	644	636	561	377	392	509	600	540	525
Water Year Types[c]												
Wet (23%)	576	511	616	516	362	307	220	229	343	496	419	416
Above Normal (24%)	588	534	713	614	481	417	304	357	474	616	515	506
Below Normal (10%)	605	553	670	654	684	599	319	359	524	610	562	549
Dry (16%)	585	519	731	705	812	682	424	456	577	634	579	557
Critical (27%)	630	566	755	743	892	827	573	537	640	652	635	607

Revised Second Basis of Comparison

	Monthly Salinity (EC)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	752	643	807	807	948	865	577	597	649	649	622	603
20%	714	611	784	781	911	824	524	572	645	648	603	584
30%	677	584	770	754	840	744	436	528	631	647	580	568
40%	642	572	758	723	790	686	383	493	606	638	571	552
50%	609	555	740	704	693	612	324	395	572	628	557	539
60%	570	538	730	691	631	499	303	363	500	617	543	520
70%	551	522	716	643	469	352	282	346	464	607	526	489
80%	522	495	691	572	316	306	261	294	420	587	451	478
90%	477	467	611	380	261	255	201	192	366	487	410	418
Long Term												
Full Simulation Period[b]	613	547	714	661	642	573	372	419	526	597	533	522
Water Year Types[c]												
Wet (23%)	585	518	623	520	357	306	220	229	365	489	405	405
Above Normal (24%)	608	548	728	628	485	421	301	365	494	617	515	506
Below Normal (10%)	618	566	688	673	692	606	313	388	555	611	563	551
Dry (16%)	597	526	742	725	818	698	413	502	593	635	579	559
Critical (27%)	648	577	772	772	909	854	563	594	643	645	623	607

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Salinity (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	5%	2%	2%	4%	1%	3%	-1%	11%	0%	0%	-2%	0%
20%	4%	2%	2%	4%	3%	4%	-1%	8%	0%	0%	0%	0%
30%	3%	1%	2%	4%	1%	3%	-4%	9%	2%	0%	0%	0%
40%	3%	2%	3%	1%	0%	1%	-1%	14%	7%	0%	0%	0%
50%	3%	2%	1%	2%	0%	1%	-2%	5%	6%	0%	0%	0%
60%	0%	2%	2%	2%	1%	1%	-2%	1%	2%	0%	0%	0%
70%	2%	2%	2%	0%	0%	0%	0%	0%	6%	0%	0%	0%
80%	0%	2%	2%	1%	-2%	0%	0%	0%	9%	0%	0%	0%
90%	0%	2%	0%	0%	-7%	-1%	0%	0%	10%	-3%	-5%	-4%
Long Term												
Full Simulation Period[b]	2%	2%	2%	3%	1%	2%	-1%	7%	3%	-1%	-1%	0%
Water Year Types[c]												
Wet (23%)	2%	1%	1%	1%	-1%	0%	0%	0%	6%	-1%	-3%	-3%
Above Normal (24%)	3%	3%	2%	2%	1%	1%	-1%	2%	4%	0%	0%	0%
Below Normal (10%)	2%	2%	3%	3%	1%	1%	-2%	8%	6%	0%	0%	0%
Dry (16%)	2%	1%	2%	3%	1%	2%	-3%	10%	3%	0%	0%	0%
Critical (27%)	3%	2%	2%	4%	2%	3%	-2%	10%	0%	-1%	-2%	0%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.1.23 Stanislaus River below Goodwin, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	350	499	508	508	907	709	1,500	1,500	2,887	360	300	300
20%	350	415	415	415	503	415	1,462	1,500	1,709	306	300	300
30%	331	386	415	408	415	415	1,337	1,434	1,571	300	296	268
40%	286	318	326	318	415	318	991	1,303	845	300	283	268
50%	286	318	318	318	318	318	664	1,303	450	284	283	268
60%	194	247	275	242	318	275	512	1,112	398	268	283	249
70%	194	247	247	242	260	242	461	920	289	268	283	249
80%	173	233	247	242	242	242	424	848	257	265	283	249
90%	164	230	230	200	239	200	378	760	255	265	283	249
Long Term												
Full Simulation Period[b]	291	388	466	584	642	607	884	1,181	1,028	390	347	363
Water Year Types[c]												
Wet (23%)	360	612	886	1,060	1,196	1,462	1,488	1,497	2,316	678	580	731
Above Normal (24%)	301	332	376	726	742	523	940	1,225	1,200	354	288	271
Below Normal (10%)	288	373	373	383	418	316	955	1,266	613	272	285	270
Dry (16%)	278	323	331	318	392	262	581	1,094	399	276	283	255
Critical (27%)	230	287	298	275	303	256	464	890	280	283	259	228

Revised Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	350	399	400	400	1,825	999	1,500	1,500	1,502	491	319	300
20%	349	356	358	359	863	400	1,500	1,498	1,243	313	300	300
30%	318	334	340	336	400	344	1,429	1,380	948	300	285	281
40%	260	305	323	318	364	312	1,241	1,134	713	296	283	250
50%	193	246	280	250	339	267	879	855	399	283	283	249
60%	146	217	230	183	304	200	649	725	300	271	283	249
70%	123	207	214	152	239	159	517	612	265	265	283	249
80%	115	202	206	136	176	140	462	507	255	265	283	249
90%	104	188	188	122	133	123	403	439	255	265	283	249
Long Term												
Full Simulation Period[b]	250	340	429	530	748	593	958	984	830	433	386	391
Water Year Types[c]												
Wet (23%)	334	581	884	1,038	1,692	1,597	1,511	1,556	1,813	860	729	857
Above Normal (24%)	248	269	331	666	712	484	1,051	1,062	986	352	287	268
Below Normal (10%)	254	306	306	336	532	292	1,087	1,021	414	269	283	261
Dry (16%)	245	282	290	253	387	185	686	743	346	276	283	249
Critical (27%)	181	242	252	203	256	174	511	548	278	291	277	233

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Flow (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	0%	-20%	-21%	-21%	101%	41%	0%	0%	-48%	37%	6%	0%
20%	0%	-14%	-14%	-13%	72%	-4%	3%	0%	-27%	2%	0%	0%
30%	-4%	-14%	-18%	-18%	-4%	-17%	7%	-4%	-40%	0%	-4%	5%
40%	-9%	-4%	-1%	0%	-12%	-2%	25%	-13%	-16%	-1%	0%	-7%
50%	-33%	-23%	-12%	-21%	6%	-16%	32%	-34%	-11%	0%	0%	-7%
60%	-25%	-12%	-16%	-24%	-5%	-27%	27%	-35%	-25%	1%	0%	0%
70%	-37%	-16%	-13%	-37%	-8%	-34%	12%	-33%	-9%	-1%	0%	0%
80%	-34%	-13%	-17%	-44%	-27%	-42%	9%	-40%	0%	0%	0%	0%
90%	-37%	-18%	-18%	-39%	-45%	-39%	7%	-42%	0%	0%	0%	0%
Long Term												
Full Simulation Period[b]	-14%	-12%	-8%	-9%	16%	-2%	8%	-17%	-19%	11%	11%	8%
Water Year Types[c]												
Wet (23%)	-7%	-5%	0%	-2%	41%	9%	2%	4%	-22%	27%	26%	17%
Above Normal (24%)	-18%	-19%	-12%	-8%	-4%	-7%	12%	-13%	-18%	0%	-1%	-1%
Below Normal (10%)	-12%	-18%	-18%	-12%	27%	-8%	14%	-19%	-33%	-1%	-1%	-3%
Dry (16%)	-12%	-13%	-12%	-20%	-1%	-29%	18%	-32%	-13%	0%	0%	-2%
Critical (27%)	-21%	-16%	-15%	-26%	-15%	-32%	10%	-38%	-1%	3%	7%	2%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.1.24 Stanislaus River at Mouth, Monthly Flow

Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	662	653	656	688	1,117	1,153	1,804	1,679	3,009	661	569	673
20%	582	548	522	557	694	613	1,608	1,592	2,016	555	485	508
30%	507	492	464	518	562	562	1,489	1,533	1,772	502	461	481
40%	471	459	427	473	512	522	1,040	1,423	1,092	444	445	457
50%	405	421	378	412	484	446	821	1,331	694	412	443	439
60%	377	388	341	364	423	394	637	1,049	572	386	416	431
70%	346	355	329	339	331	361	529	972	402	378	395	396
80%	327	312	311	318	296	295	440	865	352	350	373	373
90%	249	280	269	283	257	233	406	787	312	318	331	316
Long Term												
Full Simulation Period[b]	471	507	549	696	766	756	1,004	1,265	1,231	542	491	545
Water Year Types[c]												
Wet (23%)	530	737	980	1,176	1,407	1,704	1,731	1,634	2,632	939	772	985
Above Normal (24%)	494	463	451	840	852	680	1,126	1,323	1,495	535	463	484
Below Normal (10%)	480	503	506	532	589	489	1,057	1,443	807	452	440	443
Dry (16%)	487	437	415	433	484	407	616	1,166	555	377	404	408
Critical (27%)	384	393	360	366	367	309	476	887	334	335	343	338

Revised Second Basis of Comparison

	Monthly Flow (cfs)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	653	567	590	624	2,437	1,243	1,824	1,680	1,791	932	588	706
20%	577	482	480	506	987	615	1,626	1,588	1,545	564	488	506
30%	491	441	431	462	560	531	1,495	1,515	1,261	499	458	473
40%	424	409	382	434	498	458	1,303	1,285	1,041	443	445	446
50%	377	386	336	392	442	405	1,022	903	726	412	441	439
60%	314	344	312	279	399	311	716	756	418	389	420	431
70%	284	313	291	248	320	277	584	601	375	374	396	397
80%	248	270	270	229	232	226	469	541	347	349	374	370
90%	185	243	204	199	178	146	424	471	312	317	347	320
Long Term												
Full Simulation Period[b]	430	460	512	642	872	741	1,079	1,067	1,034	585	530	573
Water Year Types[c]												
Wet (23%)	505	706	978	1,155	1,903	1,839	1,754	1,693	2,130	1,121	921	1,111
Above Normal (24%)	441	400	406	779	822	641	1,237	1,160	1,281	533	461	480
Below Normal (10%)	445	435	438	484	703	466	1,189	1,197	607	449	438	434
Dry (16%)	454	397	375	368	479	330	720	816	502	376	404	402
Critical (27%)	336	347	314	294	320	226	524	544	332	343	361	344

Revised Second Basis of Comparison minus Second Basis of Comparison

	Monthly Flow (Percent Change)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance[a]												
10%	-1%	**-13%**	**-10%**	**-9%**	**118%**	**8%**	1%	0%	**-40%**	**41%**	3%	5%
20%	-1%	**-12%**	**-8%**	**-9%**	**42%**	0%	1%	0%	**-23%**	2%	1%	0%
30%	-3%	**-10%**	**-7%**	**-11%**	0%	**-6%**	0%	-1%	**-29%**	-1%	-1%	-2%
40%	**-10%**	**-11%**	**-11%**	**-8%**	-3%	**-12%**	**25%**	**-10%**	-5%	0%	0%	-2%
50%	**-7%**	**-9%**	**-11%**	-5%	**-9%**	**-9%**	**24%**	**-32%**	5%	0%	0%	0%
60%	**-17%**	**-11%**	**-8%**	**-23%**	**-6%**	**-21%**	**12%**	**-28%**	**-27%**	1%	1%	0%
70%	**-18%**	**-12%**	**-12%**	**-27%**	-4%	**-23%**	**10%**	**-38%**	**-7%**	-1%	0%	0%
80%	**-24%**	**-13%**	**-13%**	**-28%**	**-22%**	**-23%**	**7%**	**-37%**	-1%	0%	0%	-1%
90%	**-26%**	**-13%**	**-24%**	**-30%**	**-31%**	**-37%**	4%	**-40%**	0%	0%	5%	1%
Long Term												
Full Simulation Period[b]	**-9%**	**-9%**	**-7%**	**-8%**	**14%**	-2%	**7%**	**-16%**	**-16%**	**8%**	**8%**	**5%**
Water Year Types[c]												
Wet (23%)	-5%	-4%	0%	-2%	**35%**	**8%**	1%	4%	**-19%**	**19%**	**19%**	**13%**
Above Normal (24%)	**-11%**	**-14%**	**-10%**	**-7%**	-3%	**-6%**	**10%**	**-12%**	**-14%**	0%	0%	-1%
Below Normal (10%)	**-7%**	**-13%**	**-13%**	**-9%**	**19%**	-5%	**13%**	**-17%**	**-25%**	-1%	0%	-2%
Dry (16%)	**-7%**	**-9%**	**-10%**	**-15%**	-1%	**-19%**	**17%**	**-30%**	**-10%**	0%	0%	-1%
Critical (27%)	**-13%**	**-12%**	**-13%**	**-20%**	**-13%**	**-27%**	**10%**	**-39%**	-1%	2%	**5%**	2%

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

b Based on the 82-year simulation period.

c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.