1 Appendix 6B, Section B

Surface Water Temperature Modeling Results

4 This appendix provides information about the methods and assumptions used for 5 the Coordinated Long-Term Operation of the Central Valley Project (CVP) and 6 State Water Project (SWP) Environmental Impact Statement (EIS) analysis on 7 surface water temperature. The appendix is organized into three sections that are 8 briefly described below: 9 Appendix 6B, Section A: Surface Water Temperature Modeling Methodology, • 10 Simulations, and Assumptions 11 The water quality impacts analysis uses the HEC-5Q and Reclamation 12 Monthly Temperature models to assess and quantify effects of the alternatives on the environment. This section provides information about 13 14 the overall analytical framework linkages with other models. 15 - This section provides a brief description of the assumptions for the surface water temperature model simulations of the No Action Alternative, 16 17 Second Basis of Comparison, and other alternatives. 18 • Appendix 6B, Section B: Surface Water Temperature Modeling Results 19 This section provides model outputs and a description of the model _ 20 simulation output formats used in the analysis and interpretation of 21 modeling results for the alternatives impact assessment. 22 Appendix 6B, Section C: HEC-5Q Model Update for Surface Water 23 **Temperature Modeling** 24 This section provides a detailed description of the compilation and updates of the HEC-5Q models performed during development of the EIS for the 25 Trinity-Sacramento, American, and Stanislaus Rivers. 26

27 6B.B.1 Introduction

28 This section provides surface water temperature model (HEC-5Q and

29 Reclamation Temperature Model) simulation results for alternatives evaluated for

30 the EIS. The sections provided for each parameter include figures and tables in

31 various formats to provide the reader with tools for multiple ways of analysis.

32 The different types of presentations are explained as follows:

• **Probability of Exceedance Plots:** Probability of exceedance plots provide the

- 34 frequency of occurrence of values of a parameter that exceed a reference
- 35 value. For this appendix, the calculation of exceedance probability is done by
- 36 ranking the data. For example, for Shasta storage end-of-September
- 37 exceedance plot, Shasta storage values at the end of September for each

1 simulated year are sorted in ascending order. The smallest value would have a

- 2 probability of exceedance of 100 percent since all other values would be
- 3 greater than that value; and the largest value would have a probability of
- 4 exceedance of 0 percent. All of the values are plotted with probability of
- 5 exceedance on the x-axis and the value of the parameter on the y-axis.
- 6 Following the same example, if for one scenario, Shasta Lake end-of-
- 7 September storage of 2,000 thousand acre-feet (TAF) corresponds to
- 8 80 percent probability, it implies that Shasta end-of-September storage is
- 9 higher than 2,000 TAF in 80 percent of the years under the simulated conditions.
- 10
- 11 Long-Term Average Summary and Year-Type-Based Statistics Summary 12 Tables: These tables provide parameter values for each 10 o increment of

13 exceedance probability (rows) for each month (columns) as well as long-term and year-type averages (using the Sacramento Valley 40-30-30 Index 14

- developed by the State Water Resources Control Board for projected climate 15
- at Year 2030) for each month. For a few parameters, such as Delta outflow, 16
- annual total or average values are added to the tables (for volume and rates, 17
- 18 respectively).
- 19 All plots and tables are prepared to accommodate following comparisons:
- 20 No Action Alternative (with climate change and sea-level rise at Year 2030) • 21 compared to the Second Basis of Comparison (with climate change and 22 sea-level rise at Year 2030)
- 23 • Alternatives (with climate change and sea-level rise at Year 2030) compared to the No Action Alternative 24
- 25 Alternatives (with climate change and sea-level rise at Year 2030) compared to the Second Basis of Comparison 26

27 6B.B.1.1 Appropriate Use of Model Results

- The physical models developed and applied in the EIS analysis are generalized 28
- 29 and simplified representations of a complex water resources system. A brief
- 30 description of the appropriate use of the model results to compare two scenarios
- or to compare against threshold values or standards is presented below. 31

32 6B.B.1.1.1 Absolute vs. Relative Use of the Model Results

- 33 The models are not predictive models (in how they are applied in this project),
- and therefore the results cannot be considered as absolute with and within a 34
- quantifiable confidence interval. The model results are only useful in a 35
- comparative analysis and can only serve as an indicator of condition (e.g., 36
- 37 compliance with a standard) and of trend (e.g., generalized impacts).

38 6B.B.1.2 Appropriate Reporting Time-Step

- Due to the assumptions involved in the input data sets and model logic, care must 39
- be taken to select the most appropriate time-step for the reporting of model 40
- 41 results. Sub-monthly (e.g., weekly or daily) reporting of model results is

- 1 inappropriate for all models and the results should be presented on a monthly
- 2 basis.

3 6B.B.1.3 Statistical Comparisons Are Preferred

4 Absolute differences computed at a point in time between model results from an

5 alternative and a baseline to evaluate impacts is an inappropriate use of model

6 results (e.g., computing differences between the results from a baseline and an

7 alternative for a particular day or month and year within the period of record of

8 simulation). Likewise computing absolute differences between an alternative

9 (or a baseline) and a specific threshold value or standard is an inappropriate use of

10 model results. Statistics computed based on the absolute differences at a point in

11 time (e.g., average of monthly differences) are an inappropriate use of model

12 results. By computing the absolute differences in this way, disregards the changes

- 13 in antecedent conditions between individual scenarios and distorts the evaluation
- 14 of impacts of a specific action.

15 Reporting seasonal patterns from long-term averages and water year-type

16 averages is appropriate. Statistics computed based on long-term and water

17 year-type averages are an appropriate use of model results. Computing

18 differences between long-term or water year type averages of model results from

19 two scenarios are appropriate. Care should be taken to use the appropriate water

20 year type for presenting water year-type average statistics of model results

21 (e.g., D1641 Sacramento River 40-30-30 index or San Joaquin River 60-20-20

22 index based on climate modifications). For this study, water year-types are based

23 on the projected climate and hydrology at Year 2030.

24 The most appropriate presentation of monthly and annual model results is in the

25 form of probability distributions and comparisons of probability distributions

26 (e.g., cumulative probabilities). If necessary, comparisons of model results

against threshold or standard values should be limited to comparisons based on

28 cumulative probability distributions.

29 **6B.B.2 Results**

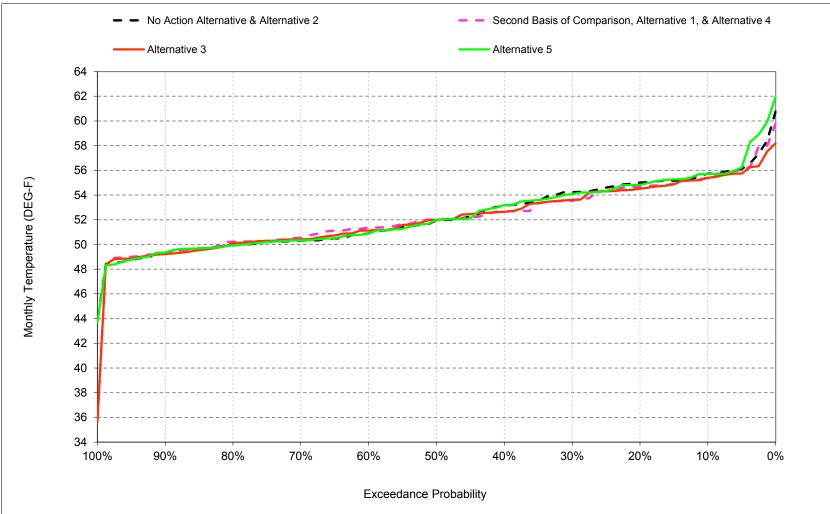
30 The results are presented in the following figures.

- B.1. Trinity River below Lewiston Temperature
- B.2. Clear Creek below Whiskeytown Temperature
- B.3. Clear Creek at Igo Temperature
- B.4. Clear Creek at Mouth Temperature
- 35 B.5. Sacramento River below Keswick Temperature
- B.6. Sacramento River at Balls Ferry Temperature
- B.7. Sacramento River at Jellys Ferry Temperature
- B.8. Sacramento River at Bend Bridge Temperature
- **39** B.9. Sacramento River at Red Bluff Temperature
- 40 B.10. Sacramento River at Hamilton City Temperature
- 41 B.11. Sacramento River at Knights Landing Temperature

- 1 B.12. American River below Nimbus Temperature
- 2 B.13. American River at Watt Avenue Temperature
- 3 B.14. American River at Mouth Temperature
- B.15. Stanislaus River below New Melones Temperature
- 5 B.16. Stanislaus River below Tulloch Temperature
- 6 B.17. Stanislaus River below Goodwin Temperature
- 7 B.18. Stanislaus River at Orange Blossom Bridge Temperature
- 8 B.19. Stanislaus River at Mouth Temperature
- 9 B.20. Feather River Low Flow Channel
- 10 B.21. Feather River at Robinson Riffle
- 11 B.22. Feather River at Gridley Bridge
- 12 B.23. Feather River at Mouth

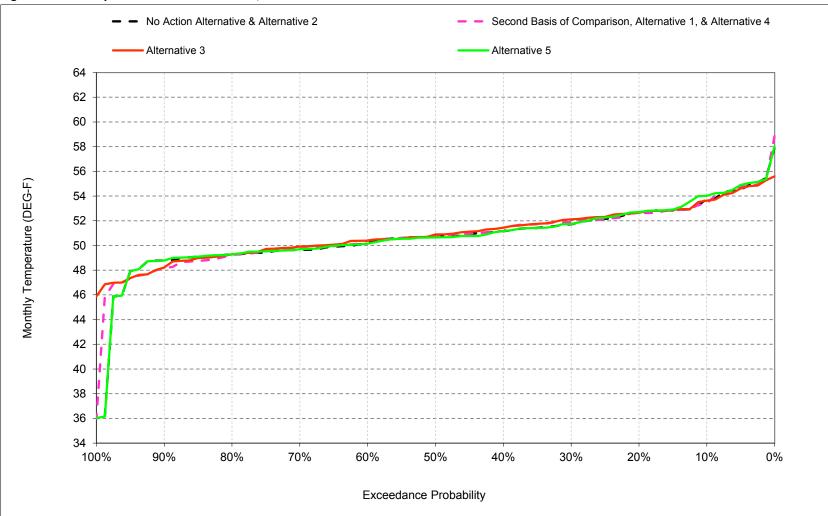
B.1. Trinity River below Lewiston Temperature

Figure B-1-1. Trinity River below Lewiston Dam, October



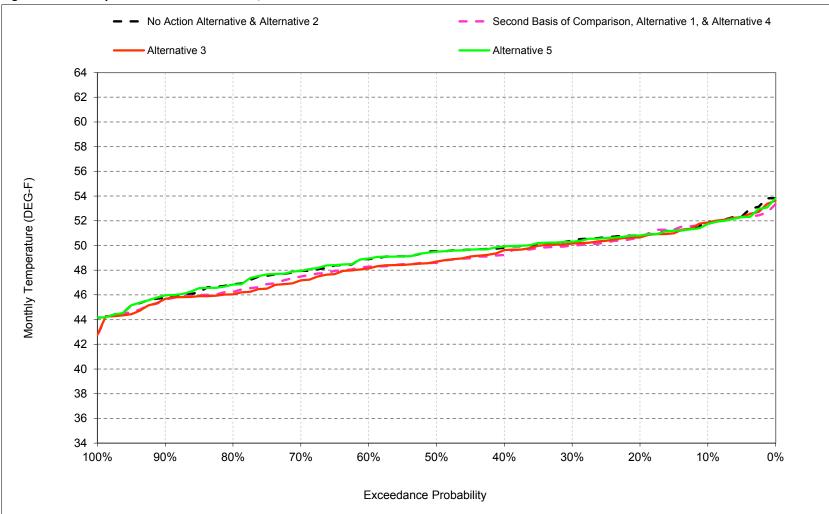
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) 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.

Figure B-1-2. Trinity River below Lewiston Dam, November



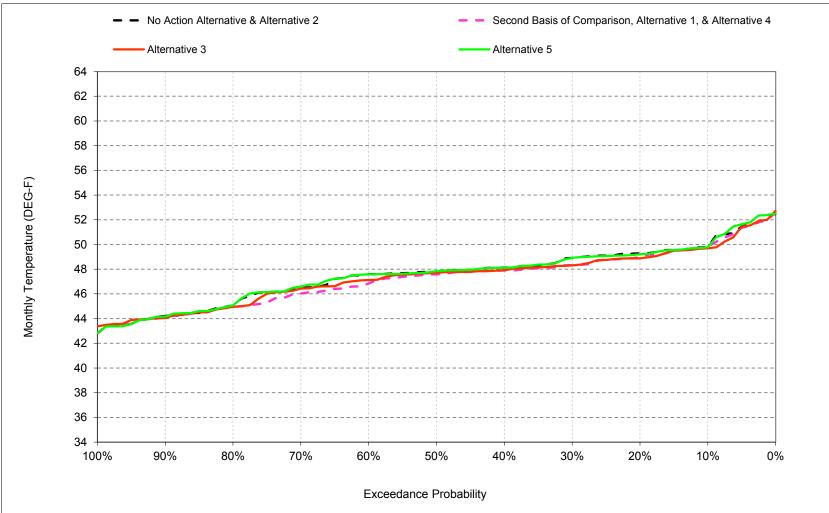
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) 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.

Figure B-1-3. Trinity River below Lewiston Dam, December



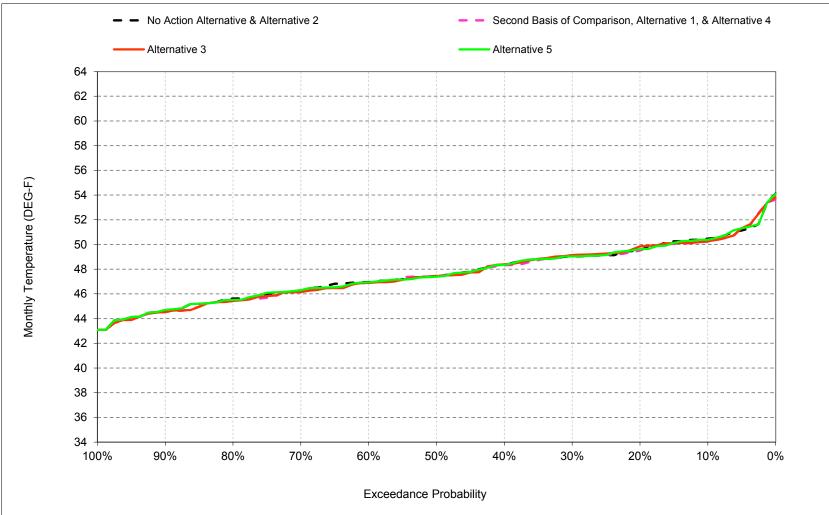
Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) 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.

Figure B-1-4. Trinity River below Lewiston Dam, January



Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) 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.

Figure B-1-5. Trinity River below Lewiston Dam, February



Notes: 1) Exceedance probability is defined as the probability a given value will be exceeded in any one year. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternatives 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) 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.

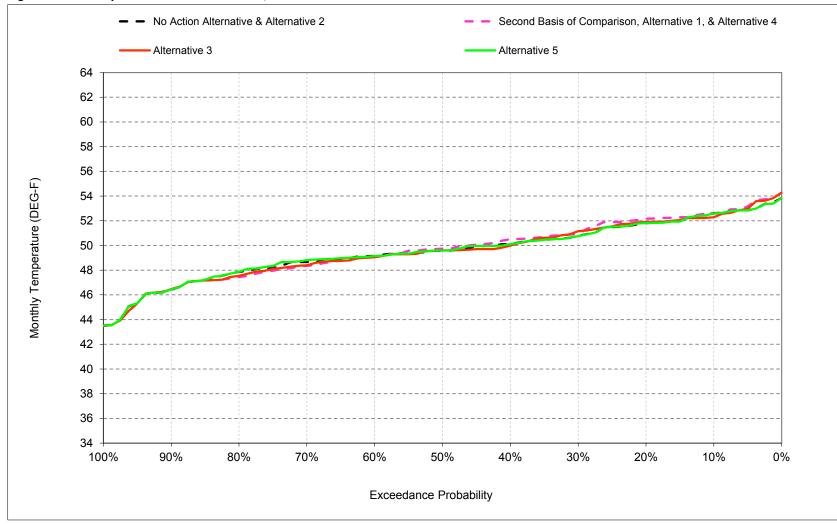


Figure B-1-6. Trinity River below Lewiston Dam, March

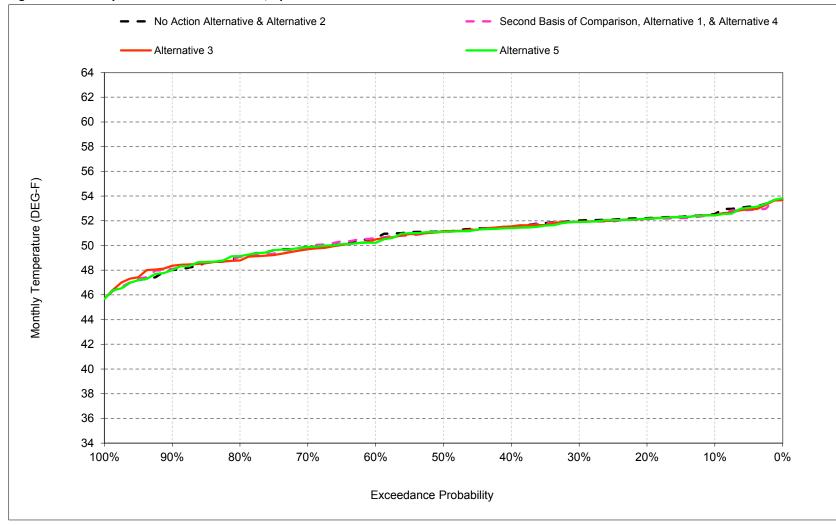


Figure B-1-7. Trinity River below Lewiston Dam, April

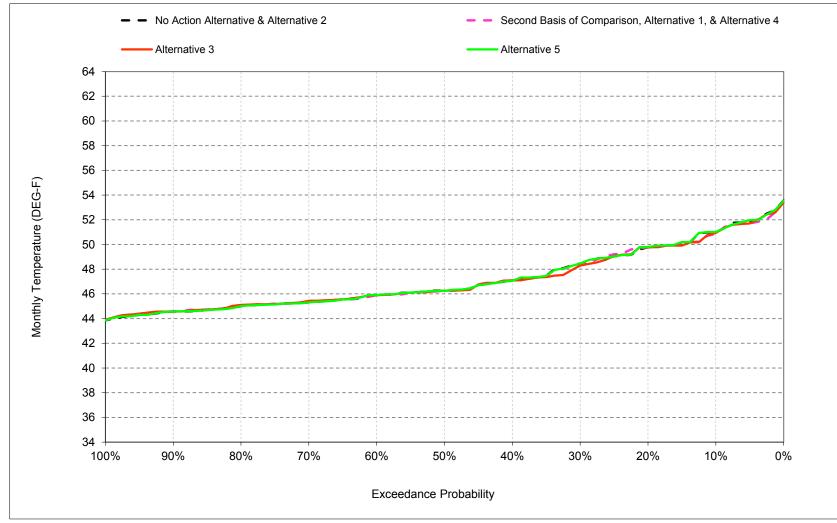


Figure B-1-8. Trinity River below Lewiston Dam, May

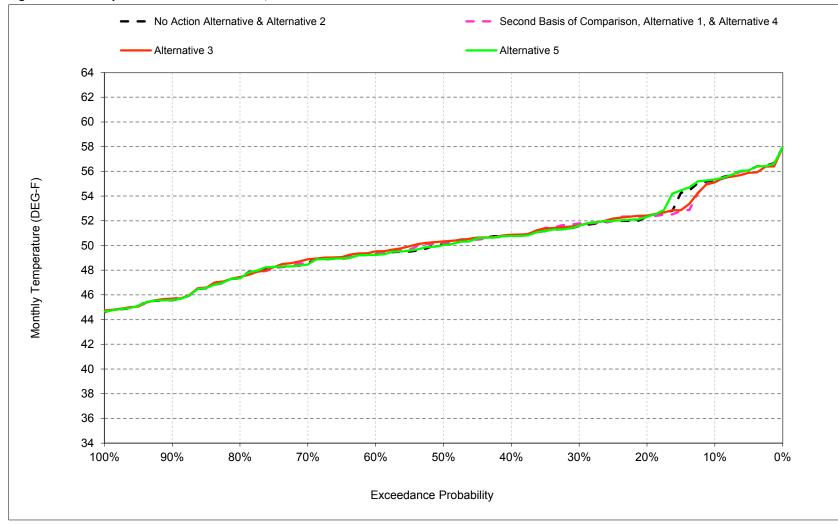


Figure B-1-9. Trinity River below Lewiston Dam, June

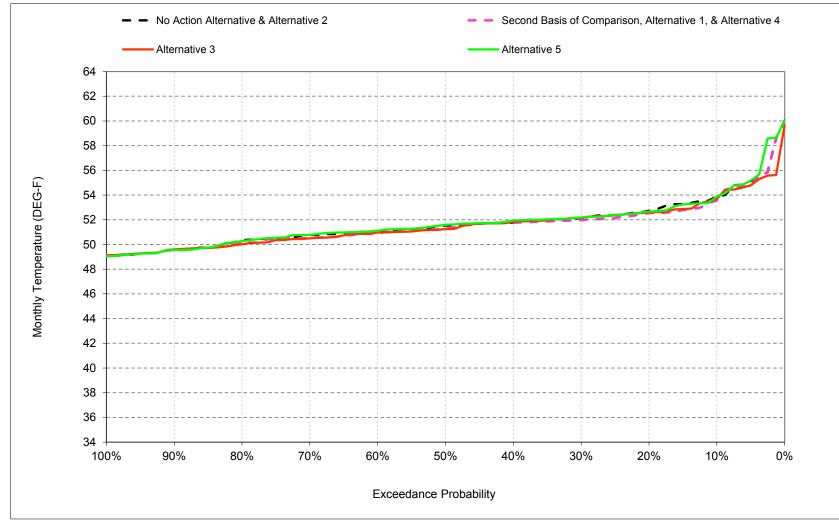


Figure B-1-10. Trinity River below Lewiston Dam, July

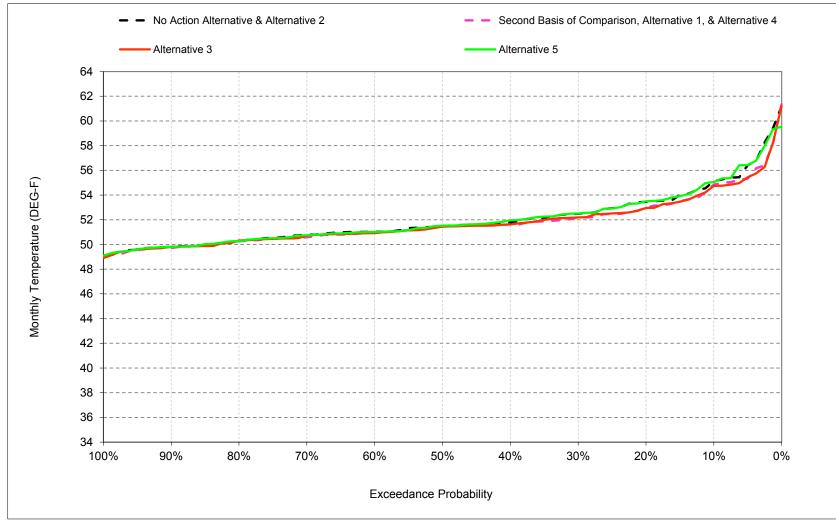


Figure B-1-11. Trinity River below Lewiston Dam, August

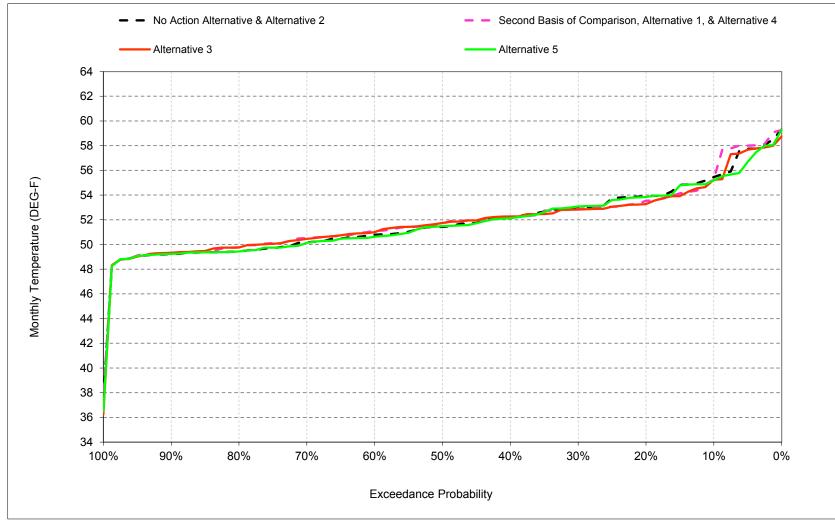


Figure B-1-12. Trinity River below Lewiston Dam, September

Table B-1-1. Trinity River below Lewiston Dam, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 54 | 52 | 50 | 50 | 53 | 53 | 51 | 55 | 54 | 55 | 55 |
| 20% | 55 | 53 | 51 | 49 | 49 | 52 | 52 | 50 | 52 | 53 | 53 | 54 |
| 30% | 54 | 52 | 50 | 49 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| 40% | 53 | 51 | 50 | 48 | 48 | 50 | 51 | 47 | 51 | 52 | 52 | 52 |
| 50% | 52 | 51 | 50 | 48 | 47 | 50 | 51 | 46 | 50 | 52 | 51 | 51 |
| 60% | 51 | 50 | 49 | 48 | 47 | 49 | 51 | 46 | 49 | 51 | 51 | 51 |
| 70% | 50 | 50 | 48 | 46 | 46 | 49 | 50 | 45 | 48 | 51 | 51 | 50 |
| 80% | 50 | 49 | 47 | 45 | 46 | 48 | 49 | 45 | 47 | 50 | 50 | 49 |
| 90% | 49 | 49 | 46 | 44 | 45 | 46 | 48 | 45 | 46 | 50 | 50 | 49 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 47 | 48 | 49 | 51 | 47 | 50 | 52 | 52 | 52 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 46 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 50 |
| Above Normal (16%) | 53 | 51 | 49 | 47 | 46 | 49 | 50 | 45 | 48 | 51 | 50 | 50 |
| Below Normal (13%) | 51 | 51 | 50 | 48 | 48 | 50 | 52 | 47 | 50 | 51 | 52 | 53 |
| Dry (24%) | 52 | 51 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 53 | 53 |
| Critical (15%) | 55 | 50 | 51 | 49 | 49 | 51 | 52 | 50 | 55 | 55 | 56 | 55 |

Alternative 1

| | | | | | Mon | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 55 | 53 | 52 | 50 | 50 | 53 | 52 | 51 | 55 | 54 | 55 | 55 |
| 20% | 55 | 53 | 51 | 49 | 49 | 52 | 52 | 50 | 52 | 53 | 53 | 53 |
| 30% | 54 | 52 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| 40% | 53 | 51 | 49 | 48 | 48 | 50 | 52 | 47 | 51 | 52 | 52 | 52 |
| 50% | 52 | 51 | 49 | 48 | 47 | 50 | 51 | 46 | 50 | 51 | 51 | 52 |
| 60% | 51 | 50 | 48 | 47 | 47 | 49 | 51 | 46 | 49 | 51 | 51 | 51 |
| 70% | 51 | 50 | 47 | 46 | 46 | 48 | 50 | 45 | 49 | 51 | 51 | 50 |
| 80% | 50 | 49 | 46 | 45 | 45 | 47 | 49 | 45 | 47 | 50 | 50 | 50 |
| 90% | 49 | 48 | 46 | 44 | 44 | 46 | 48 | 45 | 46 | 50 | 50 | 49 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 47 | 48 | 50 | 51 | 47 | 50 | 52 | 52 | 52 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 45 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 51 |
| Above Normal (16%) | 53 | 51 | 48 | 46 | 47 | 49 | 50 | 45 | 48 | 50 | 50 | 50 |
| Below Normal (13%) | 52 | 50 | 48 | 48 | 47 | 50 | 51 | 47 | 50 | 51 | 52 | 52 |
| Dry (24%) | 52 | 51 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| Critical (15%) | 55 | 52 | 51 | 49 | 50 | 52 | 52 | 50 | 55 | 55 | 55 | 55 |

Alternative 1 minus No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -0.3 | -0.4 | -0.1 | 0.1 | -0.2 | 0.0 | -0.1 | -0.2 | -0.1 | -0.3 | -0.3 | -0.2 |
| 0.2 | -0.3 | -0.1 | -0.2 | -0.3 | 0.0 | 0.4 | -0.1 | 0.0 | 0.1 | -0.2 | -0.5 | -0.4 |
| 0.3 | -0.7 | 0.2 | -0.4 | -0.6 | 0.1 | 0.2 | -0.1 | 0.0 | 0.2 | -0.2 | -0.3 | 0.0 |
| 0.4 | -0.4 | 0.0 | -0.6 | -0.2 | -0.1 | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | -0.2 | 0.0 |
| 0.5 | 0.1 | -0.1 | -0.9 | -0.2 | 0.0 | 0.1 | -0.1 | 0.0 | 0.1 | -0.2 | 0.0 | 0.2 |
| 0.6 | 0.5 | 0.2 | -0.6 | -0.8 | -0.1 | -0.1 | 0.0 | -0.1 | 0.1 | -0.2 | -0.1 | 0.3 |
| 0.7 | 0.2 | 0.1 | -0.5 | -0.5 | 0.0 | -0.4 | 0.0 | 0.0 | 0.1 | -0.2 | -0.2 | 0.3 |
| 0.8 | 0.3 | 0.0 | -0.6 | -0.1 | -0.2 | -0.4 | 0.0 | 0.1 | 0.0 | -0.1 | -0.1 | 0.3 |
| 0.9 | 0.0 | -0.6 | -0.1 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | 0.1 | -0.4 | -0.3 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 | 0.1 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | -0.1 | -0.4 | -0.2 | -0.2 | -0.1 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | 0.6 |
| Above Normal (16%) | -0.2 | -0.7 | -0.6 | -0.9 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | -0.2 | -0.3 | -0.3 |
| Below Normal (13%) | 0.3 | -0.8 | -1.5 | -0.5 | -0.4 | 0.1 | -0.5 | 0.1 | 0.1 | -0.3 | -0.2 | -0.4 |
| Dry (24%) | -0.4 | 0.0 | -0.1 | -0.1 | -0.1 | 0.3 | -0.1 | 0.0 | 0.1 | -0.1 | -0.1 | -0.2 |
| Critical (15%) | -0.2 | 2.4 | 0.2 | 0.0 | 0.3 | 0.1 | 0.0 | -0.2 | -0.4 | -0.2 | -0.7 | 0.3 |

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.

Table B-1-2. Trinity River below Lewiston Dam, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 54 | 52 | 50 | 50 | 53 | 53 | 51 | 55 | 54 | 55 | 55 |
| 20% | 55 | 53 | 51 | 49 | 49 | 52 | 52 | 50 | 52 | 53 | 53 | 54 |
| 30% | 54 | 52 | 50 | 49 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| 40% | 53 | 51 | 50 | 48 | 48 | 50 | 51 | 47 | 51 | 52 | 52 | 52 |
| 50% | 52 | 51 | 50 | 48 | 47 | 50 | 51 | 46 | 50 | 52 | 51 | 51 |
| 60% | 51 | 50 | 49 | 48 | 47 | 49 | 51 | 46 | 49 | 51 | 51 | 51 |
| 70% | 50 | 50 | 48 | 46 | 46 | 49 | 50 | 45 | 48 | 51 | 51 | 50 |
| 80% | 50 | 49 | 47 | 45 | 46 | 48 | 49 | 45 | 47 | 50 | 50 | 49 |
| 90% | 49 | 49 | 46 | 44 | 45 | 46 | 48 | 45 | 46 | 50 | 50 | 49 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 47 | 48 | 49 | 51 | 47 | 50 | 52 | 52 | 52 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 46 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 50 |
| Above Normal (16%) | 53 | 51 | 49 | 47 | 46 | 49 | 50 | 45 | 48 | 51 | 50 | 50 |
| Below Normal (13%) | 51 | 51 | 50 | 48 | 48 | 50 | 52 | 47 | 50 | 51 | 52 | 53 |
| Dry (24%) | 52 | 51 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 53 | 53 |
| Critical (15%) | 55 | 50 | 51 | 49 | 49 | 51 | 52 | 50 | 55 | 55 | 56 | 55 |

Alternative 3

| | | | | | Mont | thly Temper | ature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 55 | 54 | 52 | 50 | 50 | 52 | 52 | 51 | 55 | 54 | 55 | 55 |
| 20% | 55 | 53 | 51 | 49 | 50 | 52 | 52 | 50 | 52 | 53 | 53 | 53 |
| 30% | 54 | 52 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| 40% | 53 | 51 | 50 | 48 | 48 | 50 | 52 | 47 | 51 | 52 | 52 | 52 |
| 50% | 52 | 51 | 49 | 48 | 47 | 50 | 51 | 46 | 50 | 51 | 51 | 52 |
| 60% | 51 | 50 | 48 | 47 | 47 | 49 | 50 | 46 | 49 | 51 | 51 | 51 |
| 70% | 50 | 50 | 47 | 46 | 46 | 48 | 50 | 45 | 49 | 50 | 51 | 50 |
| 80% | 50 | 49 | 46 | 45 | 45 | 47 | 49 | 45 | 47 | 50 | 50 | 50 |
| 90% | 49 | 48 | 46 | 44 | 44 | 46 | 48 | 45 | 46 | 50 | 50 | 49 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 47 | 48 | 49 | 51 | 47 | 50 | 52 | 52 | 52 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 45 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 51 |
| Above Normal (16%) | 53 | 51 | 48 | 46 | 46 | 49 | 50 | 45 | 48 | 50 | 50 | 50 |
| Below Normal (13%) | 51 | 50 | 48 | 48 | 47 | 50 | 51 | 47 | 50 | 51 | 52 | 52 |
| Dry (24%) | 52 | 51 | 49 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| Critical (15%) | 55 | 53 | 51 | 49 | 50 | 52 | 52 | 50 | 55 | 54 | 55 | 54 |

Alternative 3 minus No Action Alternative

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -0.3 | -0.2 | -0.1 | -0.1 | -0.2 | -0.3 | -0.1 | -0.1 | -0.2 | -0.2 | -0.4 | -0.3 |
| 0.2 | -0.5 | 0.0 | -0.2 | -0.4 | 0.3 | 0.1 | -0.1 | 0.0 | 0.1 | -0.1 | -0.5 | -0.6 |
| 0.3 | -0.6 | 0.4 | -0.2 | -0.6 | 0.1 | 0.4 | -0.1 | -0.2 | 0.1 | 0.0 | -0.3 | -0.1 |
| 0.4 | -0.5 | 0.3 | -0.2 | -0.2 | 0.0 | -0.2 | 0.0 | 0.1 | 0.1 | 0.0 | -0.2 | 0.1 |
| 0.5 | 0.0 | 0.1 | -0.8 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | -0.3 | -0.1 | 0.3 |
| 0.6 | 0.2 | 0.2 | -0.8 | -0.4 | -0.1 | -0.1 | -0.2 | 0.0 | 0.2 | -0.1 | -0.1 | 0.2 |
| 0.7 | 0.1 | 0.3 | -0.8 | -0.2 | 0.0 | -0.3 | -0.2 | 0.0 | 0.3 | -0.3 | -0.2 | 0.2 |
| 0.8 | 0.2 | 0.0 | -0.8 | -0.1 | -0.2 | -0.3 | -0.1 | 0.1 | 0.0 | -0.3 | -0.1 | 0.3 |
| 0.9 | -0.1 | -0.6 | -0.1 | -0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 0.1 | 0.0 | -0.1 | 0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.2 | 0.3 | -0.4 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | -0.2 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | -0.1 | -0.4 | -0.1 | -0.2 | -0.1 | 0.2 | 0.0 | 0.0 | 0.0 | -0.1 | 0.6 |
| Above Normal (16%) | 0.0 | -0.4 | -0.6 | -0.7 | 0.0 | -0.1 | 0.0 | 0.1 | 0.3 | -0.2 | -0.1 | -0.2 |
| Below Normal (13%) | 0.1 | -0.7 | -1.5 | -0.6 | -0.5 | 0.1 | -0.6 | 0.1 | 0.1 | 0.0 | -0.2 | -0.5 |
| Dry (24%) | -0.4 | 0.0 | -0.3 | 0.0 | -0.1 | 0.0 | -0.1 | -0.1 | 0.2 | -0.2 | -0.2 | -0.2 |
| Critical (15%) | -0.8 | 3.3 | 0.3 | 0.3 | 0.6 | 0.0 | 0.0 | -0.2 | -0.4 | -0.5 | -0.8 | -0.3 |

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.

Table B-1-3. Trinity River below Lewiston Dam, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 54 | 52 | 50 | 50 | 53 | 53 | 51 | 55 | 54 | 55 | 55 |
| 20% | 55 | 53 | 51 | 49 | 49 | 52 | 52 | 50 | 52 | 53 | 53 | 54 |
| 30% | 54 | 52 | 50 | 49 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| 40% | 53 | 51 | 50 | 48 | 48 | 50 | 51 | 47 | 51 | 52 | 52 | 52 |
| 50% | 52 | 51 | 50 | 48 | 47 | 50 | 51 | 46 | 50 | 52 | 51 | 51 |
| 60% | 51 | 50 | 49 | 48 | 47 | 49 | 51 | 46 | 49 | 51 | 51 | 51 |
| 70% | 50 | 50 | 48 | 46 | 46 | 49 | 50 | 45 | 48 | 51 | 51 | 50 |
| 80% | 50 | 49 | 47 | 45 | 46 | 48 | 49 | 45 | 47 | 50 | 50 | 49 |
| 90% | 49 | 49 | 46 | 44 | 45 | 46 | 48 | 45 | 46 | 50 | 50 | 49 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 47 | 48 | 49 | 51 | 47 | 50 | 52 | 52 | 52 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 46 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 50 |
| Above Normal (16%) | 53 | 51 | 49 | 47 | 46 | 49 | 50 | 45 | 48 | 51 | 50 | 50 |
| Below Normal (13%) | 51 | 51 | 50 | 48 | 48 | 50 | 52 | 47 | 50 | 51 | 52 | 53 |
| Dry (24%) | 52 | 51 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 53 | 53 |
| Critical (15%) | 55 | 50 | 51 | 49 | 49 | 51 | 52 | 50 | 55 | 55 | 56 | 55 |

Alternative 5

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 54 | 52 | 50 | 50 | 53 | 52 | 51 | 55 | 54 | 55 | 55 |
| 20% | 55 | 53 | 51 | 49 | 50 | 52 | 52 | 50 | 52 | 53 | 53 | 54 |
| 30% | 54 | 52 | 50 | 49 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| 40% | 53 | 51 | 50 | 48 | 48 | 50 | 51 | 47 | 51 | 52 | 52 | 52 |
| 50% | 52 | 51 | 49 | 48 | 47 | 50 | 51 | 46 | 50 | 52 | 51 | 51 |
| 60% | 51 | 50 | 49 | 48 | 47 | 49 | 50 | 46 | 49 | 51 | 51 | 51 |
| 70% | 50 | 50 | 48 | 47 | 46 | 49 | 50 | 45 | 48 | 51 | 51 | 50 |
| 80% | 50 | 49 | 47 | 45 | 46 | 48 | 49 | 45 | 47 | 50 | 50 | 49 |
| 90% | 49 | 49 | 46 | 44 | 45 | 46 | 48 | 45 | 46 | 50 | 50 | 49 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 48 | 48 | 50 | 51 | 47 | 50 | 52 | 52 | 52 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 46 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 50 |
| Above Normal (16%) | 53 | 51 | 49 | 47 | 46 | 49 | 50 | 45 | 48 | 51 | 50 | 50 |
| Below Normal (13%) | 51 | 51 | 50 | 48 | 48 | 50 | 51 | 47 | 50 | 51 | 52 | 52 |
| Dry (24%) | 52 | 51 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 53 | 53 |
| Critical (15%) | 56 | 50 | 51 | 49 | 49 | 51 | 52 | 50 | 56 | 55 | 56 | 54 |

Alternative 5 minus No Action Alternative

| | | | | | Mon | thly Temper | ature (DEG | -F) | | | | |
|--|------|------|------|------|------|-------------|------------|-----|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.0 | 0.2 | -0.2 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.3 |
| 0.2 | -0.2 | 0.0 | 0.0 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.3 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| 0.4 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | -0.1 |
| 0.5 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 |
| 0.6 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.3 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 |
| 0.7 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.9 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 |
| Above Normal (16%) | 0.4 | 0.1 | -0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Below Normal (13%) | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.5 | 0.1 | 0.0 | 0.0 | 0.0 | -0.2 |
| Dry (24%) | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 |
| Critical (15%) | 0.3 | 0.3 | -0.1 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.2 | 0.4 | -0.1 | -0.3 |

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.

Table B-1-4. Trinity River below Lewiston Dam, Monthly Temperature

| | | | | | Mon | hly Temper | rature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|-----|------------|-------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 55 | 53 | 52 | 50 | 50 | 53 | 52 | 51 | 55 | 54 | 55 | 55 |
| 20% | 55 | 53 | 51 | 49 | 49 | 52 | 52 | 50 | 52 | 53 | 53 | 53 |
| 30% | 54 | 52 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| 40% | 53 | 51 | 49 | 48 | 48 | 50 | 52 | 47 | 51 | 52 | 52 | 52 |
| 50% | 52 | 51 | 49 | 48 | 47 | 50 | 51 | 46 | 50 | 51 | 51 | 52 |
| 60% | 51 | 50 | 48 | 47 | 47 | 49 | 51 | 46 | 49 | 51 | 51 | 51 |
| 70% | 51 | 50 | 47 | 46 | 46 | 48 | 50 | 45 | 49 | 51 | 51 | 50 |
| 80% | 50 | 49 | 46 | 45 | 45 | 47 | 49 | 45 | 47 | 50 | 50 | 50 |
| 90% | 49 | 48 | 46 | 44 | 44 | 46 | 48 | 45 | 46 | 50 | 50 | 49 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 47 | 48 | 50 | 51 | 47 | 50 | 52 | 52 | 52 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 45 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 51 |
| Above Normal (16%) | 53 | 51 | 48 | 46 | 47 | 49 | 50 | 45 | 48 | 50 | 50 | 50 |
| Below Normal (13%) | 52 | 50 | 48 | 48 | 47 | 50 | 51 | 47 | 50 | 51 | 52 | 52 |
| Dry (24%) | 52 | 51 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| Critical (15%) | 55 | 52 | 51 | 49 | 50 | 52 | 52 | 50 | 55 | 55 | 55 | 55 |

Second Basis of Comparison

No Action Alternative

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 54 | 52 | 50 | 50 | 53 | 53 | 51 | 55 | 54 | 55 | 55 |
| 20% | 55 | 53 | 51 | 49 | 49 | 52 | 52 | 50 | 52 | 53 | 53 | 54 |
| 30% | 54 | 52 | 50 | 49 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| 40% | 53 | 51 | 50 | 48 | 48 | 50 | 51 | 47 | 51 | 52 | 52 | 52 |
| 50% | 52 | 51 | 50 | 48 | 47 | 50 | 51 | 46 | 50 | 52 | 51 | 51 |
| 60% | 51 | 50 | 49 | 48 | 47 | 49 | 51 | 46 | 49 | 51 | 51 | 51 |
| 70% | 50 | 50 | 48 | 46 | 46 | 49 | 50 | 45 | 48 | 51 | 51 | 50 |
| 80% | 50 | 49 | 47 | 45 | 46 | 48 | 49 | 45 | 47 | 50 | 50 | 49 |
| 90% | 49 | 49 | 46 | 44 | 45 | 46 | 48 | 45 | 46 | 50 | 50 | 49 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 47 | 48 | 49 | 51 | 47 | 50 | 52 | 52 | 52 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 46 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 50 |
| Above Normal (16%) | 53 | 51 | 49 | 47 | 46 | 49 | 50 | 45 | 48 | 51 | 50 | 50 |
| Below Normal (13%) | 51 | 51 | 50 | 48 | 48 | 50 | 52 | 47 | 50 | 51 | 52 | 53 |
| Dry (24%) | 52 | 51 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 53 | 53 |
| Critical (15%) | 55 | 50 | 51 | 49 | 49 | 51 | 52 | 50 | 55 | 55 | 56 | 55 |

No Action Alternative minus Second Basis of Comparison

| | | | | | Mon | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|-----|-----|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.3 | 0.4 | 0.1 | -0.1 | 0.2 | 0.0 | 0.1 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 |
| 0.2 | 0.3 | 0.1 | 0.2 | 0.3 | 0.0 | -0.4 | 0.1 | 0.0 | -0.1 | 0.2 | 0.5 | 0.4 |
| 0.3 | 0.7 | -0.2 | 0.4 | 0.6 | -0.1 | -0.2 | 0.1 | 0.0 | -0.2 | 0.2 | 0.3 | 0.0 |
| 0.4 | 0.4 | 0.0 | 0.6 | 0.2 | 0.1 | -0.3 | 0.0 | -0.1 | 0.0 | 0.0 | 0.2 | 0.0 |
| 0.5 | -0.1 | 0.1 | 0.9 | 0.2 | 0.0 | -0.1 | 0.1 | 0.0 | -0.1 | 0.2 | 0.0 | -0.2 |
| 0.6 | -0.5 | -0.2 | 0.6 | 0.8 | 0.1 | 0.1 | 0.0 | 0.1 | -0.1 | 0.2 | 0.1 | -0.3 |
| 0.7 | -0.2 | -0.1 | 0.5 | 0.5 | 0.0 | 0.4 | 0.0 | 0.0 | -0.1 | 0.2 | 0.2 | -0.3 |
| 0.8 | -0.3 | 0.0 | 0.6 | 0.1 | 0.2 | 0.4 | 0.0 | -0.1 | 0.0 | 0.1 | 0.1 | -0.3 |
| 0.9 | 0.0 | 0.6 | 0.1 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | -0.1 | 0.4 | 0.3 | 0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | -0.1 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.1 | 0.1 | 0.4 | 0.2 | 0.2 | 0.1 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | -0.6 |
| Above Normal (16%) | 0.2 | 0.7 | 0.6 | 0.9 | -0.1 | 0.0 | -0.1 | -0.1 | -0.1 | 0.2 | 0.3 | 0.3 |
| Below Normal (13%) | -0.3 | 0.8 | 1.5 | 0.5 | 0.4 | -0.1 | 0.5 | -0.1 | -0.1 | 0.3 | 0.2 | 0.4 |
| Dry (24%) | 0.4 | 0.0 | 0.1 | 0.1 | 0.1 | -0.3 | 0.1 | 0.0 | -0.1 | 0.1 | 0.1 | 0.2 |
| Critical (15%) | 0.2 | -2.4 | -0.2 | 0.0 | -0.3 | -0.1 | 0.0 | 0.2 | 0.4 | 0.2 | 0.7 | -0.3 |

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.

Table B-1-5. Trinity River below Lewiston Dam, Monthly Temperature

| Statistic | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|-------------|-------------|------|-----|-----|-----|-----|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 55 | 53 | 52 | 50 | 50 | 53 | 52 | 51 | 55 | 54 | 55 | 55 |
| 20% | 55 | 53 | 51 | 49 | 49 | 52 | 52 | 50 | 52 | 53 | 53 | 53 |
| 30% | 54 | 52 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| 40% | 53 | 51 | 49 | 48 | 48 | 50 | 52 | 47 | 51 | 52 | 52 | 52 |
| 50% | 52 | 51 | 49 | 48 | 47 | 50 | 51 | 46 | 50 | 51 | 51 | 52 |
| 60% | 51 | 50 | 48 | 47 | 47 | 49 | 51 | 46 | 49 | 51 | 51 | 51 |
| 70% | 51 | 50 | 47 | 46 | 46 | 48 | 50 | 45 | 49 | 51 | 51 | 50 |
| 80% | 50 | 49 | 46 | 45 | 45 | 47 | 49 | 45 | 47 | 50 | 50 | 50 |
| 90% | 49 | 48 | 46 | 44 | 44 | 46 | 48 | 45 | 46 | 50 | 50 | 49 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 47 | 48 | 50 | 51 | 47 | 50 | 52 | 52 | 52 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 45 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 51 |
| Above Normal (16%) | 53 | 51 | 48 | 46 | 47 | 49 | 50 | 45 | 48 | 50 | 50 | 50 |
| Below Normal (13%) | 52 | 50 | 48 | 48 | 47 | 50 | 51 | 47 | 50 | 51 | 52 | 52 |
| Dry (24%) | 52 | 51 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| Critical (15%) | 55 | 52 | 51 | 49 | 50 | 52 | 52 | 50 | 55 | 55 | 55 | 55 |

Second Basis of Comparison

Alternative 3

| Statistic | Monthly Temperature (DEG-F) | | | | | | | | | | | | |
|--|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep | |
| Probability of Exceedance ^a | | | | | | | | | | | | | |
| 10% | 55 | 54 | 52 | 50 | 50 | 52 | 52 | 51 | 55 | 54 | 55 | 55 | |
| 20% | 55 | 53 | 51 | 49 | 50 | 52 | 52 | 50 | 52 | 53 | 53 | 53 | |
| 30% | 54 | 52 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 | |
| 40% | 53 | 51 | 50 | 48 | 48 | 50 | 52 | 47 | 51 | 52 | 52 | 52 | |
| 50% | 52 | 51 | 49 | 48 | 47 | 50 | 51 | 46 | 50 | 51 | 51 | 52 | |
| 60% | 51 | 50 | 48 | 47 | 47 | 49 | 50 | 46 | 49 | 51 | 51 | 51 | |
| 70% | 50 | 50 | 47 | 46 | 46 | 48 | 50 | 45 | 49 | 50 | 51 | 50 | |
| 80% | 50 | 49 | 46 | 45 | 45 | 47 | 49 | 45 | 47 | 50 | 50 | 50 | |
| 90% | 49 | 48 | 46 | 44 | 44 | 46 | 48 | 45 | 46 | 50 | 50 | 49 | |
| Long Term | | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 47 | 48 | 49 | 51 | 47 | 50 | 52 | 52 | 52 | |
| Water Year Types ^c | | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 45 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 51 | |
| Above Normal (16%) | 53 | 51 | 48 | 46 | 46 | 49 | 50 | 45 | 48 | 50 | 50 | 50 | |
| Below Normal (13%) | 51 | 50 | 48 | 48 | 47 | 50 | 51 | 47 | 50 | 51 | 52 | 52 | |
| Dry (24%) | 52 | 51 | 49 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 | |
| Critical (15%) | 55 | 53 | 51 | 49 | 50 | 52 | 52 | 50 | 55 | 54 | 55 | 54 | |

Alternative 3 minus Second Basis of Comparison

| Statistic | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|------|-----|------|------|------|-------------|------------|------|------|------|------|------|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.0 | 0.2 | 0.1 | -0.1 | 0.0 | -0.3 | 0.0 | 0.1 | 0.0 | 0.1 | -0.1 | -0.1 |
| 0.2 | -0.1 | 0.0 | 0.0 | -0.1 | 0.3 | -0.3 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | -0.2 |
| 0.3 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | -0.2 | -0.2 | 0.2 | 0.0 | 0.0 |
| 0.4 | 0.0 | 0.3 | 0.4 | 0.0 | 0.1 | -0.5 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| 0.5 | 0.0 | 0.2 | 0.1 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | -0.1 | -0.1 | 0.0 |
| 0.6 | -0.2 | 0.0 | -0.2 | 0.4 | 0.0 | -0.1 | -0.2 | 0.1 | 0.1 | 0.1 | 0.0 | -0.1 |
| 0.7 | -0.1 | 0.2 | -0.3 | 0.3 | -0.1 | 0.1 | -0.2 | 0.1 | 0.2 | -0.1 | 0.0 | -0.1 |
| 0.8 | -0.1 | 0.0 | -0.2 | 0.0 | 0.0 | 0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 |
| 0.9 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | 0.2 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Above Normal (16%) | 0.2 | 0.3 | 0.1 | 0.2 | -0.1 | -0.2 | -0.1 | 0.0 | 0.2 | -0.1 | 0.1 | 0.0 |
| Below Normal (13%) | -0.2 | 0.1 | 0.0 | -0.2 | 0.0 | 0.0 | -0.2 | 0.0 | 0.0 | 0.3 | 0.0 | -0.1 |
| Dry (24%) | -0.1 | 0.0 | -0.1 | 0.1 | 0.0 | -0.3 | 0.0 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Critical (15%) | -0.6 | 0.8 | 0.1 | 0.3 | 0.3 | -0.1 | 0.0 | 0.0 | -0.1 | -0.4 | -0.1 | -0.6 |

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.

Table B-1-6. Trinity River below Lewiston Dam, Monthly Temperature

| Statistic | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|-------------|-------------|------|-----|-----|-----|-----|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 55 | 53 | 52 | 50 | 50 | 53 | 52 | 51 | 55 | 54 | 55 | 55 |
| 20% | 55 | 53 | 51 | 49 | 49 | 52 | 52 | 50 | 52 | 53 | 53 | 53 |
| 30% | 54 | 52 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| 40% | 53 | 51 | 49 | 48 | 48 | 50 | 52 | 47 | 51 | 52 | 52 | 52 |
| 50% | 52 | 51 | 49 | 48 | 47 | 50 | 51 | 46 | 50 | 51 | 51 | 52 |
| 60% | 51 | 50 | 48 | 47 | 47 | 49 | 51 | 46 | 49 | 51 | 51 | 51 |
| 70% | 51 | 50 | 47 | 46 | 46 | 48 | 50 | 45 | 49 | 51 | 51 | 50 |
| 80% | 50 | 49 | 46 | 45 | 45 | 47 | 49 | 45 | 47 | 50 | 50 | 50 |
| 90% | 49 | 48 | 46 | 44 | 44 | 46 | 48 | 45 | 46 | 50 | 50 | 49 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 47 | 48 | 50 | 51 | 47 | 50 | 52 | 52 | 52 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 45 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 51 |
| Above Normal (16%) | 53 | 51 | 48 | 46 | 47 | 49 | 50 | 45 | 48 | 50 | 50 | 50 |
| Below Normal (13%) | 52 | 50 | 48 | 48 | 47 | 50 | 51 | 47 | 50 | 51 | 52 | 52 |
| Dry (24%) | 52 | 51 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 |
| Critical (15%) | 55 | 52 | 51 | 49 | 50 | 52 | 52 | 50 | 55 | 55 | 55 | 55 |

Second Basis of Comparison

Alternative 5

| Statistic | Monthly Temperature (DEG-F) | | | | | | | | | | | | |
|--|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep | |
| Probability of Exceedance ^a | | | | | | | | | | | | | |
| 10% | 56 | 54 | 52 | 50 | 50 | 53 | 52 | 51 | 55 | 54 | 55 | 55 | |
| 20% | 55 | 53 | 51 | 49 | 50 | 52 | 52 | 50 | 52 | 53 | 53 | 54 | |
| 30% | 54 | 52 | 50 | 49 | 49 | 51 | 52 | 48 | 52 | 52 | 52 | 53 | |
| 40% | 53 | 51 | 50 | 48 | 48 | 50 | 51 | 47 | 51 | 52 | 52 | 52 | |
| 50% | 52 | 51 | 49 | 48 | 47 | 50 | 51 | 46 | 50 | 52 | 51 | 51 | |
| 60% | 51 | 50 | 49 | 48 | 47 | 49 | 50 | 46 | 49 | 51 | 51 | 51 | |
| 70% | 50 | 50 | 48 | 47 | 46 | 49 | 50 | 45 | 48 | 51 | 51 | 50 | |
| 80% | 50 | 49 | 47 | 45 | 46 | 48 | 49 | 45 | 47 | 50 | 50 | 49 | |
| 90% | 49 | 49 | 46 | 44 | 45 | 46 | 48 | 45 | 46 | 50 | 50 | 49 | |
| Long Term | | | | | | | | | | | | | |
| Full Simulation Period ^b | 52 | 51 | 49 | 48 | 48 | 50 | 51 | 47 | 50 | 52 | 52 | 52 | |
| Water Year Types ^c | | | | | | | | | | | | | |
| Wet (32%) | 49 | 48 | 46 | 46 | 46 | 48 | 49 | 46 | 48 | 51 | 51 | 50 | |
| Above Normal (16%) | 53 | 51 | 49 | 47 | 46 | 49 | 50 | 45 | 48 | 51 | 50 | 50 | |
| Below Normal (13%) | 51 | 51 | 50 | 48 | 48 | 50 | 51 | 47 | 50 | 51 | 52 | 52 | |
| Dry (24%) | 52 | 51 | 50 | 48 | 49 | 51 | 52 | 48 | 52 | 52 | 53 | 53 | |
| Critical (15%) | 56 | 50 | 51 | 49 | 49 | 51 | 52 | 50 | 56 | 55 | 56 | 54 | |

Alternative 5 minus Second Basis of Comparison

| Statistic | | | | | Mont | thly Temper | rature (DEG | -F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|-----|-----|------|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.3 | 0.6 | 0.0 | -0.1 | 0.2 | 0.0 | 0.0 | 0.2 | 0.2 | 0.3 | 0.3 | -0.1 |
| 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | -0.3 | 0.0 | 0.0 | -0.1 | 0.1 | 0.5 | 0.3 |
| 0.3 | 0.6 | -0.2 | 0.3 | 0.6 | -0.1 | -0.2 | 0.0 | 0.0 | -0.2 | 0.2 | 0.3 | 0.2 |
| 0.4 | 0.5 | 0.0 | 0.7 | 0.2 | 0.1 | -0.4 | -0.1 | -0.1 | 0.0 | 0.1 | 0.3 | -0.1 |
| 0.5 | 0.0 | 0.0 | 0.9 | 0.2 | 0.0 | -0.1 | 0.0 | 0.0 | -0.2 | 0.2 | 0.1 | -0.2 |
| 0.6 | -0.5 | -0.2 | 0.6 | 0.9 | 0.1 | 0.0 | -0.3 | 0.1 | -0.2 | 0.2 | 0.1 | -0.5 |
| 0.7 | -0.2 | 0.0 | 0.5 | 0.5 | 0.0 | 0.4 | 0.0 | 0.0 | -0.1 | 0.2 | 0.2 | -0.3 |
| 0.8 | -0.3 | 0.0 | 0.6 | 0.1 | 0.1 | 0.4 | 0.2 | -0.1 | 0.0 | 0.1 | 0.1 | -0.3 |
| 0.9 | 0.1 | 0.6 | 0.3 | 0.1 | 0.1 | 0.0 | -0.2 | 0.0 | -0.1 | 0.0 | 0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.2 | -0.1 | 0.4 | 0.3 | 0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | -0.2 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.1 | 0.4 | 0.2 | 0.2 | 0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | -0.7 |
| Above Normal (16%) | 0.6 | 0.8 | 0.5 | 1.0 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | 0.2 | 0.3 | 0.2 |
| Below Normal (13%) | -0.3 | 0.8 | 1.5 | 0.5 | 0.3 | -0.1 | 0.0 | 0.0 | -0.1 | 0.3 | 0.2 | 0.2 |
| Dry (24%) | 0.3 | 0.0 | 0.2 | 0.2 | 0.1 | -0.3 | 0.1 | 0.0 | -0.2 | 0.2 | 0.1 | 0.2 |
| Critical (15%) | 0.5 | -2.2 | -0.3 | 0.0 | -0.3 | -0.1 | -0.1 | 0.2 | 0.5 | 0.5 | 0.6 | -0.7 |

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.

B.2. Clear Creek below Whiskeytown Temperature

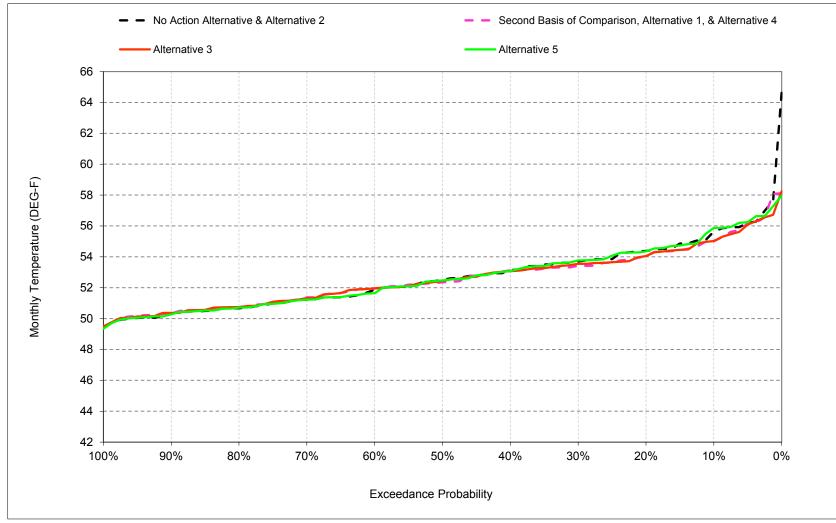


Figure B-2-1. Clear Creek below Whiskeytown, October

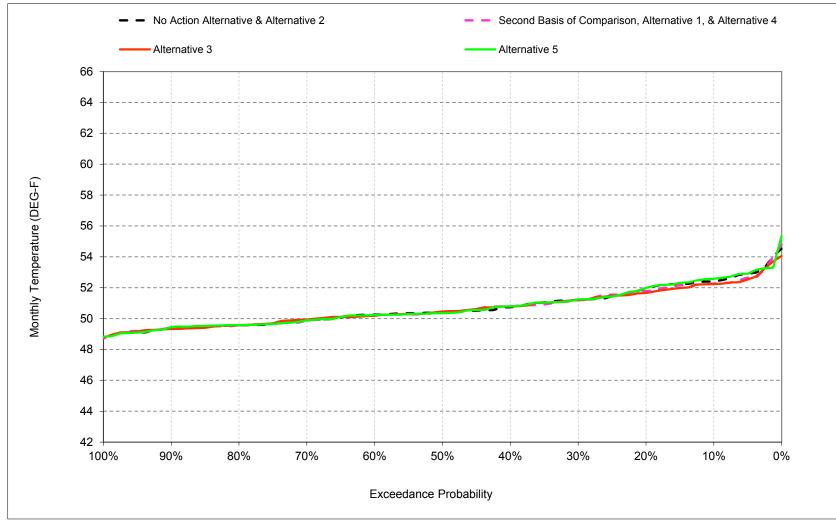


Figure B-2-2. Clear Creek below Whiskeytown, November

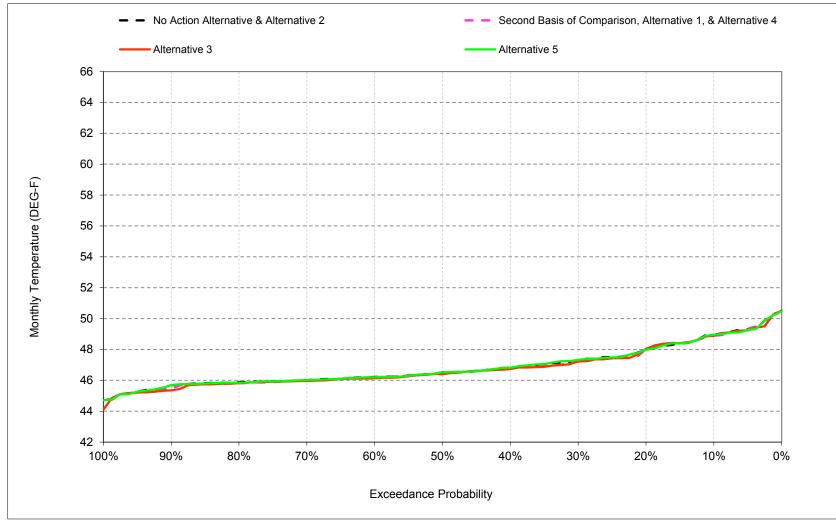


Figure B-2-3. Clear Creek below Whiskeytown, December

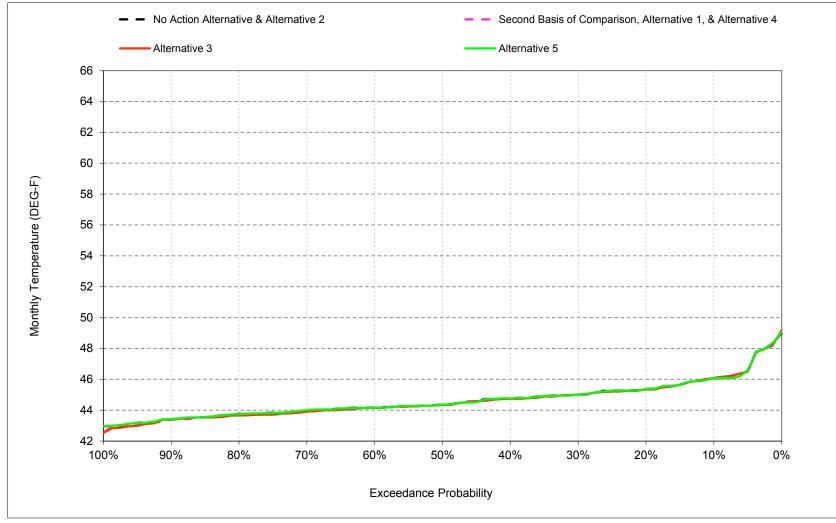


Figure B-2-4. Clear Creek below Whiskeytown, January

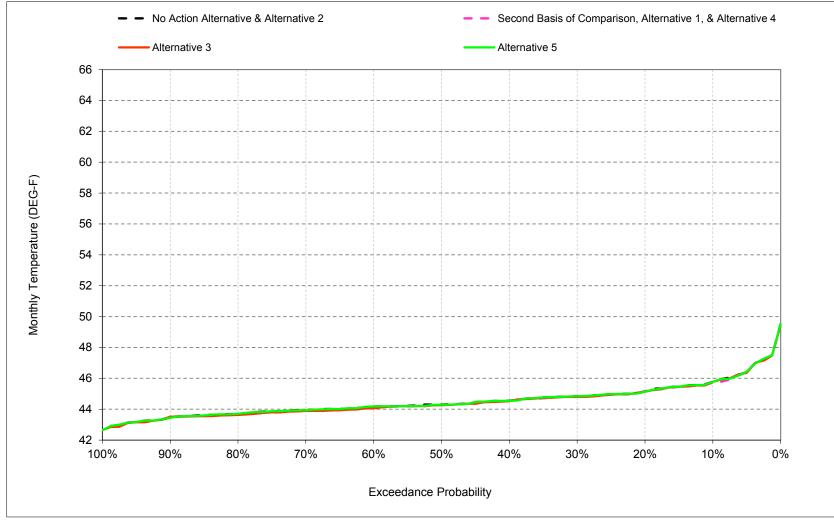


Figure B-2-5. Clear Creek below Whiskeytown, February

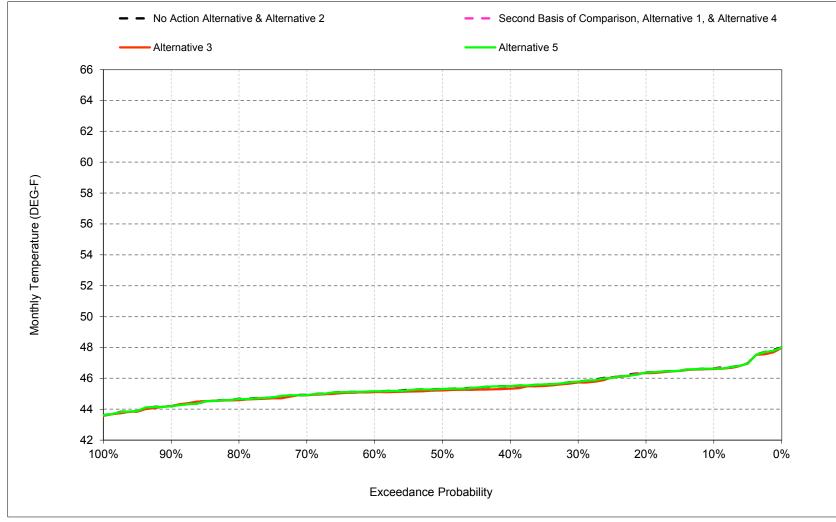


Figure B-2-6. Clear Creek below Whiskeytown, March

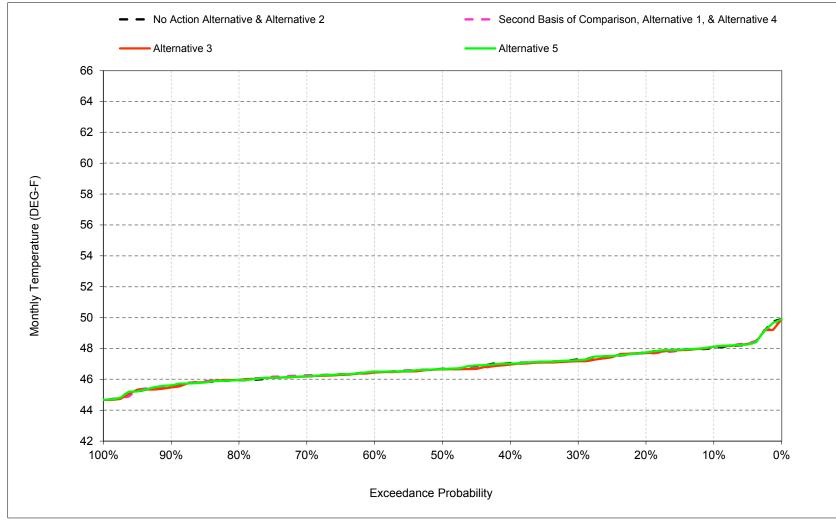


Figure B-2-7. Clear Creek below Whiskeytown, April

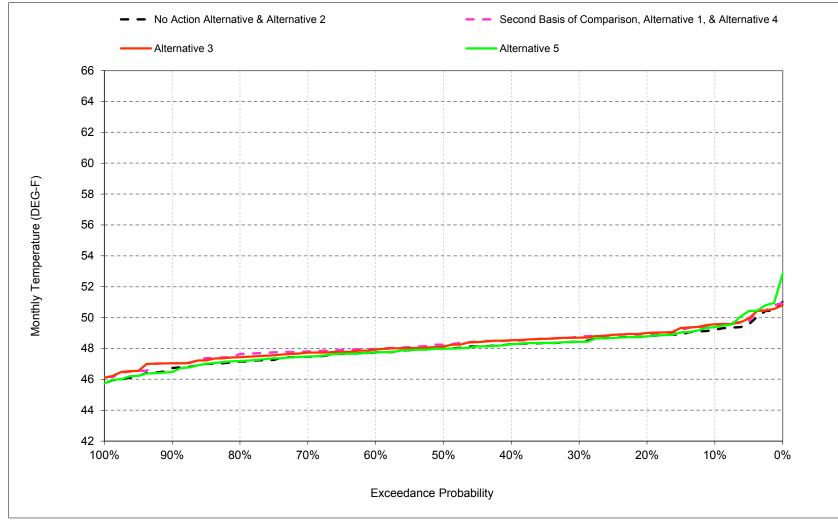


Figure B-2-8. Clear Creek below Whiskeytown, May

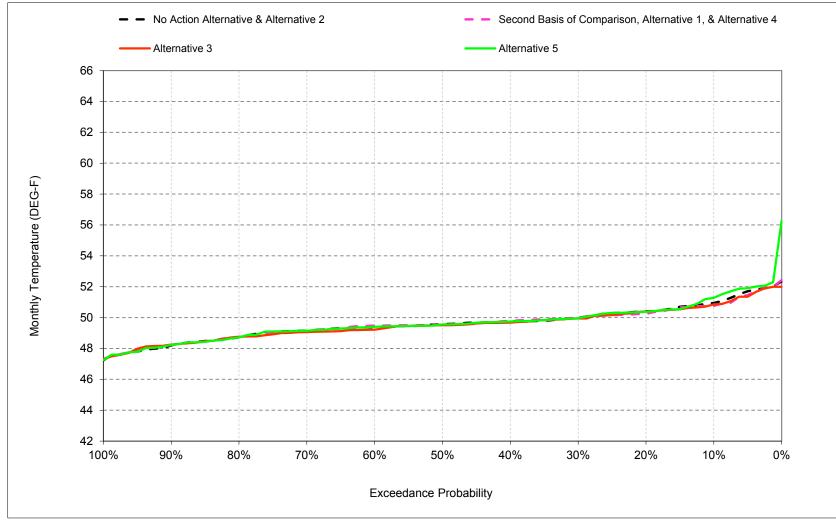


Figure B-2-9. Clear Creek below Whiskeytown, June

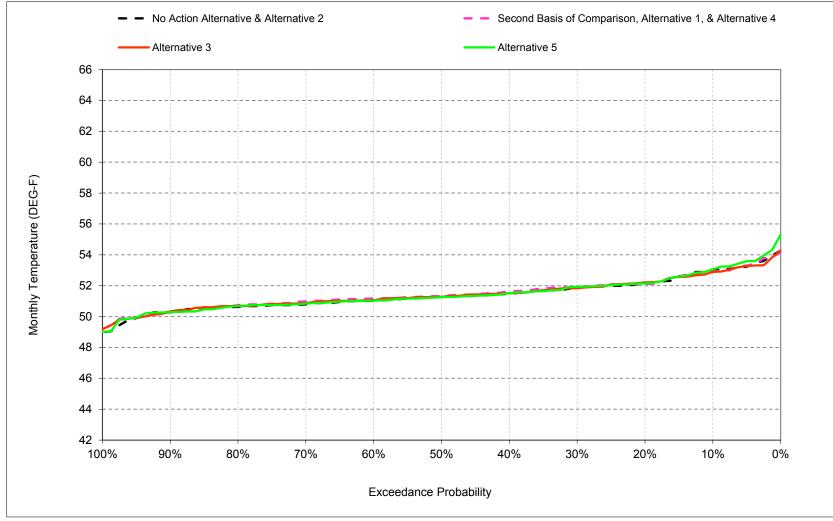


Figure B-2-10. Clear Creek below Whiskeytown, July

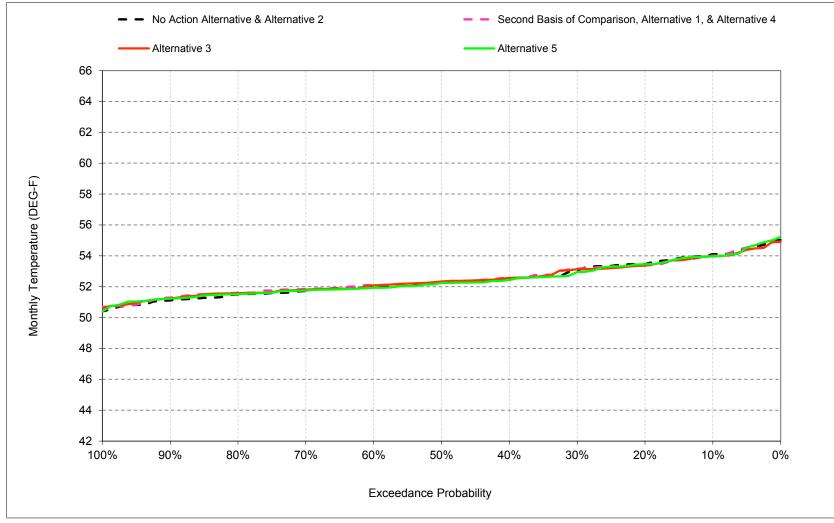


Figure B-2-11. Clear Creek below Whiskeytown, August

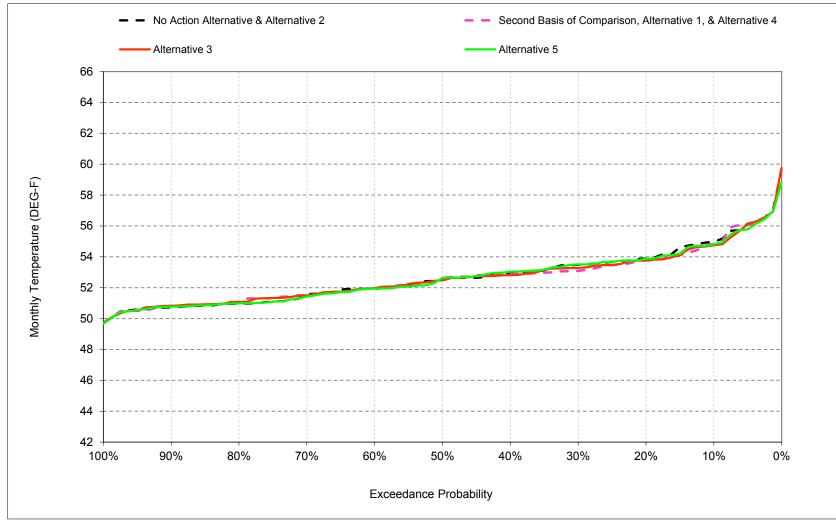


Figure B-2-12. Clear Creek below Whiskeytown, September

Table B-2-1. Clear Creek below Whiskeytown, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 52 | 49 | 46 | 46 | 47 | 48 | 49 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 54 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 53 | 53 |
| 50% | 53 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 52 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 51 | 51 |
| 90% | 50 | 49 | 46 | 43 | 43 | 44 | 45 | 47 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 49 | 51 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| Critical (15%) | 55 | 52 | 48 | 46 | 46 | 46 | 48 | 49 | 50 | 52 | 54 | 56 |

Alternative 1

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 55 | 52 | 49 | 46 | 46 | 47 | 48 | 50 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 52 | 53 | 53 |
| 50% | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 90% | 50 | 49 | 45 | 43 | 43 | 44 | 45 | 47 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 49 | 52 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| Critical (15%) | 55 | 52 | 48 | 46 | 45 | 46 | 48 | 49 | 50 | 52 | 54 | 56 |

Alternative 1 minus No Action Alternative

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -0.6 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | -0.2 | -0.1 | -0.1 | -0.1 |
| 0.2 | -0.3 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.2 | -0.2 | 0.0 | -0.1 | -0.1 |
| 0.3 | -0.3 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.3 | 0.0 | 0.0 | 0.1 | -0.4 |
| 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -0.2 | -0.1 | 0.2 | 0.0 | 0.1 | 0.0 | -0.1 |
| 0.5 | -0.2 | 0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 |
| 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 |
| 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.1 | 0.3 | -0.1 | 0.2 | 0.1 | 0.1 |
| 0.8 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.1 | 0.1 | 0.1 | 0.2 |
| 0.9 | 0.0 | -0.1 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.1 | -0.1 | 0.2 | 0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.1 | 0.1 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.1 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.3 | 0.0 | 0.1 | 0.1 | 0.1 |
| Above Normal (16%) | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | -0.1 |
| Below Normal (13%) | -0.1 | 0.0 | -0.2 | 0.0 | 0.0 | -0.1 | -0.1 | 0.4 | 0.2 | 0.2 | 0.1 | 0.0 |
| Dry (24%) | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | -0.1 | 0.0 | 0.0 | -0.2 |
| Critical (15%) | -0.3 | -0.1 | -0.1 | 0.0 | -0.1 | -0.1 | -0.1 | 0.1 | 0.0 | 0.1 | 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.

Table B-2-2. Clear Creek below Whiskeytown, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | ature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 52 | 49 | 46 | 46 | 47 | 48 | 49 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 54 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 53 | 53 |
| 50% | 53 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 52 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 51 | 51 |
| 90% | 50 | 49 | 46 | 43 | 43 | 44 | 45 | 47 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 49 | 51 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| Critical (15%) | 55 | 52 | 48 | 46 | 46 | 46 | 48 | 49 | 50 | 52 | 54 | 56 |

Alternative 3

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 55 | 52 | 49 | 46 | 46 | 47 | 48 | 50 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 54 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 49 | 50 | 51 | 53 | 53 |
| 50% | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 49 | 51 | 52 | 52 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 90% | 50 | 49 | 45 | 43 | 43 | 44 | 45 | 47 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 49 | 52 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 49 | 52 | 53 | 53 |
| Critical (15%) | 54 | 52 | 48 | 46 | 45 | 46 | 48 | 49 | 50 | 52 | 54 | 56 |

Alternative 3 minus No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -0.6 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | -0.1 | -0.1 | -0.1 | -0.2 |
| 0.2 | -0.3 | -0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.1 | -0.1 | -0.1 |
| 0.3 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.3 | 0.0 | 0.0 | 0.1 | -0.2 |
| 0.4 | -0.1 | 0.1 | -0.1 | 0.0 | 0.0 | -0.2 | -0.1 | 0.3 | -0.1 | 0.0 | 0.0 | -0.1 |
| 0.5 | -0.1 | 0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.1 | -0.1 | 0.0 | 0.1 | 0.0 |
| 0.6 | 0.1 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.2 | -0.2 | 0.0 | 0.1 | 0.0 |
| 0.7 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.2 | -0.1 | 0.1 | 0.1 | 0.0 |
| 0.8 | 0.1 | 0.0 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 |
| 0.9 | 0.0 | -0.1 | -0.3 | 0.0 | 0.0 | 0.0 | -0.1 | 0.5 | 0.2 | -0.1 | 0.1 | 0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.3 | -0.1 | 0.0 | 0.0 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.1 | -0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.3 | 0.0 | 0.1 | 0.1 | 0.2 |
| Above Normal (16%) | -0.1 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.3 | -0.1 | 0.0 | 0.0 | -0.1 |
| Below Normal (13%) | 0.0 | 0.0 | -0.2 | 0.0 | -0.1 | -0.1 | -0.1 | 0.4 | 0.1 | 0.1 | 0.1 | -0.1 |
| Dry (24%) | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.2 | -0.2 | -0.1 | -0.1 | -0.2 |
| Critical (15%) | -0.4 | -0.3 | -0.2 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | 0.1 | -0.2 |

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

Table B-2-3. Clear Creek below Whiskeytown, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | ature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 52 | 49 | 46 | 46 | 47 | 48 | 49 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 54 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 53 | 53 |
| 50% | 53 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 52 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 51 | 51 |
| 90% | 50 | 49 | 46 | 43 | 43 | 44 | 45 | 47 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 49 | 51 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| Critical (15%) | 55 | 52 | 48 | 46 | 46 | 46 | 48 | 49 | 50 | 52 | 54 | 56 |

Alternative 5

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 53 | 49 | 46 | 46 | 47 | 48 | 49 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 54 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| 50% | 52 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 52 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 90% | 50 | 49 | 46 | 43 | 43 | 44 | 46 | 46 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 49 | 52 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| Critical (15%) | 55 | 52 | 48 | 46 | 46 | 46 | 48 | 49 | 51 | 52 | 53 | 56 |

Alternative 5 minus No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|-----|-----|-----|-------------|-------------|------|-----|-----|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.1 | -0.1 | -0.2 |
| 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.0 |
| 0.4 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 |
| 0.5 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.6 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.7 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.9 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.1 | 0.0 | 0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Above Normal (16%) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| Dry (24%) | -0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.3 | 0.4 | 0.2 | -0.2 | -0.3 |

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.

Table B-2-4. Clear Creek below Whiskeytown, Monthly Temperature

| | | | | | Mont | hly Temper | rature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|------------|-------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 55 | 52 | 49 | 46 | 46 | 47 | 48 | 50 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 52 | 53 | 53 |
| 50% | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 90% | 50 | 49 | 45 | 43 | 43 | 44 | 45 | 47 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 49 | 52 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| Critical (15%) | 55 | 52 | 48 | 46 | 45 | 46 | 48 | 49 | 50 | 52 | 54 | 56 |

Second Basis of Comparison

No Action Alternative

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 52 | 49 | 46 | 46 | 47 | 48 | 49 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 54 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 53 | 53 |
| 50% | 53 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 52 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 51 | 51 |
| 90% | 50 | 49 | 46 | 43 | 43 | 44 | 45 | 47 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 49 | 51 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| Critical (15%) | 55 | 52 | 48 | 46 | 46 | 46 | 48 | 49 | 50 | 52 | 54 | 56 |

No Action Alternative minus Second Basis of Comparison

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|-----|-----|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.6 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | -0.3 | 0.2 | 0.1 | 0.1 | 0.1 |
| 0.2 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.2 | 0.2 | 0.0 | 0.1 | 0.1 |
| 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | -0.3 | 0.0 | 0.0 | -0.1 | 0.4 |
| 0.4 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | -0.2 | 0.0 | -0.1 | 0.0 | 0.1 |
| 0.5 | 0.2 | -0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.2 | 0.0 | -0.1 | 0.0 | 0.0 |
| 0.6 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | -0.1 | -0.1 | -0.1 | 0.0 |
| 0.7 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | -0.3 | 0.1 | -0.2 | -0.1 | -0.1 |
| 0.8 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.4 | -0.1 | -0.1 | -0.1 | -0.2 |
| 0.9 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | -0.5 | -0.1 | 0.1 | -0.2 | -0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.3 | 0.0 | -0.1 | -0.1 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.3 | 0.0 | -0.1 | -0.1 | -0.1 |
| Above Normal (16%) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.4 | 0.0 | 0.0 | 0.0 | 0.1 |
| Below Normal (13%) | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | -0.4 | -0.2 | -0.2 | -0.1 | 0.0 |
| Dry (24%) | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.1 | 0.0 | 0.0 | 0.2 |
| Critical (15%) | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | -0.1 | 0.0 | -0.1 | -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.

Table B-2-5. Clear Creek below Whiskeytown, Monthly Temperature

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 55 | 52 | 49 | 46 | 46 | 47 | 48 | 50 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 52 | 53 | 53 |
| 50% | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 90% | 50 | 49 | 45 | 43 | 43 | 44 | 45 | 47 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 49 | 52 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| Critical (15%) | 55 | 52 | 48 | 46 | 45 | 46 | 48 | 49 | 50 | 52 | 54 | 56 |

Second Basis of Comparison

Alternative 3

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | - |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 55 | 52 | 49 | 46 | 46 | 47 | 48 | 50 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 54 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 49 | 50 | 51 | 53 | 53 |
| 50% | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 49 | 51 | 52 | 52 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 90% | 50 | 49 | 45 | 43 | 43 | 44 | 45 | 47 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 49 | 52 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 49 | 52 | 53 | 53 |
| Critical (15%) | 54 | 52 | 48 | 46 | 45 | 46 | 48 | 49 | 50 | 52 | 54 | 56 |

Alternative 3 minus Second Basis of Comparison

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|------|------|------|-----|------|-------------|------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 |
| 0.2 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 |
| 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | -0.1 | -0.1 | 0.2 |
| 0.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | -0.1 |
| 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 |
| 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.3 | -0.1 | -0.1 | 0.0 |
| 0.7 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 |
| 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 |
| 0.9 | 0.1 | -0.1 | -0.1 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 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 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| Below Normal (13%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 |
| Dry (24%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 |
| Critical (15%) | -0.1 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | -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.

Table B-2-6. Clear Creek below Whiskeytown, Monthly Temperature

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 55 | 52 | 49 | 46 | 46 | 47 | 48 | 50 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 52 | 53 | 53 |
| 50% | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 90% | 50 | 49 | 45 | 43 | 43 | 44 | 45 | 47 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 49 | 52 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| Critical (15%) | 55 | 52 | 48 | 46 | 45 | 46 | 48 | 49 | 50 | 52 | 54 | 56 |

Second Basis of Comparison

Alternative 5

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 53 | 49 | 46 | 46 | 47 | 48 | 49 | 51 | 53 | 54 | 55 |
| 20% | 54 | 52 | 48 | 45 | 45 | 46 | 48 | 49 | 50 | 52 | 53 | 54 |
| 30% | 54 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| 40% | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| 50% | 52 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 50 | 51 | 52 | 52 |
| 60% | 52 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 52 |
| 70% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 49 | 51 | 52 | 51 |
| 90% | 50 | 49 | 46 | 43 | 43 | 44 | 46 | 46 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 45 | 47 | 48 | 50 | 51 | 52 | 53 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 53 | 51 | 47 | 44 | 44 | 45 | 46 | 48 | 49 | 51 | 52 | 51 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 44 | 45 | 47 | 48 | 49 | 52 | 52 | 53 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 48 | 50 | 52 | 53 | 53 |
| Critical (15%) | 55 | 52 | 48 | 46 | 46 | 46 | 48 | 49 | 51 | 52 | 53 | 56 |

Alternative 5 minus Second Basis of Comparison

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|-----|-----|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.9 | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.2 | 0.5 | 0.1 | 0.0 | 0.0 |
| 0.2 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.2 | 0.1 | 0.0 | 0.1 | 0.1 |
| 0.3 | 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.3 | 0.0 | 0.0 | -0.3 | 0.4 |
| 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | -0.2 | 0.0 | -0.1 | -0.1 | 0.1 |
| 0.5 | 0.1 | -0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.3 | 0.0 | -0.1 | -0.1 | -0.1 |
| 0.6 | -0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.2 | -0.1 | -0.1 | -0.2 | 0.0 |
| 0.7 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | -0.1 | -0.3 | 0.1 | -0.2 | -0.1 | -0.1 |
| 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.3 | -0.1 | 0.0 | -0.1 | -0.1 |
| 0.9 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | -0.6 | 0.0 | 0.0 | -0.1 | -0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.1 | 0.0 | -0.1 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.3 | 0.1 | 0.0 | -0.1 | -0.2 |
| Above Normal (16%) | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | -0.4 | 0.0 | 0.0 | 0.0 | 0.1 |
| Below Normal (13%) | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | -0.2 | -0.1 | -0.1 | 0.0 | 0.1 |
| Dry (24%) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.1 | 0.0 | 0.0 | 0.1 |
| Critical (15%) | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.5 | 0.1 | -0.3 | -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.

B.3. Clear Creek at Igo Temperature

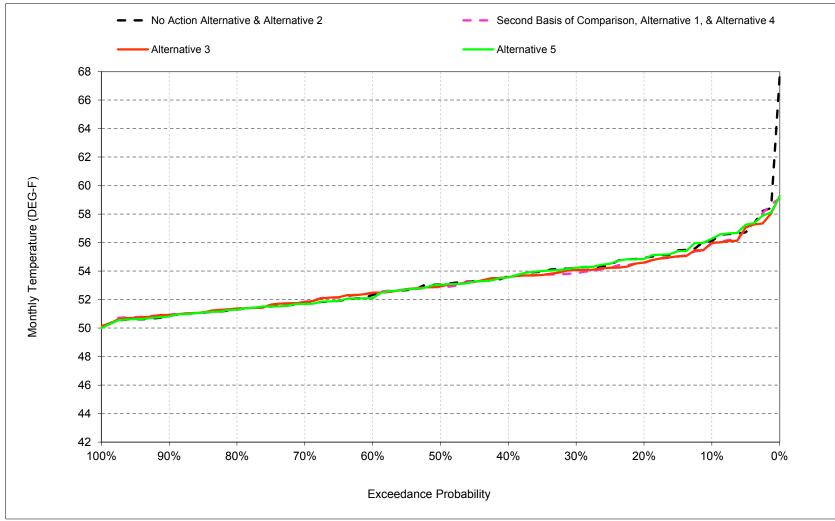


Figure B-3-1. Clear Creek at Igo, October

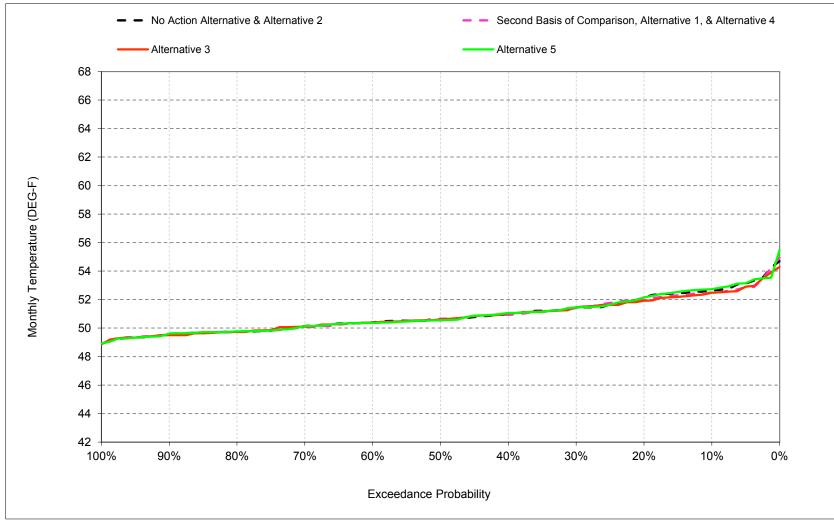


Figure B-3-2. Clear Creek at Igo, November

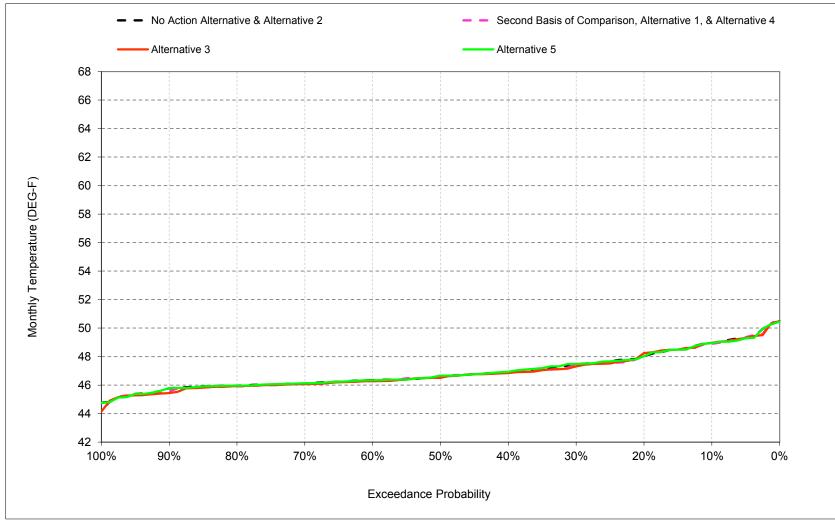


Figure B-3-3. Clear Creek at Igo, December

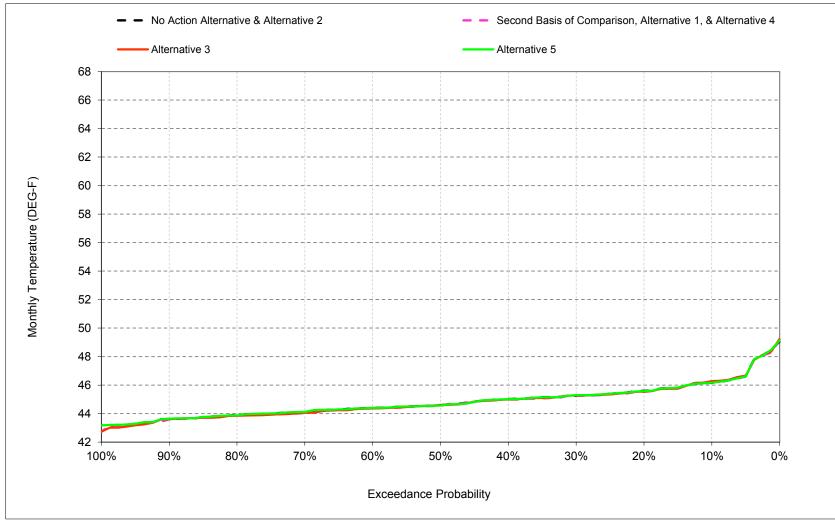


Figure B-3-4. Clear Creek at Igo, January

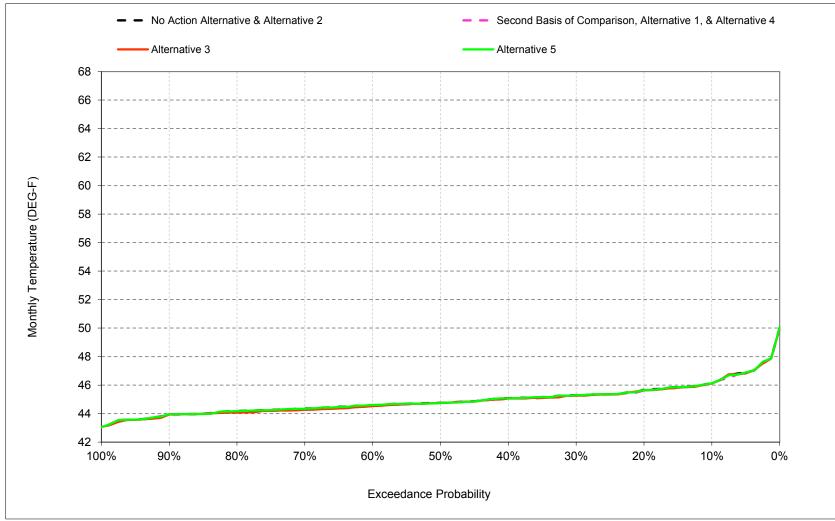


Figure B-3-5. Clear Creek at Igo, February

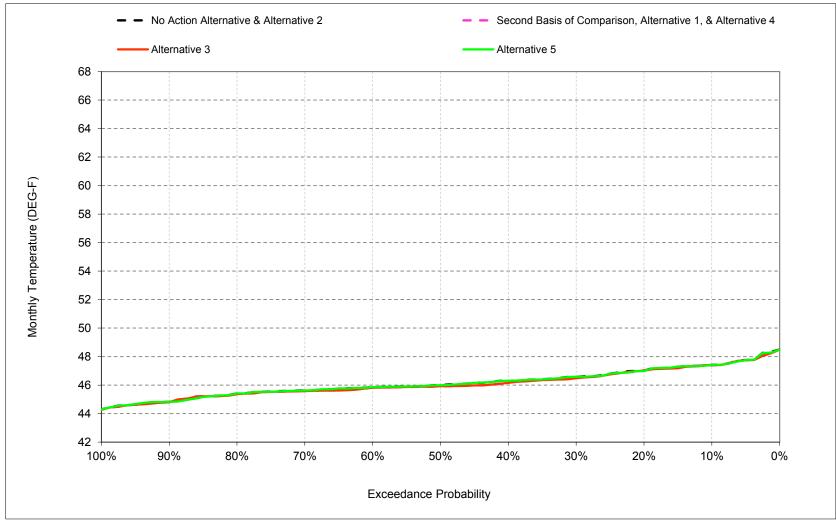


Figure B-3-6. Clear Creek at Igo, March

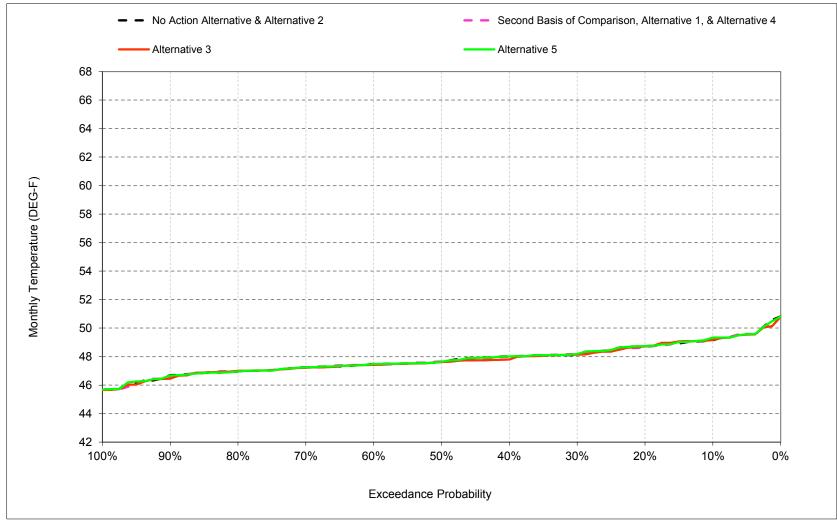


Figure B-3-7. Clear Creek at Igo, April

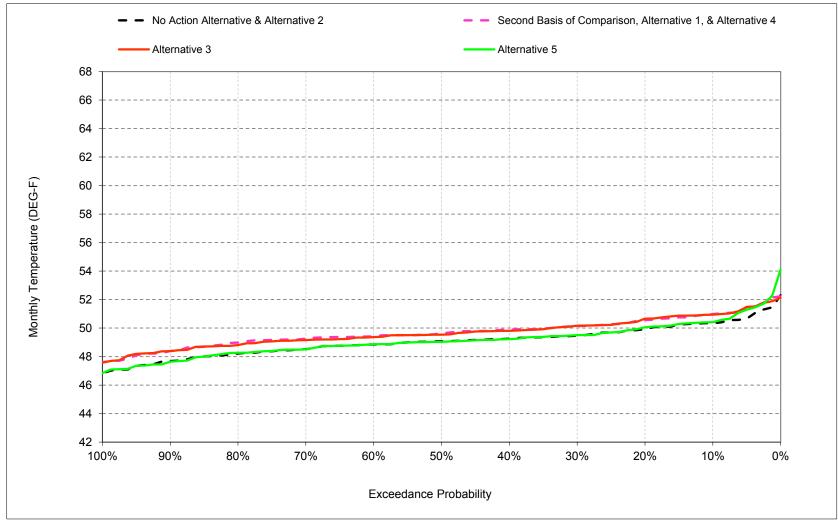


Figure B-3-8. Clear Creek at Igo, May

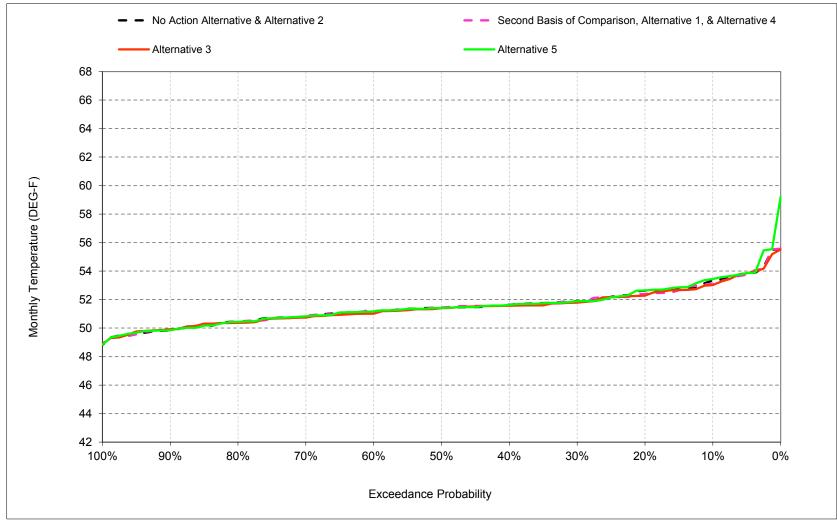


Figure B-3-9. Clear Creek at Igo, June

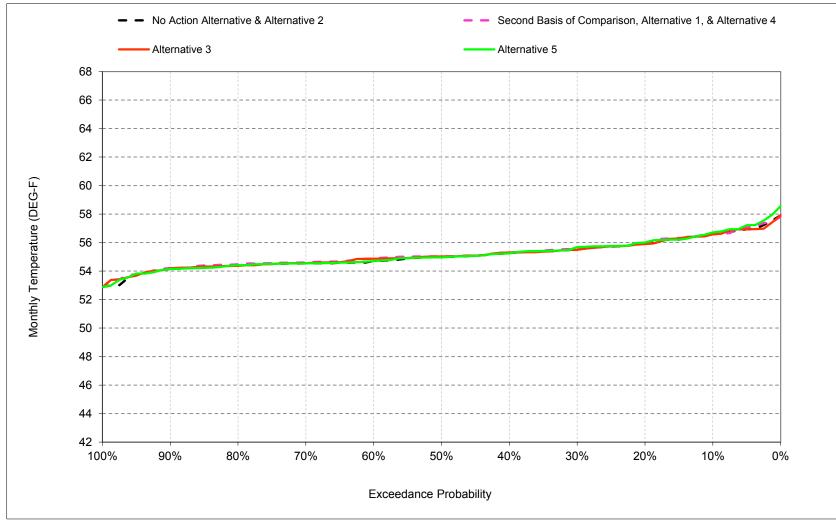


Figure B-3-10. Clear Creek at Igo, July

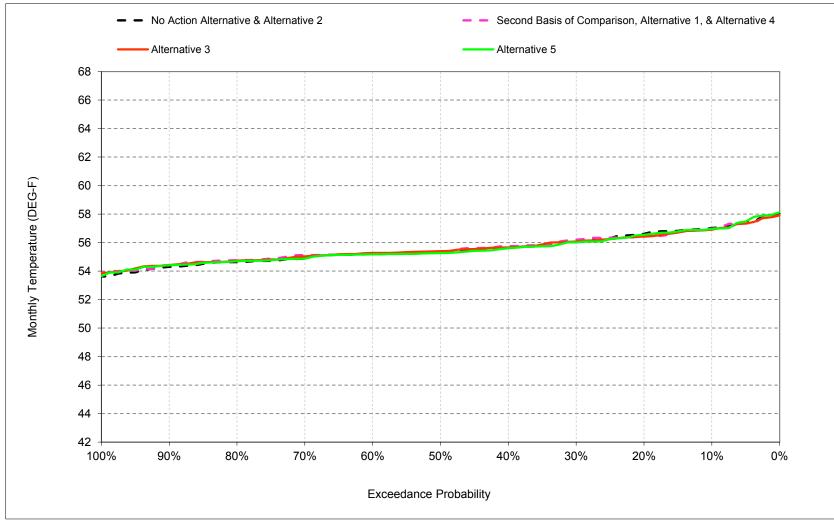


Figure B-3-11. Clear Creek at Igo, August

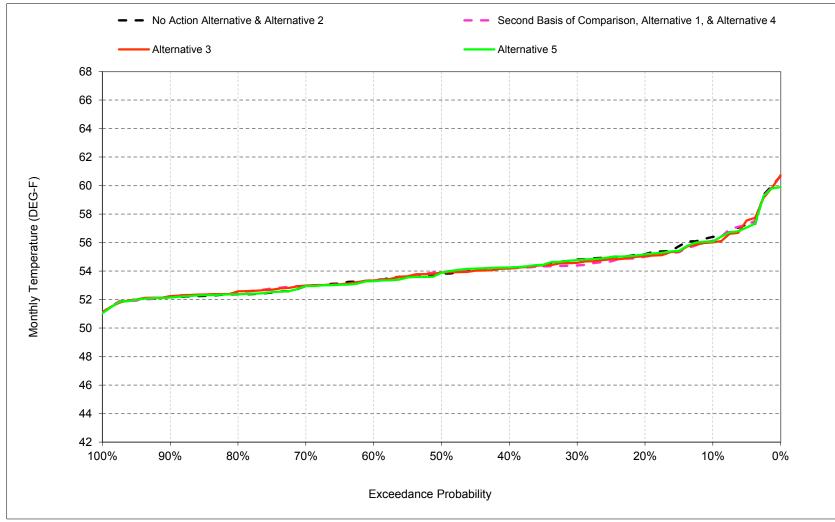


Figure B-3-12. Clear Creek at Igo, September

Table B-3-1. Clear Creek at Igo, Monthly Temperature

No Action Alternative

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 53 | 49 | 46 | 46 | 47 | 49 | 50 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 50 | 53 | 56 | 57 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 47 | 48 | 49 | 52 | 55 | 56 | 55 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 48 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 50 | 54 | 55 | 52 |
| 90% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| Dry (24%) | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 56 | 55 |
| Critical (15%) | 55 | 53 | 48 | 46 | 46 | 47 | 49 | 50 | 53 | 55 | 57 | 57 |

Alternative 1

| | | | | | Mon | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 52 | 49 | 46 | 46 | 47 | 49 | 51 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 51 | 52 | 56 | 56 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 47 | 48 | 50 | 52 | 56 | 56 | 54 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 49 | 50 | 54 | 55 | 52 |
| 90% | 51 | 50 | 46 | 43 | 44 | 45 | 46 | 48 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 50 | 51 | 55 | 55 | 54 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Critical (15%) | 55 | 53 | 48 | 46 | 46 | 47 | 49 | 51 | 53 | 56 | 57 | 57 |

Alternative 1 minus No Action Alternative

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -0.1 | -0.2 | -0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.6 | -0.2 | -0.1 | 0.0 | -0.3 |
| 0.2 | -0.4 | -0.2 | 0.2 | -0.1 | 0.0 | 0.0 | -0.1 | 0.6 | -0.2 | 0.0 | -0.2 | -0.2 |
| 0.3 | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | 0.7 | 0.0 | 0.1 | 0.1 | -0.4 |
| 0.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 | 0.6 | 0.0 | 0.1 | 0.1 | 0.0 |
| 0.5 | -0.2 | 0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.5 | 0.0 | 0.1 | 0.1 | 0.1 |
| 0.6 | 0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.6 | 0.1 | 0.2 | 0.0 | 0.0 |
| 0.7 | 0.1 | -0.1 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.7 | 0.0 | 0.1 | 0.2 | 0.0 |
| 0.8 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.1 | 0.8 | 0.0 | 0.1 | 0.1 | 0.1 |
| 0.9 | 0.1 | -0.1 | -0.2 | -0.2 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.1 | 0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.1 | 0.1 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.1 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.6 | 0.0 | 0.1 | 0.1 | 0.1 |
| Above Normal (16%) | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 0.0 | 0.0 | 0.0 | -0.1 |
| Below Normal (13%) | -0.1 | 0.0 | -0.2 | 0.0 | 0.0 | -0.1 | -0.1 | 0.8 | 0.2 | 0.1 | 0.1 | 0.0 |
| Dry (24%) | -0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | -0.1 | 0.0 | 0.0 | -0.1 |
| Critical (15%) | -0.3 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.4 | 0.0 | 0.1 | 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.

Table B-3-2. Clear Creek at Igo, Monthly Temperature

No Action Alternative

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 53 | 49 | 46 | 46 | 47 | 49 | 50 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 50 | 53 | 56 | 57 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 47 | 48 | 49 | 52 | 55 | 56 | 55 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 48 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 50 | 54 | 55 | 52 |
| 90% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| Dry (24%) | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 56 | 55 |
| Critical (15%) | 55 | 53 | 48 | 46 | 46 | 47 | 49 | 50 | 53 | 55 | 57 | 57 |

Alternative 3

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 52 | 49 | 46 | 46 | 47 | 49 | 51 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 51 | 52 | 56 | 56 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 52 | 55 | 56 | 55 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 49 | 50 | 54 | 55 | 53 |
| 90% | 51 | 49 | 45 | 44 | 44 | 45 | 46 | 48 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Critical (15%) | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 51 | 53 | 55 | 57 | 57 |

Alternative 3 minus No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -0.1 | -0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.6 | -0.3 | -0.1 | -0.1 | -0.4 |
| 0.2 | -0.3 | -0.2 | 0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.7 | -0.4 | -0.1 | -0.2 | -0.1 |
| 0.3 | -0.2 | 0.1 | -0.2 | 0.0 | 0.0 | -0.1 | 0.0 | 0.7 | -0.1 | 0.0 | 0.0 | -0.2 |
| 0.4 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -0.2 | -0.2 | 0.6 | 0.0 | 0.1 | 0.0 | -0.1 |
| 0.5 | -0.1 | 0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.5 | -0.1 | 0.0 | 0.1 | 0.1 |
| 0.6 | 0.2 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.5 | -0.1 | 0.2 | 0.1 | 0.0 |
| 0.7 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | 0.0 | 0.7 | 0.0 | 0.0 | 0.2 | 0.0 |
| 0.8 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.6 | -0.1 | 0.0 | 0.0 | 0.2 |
| 0.9 | 0.0 | -0.1 | -0.3 | 0.0 | -0.1 | 0.0 | 0.0 | 0.7 | 0.1 | 0.0 | 0.1 | 0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.2 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.6 | -0.1 | 0.0 | 0.0 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.1 | -0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.6 | 0.0 | 0.1 | 0.1 | 0.2 |
| Above Normal (16%) | -0.1 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.7 | -0.1 | 0.0 | 0.0 | -0.1 |
| Below Normal (13%) | 0.0 | 0.0 | -0.2 | 0.0 | -0.1 | -0.1 | -0.1 | 0.8 | 0.1 | 0.1 | 0.1 | -0.1 |
| Dry (24%) | -0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.6 | -0.2 | -0.1 | -0.1 | -0.1 |
| Critical (15%) | -0.4 | -0.3 | -0.2 | -0.1 | -0.1 | -0.1 | -0.1 | 0.4 | -0.1 | 0.0 | 0.1 | -0.2 |

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

Table B-3-3. Clear Creek at Igo, Monthly Temperature

No Action Alternative

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 53 | 49 | 46 | 46 | 47 | 49 | 50 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 50 | 53 | 56 | 57 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 47 | 48 | 49 | 52 | 55 | 56 | 55 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 48 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 50 | 54 | 55 | 52 |
| 90% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| Dry (24%) | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 56 | 55 |
| Critical (15%) | 55 | 53 | 48 | 46 | 46 | 47 | 49 | 50 | 53 | 55 | 57 | 57 |

Alternative 5

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 53 | 49 | 46 | 46 | 47 | 49 | 50 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 50 | 53 | 56 | 57 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 47 | 48 | 49 | 52 | 56 | 56 | 55 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 48 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 50 | 54 | 55 | 52 |
| 90% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 52 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| Dry (24%) | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 56 | 55 |
| Critical (15%) | 55 | 53 | 48 | 46 | 46 | 47 | 49 | 50 | 54 | 56 | 56 | 57 |

Alternative 5 minus No Action Alternative

| | | | | | Mont | thly Temper | rature (DEG | -F) | | | | |
|--|------|-----|-----|-----|------|-------------|-------------|------|-----|-----|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | -0.1 | -0.3 |
| 0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 0.4 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.6 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.9 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 | 0.0 | 0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Above Normal (16%) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 |
| Dry (24%) | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.3 | 0.4 | 0.2 | -0.2 | -0.2 |

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

Table B-3-4. Clear Creek at Igo, Monthly Temperature

| | | | | | Mon | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 52 | 49 | 46 | 46 | 47 | 49 | 51 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 51 | 52 | 56 | 56 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 47 | 48 | 50 | 52 | 56 | 56 | 54 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 49 | 50 | 54 | 55 | 52 |
| 90% | 51 | 50 | 46 | 43 | 44 | 45 | 46 | 48 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 50 | 51 | 55 | 55 | 54 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Critical (15%) | 55 | 53 | 48 | 46 | 46 | 47 | 49 | 51 | 53 | 56 | 57 | 57 |

Second Basis of Comparison

No Action Alternative

| | | | | | Mont | hly Temper | ature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 53 | 49 | 46 | 46 | 47 | 49 | 50 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 50 | 53 | 56 | 57 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 47 | 48 | 49 | 52 | 55 | 56 | 55 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 48 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 50 | 54 | 55 | 52 |
| 90% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 48 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| Dry (24%) | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 56 | 55 |
| Critical (15%) | 55 | 53 | 48 | 46 | 46 | 47 | 49 | 50 | 53 | 55 | 57 | 57 |

No Action Alternative minus Second Basis of Comparison

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.1 | 0.2 | 0.1 | -0.1 | 0.0 | 0.0 | -0.1 | -0.6 | 0.2 | 0.1 | 0.0 | 0.3 |
| 0.2 | 0.4 | 0.2 | -0.2 | 0.1 | 0.0 | 0.0 | 0.1 | -0.6 | 0.2 | 0.0 | 0.2 | 0.2 |
| 0.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | -0.7 | 0.0 | -0.1 | -0.1 | 0.4 |
| 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | -0.6 | 0.0 | -0.1 | -0.1 | 0.0 |
| 0.5 | 0.2 | -0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.5 | 0.0 | -0.1 | -0.1 | -0.1 |
| 0.6 | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.6 | -0.1 | -0.2 | 0.0 | 0.0 |
| 0.7 | -0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | -0.7 | 0.0 | -0.1 | -0.2 | 0.0 |
| 0.8 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | -0.8 | 0.0 | -0.1 | -0.1 | -0.1 |
| 0.9 | -0.1 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | -0.6 | 0.0 | -0.1 | -0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.6 | 0.0 | -0.1 | -0.1 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.6 | 0.0 | -0.1 | -0.1 | -0.1 |
| Above Normal (16%) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.7 | 0.0 | 0.0 | 0.0 | 0.1 |
| Below Normal (13%) | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | -0.8 | -0.2 | -0.1 | -0.1 | 0.0 |
| Dry (24%) | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.6 | 0.1 | 0.0 | 0.0 | 0.1 |
| Critical (15%) | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | -0.4 | 0.0 | -0.1 | -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.

Table B-3-5. Clear Creek at Igo, Monthly Temperature

| | | | | | Mon | hly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 52 | 49 | 46 | 46 | 47 | 49 | 51 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 51 | 52 | 56 | 56 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 47 | 48 | 50 | 52 | 56 | 56 | 54 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 49 | 50 | 54 | 55 | 52 |
| 90% | 51 | 50 | 46 | 43 | 44 | 45 | 46 | 48 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 50 | 51 | 55 | 55 | 54 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Critical (15%) | 55 | 53 | 48 | 46 | 46 | 47 | 49 | 51 | 53 | 56 | 57 | 57 |

Second Basis of Comparison

Alternative 3

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 52 | 49 | 46 | 46 | 47 | 49 | 51 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 51 | 52 | 56 | 56 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 52 | 55 | 56 | 55 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 49 | 50 | 54 | 55 | 53 |
| 90% | 51 | 49 | 45 | 44 | 44 | 45 | 46 | 48 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Critical (15%) | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 51 | 53 | 55 | 57 | 57 |

Alternative 3 minus Second Basis of Comparison

| | | | | | Mon | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|-----|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | -0.1 |
| 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | -0.1 | -0.1 | 0.0 | 0.0 |
| 0.3 | 0.2 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | 0.2 |
| 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 |
| 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 | 0.0 | 0.0 | 0.0 |
| 0.7 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 | -0.1 | -0.1 | 0.1 |
| 0.9 | 0.0 | 0.0 | -0.1 | 0.1 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 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 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Below Normal (13%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 |
| Dry (24%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 |
| Critical (15%) | -0.1 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 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.

Table B-3-6. Clear Creek at Igo, Monthly Temperature

| | | | | | Mon | thly Temper | rature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 52 | 49 | 46 | 46 | 47 | 49 | 51 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 51 | 52 | 56 | 56 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 47 | 48 | 50 | 52 | 56 | 56 | 54 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 49 | 50 | 54 | 55 | 52 |
| 90% | 51 | 50 | 46 | 43 | 44 | 45 | 46 | 48 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 53 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 50 | 51 | 55 | 55 | 54 |
| Dry (24%) | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 50 | 51 | 55 | 56 | 54 |
| Critical (15%) | 55 | 53 | 48 | 46 | 46 | 47 | 49 | 51 | 53 | 56 | 57 | 57 |

Second Basis of Comparison

Alternative 5

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 56 | 53 | 49 | 46 | 46 | 47 | 49 | 50 | 53 | 57 | 57 | 56 |
| 20% | 55 | 52 | 48 | 46 | 46 | 47 | 49 | 50 | 53 | 56 | 57 | 55 |
| 30% | 54 | 51 | 47 | 45 | 45 | 47 | 48 | 49 | 52 | 56 | 56 | 55 |
| 40% | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 52 | 55 | 56 | 54 |
| 50% | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| 60% | 52 | 50 | 46 | 44 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| 70% | 52 | 50 | 46 | 44 | 44 | 46 | 47 | 48 | 51 | 55 | 55 | 53 |
| 80% | 51 | 50 | 46 | 44 | 44 | 45 | 47 | 48 | 50 | 54 | 55 | 52 |
| 90% | 51 | 50 | 46 | 44 | 44 | 45 | 46 | 47 | 50 | 54 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 53 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 52 | 55 | 56 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 50 | 48 | 45 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 46 | 47 | 49 | 51 | 55 | 55 | 53 |
| Below Normal (13%) | 52 | 50 | 47 | 44 | 45 | 46 | 48 | 49 | 51 | 55 | 55 | 54 |
| Dry (24%) | 54 | 51 | 47 | 45 | 45 | 46 | 48 | 49 | 51 | 55 | 56 | 55 |
| Critical (15%) | 55 | 53 | 48 | 46 | 46 | 47 | 49 | 50 | 54 | 56 | 56 | 57 |

Alternative 5 minus Second Basis of Comparison

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.3 | 0.2 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | -0.6 | 0.3 | 0.1 | 0.0 | 0.0 |
| 0.2 | 0.3 | 0.2 | -0.2 | 0.0 | 0.0 | 0.0 | 0.1 | -0.5 | 0.2 | 0.0 | 0.1 | 0.2 |
| 0.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.6 | 0.0 | 0.1 | -0.2 | 0.4 |
| 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | -0.7 | 0.0 | -0.1 | -0.2 | 0.1 |
| 0.5 | 0.2 | -0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.6 | 0.0 | -0.1 | -0.1 | -0.2 |
| 0.6 | -0.4 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.6 | 0.0 | -0.2 | 0.0 | -0.1 |
| 0.7 | -0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | -0.7 | 0.0 | -0.1 | -0.2 | 0.0 |
| 0.8 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | -0.7 | 0.0 | -0.1 | -0.1 | -0.1 |
| 0.9 | -0.1 | 0.1 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | -0.8 | 0.0 | -0.1 | 0.0 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.6 | 0.1 | 0.0 | -0.1 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.6 | 0.1 | 0.0 | -0.1 | -0.2 |
| Above Normal (16%) | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | -0.8 | 0.0 | 0.0 | 0.0 | 0.1 |
| Below Normal (13%) | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | -0.6 | -0.1 | -0.1 | 0.0 | 0.1 |
| Dry (24%) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.6 | 0.1 | 0.0 | 0.0 | 0.1 |
| Critical (15%) | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | -0.1 | 0.4 | 0.1 | -0.3 | -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.

B.4. Clear Creek at Mouth Temperature

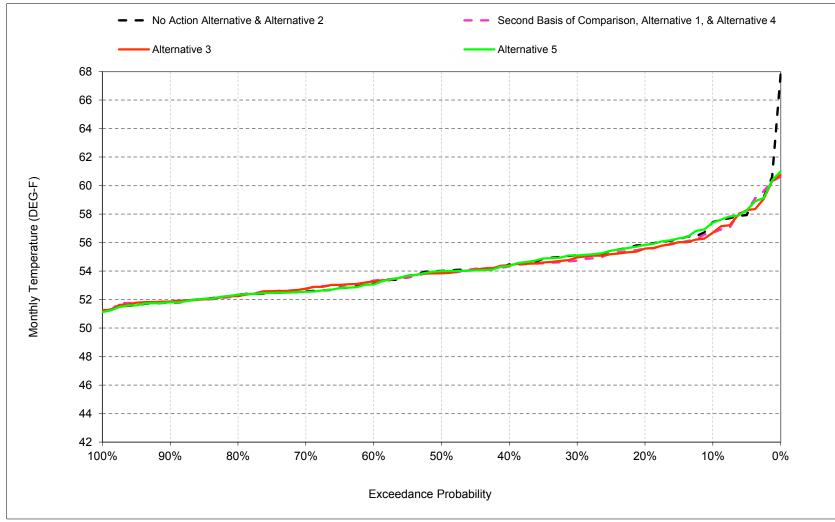


Figure B-4-1. Clear Creek at mouth, October

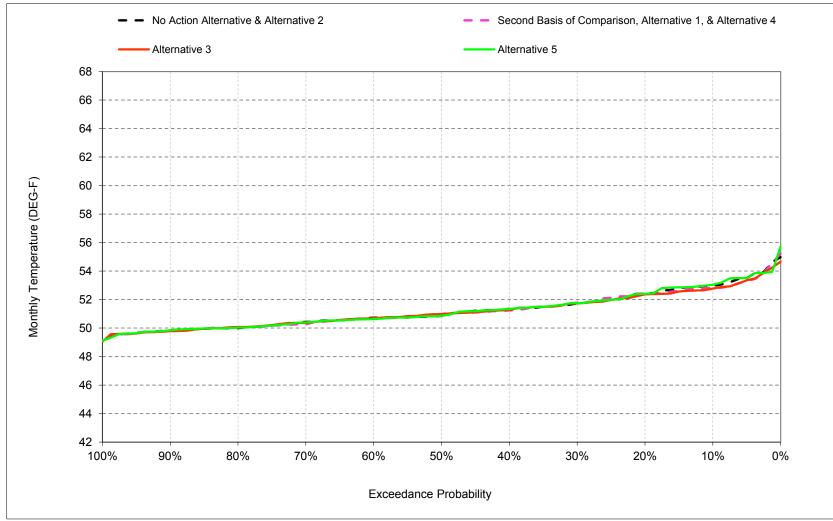


Figure B-4-2. Clear Creek at mouth, November

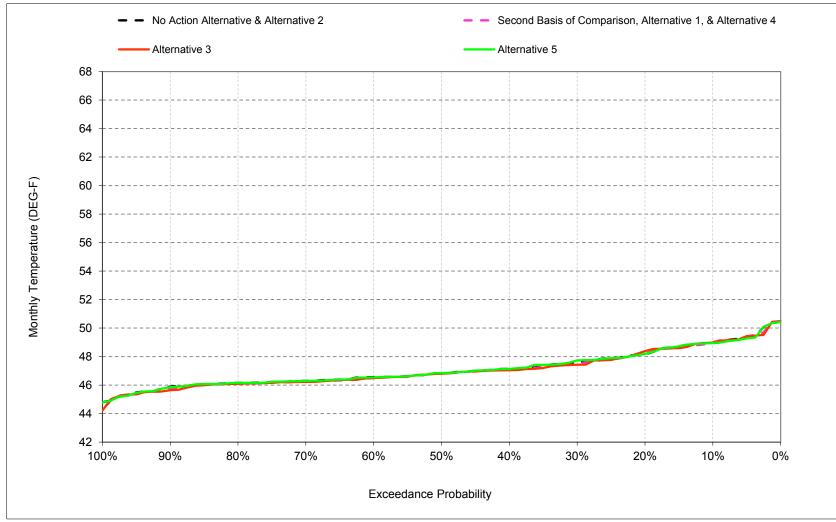


Figure B-4-3. Clear Creek at mouth, December

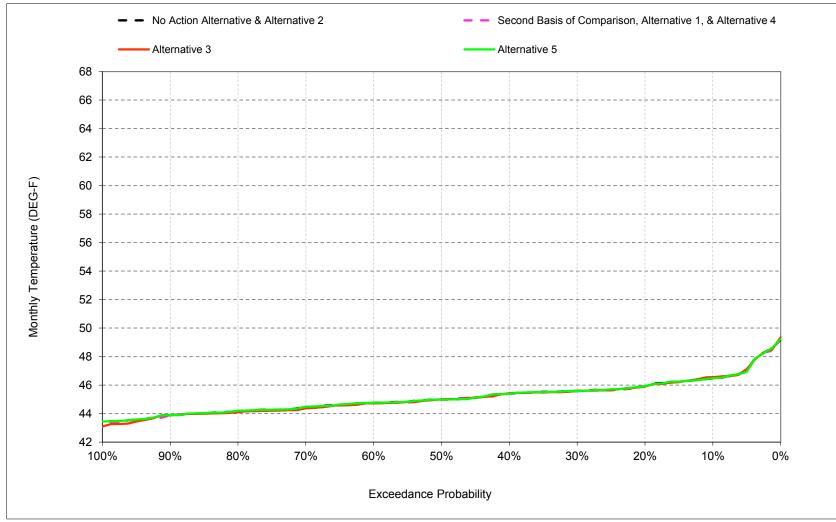


Figure B-4-4. Clear Creek at mouth, January

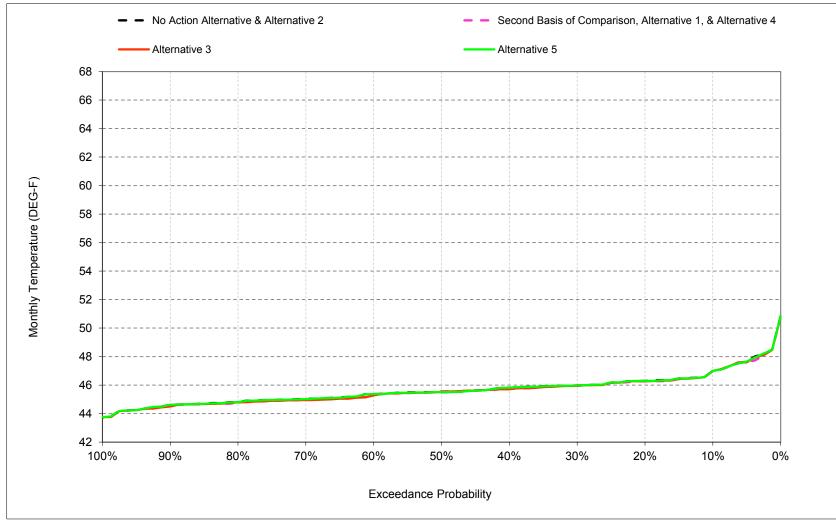


Figure B-4-5. Clear Creek at mouth, February

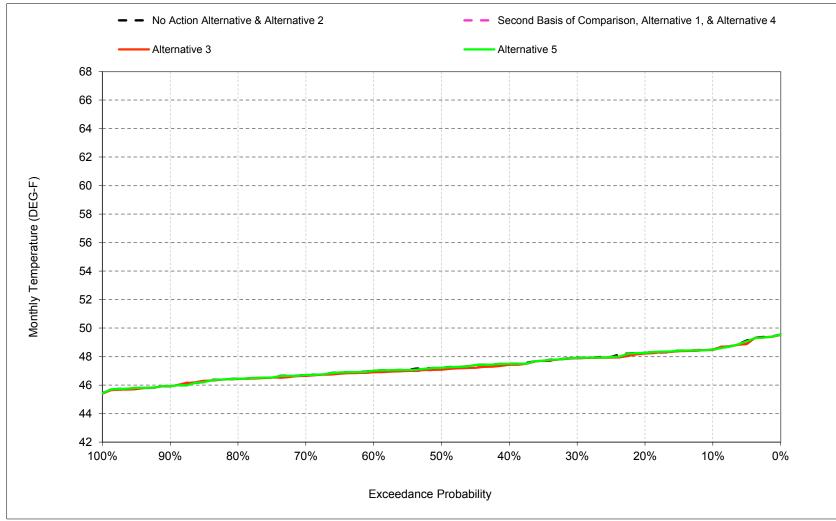


Figure B-4-6. Clear Creek at mouth, March

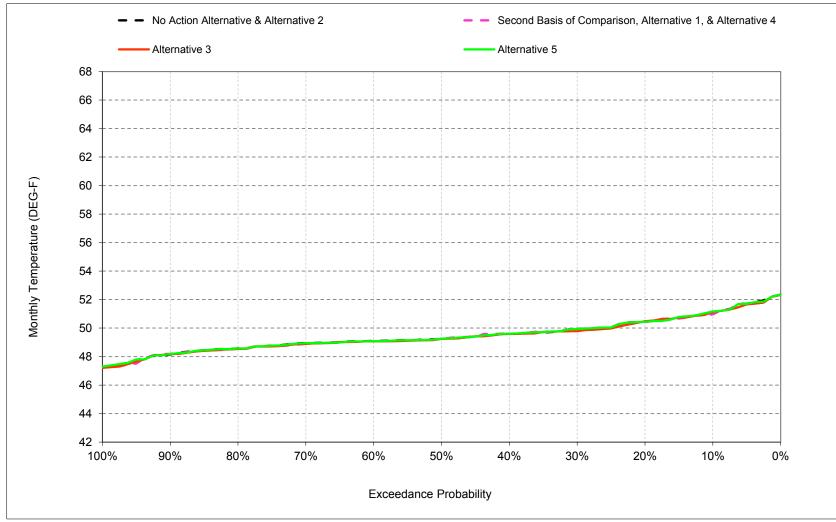


Figure B-4-7. Clear Creek at mouth, April

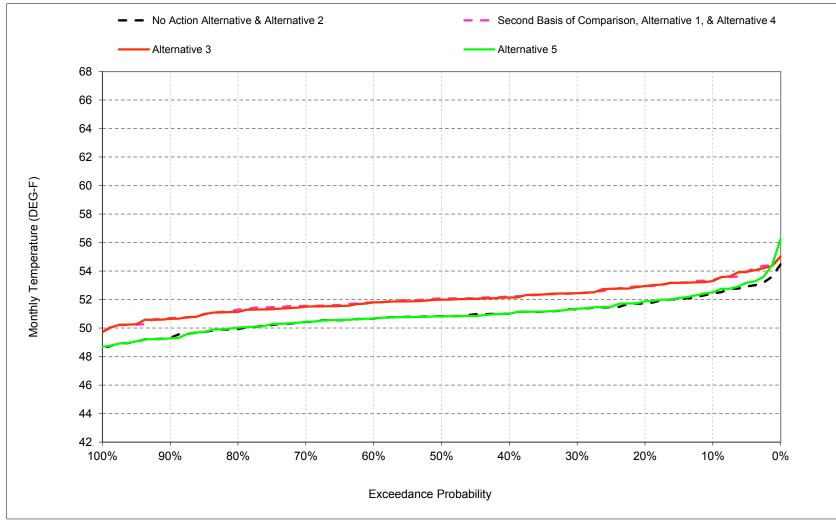


Figure B-4-8. Clear Creek at mouth, May

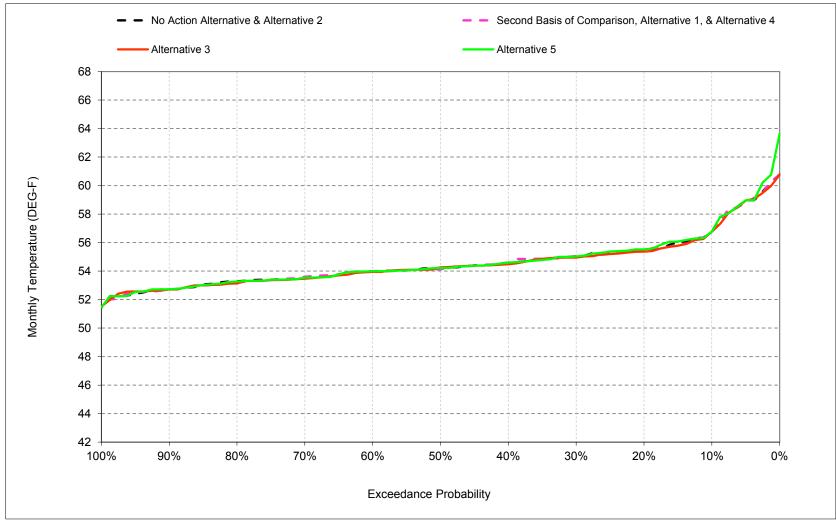


Figure B-4-9. Clear Creek at mouth, June

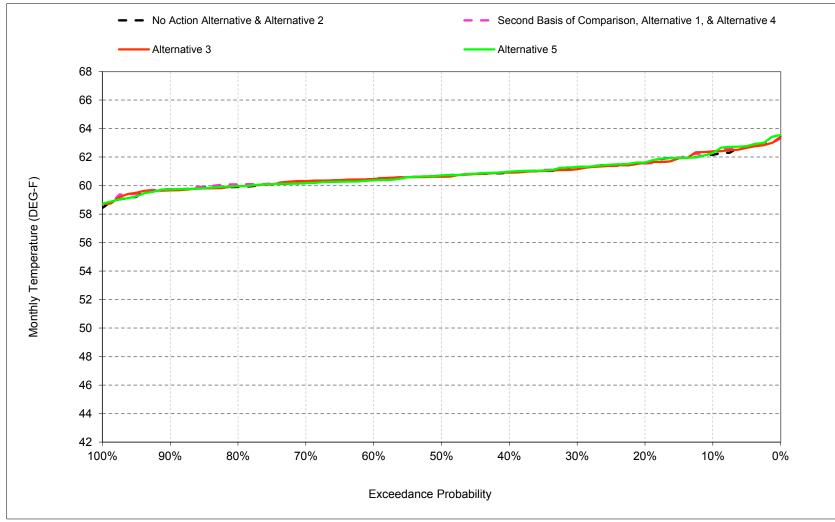


Figure B-4-10. Clear Creek at mouth, July

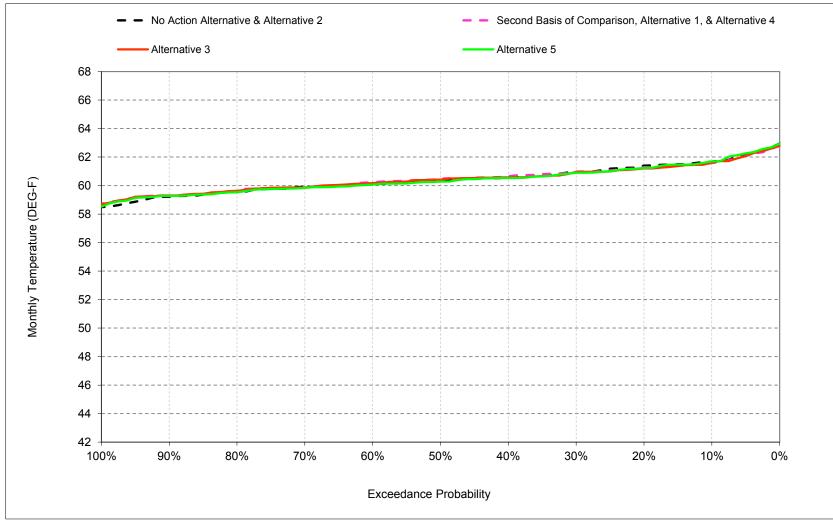


Figure B-4-11. Clear Creek at mouth, August

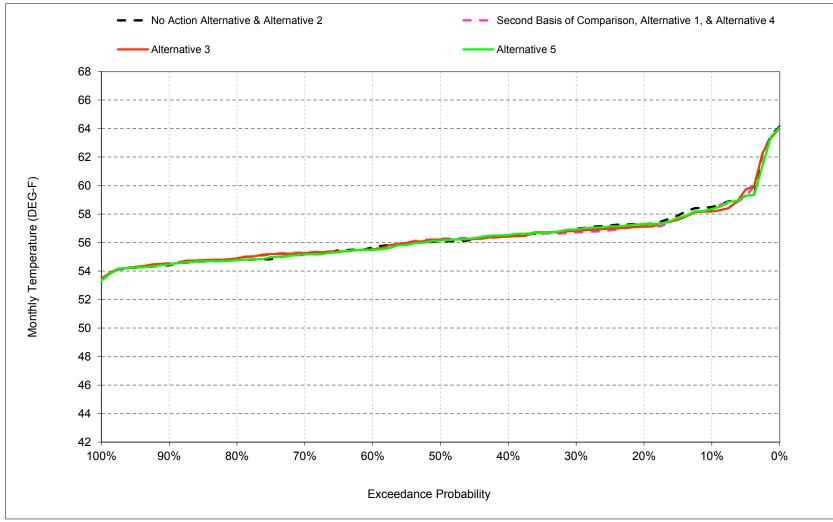


Figure B-4-12. Clear Creek at mouth, September

Table B-4-1. Clear Creek at mouth, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 46 | 47 | 48 | 51 | 52 | 57 | 62 | 62 | 58 |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 52 | 55 | 62 | 61 | 57 |
| 30% | 55 | 52 | 48 | 46 | 46 | 48 | 50 | 51 | 55 | 61 | 61 | 57 |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 51 | 55 | 61 | 61 | 56 |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 54 | 61 | 60 | 56 |
| 60% | 53 | 51 | 47 | 45 | 45 | 47 | 49 | 51 | 54 | 60 | 60 | 56 |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 50 | 53 | 60 | 60 | 55 |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 50 | 53 | 60 | 60 | 55 |
| 90% | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 49 | 53 | 60 | 59 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 55 | 61 | 60 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 51 | 54 | 61 | 60 | 55 |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 47 | 49 | 51 | 54 | 60 | 60 | 55 |
| Below Normal (13%) | 53 | 50 | 47 | 45 | 45 | 47 | 50 | 50 | 54 | 61 | 60 | 56 |
| Dry (24%) | 55 | 51 | 47 | 45 | 46 | 48 | 50 | 51 | 55 | 61 | 61 | 57 |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 52 | 58 | 61 | 61 | 60 |

Alternative 1

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 47 | 47 | 48 | 51 | 53 | 57 | 62 | 62 | 58 |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 53 | 55 | 62 | 61 | 57 |
| 30% | 55 | 52 | 47 | 46 | 46 | 48 | 50 | 52 | 55 | 61 | 61 | 57 |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 52 | 55 | 61 | 61 | 56 |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 54 | 61 | 60 | 56 |
| 60% | 53 | 51 | 46 | 45 | 45 | 47 | 49 | 52 | 54 | 60 | 60 | 56 |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 52 | 54 | 60 | 60 | 55 |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 51 | 53 | 60 | 60 | 55 |
| 90% | 52 | 50 | 46 | 44 | 44 | 46 | 48 | 51 | 53 | 60 | 59 | 55 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 55 | 61 | 60 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 |
| Below Normal (13%) | 53 | 50 | 47 | 45 | 45 | 47 | 50 | 52 | 54 | 61 | 60 | 56 |
| Dry (24%) | 54 | 51 | 47 | 45 | 46 | 48 | 50 | 52 | 54 | 61 | 61 | 57 |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 53 | 58 | 61 | 61 | 60 |

Alternative 1 minus No Action Alternative

| | | | | | Mon | thly Temper | ature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -0.7 | -0.2 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.9 | 0.0 | 0.2 | -0.1 | -0.2 |
| 0.2 | -0.2 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | -0.1 | -0.1 | -0.1 | -0.2 |
| 0.3 | -0.4 | 0.0 | -0.2 | 0.0 | 0.0 | 0.0 | -0.1 | 1.1 | 0.0 | 0.1 | 0.0 | -0.2 |
| 0.4 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | 1.2 | 0.0 | 0.0 | 0.1 | 0.0 |
| 0.5 | -0.2 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 1.2 | -0.1 | 0.0 | 0.2 | 0.2 |
| 0.6 | 0.2 | 0.0 | -0.1 | 0.0 | -0.2 | -0.1 | 0.0 | 1.1 | 0.0 | 0.1 | 0.1 | -0.1 |
| 0.7 | 0.1 | -0.2 | 0.0 | -0.1 | -0.1 | 0.0 | -0.1 | 1.2 | 0.1 | 0.1 | -0.1 | 0.1 |
| 0.8 | -0.1 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 1.3 | -0.1 | 0.2 | 0.0 | 0.1 |
| 0.9 | 0.1 | 0.0 | -0.2 | -0.1 | 0.0 | 0.0 | 0.1 | 1.4 | -0.1 | 0.0 | 0.1 | 0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.0 | 0.1 | 0.0 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.0 | 0.1 | 0.1 | 0.2 |
| Above Normal (16%) | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.3 | 0.0 | 0.0 | 0.0 | -0.1 |
| Below Normal (13%) | -0.1 | 0.0 | -0.2 | 0.0 | 0.0 | -0.1 | -0.1 | 1.3 | 0.2 | 0.1 | 0.1 | 0.0 |
| Dry (24%) | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | -0.1 | 0.0 | 0.0 | -0.1 |
| Critical (15%) | -0.2 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.9 | 0.0 | 0.1 | 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.

Table B-4-2. Clear Creek at mouth, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 46 | 47 | 48 | 51 | 52 | 57 | 62 | 62 | 58 |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 52 | 55 | 62 | 61 | 57 |
| 30% | 55 | 52 | 48 | 46 | 46 | 48 | 50 | 51 | 55 | 61 | 61 | 57 |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 51 | 55 | 61 | 61 | 56 |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 54 | 61 | 60 | 56 |
| 60% | 53 | 51 | 47 | 45 | 45 | 47 | 49 | 51 | 54 | 60 | 60 | 56 |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 50 | 53 | 60 | 60 | 55 |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 50 | 53 | 60 | 60 | 55 |
| 90% | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 49 | 53 | 60 | 59 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 55 | 61 | 60 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 51 | 54 | 61 | 60 | 55 |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 47 | 49 | 51 | 54 | 60 | 60 | 55 |
| Below Normal (13%) | 53 | 50 | 47 | 45 | 45 | 47 | 50 | 50 | 54 | 61 | 60 | 56 |
| Dry (24%) | 55 | 51 | 47 | 45 | 46 | 48 | 50 | 51 | 55 | 61 | 61 | 57 |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 52 | 58 | 61 | 61 | 60 |

Alternative 3

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 47 | 47 | 48 | 51 | 53 | 57 | 62 | 62 | 58 |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 53 | 55 | 62 | 61 | 57 |
| 30% | 55 | 52 | 47 | 46 | 46 | 48 | 50 | 52 | 55 | 61 | 61 | 57 |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 52 | 54 | 61 | 61 | 56 |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 54 | 61 | 60 | 56 |
| 60% | 53 | 51 | 46 | 45 | 45 | 47 | 49 | 52 | 54 | 60 | 60 | 56 |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 51 | 53 | 60 | 60 | 55 |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 51 | 53 | 60 | 60 | 55 |
| 90% | 52 | 50 | 46 | 44 | 44 | 46 | 48 | 51 | 53 | 60 | 59 | 55 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 55 | 61 | 60 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 |
| Below Normal (13%) | 53 | 51 | 47 | 45 | 45 | 47 | 50 | 52 | 54 | 61 | 60 | 56 |
| Dry (24%) | 54 | 51 | 47 | 45 | 46 | 48 | 50 | 52 | 54 | 61 | 61 | 57 |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 53 | 58 | 61 | 61 | 60 |

Alternative 3 minus No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -0.8 | -0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.9 | 0.0 | 0.2 | -0.1 | -0.3 |
| 0.2 | -0.3 | -0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | -0.1 | 0.0 | -0.2 | -0.2 |
| 0.3 | -0.1 | 0.0 | -0.2 | 0.0 | 0.0 | 0.0 | -0.1 | 1.1 | -0.1 | -0.1 | 0.0 | -0.1 |
| 0.4 | -0.1 | -0.1 | -0.1 | 0.0 | -0.1 | -0.1 | 0.0 | 1.1 | -0.1 | 0.0 | 0.0 | -0.1 |
| 0.5 | -0.2 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 1.2 | 0.0 | -0.1 | 0.1 | 0.1 |
| 0.6 | 0.2 | 0.0 | -0.1 | 0.0 | -0.2 | -0.1 | 0.0 | 1.1 | -0.1 | 0.1 | 0.1 | -0.1 |
| 0.7 | 0.2 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | -0.1 | 1.1 | 0.0 | 0.2 | 0.0 | 0.1 |
| 0.8 | -0.1 | 0.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 1.2 | -0.1 | 0.0 | 0.1 | 0.1 |
| 0.9 | 0.1 | 0.0 | -0.2 | 0.0 | -0.1 | 0.0 | 0.0 | 1.3 | -0.1 | -0.1 | 0.1 | 0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 1.2 | 0.0 | 0.0 | 0.0 | 0.2 |
| Above Normal (16%) | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| Below Normal (13%) | 0.0 | 0.0 | -0.2 | 0.0 | -0.1 | -0.1 | -0.1 | 1.3 | 0.1 | 0.1 | 0.1 | -0.1 |
| Dry (24%) | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 1.1 | -0.1 | 0.0 | -0.1 | -0.1 |
| Critical (15%) | -0.4 | -0.3 | -0.2 | -0.1 | -0.1 | -0.1 | -0.1 | 0.8 | -0.1 | 0.0 | 0.1 | -0.2 |

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

Table B-4-3. Clear Creek at mouth, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 46 | 47 | 48 | 51 | 52 | 57 | 62 | 62 | 58 |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 52 | 55 | 62 | 61 | 57 |
| 30% | 55 | 52 | 48 | 46 | 46 | 48 | 50 | 51 | 55 | 61 | 61 | 57 |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 51 | 55 | 61 | 61 | 56 |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 54 | 61 | 60 | 56 |
| 60% | 53 | 51 | 47 | 45 | 45 | 47 | 49 | 51 | 54 | 60 | 60 | 56 |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 50 | 53 | 60 | 60 | 55 |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 50 | 53 | 60 | 60 | 55 |
| 90% | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 49 | 53 | 60 | 59 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 55 | 61 | 60 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 51 | 54 | 61 | 60 | 55 |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 47 | 49 | 51 | 54 | 60 | 60 | 55 |
| Below Normal (13%) | 53 | 50 | 47 | 45 | 45 | 47 | 50 | 50 | 54 | 61 | 60 | 56 |
| Dry (24%) | 55 | 51 | 47 | 45 | 46 | 48 | 50 | 51 | 55 | 61 | 61 | 57 |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 52 | 58 | 61 | 61 | 60 |

Alternative 5

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 46 | 47 | 48 | 51 | 53 | 57 | 62 | 62 | 58 |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 52 | 56 | 62 | 61 | 57 |
| 30% | 55 | 52 | 48 | 46 | 46 | 48 | 50 | 51 | 55 | 61 | 61 | 57 |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 51 | 55 | 61 | 61 | 57 |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 54 | 61 | 60 | 56 |
| 60% | 53 | 51 | 47 | 45 | 45 | 47 | 49 | 51 | 54 | 60 | 60 | 56 |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 50 | 53 | 60 | 60 | 55 |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 50 | 53 | 60 | 60 | 55 |
| 90% | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 49 | 53 | 60 | 59 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 55 | 61 | 60 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 51 | 54 | 61 | 60 | 55 |
| Above Normal (16%) | 55 | 51 | 47 | 45 | 45 | 47 | 49 | 50 | 54 | 60 | 60 | 55 |
| Below Normal (13%) | 53 | 50 | 47 | 45 | 45 | 47 | 50 | 51 | 54 | 61 | 60 | 56 |
| Dry (24%) | 55 | 51 | 47 | 45 | 46 | 48 | 50 | 51 | 54 | 61 | 61 | 57 |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 53 | 58 | 61 | 61 | 59 |

Alternative 5 minus No Action Alternative

| | | | | | Mon | thly Temper | ature (DEG | -F) | | | | |
|--|------|------|-----|-----|-----|-------------|------------|-----|-----|-----|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | -0.1 |
| 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 0.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.6 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 |
| 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Above Normal (16%) | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 |
| Dry (24%) | -0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.3 | 0.3 | 0.2 | -0.2 | -0.2 |

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

Table B-4-4. Clear Creek at mouth, Monthly Temperature

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|-------------|-------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 47 | 47 | 48 | 51 | 53 | 57 | 62 | 62 | 58 |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 53 | 55 | 62 | 61 | 57 |
| 30% | 55 | 52 | 47 | 46 | 46 | 48 | 50 | 52 | 55 | 61 | 61 | 57 |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 52 | 55 | 61 | 61 | 56 |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 54 | 61 | 60 | 56 |
| 60% | 53 | 51 | 46 | 45 | 45 | 47 | 49 | 52 | 54 | 60 | 60 | 56 |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 52 | 54 | 60 | 60 | 55 |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 51 | 53 | 60 | 60 | 55 |
| 90% | 52 | 50 | 46 | 44 | 44 | 46 | 48 | 51 | 53 | 60 | 59 | 55 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 55 | 61 | 60 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 |
| Below Normal (13%) | 53 | 50 | 47 | 45 | 45 | 47 | 50 | 52 | 54 | 61 | 60 | 56 |
| Dry (24%) | 54 | 51 | 47 | 45 | 46 | 48 | 50 | 52 | 54 | 61 | 61 | 57 |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 53 | 58 | 61 | 61 | 60 |

Second Basis of Comparison

No Action Alternative

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 46 | 47 | 48 | 51 | 52 | 57 | 62 | 62 | 58 |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 52 | 55 | 62 | 61 | 57 |
| 30% | 55 | 52 | 48 | 46 | 46 | 48 | 50 | 51 | 55 | 61 | 61 | 57 |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 51 | 55 | 61 | 61 | 56 |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 54 | 61 | 60 | 56 |
| 60% | 53 | 51 | 47 | 45 | 45 | 47 | 49 | 51 | 54 | 60 | 60 | 56 |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 50 | 53 | 60 | 60 | 55 |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 50 | 53 | 60 | 60 | 55 |
| 90% | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 49 | 53 | 60 | 59 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 55 | 61 | 60 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 51 | 54 | 61 | 60 | 55 |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 47 | 49 | 51 | 54 | 60 | 60 | 55 |
| Below Normal (13%) | 53 | 50 | 47 | 45 | 45 | 47 | 50 | 50 | 54 | 61 | 60 | 56 |
| Dry (24%) | 55 | 51 | 47 | 45 | 46 | 48 | 50 | 51 | 55 | 61 | 61 | 57 |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 52 | 58 | 61 | 61 | 60 |

No Action Alternative minus Second Basis of Comparison

| | | | | | Mon | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|-----|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.7 | 0.2 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | -0.9 | 0.0 | -0.2 | 0.1 | 0.2 |
| 0.2 | 0.2 | 0.0 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | -1.2 | 0.1 | 0.1 | 0.1 | 0.2 |
| 0.3 | 0.4 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | -1.1 | 0.0 | -0.1 | 0.0 | 0.2 |
| 0.4 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | -1.2 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.5 | 0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -1.2 | 0.1 | 0.0 | -0.2 | -0.2 |
| 0.6 | -0.2 | 0.0 | 0.1 | 0.0 | 0.2 | 0.1 | 0.0 | -1.1 | 0.0 | -0.1 | -0.1 | 0.1 |
| 0.7 | -0.1 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | -1.2 | -0.1 | -0.1 | 0.1 | -0.1 |
| 0.8 | 0.1 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -1.3 | 0.1 | -0.2 | 0.0 | -0.1 |
| 0.9 | -0.1 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | -0.1 | -1.4 | 0.1 | 0.0 | -0.1 | -0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.2 | 0.0 | -0.1 | 0.0 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.2 | 0.0 | -0.1 | -0.1 | -0.2 |
| Above Normal (16%) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -1.3 | 0.0 | 0.0 | 0.0 | 0.1 |
| Below Normal (13%) | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | -1.3 | -0.2 | -0.1 | -0.1 | 0.0 |
| Dry (24%) | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.2 | 0.1 | 0.0 | 0.0 | 0.1 |
| Critical (15%) | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | -0.9 | 0.0 | -0.1 | -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.

Table B-4-5. Clear Creek at mouth, Monthly Temperature

| | | | | | Mont | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 47 | 47 | 48 | 51 | 53 | 57 | 62 | 62 | 58 |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 53 | 55 | 62 | 61 | 57 |
| 30% | 55 | 52 | 47 | 46 | 46 | 48 | 50 | 52 | 55 | 61 | 61 | 57 |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 52 | 55 | 61 | 61 | 56 |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 54 | 61 | 60 | 56 |
| 60% | 53 | 51 | 46 | 45 | 45 | 47 | 49 | 52 | 54 | 60 | 60 | 56 |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 52 | 54 | 60 | 60 | 55 |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 51 | 53 | 60 | 60 | 55 |
| 90% | 52 | 50 | 46 | 44 | 44 | 46 | 48 | 51 | 53 | 60 | 59 | 55 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 55 | 61 | 60 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 |
| Below Normal (13%) | 53 | 50 | 47 | 45 | 45 | 47 | 50 | 52 | 54 | 61 | 60 | 56 |
| Dry (24%) | 54 | 51 | 47 | 45 | 46 | 48 | 50 | 52 | 54 | 61 | 61 | 57 |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 53 | 58 | 61 | 61 | 60 |

Second Basis of Comparison

Alternative 3

| | Monthly Temperature (DEG-F) | | | | | | | | | | | | | |
|--|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep | | |
| Probability of Exceedance ^a | | | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 47 | 47 | 48 | 51 | 53 | 57 | 62 | 62 | 58 | | |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 53 | 55 | 62 | 61 | 57 | | |
| 30% | 55 | 52 | 47 | 46 | 46 | 48 | 50 | 52 | 55 | 61 | 61 | 57 | | |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 52 | 54 | 61 | 61 | 56 | | |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 54 | 61 | 60 | 56 | | |
| 60% | 53 | 51 | 46 | 45 | 45 | 47 | 49 | 52 | 54 | 60 | 60 | 56 | | |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 51 | 53 | 60 | 60 | 55 | | |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 51 | 53 | 60 | 60 | 55 | | |
| 90% | 52 | 50 | 46 | 44 | 44 | 46 | 48 | 51 | 53 | 60 | 59 | 55 | | |
| Long Term | | | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 55 | 61 | 60 | 56 | | |
| Water Year Types ^c | | | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 | | |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 | | |
| Below Normal (13%) | 53 | 51 | 47 | 45 | 45 | 47 | 50 | 52 | 54 | 61 | 60 | 56 | | |
| Dry (24%) | 54 | 51 | 47 | 45 | 46 | 48 | 50 | 52 | 54 | 61 | 61 | 57 | | |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 53 | 58 | 61 | 61 | 60 | | |

Alternative 3 minus Second Basis of Comparison

| | Monthly Temperature (DEG-F) | | | | | | | | | | | | |
|--|-----------------------------|------|------|------|-----|-----|------|------|------|------|------|------|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | |
| Probability of Exceedance ^a | | | | | | | | | | | | | |
| 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | |
| 0.2 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | |
| 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 | 0.0 | 0.1 | |
| 0.4 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | |
| 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | |
| 0.6 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | |
| 0.7 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | |
| 0.8 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.2 | 0.1 | 0.0 | |
| 0.9 | 0.0 | 0.0 | -0.1 | 0.2 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | -0.1 | |
| Long Term | | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 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 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Below Normal (13%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | |
| Dry (24%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | |
| Critical (15%) | -0.1 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 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.

Table B-4-6. Clear Creek at mouth, Monthly Temperature

| | | | | | Mont | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 47 | 47 | 48 | 51 | 53 | 57 | 62 | 62 | 58 |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 53 | 55 | 62 | 61 | 57 |
| 30% | 55 | 52 | 47 | 46 | 46 | 48 | 50 | 52 | 55 | 61 | 61 | 57 |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 52 | 55 | 61 | 61 | 56 |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 54 | 61 | 60 | 56 |
| 60% | 53 | 51 | 46 | 45 | 45 | 47 | 49 | 52 | 54 | 60 | 60 | 56 |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 52 | 54 | 60 | 60 | 55 |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 51 | 53 | 60 | 60 | 55 |
| 90% | 52 | 50 | 46 | 44 | 44 | 46 | 48 | 51 | 53 | 60 | 59 | 55 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 52 | 55 | 61 | 60 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 |
| Above Normal (16%) | 54 | 51 | 47 | 45 | 45 | 47 | 49 | 52 | 54 | 61 | 60 | 55 |
| Below Normal (13%) | 53 | 50 | 47 | 45 | 45 | 47 | 50 | 52 | 54 | 61 | 60 | 56 |
| Dry (24%) | 54 | 51 | 47 | 45 | 46 | 48 | 50 | 52 | 54 | 61 | 61 | 57 |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 53 | 58 | 61 | 61 | 60 |

Second Basis of Comparison

Alternative 5

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | - |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 57 | 53 | 49 | 46 | 47 | 48 | 51 | 53 | 57 | 62 | 62 | 58 |
| 20% | 56 | 52 | 48 | 46 | 46 | 48 | 50 | 52 | 56 | 62 | 61 | 57 |
| 30% | 55 | 52 | 48 | 46 | 46 | 48 | 50 | 51 | 55 | 61 | 61 | 57 |
| 40% | 54 | 51 | 47 | 45 | 46 | 47 | 50 | 51 | 55 | 61 | 61 | 57 |
| 50% | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 54 | 61 | 60 | 56 |
| 60% | 53 | 51 | 47 | 45 | 45 | 47 | 49 | 51 | 54 | 60 | 60 | 56 |
| 70% | 53 | 50 | 46 | 44 | 45 | 47 | 49 | 50 | 53 | 60 | 60 | 55 |
| 80% | 52 | 50 | 46 | 44 | 45 | 46 | 49 | 50 | 53 | 60 | 60 | 55 |
| 90% | 52 | 50 | 46 | 44 | 45 | 46 | 48 | 49 | 53 | 60 | 59 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 54 | 51 | 47 | 45 | 46 | 47 | 49 | 51 | 55 | 61 | 60 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 51 | 49 | 45 | 45 | 45 | 47 | 49 | 51 | 54 | 61 | 60 | 55 |
| Above Normal (16%) | 55 | 51 | 47 | 45 | 45 | 47 | 49 | 50 | 54 | 60 | 60 | 55 |
| Below Normal (13%) | 53 | 50 | 47 | 45 | 45 | 47 | 50 | 51 | 54 | 61 | 60 | 56 |
| Dry (24%) | 55 | 51 | 47 | 45 | 46 | 48 | 50 | 51 | 54 | 61 | 61 | 57 |
| Critical (15%) | 56 | 53 | 48 | 46 | 47 | 49 | 51 | 53 | 58 | 61 | 61 | 59 |

Alternative 5 minus Second Basis of Comparison

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.7 | 0.2 | -0.1 | -0.1 | 0.0 | 0.0 | 0.2 | -0.9 | 0.0 | -0.1 | 0.1 | 0.1 |
| 0.2 | 0.2 | 0.0 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | -1.1 | 0.1 | 0.1 | 0.0 | 0.2 |
| 0.3 | 0.4 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 | -1.1 | 0.0 | 0.0 | -0.1 | 0.2 |
| 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | -1.2 | 0.0 | 0.0 | -0.1 | 0.1 |
| 0.5 | 0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -1.2 | 0.1 | 0.0 | -0.2 | -0.1 |
| 0.6 | -0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | -1.1 | 0.0 | -0.1 | -0.2 | -0.1 |
| 0.7 | -0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | -1.2 | 0.0 | -0.1 | 0.0 | -0.1 |
| 0.8 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -1.2 | 0.0 | -0.1 | 0.0 | -0.1 |
| 0.9 | -0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | -0.1 | -1.4 | 0.1 | 0.0 | 0.0 | -0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.1 | 0.1 | 0.0 | -0.1 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.1 | 0.0 | 0.0 | 0.0 | -0.2 |
| Above Normal (16%) | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -1.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| Below Normal (13%) | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | -1.1 | -0.1 | -0.1 | 0.0 | 0.1 |
| Dry (24%) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -1.2 | 0.1 | 0.0 | 0.0 | 0.1 |
| Critical (15%) | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | -0.6 | 0.3 | 0.1 | -0.2 | -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.

B.5. Sacramento River below Keswick Temperature

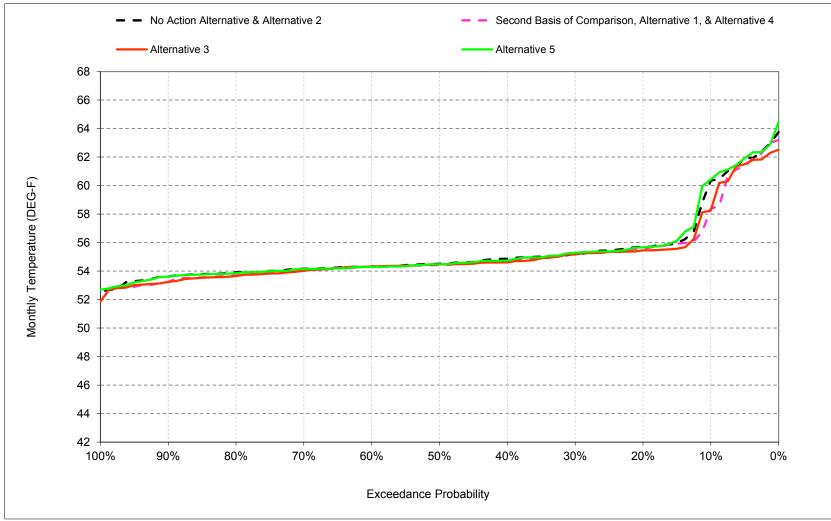


Figure B-5-1. Sacramento River below Keswick, October

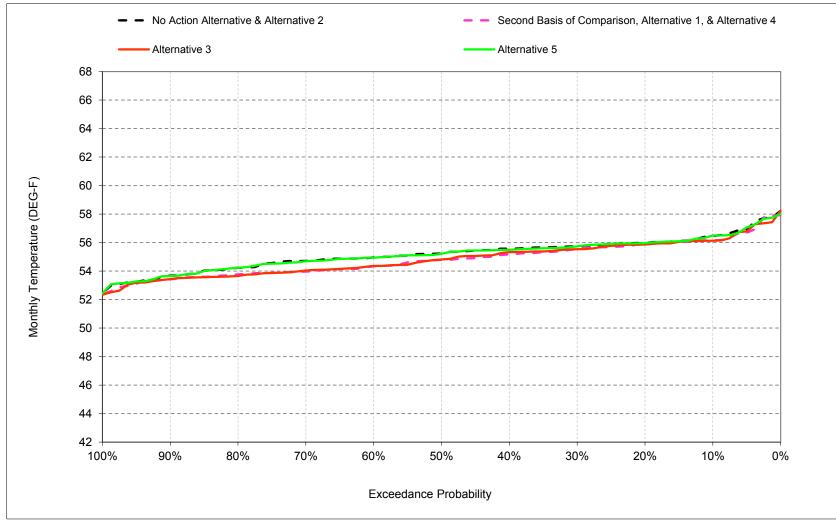


Figure B-5-2. Sacramento River below Keswick, November

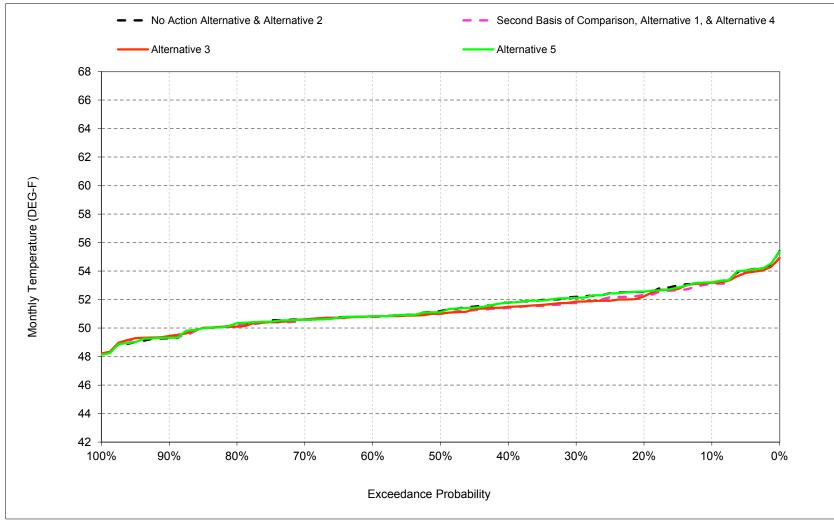


Figure B-5-3. Sacramento River below Keswick, December

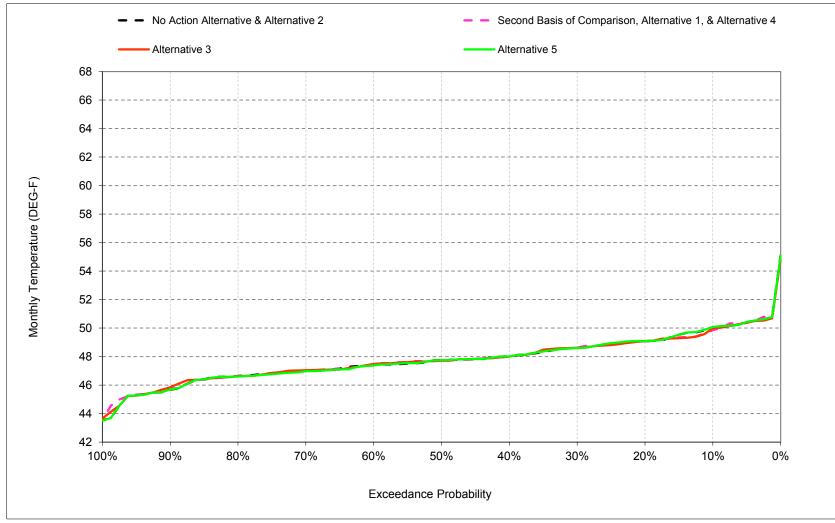


Figure B-5-4. Sacramento River below Keswick, January

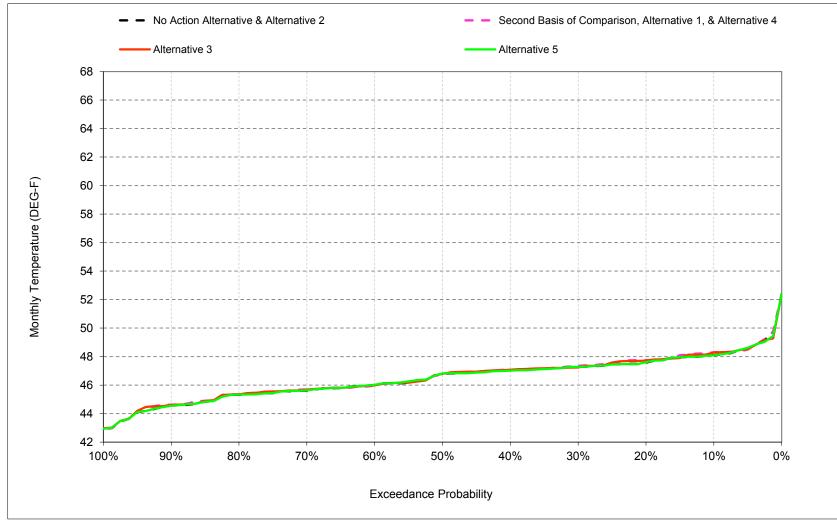


Figure B-5-5. Sacramento River below Keswick, February

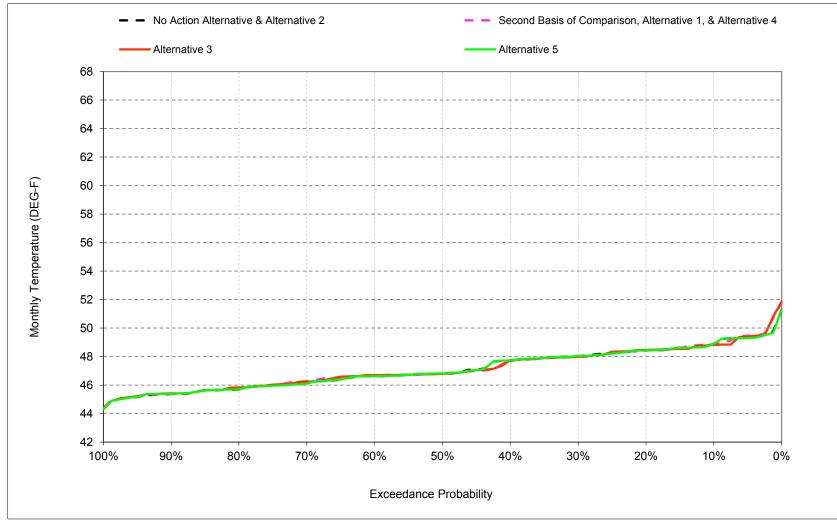


Figure B-5-6. Sacramento River below Keswick, March

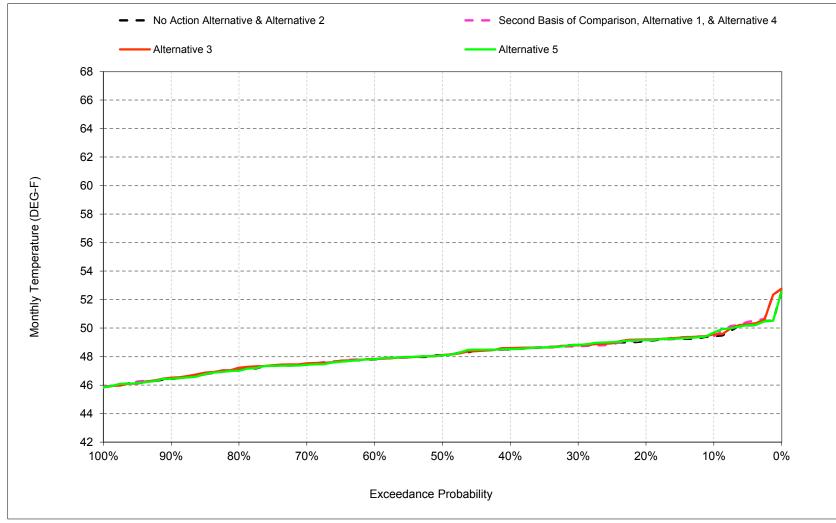


Figure B-5-7. Sacramento River below Keswick, April

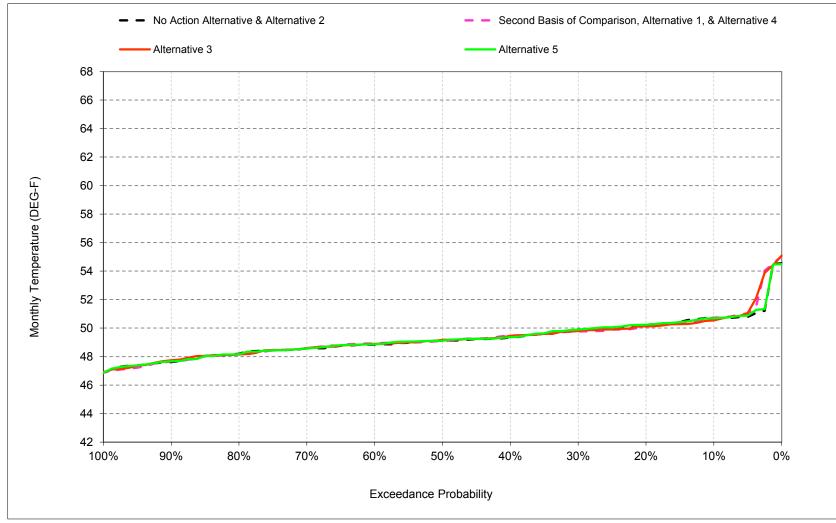


Figure B-5-8. Sacramento River below Keswick, May

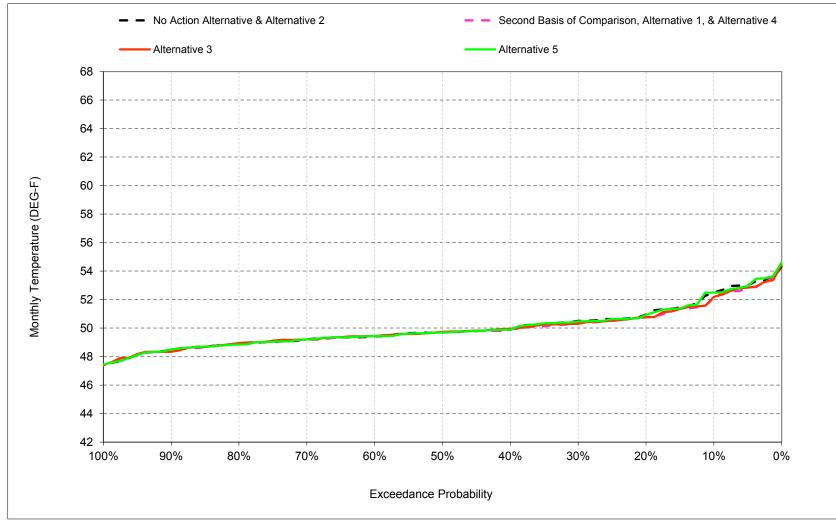


Figure B-5-9. Sacramento River below Keswick, June

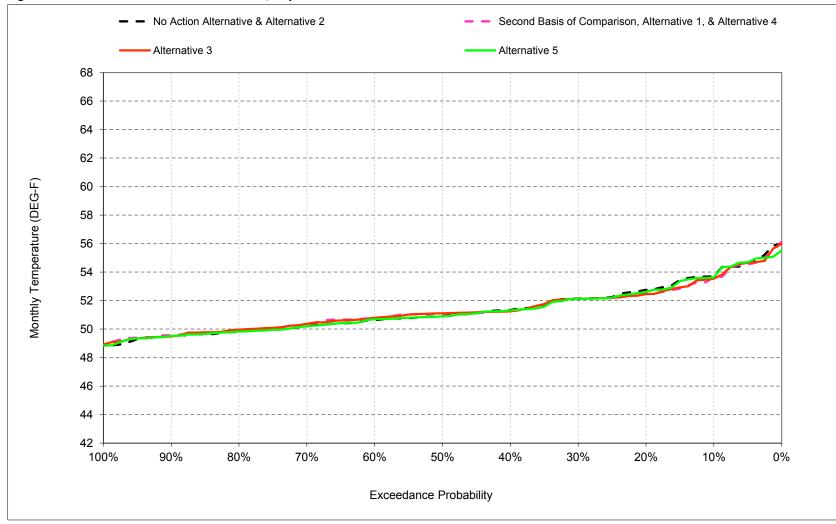


Figure B-5-10. Sacramento River below Keswick, July

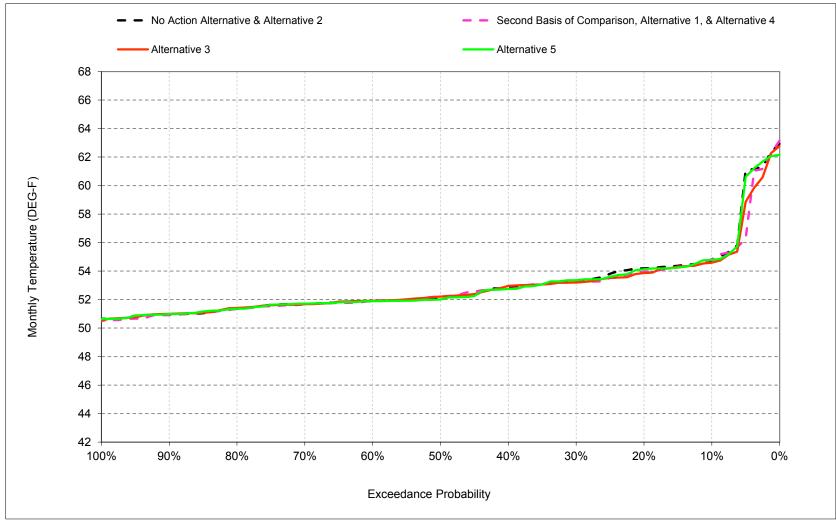


Figure B-5-11. Sacramento River below Keswick, August

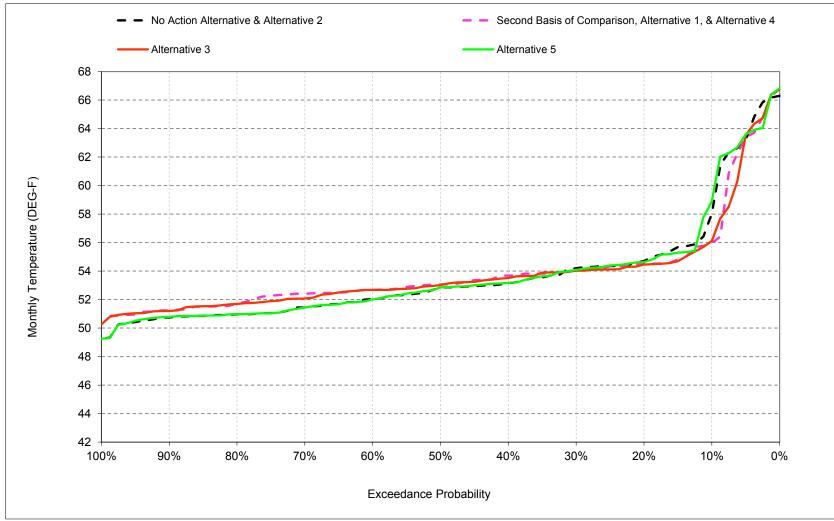


Figure B-5-12. Sacramento River below Keswick, September

Table B-5-1. Sacramento River below Keswick, Monthly Temperature

| | Monthly Temperature (DEG-F) | | | | | | | | | | | |
|--|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 56 | 53 | 50 | 48 | 49 | 49 | 51 | 52 | 54 | 55 | 58 |
| 20% | 56 | 56 | 53 | 49 | 48 | 48 | 49 | 50 | 51 | 53 | 54 | 55 |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 |
| 40% | 55 | 56 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 53 |
| 50% | 55 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |
| 60% | 54 | 55 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 52 |
| 70% | 54 | 55 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 51 |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 51 |
| 90% | 54 | 54 | 49 | 46 | 45 | 45 | 46 | 48 | 48 | 49 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 53 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 55 | 55 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 51 |
| Below Normal (13%) | 55 | 55 | 52 | 48 | 47 | 48 | 48 | 49 | 50 | 51 | 52 | 53 |
| Dry (24%) | 55 | 55 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 52 | 53 | 54 |
| Critical (15%) | 58 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 52 | 54 | 58 | 61 |

Alternative 1

| | Monthly Temperature (DEG-F) | | | | | | | | | | | | | |
|--|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | | |
| Probability of Exceedance ^a | | | | | | | | | | | | | | |
| 10% | 58 | 56 | 53 | 50 | 48 | 49 | 49 | 51 | 52 | 54 | 55 | 56 | | |
| 20% | 56 | 56 | 52 | 49 | 48 | 48 | 49 | 50 | 51 | 52 | 54 | 55 | | |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 | | |
| 40% | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 | | |
| 50% | 54 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | | |
| 60% | 54 | 54 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 53 | | |
| 70% | 54 | 54 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 52 | | |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | | |
| 90% | 53 | 53 | 49 | 46 | 45 | 45 | 46 | 48 | 48 | 50 | 51 | 51 | | |
| Long Term | | | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 | | |
| Water Year Types ^c | | | | | | | | | | | | | | |
| Wet (32%) | 52 | 52 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 52 | | |
| Above Normal (16%) | 55 | 54 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 52 | | |
| Below Normal (13%) | 54 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 52 | 53 | | |
| Dry (24%) | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 | | |
| Critical (15%) | 57 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 52 | 54 | 57 | 60 | | |

Alternative 1 minus No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|-----|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -2.0 | -0.3 | -0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | -0.4 | -0.1 | 0.1 | -1.9 |
| 0.2 | -0.1 | -0.1 | -0.2 | 0.0 | 0.2 | 0.0 | 0.0 | -0.1 | -0.2 | -0.3 | -0.3 | -0.2 |
| 0.3 | 0.1 | -0.2 | -0.4 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.2 | 0.0 | -0.1 | -0.1 |
| 0.4 | -0.1 | -0.4 | -0.4 | 0.0 | 0.0 | -0.1 | 0.0 | 0.1 | 0.0 | -0.1 | -0.1 | 0.6 |
| 0.5 | -0.1 | -0.4 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.3 |
| 0.6 | 0.0 | -0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 | 0.7 |
| 0.7 | -0.1 | -0.7 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.9 |
| 0.8 | -0.2 | -0.5 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| 0.9 | -0.4 | -0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.5 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.2 | -0.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.2 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.2 | -0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 1.0 |
| Above Normal (16%) | -0.1 | -0.4 | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.8 |
| Below Normal (13%) | -0.3 | -0.6 | -0.5 | -0.1 | 0.0 | -0.1 | 0.2 | 0.3 | 0.0 | 0.0 | -0.2 | 0.1 |
| Dry (24%) | 0.1 | -0.3 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 |
| Critical (15%) | -0.8 | -0.2 | 0.0 | 0.3 | 0.2 | 0.1 | 0.1 | 0.0 | -0.2 | -0.1 | -0.5 | -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.

Table B-5-2. Sacramento River below Keswick, Monthly Temperature

| No Action | Alternative |
|-----------|-------------|
|-----------|-------------|

| | Monthly Temperature (DEG-F) | | | | | | | | | | | |
|--|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 56 | 53 | 50 | 48 | 49 | 49 | 51 | 52 | 54 | 55 | 58 |
| 20% | 56 | 56 | 53 | 49 | 48 | 48 | 49 | 50 | 51 | 53 | 54 | 55 |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 |
| 40% | 55 | 56 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 53 |
| 50% | 55 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |
| 60% | 54 | 55 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 52 |
| 70% | 54 | 55 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 51 |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 51 |
| 90% | 54 | 54 | 49 | 46 | 45 | 45 | 46 | 48 | 48 | 49 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 53 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 55 | 55 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 51 |
| Below Normal (13%) | 55 | 55 | 52 | 48 | 47 | 48 | 48 | 49 | 50 | 51 | 52 | 53 |
| Dry (24%) | 55 | 55 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 52 | 53 | 54 |
| Critical (15%) | 58 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 52 | 54 | 58 | 61 |

Alternative 3

| | | | | | Mon | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 58 | 56 | 53 | 50 | 48 | 49 | 50 | 51 | 52 | 54 | 55 | 56 |
| 20% | 55 | 56 | 52 | 49 | 48 | 48 | 49 | 50 | 51 | 52 | 54 | 54 |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 |
| 40% | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 53 |
| 50% | 54 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |
| 60% | 54 | 54 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 53 |
| 70% | 54 | 54 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 52 |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| 90% | 53 | 53 | 49 | 46 | 45 | 45 | 46 | 48 | 48 | 49 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 52 | 53 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 52 |
| Above Normal (16%) | 55 | 54 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 52 |
| Below Normal (13%) | 54 | 55 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 52 | 53 |
| Dry (24%) | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 |
| Critical (15%) | 57 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 52 | 54 | 57 | 60 |

Alternative 3 minus No Action Alternative

| | Monthly Temperature (DEG-F) | | | | | | | | | | | | | |
|--|-----------------------------|------|------|------|------|------|-----|------|------|------|------|------|--|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | | |
| Probability of Exceedance ^a | | | | | | | | | | | | | | |
| 0.1 | -2.1 | -0.3 | 0.0 | 0.1 | 0.2 | -0.1 | 0.1 | -0.2 | -0.3 | -0.2 | -0.2 | -1.8 | | |
| 0.2 | -0.2 | -0.1 | -0.3 | 0.0 | 0.2 | 0.0 | 0.1 | -0.1 | -0.1 | -0.3 | -0.3 | -0.3 | | |
| 0.3 | -0.1 | -0.2 | -0.3 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 | -0.1 | -0.2 | | |
| 0.4 | -0.3 | -0.2 | -0.3 | 0.0 | 0.0 | -0.1 | 0.1 | 0.1 | 0.1 | -0.1 | 0.1 | 0.4 | | |
| 0.5 | -0.1 | -0.4 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.2 | | |
| 0.6 | 0.0 | -0.6 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.7 | | |
| 0.7 | -0.1 | -0.7 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.6 | | |
| 0.8 | -0.3 | -0.6 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.7 | | |
| 0.9 | -0.4 | -0.2 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.5 | | |
| Long Term | | | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.2 | -0.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.1 | | |
| Water Year Types ^c | | | | | | | | | | | | | | |
| Wet (32%) | -0.2 | -0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.8 | | |
| Above Normal (16%) | 0.0 | -0.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.8 | | |
| Below Normal (13%) | -0.4 | -0.6 | -0.4 | -0.1 | 0.0 | -0.1 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | -0.3 | | |
| Dry (24%) | -0.1 | -0.4 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | -0.2 | | |
| Critical (15%) | -0.6 | -0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | -0.1 | -0.1 | -0.6 | -1.2 | | |

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

Table B-5-3. Sacramento River below Keswick, Monthly Temperature

| No Action | Alternative |
|-----------|-------------|
|-----------|-------------|

| | Monthly Temperature (DEG-F) | | | | | | | | | | | | | |
|--|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep | | |
| Probability of Exceedance ^a | | | | | | | | | | | | | | |
| 10% | 60 | 56 | 53 | 50 | 48 | 49 | 49 | 51 | 52 | 54 | 55 | 58 | | |
| 20% | 56 | 56 | 53 | 49 | 48 | 48 | 49 | 50 | 51 | 53 | 54 | 55 | | |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 | | |
| 40% | 55 | 56 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 53 | | |
| 50% | 55 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | | |
| 60% | 54 | 55 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 52 | | |
| 70% | 54 | 55 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 51 | | |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 51 | | |
| 90% | 54 | 54 | 49 | 46 | 45 | 45 | 46 | 48 | 48 | 49 | 51 | 51 | | |
| Long Term | | | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 | | |
| Water Year Types ^c | | | | | | | | | | | | | | |
| Wet (32%) | 53 | 53 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 51 | | |
| Above Normal (16%) | 55 | 55 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 51 | | |
| Below Normal (13%) | 55 | 55 | 52 | 48 | 47 | 48 | 48 | 49 | 50 | 51 | 52 | 53 | | |
| Dry (24%) | 55 | 55 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 52 | 53 | 54 | | |
| Critical (15%) | 58 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 52 | 54 | 58 | 61 | | |

Alternative 5

| - | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 56 | 53 | 50 | 48 | 49 | 50 | 51 | 52 | 54 | 55 | 59 |
| 20% | 56 | 56 | 53 | 49 | 48 | 48 | 49 | 50 | 51 | 53 | 54 | 55 |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 |
| 40% | 55 | 55 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 53 |
| 50% | 54 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |
| 60% | 54 | 55 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 52 |
| 70% | 54 | 55 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 51 |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 51 |
| 90% | 54 | 54 | 49 | 46 | 44 | 45 | 46 | 48 | 48 | 49 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 53 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 55 | 55 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 51 |
| Below Normal (13%) | 54 | 55 | 52 | 48 | 47 | 48 | 48 | 49 | 50 | 51 | 52 | 53 |
| Dry (24%) | 55 | 55 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 |
| Critical (15%) | 58 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 53 | 54 | 58 | 61 |

Alternative 5 minus No Action Alternative

| | Monthly Temperature (DEG-F) | | | | | | | | | | | | | |
|--|-----------------------------|------|------|------|-----|-----|-----|-----|-----|------|------|------|--|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | | |
| Probability of Exceedance ^a | | | | | | | | | | | | | | |
| 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | -0.1 | 0.0 | 0.9 | | |
| 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | | |
| 0.3 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | | |
| 0.4 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | | |
| 0.5 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | | |
| 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 0.7 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 0.8 | -0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Above Normal (16%) | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Below Normal (13%) | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | | |
| Dry (24%) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | -0.1 | -0.1 | | |
| Critical (15%) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | -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.

Table B-5-4. Sacramento River below Keswick, Monthly Temperature

| | | | | | Mont | hly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 58 | 56 | 53 | 50 | 48 | 49 | 49 | 51 | 52 | 54 | 55 | 56 |
| 20% | 56 | 56 | 52 | 49 | 48 | 48 | 49 | 50 | 51 | 52 | 54 | 55 |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 |
| 40% | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 |
| 50% | 54 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |
| 60% | 54 | 54 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 53 |
| 70% | 54 | 54 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 52 |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| 90% | 53 | 53 | 49 | 46 | 45 | 45 | 46 | 48 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 52 | 52 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 52 |
| Above Normal (16%) | 55 | 54 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 52 |
| Below Normal (13%) | 54 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 52 | 53 |
| Dry (24%) | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 |
| Critical (15%) | 57 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 52 | 54 | 57 | 60 |

Second Basis of Comparison

No Action Alternative

| - | | Monthly Temperature (DEG-F) | | | | | | | | | | | | | |
|--|-----|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep | | | |
| Probability of Exceedance ^a | | | | | | | | | | | | | | | |
| 10% | 60 | 56 | 53 | 50 | 48 | 49 | 49 | 51 | 52 | 54 | 55 | 58 | | | |
| 20% | 56 | 56 | 53 | 49 | 48 | 48 | 49 | 50 | 51 | 53 | 54 | 55 | | | |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 | | | |
| 40% | 55 | 56 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 53 | | | |
| 50% | 55 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | | | |
| 60% | 54 | 55 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 52 | | | |
| 70% | 54 | 55 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 51 | | | |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 51 | | | |
| 90% | 54 | 54 | 49 | 46 | 45 | 45 | 46 | 48 | 48 | 49 | 51 | 51 | | | |
| Long Term | | | | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 | | | |
| Water Year Types ^c | | | | | | | | | | | | | | | |
| Wet (32%) | 53 | 53 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 51 | | | |
| Above Normal (16%) | 55 | 55 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 51 | | | |
| Below Normal (13%) | 55 | 55 | 52 | 48 | 47 | 48 | 48 | 49 | 50 | 51 | 52 | 53 | | | |
| Dry (24%) | 55 | 55 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 52 | 53 | 54 | | | |
| Critical (15%) | 58 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 52 | 54 | 58 | 61 | | | |

No Action Alternative minus Second Basis of Comparison

| | Monthly Temperature (DEG-F) | | | | | | | | | | | | | |
|--|-----------------------------|-----|------|------|------|------|------|------|-----|------|------|------|--|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | | |
| Probability of Exceedance ^a | | | | | | | | | | | | | | |
| 0.1 | 2.0 | 0.3 | 0.1 | 0.0 | -0.2 | 0.0 | 0.0 | 0.0 | 0.4 | 0.1 | -0.1 | 1.9 | | |
| 0.2 | 0.1 | 0.1 | 0.2 | 0.0 | -0.2 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.3 | 0.2 | | |
| 0.3 | -0.1 | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | | |
| 0.4 | 0.1 | 0.4 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 | 0.1 | 0.1 | -0.6 | | |
| 0.5 | 0.1 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | -0.1 | -0.3 | | |
| 0.6 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.2 | 0.0 | -0.7 | | |
| 0.7 | 0.1 | 0.7 | 0.0 | 0.0 | -0.1 | -0.2 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | -0.9 | | |
| 0.8 | 0.2 | 0.5 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.8 | | |
| 0.9 | 0.4 | 0.3 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.5 | | |
| Long Term | | | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.2 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | -0.2 | | |
| Water Year Types ^c | | | | | | | | | | | | | | |
| Wet (32%) | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -1.0 | | |
| Above Normal (16%) | 0.1 | 0.4 | 0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | -0.2 | 0.0 | -0.8 | | |
| Below Normal (13%) | 0.3 | 0.6 | 0.5 | 0.1 | 0.0 | 0.1 | -0.2 | -0.3 | 0.0 | 0.0 | 0.2 | -0.1 | | |
| Dry (24%) | -0.1 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | | |
| Critical (15%) | 0.8 | 0.2 | 0.0 | -0.3 | -0.2 | -0.1 | -0.1 | 0.0 | 0.2 | 0.1 | 0.5 | 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.

Table B-5-5. Sacramento River below Keswick, Monthly Temperature

| | | | | | Mont | hly Temper | rature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|------------|-------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 58 | 56 | 53 | 50 | 48 | 49 | 49 | 51 | 52 | 54 | 55 | 56 |
| 20% | 56 | 56 | 52 | 49 | 48 | 48 | 49 | 50 | 51 | 52 | 54 | 55 |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 |
| 40% | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 |
| 50% | 54 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |
| 60% | 54 | 54 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 53 |
| 70% | 54 | 54 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 52 |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| 90% | 53 | 53 | 49 | 46 | 45 | 45 | 46 | 48 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 52 | 52 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 52 |
| Above Normal (16%) | 55 | 54 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 52 |
| Below Normal (13%) | 54 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 52 | 53 |
| Dry (24%) | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 |
| Critical (15%) | 57 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 52 | 54 | 57 | 60 |

Second Basis of Comparison

Alternative 3

| - | Monthly Temperature (DEG-F) | | | | | | | | | | | | | |
|--|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep | | |
| Probability of Exceedance ^a | | | | | | | | | | | | | | |
| 10% | 58 | 56 | 53 | 50 | 48 | 49 | 50 | 51 | 52 | 54 | 55 | 56 | | |
| 20% | 55 | 56 | 52 | 49 | 48 | 48 | 49 | 50 | 51 | 52 | 54 | 54 | | |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 | | |
| 40% | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 53 | | |
| 50% | 54 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | | |
| 60% | 54 | 54 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 53 | | |
| 70% | 54 | 54 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 52 | | |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | | |
| 90% | 53 | 53 | 49 | 46 | 45 | 45 | 46 | 48 | 48 | 49 | 51 | 51 | | |
| Long Term | | | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 | | |
| Water Year Types ^c | | | | | | | | | | | | | | |
| Wet (32%) | 52 | 53 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 52 | | |
| Above Normal (16%) | 55 | 54 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 52 | | |
| Below Normal (13%) | 54 | 55 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 52 | 53 | | |
| Dry (24%) | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 | | |
| Critical (15%) | 57 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 52 | 54 | 57 | 60 | | |

Alternative 3 minus Second Basis of Comparison

| | Monthly Temperature (DEG-F) | | | | | | | | | | | | | |
|--|-----------------------------|------|------|------|------|------|-----|------|-----|------|------|------|--|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | | |
| Probability of Exceedance ^a | | | | | | | | | | | | | | |
| 0.1 | -0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | -0.2 | 0.1 | -0.1 | -0.2 | 0.1 | | |
| 0.2 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | | |
| 0.3 | -0.1 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 0.4 | -0.1 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.2 | -0.2 | | |
| 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | | |
| 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 0.7 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.3 | | |
| 0.8 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | | |
| 0.9 | 0.0 | 0.0 | 0.1 | 0.1 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | 0.1 | 0.0 | | |
| Long Term | | | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | | |
| Water Year Types ^c | | | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | | |
| Above Normal (16%) | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | | |
| Below Normal (13%) | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.2 | -0.3 | | |
| Dry (24%) | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | -0.1 | | |
| Critical (15%) | 0.2 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 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.

Table B-5-6. Sacramento River below Keswick, Monthly Temperature

| Statistic | Monthly Temperature (DEG-F) | | | | | | | | | | | |
|--|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 58 | 56 | 53 | 50 | 48 | 49 | 49 | 51 | 52 | 54 | 55 | 56 |
| 20% | 56 | 56 | 52 | 49 | 48 | 48 | 49 | 50 | 51 | 52 | 54 | 55 |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 |
| 40% | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 |
| 50% | 54 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |
| 60% | 54 | 54 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 53 |
| 70% | 54 | 54 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 52 |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 |
| 90% | 53 | 53 | 49 | 46 | 45 | 45 | 46 | 48 | 48 | 50 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 52 | 52 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 52 |
| Above Normal (16%) | 55 | 54 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 52 |
| Below Normal (13%) | 54 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 52 | 53 |
| Dry (24%) | 55 | 55 | 51 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 |
| Critical (15%) | 57 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 52 | 54 | 57 | 60 |

Second Basis of Comparison

Alternative 5

| Statistic | Monthly Temperature (DEG-F) | | | | | | | | | | | |
|--|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 56 | 53 | 50 | 48 | 49 | 50 | 51 | 52 | 54 | 55 | 59 |
| 20% | 56 | 56 | 53 | 49 | 48 | 48 | 49 | 50 | 51 | 53 | 54 | 55 |
| 30% | 55 | 56 | 52 | 49 | 47 | 48 | 49 | 50 | 50 | 52 | 53 | 54 |
| 40% | 55 | 55 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 53 |
| 50% | 54 | 55 | 51 | 48 | 47 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |
| 60% | 54 | 55 | 51 | 47 | 46 | 47 | 48 | 49 | 49 | 51 | 52 | 52 |
| 70% | 54 | 55 | 51 | 47 | 46 | 46 | 47 | 49 | 49 | 50 | 52 | 51 |
| 80% | 54 | 54 | 50 | 47 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 51 |
| 90% | 54 | 54 | 49 | 46 | 44 | 45 | 46 | 48 | 48 | 49 | 51 | 51 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 55 | 55 | 51 | 48 | 46 | 47 | 48 | 49 | 50 | 51 | 53 | 54 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 53 | 49 | 47 | 46 | 46 | 48 | 49 | 49 | 51 | 52 | 51 |
| Above Normal (16%) | 55 | 55 | 51 | 47 | 46 | 46 | 48 | 49 | 49 | 50 | 51 | 51 |
| Below Normal (13%) | 54 | 55 | 52 | 48 | 47 | 48 | 48 | 49 | 50 | 51 | 52 | 53 |
| Dry (24%) | 55 | 55 | 52 | 48 | 47 | 48 | 49 | 49 | 50 | 51 | 53 | 54 |
| Critical (15%) | 58 | 56 | 52 | 48 | 47 | 48 | 49 | 51 | 53 | 54 | 58 | 61 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) | | | | | | | | | | | |
|--|-----------------------------|-----|------|------|------|------|------|------|-----|------|------|------|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 2.1 | 0.3 | 0.1 | 0.2 | -0.2 | 0.0 | 0.2 | 0.0 | 0.4 | 0.0 | 0.0 | 2.8 |
| 0.2 | 0.1 | 0.1 | 0.2 | 0.0 | -0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| 0.3 | 0.0 | 0.2 | 0.4 | 0.0 | -0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 |
| 0.4 | 0.0 | 0.3 | 0.4 | 0.0 | -0.1 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | -0.5 |
| 0.5 | 0.1 | 0.4 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | -0.2 | -0.3 |
| 0.6 | 0.0 | 0.6 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | -0.7 |
| 0.7 | 0.1 | 0.7 | 0.0 | -0.1 | -0.1 | -0.2 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | -0.9 |
| 0.8 | 0.1 | 0.5 | 0.2 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.8 |
| 0.9 | 0.4 | 0.2 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 | -0.5 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.2 | 0.4 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | -0.2 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.9 |
| Above Normal (16%) | 0.1 | 0.3 | 0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | -0.2 | -0.1 | -0.8 |
| Below Normal (13%) | 0.3 | 0.6 | 0.5 | 0.1 | 0.0 | 0.1 | -0.1 | -0.2 | 0.0 | 0.0 | 0.3 | 0.0 |
| Dry (24%) | 0.0 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | -0.2 | 0.0 |
| Critical (15%) | 0.9 | 0.3 | 0.0 | -0.3 | -0.2 | -0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.4 | 1.2 |

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

B.6. Sacramento River at Balls Ferry Temperature

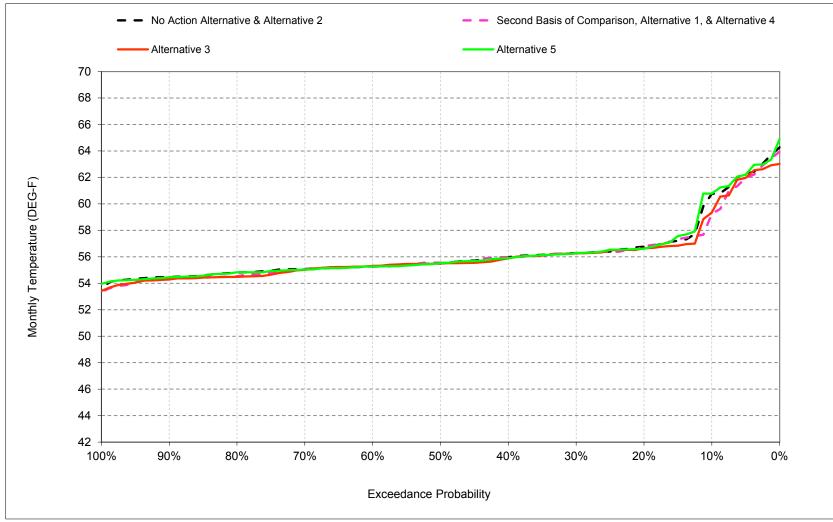


Figure B-6-1. Sacramento River at Balls Ferry, October

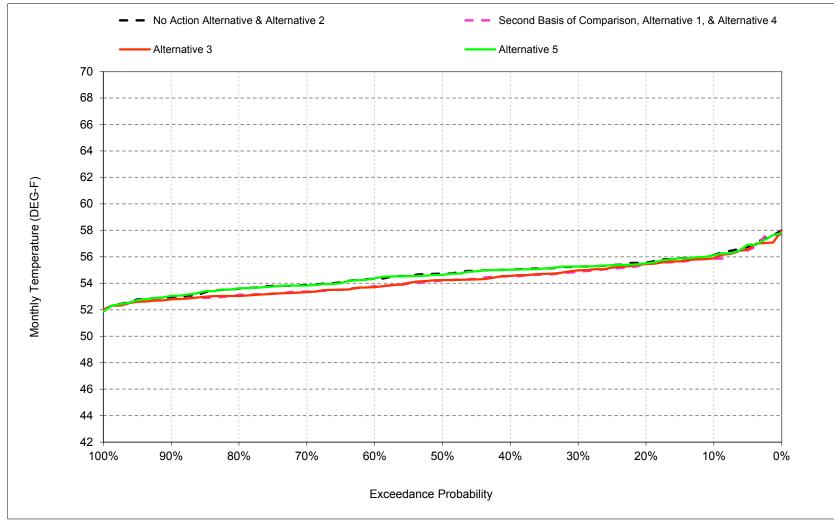


Figure B-6-2. Sacramento River at Balls Ferry, November

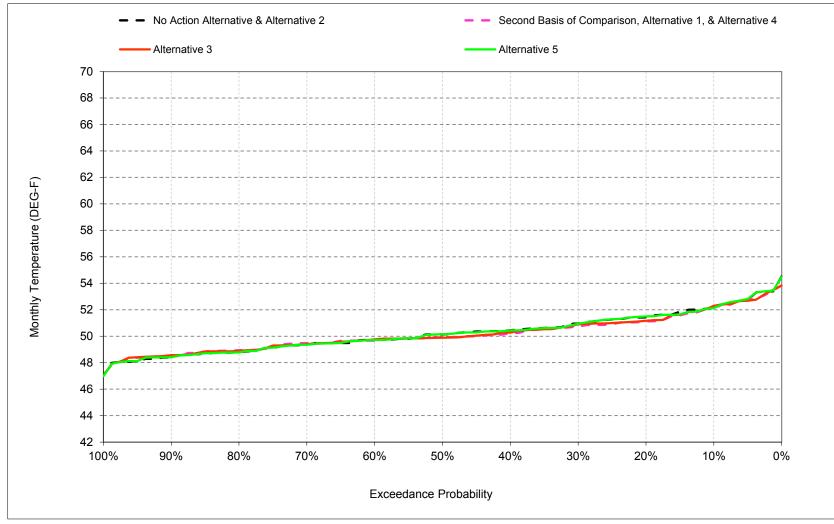


Figure B-6-3. Sacramento River at Balls Ferry, December

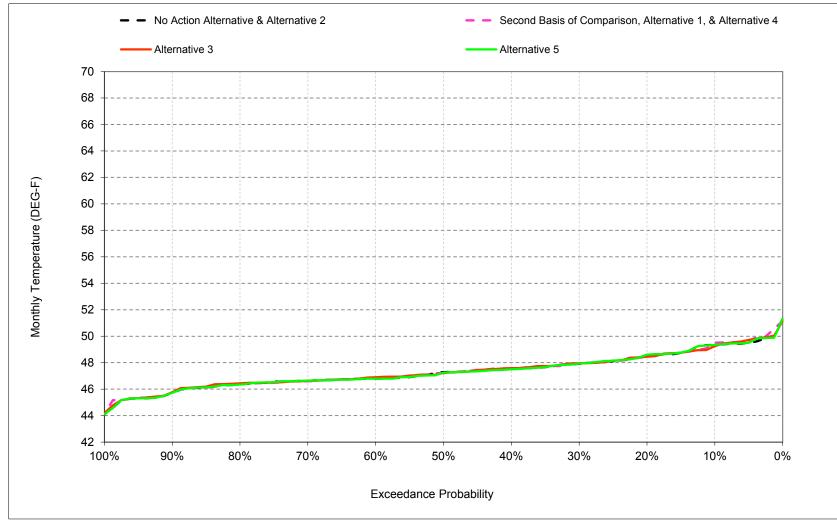


Figure B-6-4. Sacramento River at Balls Ferry, January

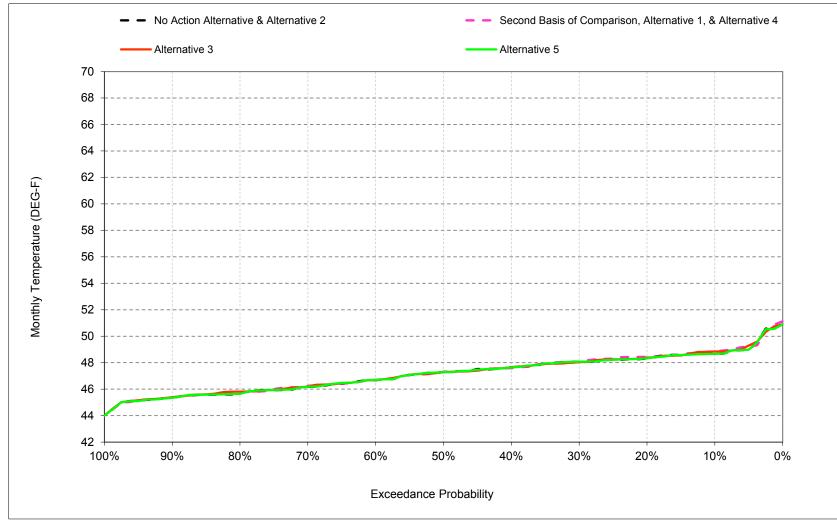


Figure B-6-5. Sacramento River at Balls Ferry, February

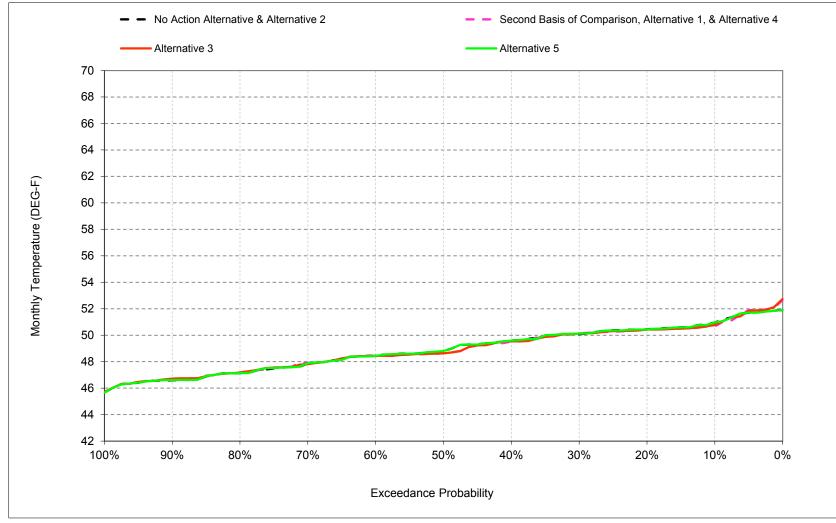


Figure B-6-6. Sacramento River at Balls Ferry, March

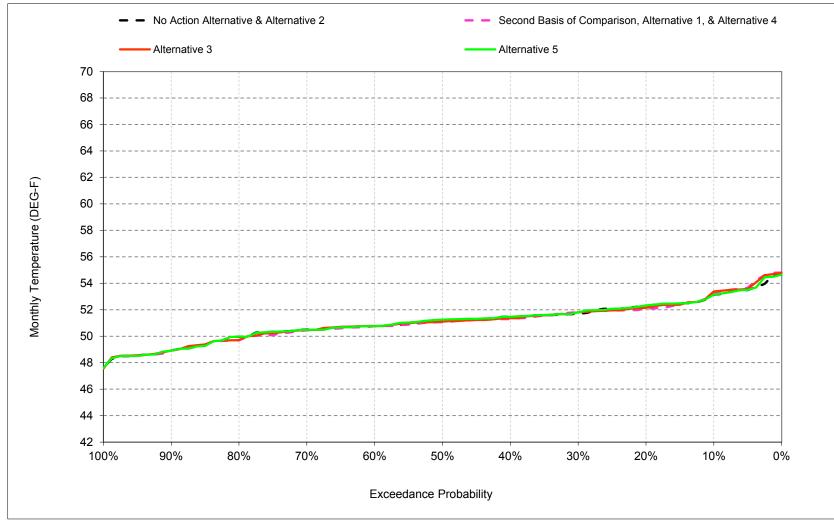


Figure B-6-7. Sacramento River at Balls Ferry, April

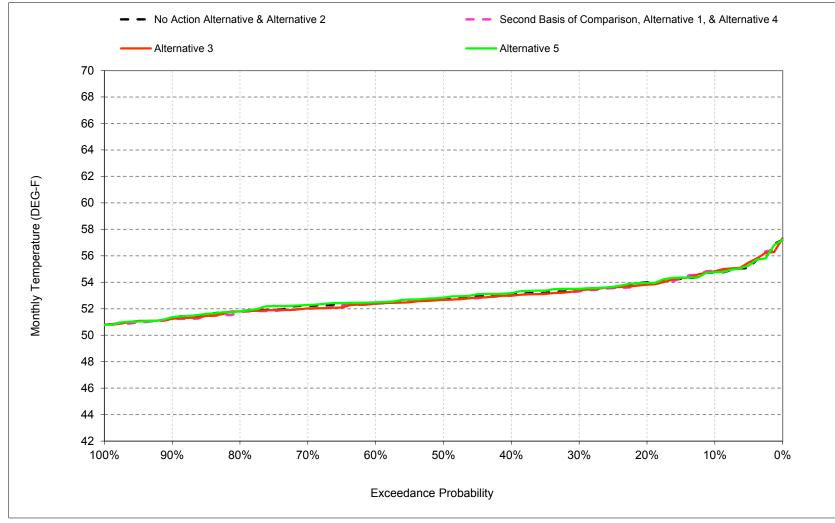


Figure B-6-8. Sacramento River at Balls Ferry, May

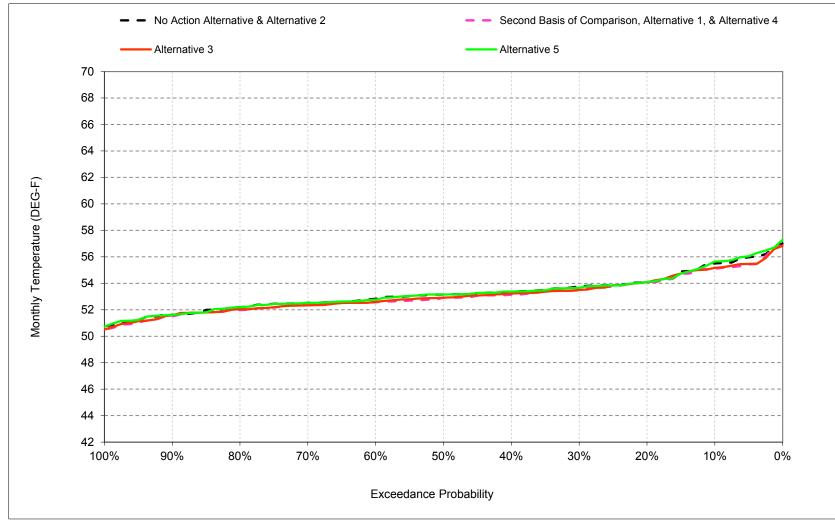


Figure B-6-9. Sacramento River at Balls Ferry, June

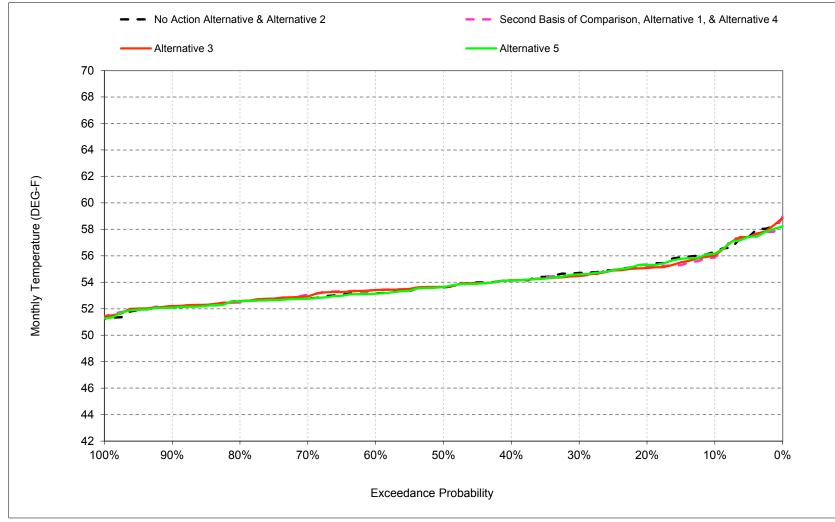


Figure B-6-10. Sacramento River at Balls Ferry, July

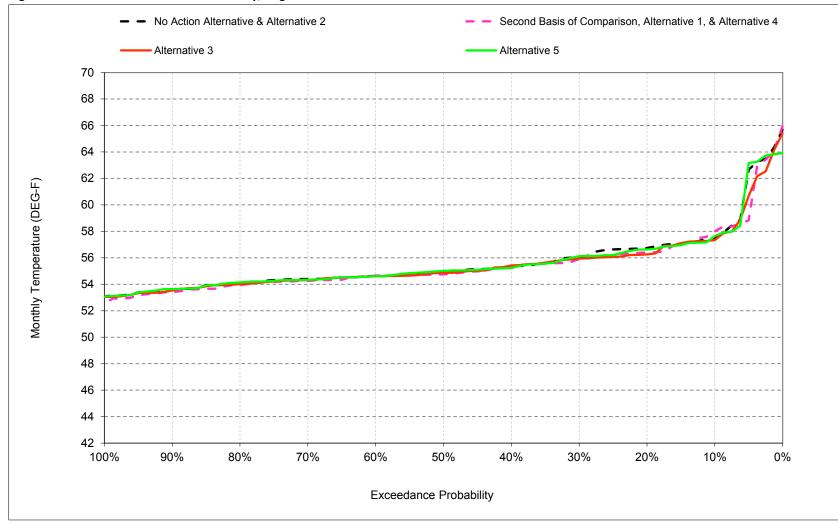


Figure B-6-11. Sacramento River at Balls Ferry, August

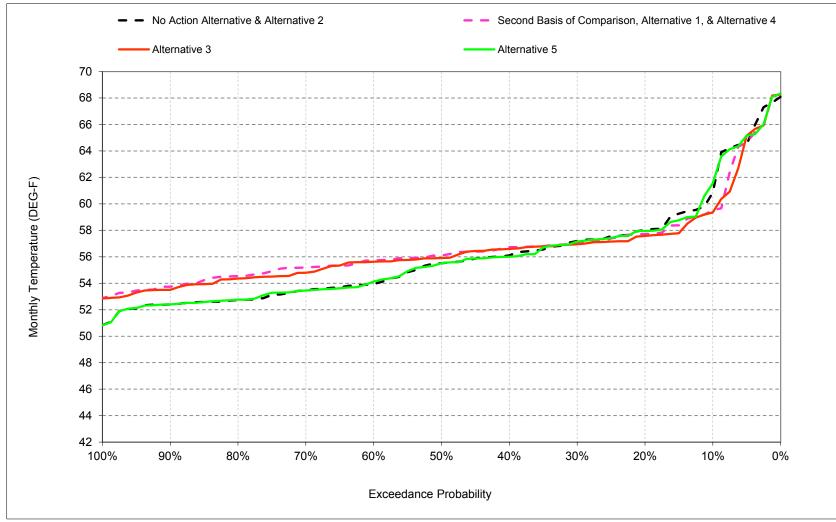


Figure B-6-12. Sacramento River at Balls Ferry, September

Table B-6-1. Sacramento River at Balls Ferry, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 55 | 56 | 57 | 61 |
| 20% | 57 | 56 | 51 | 49 | 48 | 50 | 52 | 54 | 54 | 55 | 57 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 53 | 54 | 55 | 56 | 57 |
| 40% | 56 | 55 | 50 | 48 | 48 | 50 | 51 | 53 | 53 | 54 | 55 | 56 |
| 50% | 55 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 55 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 54 |
| 70% | 55 | 54 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 53 |
| 80% | 55 | 54 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 53 | 54 | 53 |
| 90% | 54 | 53 | 48 | 46 | 45 | 47 | 49 | 51 | 52 | 52 | 53 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 56 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 47 | 50 | 53 | 53 | 53 | 54 | 53 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 53 | 52 | 52 | 54 | 54 |
| Below Normal (13%) | 56 | 55 | 51 | 47 | 47 | 50 | 51 | 52 | 53 | 53 | 55 | 56 |
| Dry (24%) | 56 | 55 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 59 | 56 | 51 | 48 | 48 | 50 | 51 | 54 | 55 | 57 | 60 | 63 |

Alternative 1

| | | | | | Mon | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 59 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 55 | 56 | 58 | 59 |
| 20% | 57 | 56 | 51 | 48 | 48 | 50 | 52 | 54 | 54 | 55 | 56 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| 40% | 56 | 55 | 50 | 48 | 48 | 49 | 51 | 53 | 53 | 54 | 55 | 57 |
| 50% | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 56 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 56 |
| 70% | 55 | 53 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 55 |
| 80% | 55 | 53 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 52 | 54 | 55 |
| 90% | 54 | 53 | 48 | 46 | 45 | 47 | 49 | 51 | 51 | 52 | 53 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 48 | 50 | 53 | 53 | 53 | 54 | 55 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 52 | 52 | 53 | 54 | 55 |
| Below Normal (13%) | 55 | 54 | 50 | 47 | 47 | 49 | 51 | 52 | 53 | 53 | 54 | 56 |
| Dry (24%) | 56 | 54 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 58 | 56 | 51 | 48 | 48 | 50 | 51 | 54 | 55 | 57 | 60 | 62 |

Alternative 1 minus No Action Alternative

| | | | | | Mont | thly Temper | rature (DEG | -F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -1.5 | -0.3 | 0.0 | 0.1 | 0.2 | -0.3 | 0.2 | 0.1 | -0.4 | -0.4 | 0.5 | -1.3 |
| 0.2 | 0.0 | -0.1 | -0.3 | -0.1 | 0.1 | 0.0 | -0.1 | -0.1 | 0.0 | -0.2 | -0.3 | -0.3 |
| 0.3 | 0.0 | -0.4 | -0.2 | 0.0 | 0.0 | 0.1 | 0.1 | -0.1 | -0.3 | -0.2 | -0.2 | -0.2 |
| 0.4 | 0.0 | -0.5 | -0.2 | 0.1 | 0.0 | -0.1 | -0.2 | -0.1 | -0.2 | 0.0 | -0.1 | 0.6 |
| 0.5 | 0.1 | -0.5 | -0.2 | -0.1 | 0.0 | -0.1 | -0.1 | -0.1 | -0.3 | 0.0 | -0.2 | 0.6 |
| 0.6 | 0.0 | -0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 | 0.2 | 0.0 | 1.7 |
| 0.7 | 0.0 | -0.5 | 0.1 | 0.0 | 0.0 | 0.2 | -0.1 | -0.2 | -0.1 | 0.2 | -0.1 | 1.7 |
| 0.8 | -0.3 | -0.5 | 0.2 | 0.0 | 0.1 | 0.0 | -0.3 | -0.2 | -0.2 | -0.1 | -0.1 | 1.8 |
| 0.9 | 0.0 | -0.1 | 0.1 | 0.0 | 0.0 | 0.1 | -0.1 | 0.0 | -0.2 | 0.1 | -0.1 | 1.3 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | -0.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 | 0.0 | -0.2 | 0.7 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | -0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.2 | 2.0 |
| Above Normal (16%) | 0.0 | -0.4 | -0.1 | 0.1 | 0.0 | -0.1 | 0.0 | -0.2 | -0.2 | 0.1 | -0.1 | 1.5 |
| Below Normal (13%) | -0.3 | -0.6 | -0.4 | 0.0 | 0.0 | -0.2 | 0.0 | 0.0 | -0.2 | 0.0 | -0.3 | 0.0 |
| Dry (24%) | 0.0 | -0.3 | -0.2 | -0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.3 | -0.1 | 0.1 | -0.1 |
| Critical (15%) | -0.6 | -0.3 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | -0.3 | -0.1 | -0.4 | -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.

Table B-6-2. Sacramento River at Balls Ferry, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 55 | 56 | 57 | 61 |
| 20% | 57 | 56 | 51 | 49 | 48 | 50 | 52 | 54 | 54 | 55 | 57 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 53 | 54 | 55 | 56 | 57 |
| 40% | 56 | 55 | 50 | 48 | 48 | 50 | 51 | 53 | 53 | 54 | 55 | 56 |
| 50% | 55 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 55 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 54 |
| 70% | 55 | 54 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 53 |
| 80% | 55 | 54 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 53 | 54 | 53 |
| 90% | 54 | 53 | 48 | 46 | 45 | 47 | 49 | 51 | 52 | 52 | 53 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 56 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 47 | 50 | 53 | 53 | 53 | 54 | 53 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 53 | 52 | 52 | 54 | 54 |
| Below Normal (13%) | 56 | 55 | 51 | 47 | 47 | 50 | 51 | 52 | 53 | 53 | 55 | 56 |
| Dry (24%) | 56 | 55 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 59 | 56 | 51 | 48 | 48 | 50 | 51 | 54 | 55 | 57 | 60 | 63 |

Alternative 3

| | | | | | Mont | thly Temper | ature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 59 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 55 | 56 | 57 | 59 |
| 20% | 57 | 55 | 51 | 48 | 48 | 50 | 52 | 54 | 54 | 55 | 56 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| 40% | 56 | 55 | 50 | 48 | 48 | 50 | 51 | 53 | 53 | 54 | 55 | 57 |
| 50% | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 56 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 56 |
| 70% | 55 | 53 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 55 |
| 80% | 54 | 53 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 52 | 54 | 54 |
| 90% | 54 | 53 | 49 | 46 | 45 | 47 | 49 | 51 | 52 | 52 | 53 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 56 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 48 | 50 | 53 | 53 | 53 | 54 | 55 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 52 | 52 | 53 | 54 | 55 |
| Below Normal (13%) | 55 | 54 | 50 | 47 | 47 | 50 | 51 | 52 | 53 | 53 | 55 | 56 |
| Dry (24%) | 56 | 54 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 58 | 56 | 51 | 48 | 48 | 50 | 52 | 54 | 55 | 57 | 59 | 62 |

Alternative 3 minus No Action Alternative

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -1.4 | -0.3 | 0.1 | -0.1 | 0.2 | -0.2 | 0.2 | 0.1 | -0.3 | -0.3 | -0.2 | -1.4 |
| 0.2 | -0.1 | -0.1 | -0.3 | -0.1 | 0.1 | 0.0 | -0.1 | -0.2 | 0.0 | -0.2 | -0.5 | -0.4 |
| 0.3 | 0.0 | -0.3 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.3 | -0.2 | -0.1 | -0.2 |
| 0.4 | -0.1 | -0.5 | -0.2 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | 0.0 | 0.1 | 0.5 |
| 0.5 | 0.0 | -0.5 | -0.2 | -0.1 | 0.0 | -0.1 | 0.0 | -0.1 | -0.2 | 0.0 | -0.1 | 0.4 |
| 0.6 | 0.1 | -0.6 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 | 0.2 | 0.0 | 1.6 |
| 0.7 | -0.1 | -0.5 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.2 | -0.2 | 0.1 | -0.1 | 1.3 |
| 0.8 | -0.3 | -0.6 | 0.1 | 0.1 | 0.2 | 0.0 | -0.3 | 0.0 | -0.2 | -0.1 | -0.1 | 1.6 |
| 0.9 | -0.2 | -0.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.1 | -0.1 | 1.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.2 | -0.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 | -0.2 | 0.5 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | -0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 1.8 |
| Above Normal (16%) | 0.0 | -0.4 | -0.2 | 0.0 | 0.0 | -0.1 | 0.0 | -0.2 | -0.1 | 0.2 | 0.1 | 1.5 |
| Below Normal (13%) | -0.3 | -0.6 | -0.4 | 0.0 | 0.0 | -0.2 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | -0.7 |
| Dry (24%) | -0.1 | -0.4 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.3 | -0.1 | -0.2 | -0.2 |
| Critical (15%) | -0.5 | -0.2 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | -0.3 | 0.0 | -0.5 | -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.

Table B-6-3. Sacramento River at Balls Ferry, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 55 | 56 | 57 | 61 |
| 20% | 57 | 56 | 51 | 49 | 48 | 50 | 52 | 54 | 54 | 55 | 57 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 53 | 54 | 55 | 56 | 57 |
| 40% | 56 | 55 | 50 | 48 | 48 | 50 | 51 | 53 | 53 | 54 | 55 | 56 |
| 50% | 55 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 55 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 54 |
| 70% | 55 | 54 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 53 |
| 80% | 55 | 54 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 53 | 54 | 53 |
| 90% | 54 | 53 | 48 | 46 | 45 | 47 | 49 | 51 | 52 | 52 | 53 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 56 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 47 | 50 | 53 | 53 | 53 | 54 | 53 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 53 | 52 | 52 | 54 | 54 |
| Below Normal (13%) | 56 | 55 | 51 | 47 | 47 | 50 | 51 | 52 | 53 | 53 | 55 | 56 |
| Dry (24%) | 56 | 55 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 59 | 56 | 51 | 48 | 48 | 50 | 51 | 54 | 55 | 57 | 60 | 63 |

Alternative 5

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 56 | 56 | 58 | 61 |
| 20% | 57 | 56 | 51 | 49 | 48 | 50 | 52 | 54 | 54 | 55 | 57 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 54 | 54 | 55 | 56 | 57 |
| 40% | 56 | 55 | 50 | 47 | 48 | 50 | 51 | 53 | 53 | 54 | 55 | 56 |
| 50% | 56 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 55 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 54 |
| 70% | 55 | 54 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 53 |
| 80% | 55 | 54 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 53 | 54 | 53 |
| 90% | 54 | 53 | 48 | 46 | 45 | 47 | 49 | 51 | 52 | 52 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 56 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 47 | 50 | 53 | 53 | 53 | 54 | 53 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 53 | 52 | 52 | 54 | 54 |
| Below Normal (13%) | 55 | 54 | 51 | 47 | 48 | 50 | 51 | 53 | 53 | 53 | 55 | 56 |
| Dry (24%) | 56 | 55 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 59 | 56 | 51 | 48 | 48 | 50 | 52 | 54 | 56 | 57 | 60 | 63 |

Alternative 5 minus No Action Alternative

| | | | | | Mon | thly Temper | ature (DEG | -F) | | | | |
|--|------|------|-----|------|-----|-------------|------------|-----|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.1 | 0.7 |
| 0.2 | -0.2 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | -0.1 | -0.1 | 0.0 | -0.1 |
| 0.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 |
| 0.5 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 |
| 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 |
| 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.9 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Above Normal (16%) | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Below Normal (13%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 |
| Dry (24%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | -0.1 | -0.2 | -0.1 |
| Critical (15%) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | -0.2 | -0.2 | 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.

Table B-6-4. Sacramento River at Balls Ferry, Monthly Temperature

| | | | | | Mon | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 59 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 55 | 56 | 58 | 59 |
| 20% | 57 | 56 | 51 | 48 | 48 | 50 | 52 | 54 | 54 | 55 | 56 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| 40% | 56 | 55 | 50 | 48 | 48 | 49 | 51 | 53 | 53 | 54 | 55 | 57 |
| 50% | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 56 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 56 |
| 70% | 55 | 53 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 55 |
| 80% | 55 | 53 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 52 | 54 | 55 |
| 90% | 54 | 53 | 48 | 46 | 45 | 47 | 49 | 51 | 51 | 52 | 53 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 48 | 50 | 53 | 53 | 53 | 54 | 55 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 52 | 52 | 53 | 54 | 55 |
| Below Normal (13%) | 55 | 54 | 50 | 47 | 47 | 49 | 51 | 52 | 53 | 53 | 54 | 56 |
| Dry (24%) | 56 | 54 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 58 | 56 | 51 | 48 | 48 | 50 | 51 | 54 | 55 | 57 | 60 | 62 |

Second Basis of Comparison

No Action Alternative

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 55 | 56 | 57 | 61 |
| 20% | 57 | 56 | 51 | 49 | 48 | 50 | 52 | 54 | 54 | 55 | 57 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 53 | 54 | 55 | 56 | 57 |
| 40% | 56 | 55 | 50 | 48 | 48 | 50 | 51 | 53 | 53 | 54 | 55 | 56 |
| 50% | 55 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 55 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 54 |
| 70% | 55 | 54 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 53 |
| 80% | 55 | 54 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 53 | 54 | 53 |
| 90% | 54 | 53 | 48 | 46 | 45 | 47 | 49 | 51 | 52 | 52 | 53 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 56 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 47 | 50 | 53 | 53 | 53 | 54 | 53 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 53 | 52 | 52 | 54 | 54 |
| Below Normal (13%) | 56 | 55 | 51 | 47 | 47 | 50 | 51 | 52 | 53 | 53 | 55 | 56 |
| Dry (24%) | 56 | 55 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 59 | 56 | 51 | 48 | 48 | 50 | 51 | 54 | 55 | 57 | 60 | 63 |

No Action Alternative minus Second Basis of Comparison

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|-----|------|------|------|-------------|-------------|------|-----|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 1.5 | 0.3 | 0.0 | -0.1 | -0.2 | 0.3 | -0.2 | -0.1 | 0.4 | 0.4 | -0.5 | 1.3 |
| 0.2 | 0.0 | 0.1 | 0.3 | 0.1 | -0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 | 0.3 | 0.3 |
| 0.3 | 0.0 | 0.4 | 0.2 | 0.0 | 0.0 | -0.1 | -0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 |
| 0.4 | 0.0 | 0.5 | 0.2 | -0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.2 | 0.0 | 0.1 | -0.6 |
| 0.5 | -0.1 | 0.5 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.0 | 0.2 | -0.6 |
| 0.6 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | -0.2 | 0.0 | -1.7 |
| 0.7 | 0.0 | 0.5 | -0.1 | 0.0 | 0.0 | -0.2 | 0.1 | 0.2 | 0.1 | -0.2 | 0.1 | -1.7 |
| 0.8 | 0.3 | 0.5 | -0.2 | 0.0 | -0.1 | 0.0 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | -1.8 |
| 0.9 | 0.0 | 0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.1 | 0.0 | 0.2 | -0.1 | 0.1 | -1.3 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.2 | -0.7 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.1 | 0.3 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | -2.0 |
| Above Normal (16%) | 0.0 | 0.4 | 0.1 | -0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.2 | -0.1 | 0.1 | -1.5 |
| Below Normal (13%) | 0.3 | 0.6 | 0.4 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 | 0.0 | 0.3 | 0.0 |
| Dry (24%) | 0.0 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.1 | -0.1 | 0.1 |
| Critical (15%) | 0.6 | 0.3 | 0.0 | -0.2 | -0.2 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.4 | 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.

Table B-6-5. Sacramento River at Balls Ferry, Monthly Temperature

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 59 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 55 | 56 | 58 | 59 |
| 20% | 57 | 56 | 51 | 48 | 48 | 50 | 52 | 54 | 54 | 55 | 56 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| 40% | 56 | 55 | 50 | 48 | 48 | 49 | 51 | 53 | 53 | 54 | 55 | 57 |
| 50% | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 56 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 56 |
| 70% | 55 | 53 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 55 |
| 80% | 55 | 53 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 52 | 54 | 55 |
| 90% | 54 | 53 | 48 | 46 | 45 | 47 | 49 | 51 | 51 | 52 | 53 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 48 | 50 | 53 | 53 | 53 | 54 | 55 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 52 | 52 | 53 | 54 | 55 |
| Below Normal (13%) | 55 | 54 | 50 | 47 | 47 | 49 | 51 | 52 | 53 | 53 | 54 | 56 |
| Dry (24%) | 56 | 54 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 58 | 56 | 51 | 48 | 48 | 50 | 51 | 54 | 55 | 57 | 60 | 62 |

Second Basis of Comparison

Alternative 3

| - | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 59 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 55 | 56 | 57 | 59 |
| 20% | 57 | 55 | 51 | 48 | 48 | 50 | 52 | 54 | 54 | 55 | 56 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| 40% | 56 | 55 | 50 | 48 | 48 | 50 | 51 | 53 | 53 | 54 | 55 | 57 |
| 50% | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 56 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 56 |
| 70% | 55 | 53 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 55 |
| 80% | 54 | 53 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 52 | 54 | 54 |
| 90% | 54 | 53 | 49 | 46 | 45 | 47 | 49 | 51 | 52 | 52 | 53 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 56 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 48 | 50 | 53 | 53 | 53 | 54 | 55 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 52 | 52 | 53 | 54 | 55 |
| Below Normal (13%) | 55 | 54 | 50 | 47 | 47 | 50 | 51 | 52 | 53 | 53 | 55 | 56 |
| Dry (24%) | 56 | 54 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 58 | 56 | 51 | 48 | 48 | 50 | 52 | 54 | 55 | 57 | 59 | 62 |

Alternative 3 minus Second Basis of Comparison

| | Monthly Temperature (DEG-F) | | | | | | | | | | | | | |
|--|-----------------------------|------|------|------|------|------|-----|------|-----|------|------|------|--|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | | |
| Probability of Exceedance ^a | | | | | | | | | | | | | | |
| 0.1 | 0.1 | 0.0 | 0.1 | -0.3 | 0.0 | 0.1 | 0.0 | -0.1 | 0.1 | 0.1 | -0.6 | -0.1 | | |
| 0.2 | -0.2 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.1 | -0.1 | 0.0 | -0.1 | -0.2 | -0.1 | | |
| 0.3 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | -0.1 | | |
| 0.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | -0.1 | | |
| 0.5 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | -0.2 | | |
| 0.6 | 0.1 | -0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | | |
| 0.7 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.4 | | |
| 0.8 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.1 | -0.2 | | |
| 0.9 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.2 | | |
| Long Term | | | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | | |
| Water Year Types ^c | | | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.2 | | |
| Above Normal (16%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | | |
| Below Normal (13%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | -0.1 | 0.2 | -0.6 | | |
| Dry (24%) | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -0.2 | -0.1 | | |
| Critical (15%) | 0.1 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -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.

Table B-6-6. Sacramento River at Balls Ferry, Monthly Temperature

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 59 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 55 | 56 | 58 | 59 |
| 20% | 57 | 56 | 51 | 48 | 48 | 50 | 52 | 54 | 54 | 55 | 56 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| 40% | 56 | 55 | 50 | 48 | 48 | 49 | 51 | 53 | 53 | 54 | 55 | 57 |
| 50% | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 56 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 56 |
| 70% | 55 | 53 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 55 |
| 80% | 55 | 53 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 52 | 54 | 55 |
| 90% | 54 | 53 | 48 | 46 | 45 | 47 | 49 | 51 | 51 | 52 | 53 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 54 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 48 | 50 | 53 | 53 | 53 | 54 | 55 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 52 | 52 | 53 | 54 | 55 |
| Below Normal (13%) | 55 | 54 | 50 | 47 | 47 | 49 | 51 | 52 | 53 | 53 | 54 | 56 |
| Dry (24%) | 56 | 54 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 58 | 56 | 51 | 48 | 48 | 50 | 51 | 54 | 55 | 57 | 60 | 62 |

Second Basis of Comparison

Alternative 5

| | | | | | Mont | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 52 | 49 | 49 | 51 | 53 | 55 | 56 | 56 | 58 | 61 |
| 20% | 57 | 56 | 51 | 49 | 48 | 50 | 52 | 54 | 54 | 55 | 57 | 58 |
| 30% | 56 | 55 | 51 | 48 | 48 | 50 | 52 | 54 | 54 | 55 | 56 | 57 |
| 40% | 56 | 55 | 50 | 47 | 48 | 50 | 51 | 53 | 53 | 54 | 55 | 56 |
| 50% | 56 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 55 | 55 |
| 60% | 55 | 54 | 50 | 47 | 47 | 48 | 51 | 52 | 53 | 53 | 55 | 54 |
| 70% | 55 | 54 | 49 | 47 | 46 | 48 | 50 | 52 | 52 | 53 | 54 | 53 |
| 80% | 55 | 54 | 49 | 46 | 46 | 47 | 50 | 52 | 52 | 53 | 54 | 53 |
| 90% | 54 | 53 | 48 | 46 | 45 | 47 | 49 | 51 | 52 | 52 | 54 | 52 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 56 | 55 | 50 | 47 | 47 | 49 | 51 | 53 | 53 | 54 | 56 | 56 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 53 | 52 | 48 | 47 | 46 | 47 | 50 | 53 | 53 | 53 | 54 | 53 |
| Above Normal (16%) | 56 | 54 | 50 | 47 | 46 | 48 | 51 | 53 | 52 | 52 | 54 | 54 |
| Below Normal (13%) | 55 | 54 | 51 | 47 | 48 | 50 | 51 | 53 | 53 | 53 | 55 | 56 |
| Dry (24%) | 56 | 55 | 50 | 48 | 48 | 50 | 52 | 53 | 53 | 54 | 56 | 57 |
| Critical (15%) | 59 | 56 | 51 | 48 | 48 | 50 | 52 | 54 | 56 | 57 | 60 | 63 |

Alternative 5 minus Second Basis of Comparison

| | Monthly Temperature (DEG-F) | | | | | | | | | | | | | |
|--|-----------------------------|-----|------|------|------|------|------|------|-----|------|------|------|--|--|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | | |
| Probability of Exceedance ^a | | | | | | | | | | | | | | |
| 0.1 | 1.5 | 0.3 | -0.1 | -0.1 | -0.2 | 0.3 | -0.2 | -0.1 | 0.5 | 0.3 | -0.4 | 2.0 | | |
| 0.2 | -0.2 | 0.0 | 0.4 | 0.1 | -0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | | |
| 0.3 | 0.0 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | | |
| 0.4 | -0.1 | 0.5 | 0.2 | -0.1 | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | -0.7 | | |
| 0.5 | 0.0 | 0.4 | 0.2 | -0.1 | 0.0 | 0.2 | 0.2 | 0.2 | 0.3 | 0.0 | 0.3 | -0.7 | | |
| 0.6 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | -0.3 | 0.0 | -1.5 | | |
| 0.7 | 0.0 | 0.5 | -0.1 | 0.0 | 0.0 | -0.2 | 0.1 | 0.3 | 0.1 | -0.2 | 0.1 | -1.7 | | |
| 0.8 | 0.3 | 0.5 | -0.2 | 0.0 | -0.1 | 0.0 | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 | -1.8 | | |
| 0.9 | 0.0 | 0.3 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | -0.1 | 0.2 | -1.3 | | |
| Long Term | | | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.2 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.1 | -0.7 | | |
| Water Year Types ^c | | | | | | | | | | | | | | |
| Wet (32%) | 0.1 | 0.3 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | -2.0 | | |
| Above Normal (16%) | 0.0 | 0.3 | 0.2 | -0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.2 | -0.1 | 0.1 | -1.5 | | |
| Below Normal (13%) | 0.2 | 0.5 | 0.4 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | 0.2 | 0.0 | 0.5 | 0.0 | | |
| Dry (24%) | 0.0 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 0.3 | 0.0 | -0.3 | 0.0 | | |
| Critical (15%) | 0.7 | 0.3 | 0.0 | -0.2 | -0.2 | 0.0 | 0.0 | 0.1 | 0.4 | -0.1 | 0.2 | 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.

B.7. Sacramento River at Jellys Ferry Temperature

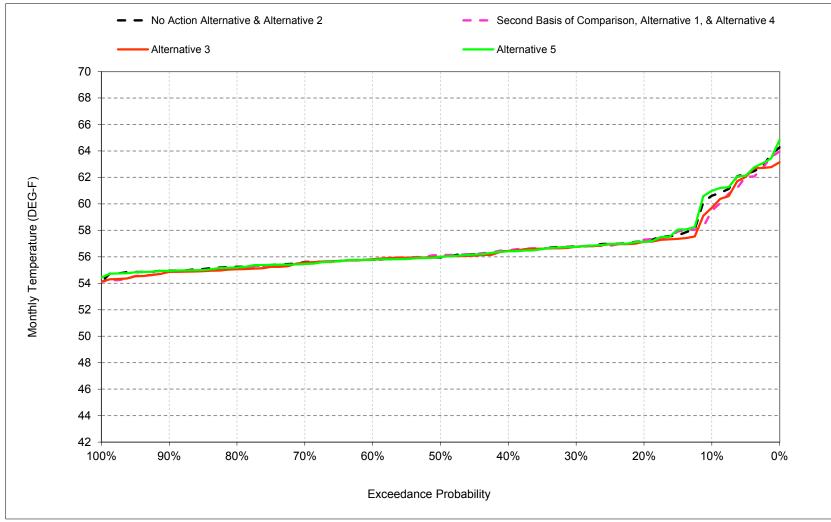


Figure B-7-1. Sacramento River at Jellys Ferry, October

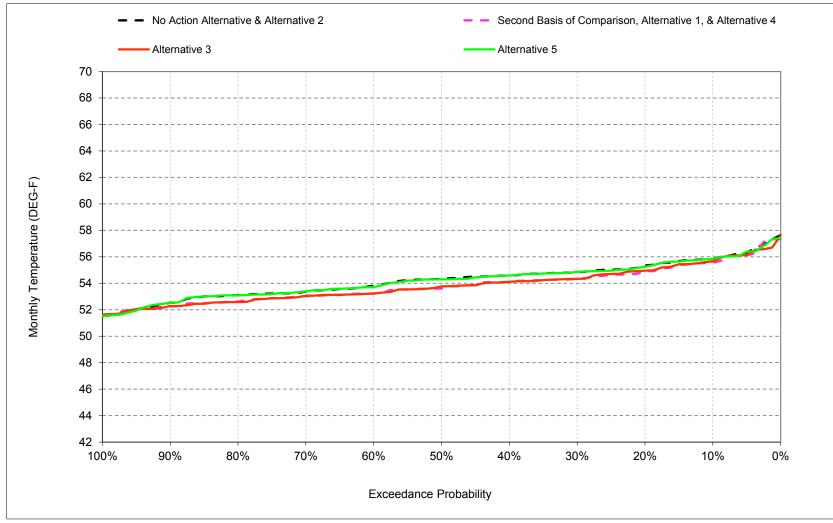


Figure B-7-2. Sacramento River at Jellys Ferry, November

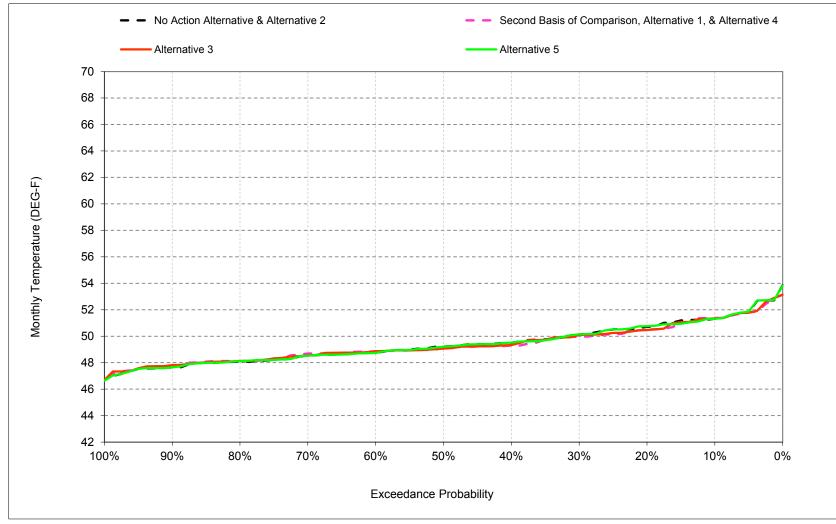


Figure B-7-3. Sacramento River at Jellys Ferry, December

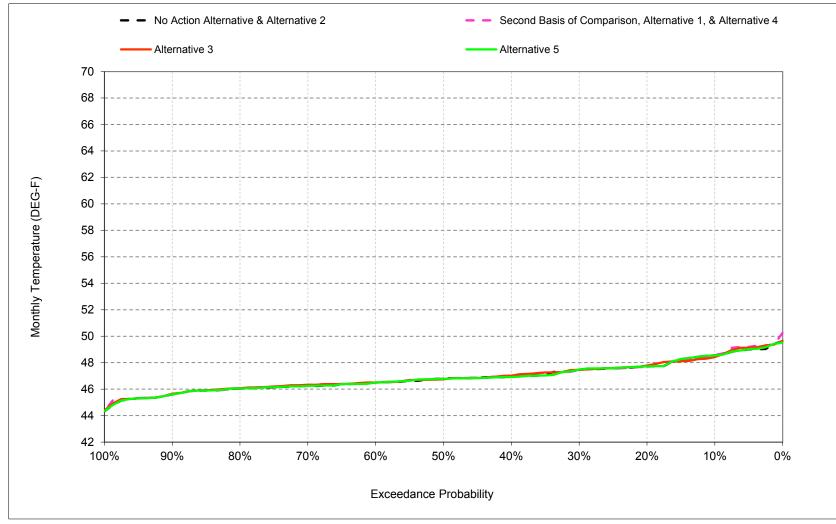


Figure B-7-4. Sacramento River at Jellys Ferry, January

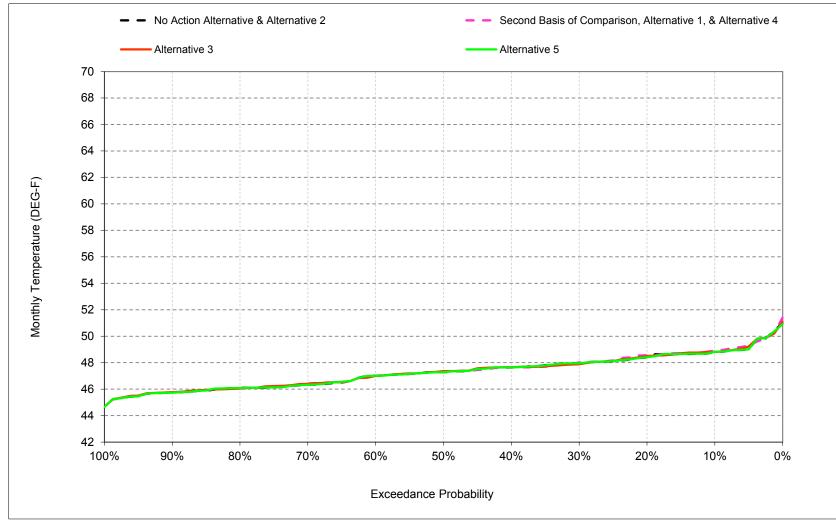


Figure B-7-5. Sacramento River at Jellys Ferry, February

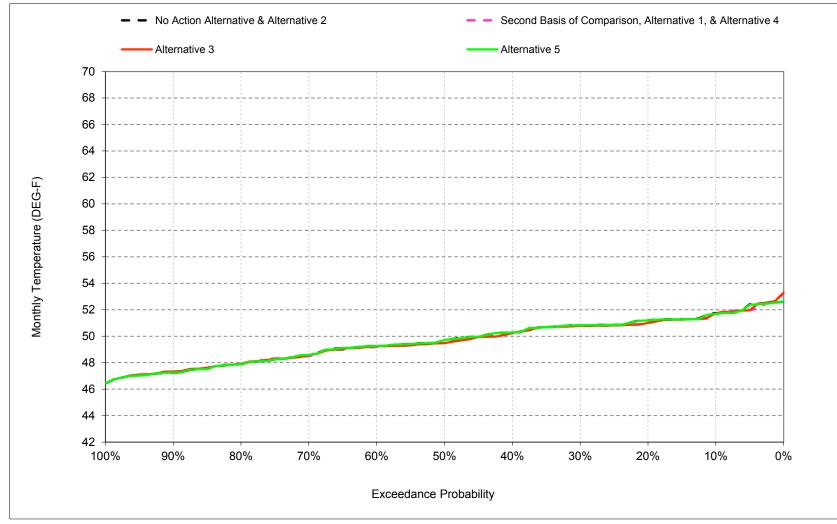


Figure B-7-6. Sacramento River at Jellys Ferry, March

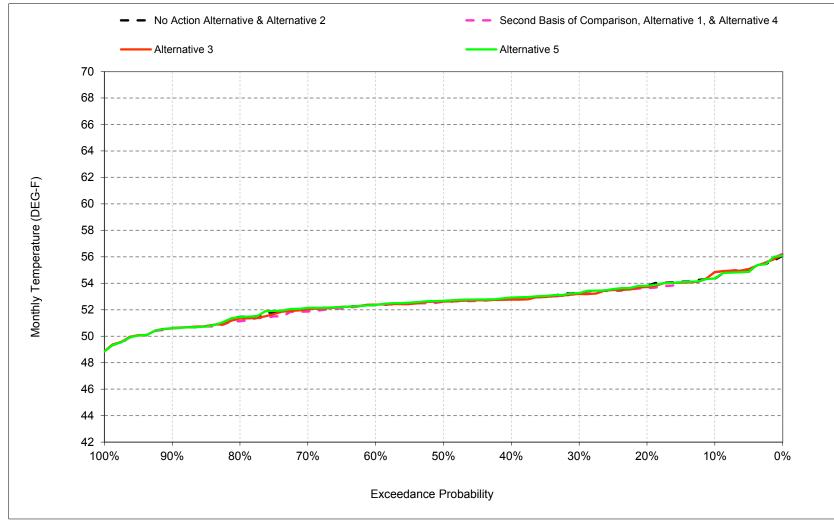


Figure B-7-7. Sacramento River at Jellys Ferry, April

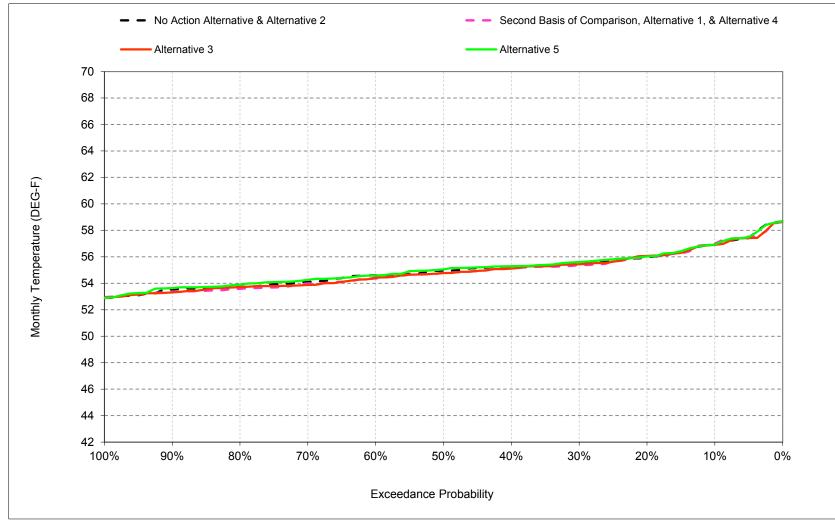


Figure B-7-8. Sacramento River at Jellys Ferry, May

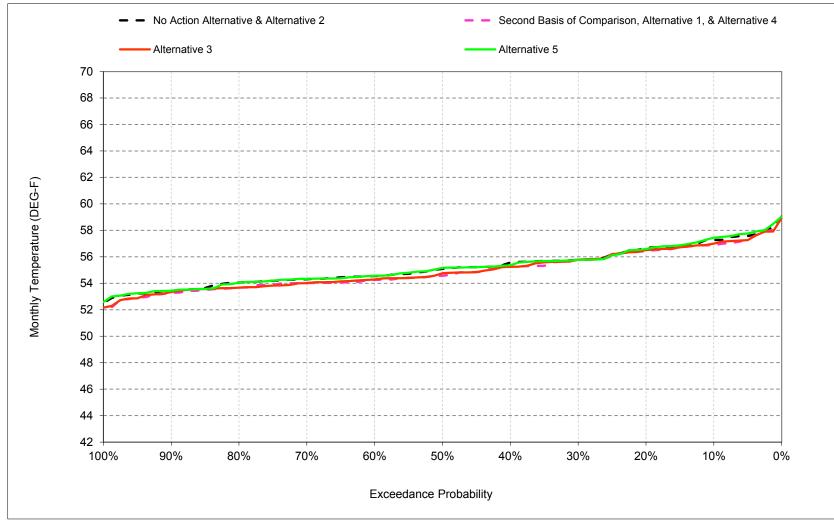


Figure B-7-9. Sacramento River at Jellys Ferry, June

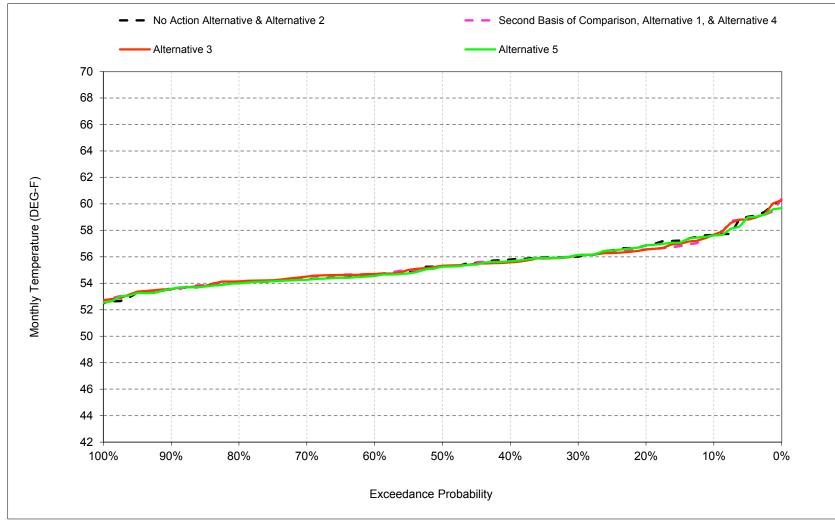


Figure B-7-10. Sacramento River at Jellys Ferry, July

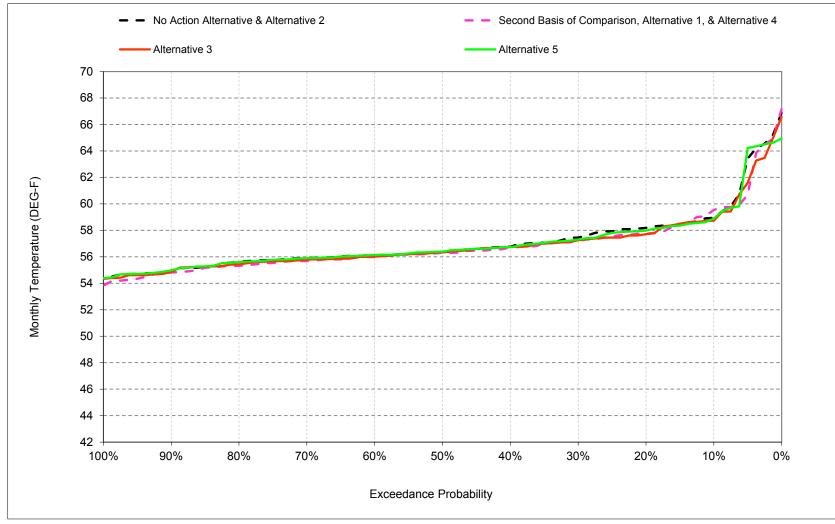


Figure B-7-11. Sacramento River at Jellys Ferry, August

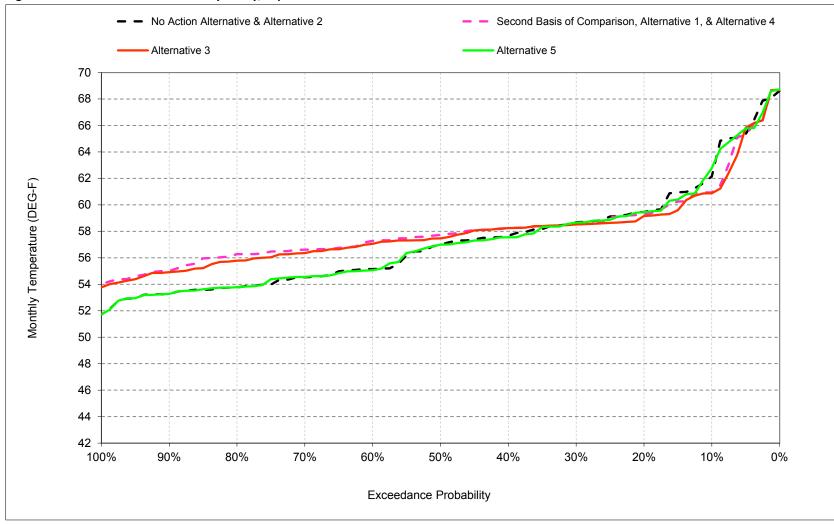


Figure B-7-12. Sacramento River at Jellys Ferry, September

Table B-7-1. Sacramento River at Jellys Ferry, Monthly Temperature

| No Action | Alternative |
|-----------|-------------|
|-----------|-------------|

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 49 | 49 | 52 | 54 | 57 | 57 | 58 | 59 | 62 |
| 20% | 57 | 55 | 51 | 48 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 59 |
| 30% | 57 | 55 | 50 | 47 | 48 | 51 | 53 | 55 | 56 | 56 | 57 | 59 |
| 40% | 56 | 55 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 56 | 57 |
| 60% | 56 | 54 | 49 | 46 | 47 | 49 | 52 | 55 | 55 | 55 | 56 | 55 |
| 70% | 56 | 53 | 49 | 46 | 46 | 49 | 52 | 54 | 54 | 54 | 56 | 55 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 56 | 54 |
| 90% | 55 | 53 | 48 | 45 | 46 | 47 | 51 | 54 | 53 | 53 | 55 | 53 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 57 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 52 | 47 | 46 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 54 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 55 |
| Below Normal (13%) | 56 | 54 | 50 | 47 | 48 | 50 | 53 | 54 | 55 | 55 | 56 | 58 |
| Dry (24%) | 57 | 54 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 55 | 58 | 59 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 64 |

Alternative 1

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 59 | 56 | 51 | 49 | 49 | 52 | 55 | 57 | 57 | 58 | 59 | 61 |
| 20% | 57 | 55 | 51 | 48 | 49 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 30% | 57 | 54 | 50 | 47 | 48 | 51 | 53 | 55 | 56 | 56 | 57 | 59 |
| 40% | 56 | 54 | 49 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 49 | 53 | 55 | 55 | 55 | 56 | 58 |
| 60% | 56 | 53 | 49 | 46 | 47 | 49 | 52 | 54 | 54 | 55 | 56 | 57 |
| 70% | 55 | 53 | 49 | 46 | 46 | 48 | 52 | 54 | 54 | 54 | 56 | 57 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 55 | 56 |
| 90% | 55 | 52 | 48 | 45 | 46 | 47 | 50 | 53 | 53 | 53 | 55 | 55 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 52 | 55 | 55 | 55 | 57 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 47 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 56 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 57 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 50 | 53 | 54 | 54 | 55 | 56 | 58 |
| Dry (24%) | 57 | 54 | 49 | 47 | 48 | 50 | 53 | 55 | 54 | 55 | 58 | 59 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 63 |

Alternative 1 minus No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -1.1 | -0.3 | 0.1 | 0.0 | 0.1 | -0.1 | 0.5 | 0.1 | -0.4 | 0.0 | 0.5 | -1.2 |
| 0.2 | 0.1 | -0.4 | -0.2 | 0.0 | 0.2 | -0.2 | -0.1 | 0.1 | -0.2 | -0.3 | -0.4 | -0.2 |
| 0.3 | 0.0 | -0.5 | -0.2 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | 0.0 | 0.1 | -0.3 | -0.1 |
| 0.4 | 0.0 | -0.5 | -0.2 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | -0.2 | -0.1 | -0.1 | 0.6 |
| 0.5 | 0.2 | -0.7 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.2 | -0.5 | -0.1 | -0.1 | 0.8 |
| 0.6 | 0.0 | -0.6 | 0.1 | 0.0 | -0.1 | -0.1 | 0.0 | -0.3 | -0.3 | 0.1 | -0.1 | 2.1 |
| 0.7 | -0.2 | -0.3 | 0.2 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.3 | 0.1 | -0.2 | 2.1 |
| 0.8 | -0.1 | -0.5 | 0.1 | 0.0 | 0.0 | 0.0 | -0.3 | -0.1 | -0.4 | 0.1 | -0.3 | 2.5 |
| 0.9 | -0.1 | -0.3 | 0.1 | 0.0 | 0.0 | 0.1 | -0.1 | -0.2 | -0.2 | 0.0 | -0.1 | 1.7 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | -0.4 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.3 | 0.0 | -0.2 | 0.9 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | -0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.3 | 2.5 |
| Above Normal (16%) | 0.0 | -0.4 | -0.2 | 0.1 | 0.0 | -0.1 | 0.0 | -0.2 | -0.3 | 0.1 | -0.2 | 1.8 |
| Below Normal (13%) | -0.2 | -0.5 | -0.3 | 0.1 | 0.0 | -0.3 | -0.1 | -0.1 | -0.3 | 0.0 | -0.4 | -0.1 |
| Dry (24%) | 0.0 | -0.3 | -0.2 | -0.1 | 0.0 | 0.0 | -0.1 | -0.2 | -0.4 | -0.1 | 0.1 | -0.1 |
| Critical (15%) | -0.5 | -0.3 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | -0.4 | -0.1 | -0.4 | -0.9 |

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.

Table B-7-2. Sacramento River at Jellys Ferry, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 49 | 49 | 52 | 54 | 57 | 57 | 58 | 59 | 62 |
| 20% | 57 | 55 | 51 | 48 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 59 |
| 30% | 57 | 55 | 50 | 47 | 48 | 51 | 53 | 55 | 56 | 56 | 57 | 59 |
| 40% | 56 | 55 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 56 | 57 |
| 60% | 56 | 54 | 49 | 46 | 47 | 49 | 52 | 55 | 55 | 55 | 56 | 55 |
| 70% | 56 | 53 | 49 | 46 | 46 | 49 | 52 | 54 | 54 | 54 | 56 | 55 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 56 | 54 |
| 90% | 55 | 53 | 48 | 45 | 46 | 47 | 51 | 54 | 53 | 53 | 55 | 53 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 57 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 52 | 47 | 46 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 54 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 55 |
| Below Normal (13%) | 56 | 54 | 50 | 47 | 48 | 50 | 53 | 54 | 55 | 55 | 56 | 58 |
| Dry (24%) | 57 | 54 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 55 | 58 | 59 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 64 |

Alternative 3

| - | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 56 | 51 | 48 | 49 | 52 | 55 | 57 | 57 | 58 | 59 | 61 |
| 20% | 57 | 55 | 50 | 48 | 48 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 30% | 57 | 54 | 50 | 47 | 48 | 51 | 53 | 55 | 56 | 56 | 57 | 59 |
| 40% | 56 | 54 | 49 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 49 | 53 | 55 | 55 | 55 | 56 | 57 |
| 60% | 56 | 53 | 49 | 47 | 47 | 49 | 52 | 54 | 54 | 55 | 56 | 57 |
| 70% | 56 | 53 | 49 | 46 | 46 | 48 | 52 | 54 | 54 | 54 | 56 | 56 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 55 | 56 |
| 90% | 55 | 52 | 48 | 45 | 46 | 47 | 51 | 53 | 53 | 54 | 55 | 55 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 57 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 47 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 56 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 57 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 50 | 53 | 54 | 54 | 55 | 56 | 57 |
| Dry (24%) | 56 | 54 | 50 | 47 | 48 | 50 | 53 | 55 | 54 | 55 | 57 | 59 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 63 |

Alternative 3 minus No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -0.9 | -0.2 | 0.0 | -0.1 | 0.0 | -0.1 | 0.5 | 0.0 | -0.3 | 0.0 | -0.2 | -1.2 |
| 0.2 | 0.0 | -0.4 | -0.2 | 0.1 | 0.1 | -0.2 | -0.1 | 0.1 | -0.2 | -0.3 | -0.5 | -0.4 |
| 0.3 | 0.0 | -0.5 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | -0.2 | -0.1 |
| 0.4 | 0.0 | -0.5 | -0.2 | 0.1 | 0.0 | -0.1 | -0.1 | -0.1 | -0.2 | -0.2 | 0.0 | 0.6 |
| 0.5 | 0.1 | -0.6 | -0.2 | -0.1 | 0.1 | -0.1 | 0.0 | -0.2 | -0.4 | 0.0 | 0.0 | 0.5 |
| 0.6 | 0.0 | -0.6 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | -0.2 | -0.3 | 0.1 | -0.1 | 2.0 |
| 0.7 | 0.0 | -0.3 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | -0.2 | -0.3 | 0.2 | -0.1 | 1.9 |
| 0.8 | -0.2 | -0.5 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 | -0.4 | 0.1 | -0.1 | 2.0 |
| 0.9 | -0.1 | -0.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | -0.2 | -0.2 | 0.1 | -0.1 | 1.6 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.2 | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 | 0.0 | -0.2 | 0.7 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | -0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.2 | 2.3 |
| Above Normal (16%) | 0.0 | -0.4 | -0.2 | 0.0 | 0.0 | -0.1 | 0.0 | -0.2 | -0.2 | 0.2 | 0.0 | 1.9 |
| Below Normal (13%) | -0.2 | -0.6 | -0.3 | 0.1 | 0.0 | -0.2 | -0.1 | -0.1 | -0.2 | -0.1 | -0.1 | -0.9 |
| Dry (24%) | -0.1 | -0.4 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.4 | -0.1 | -0.2 | -0.2 |
| Critical (15%) | -0.4 | -0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | -0.3 | 0.1 | -0.5 | -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.

Table B-7-3. Sacramento River at Jellys Ferry, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 49 | 49 | 52 | 54 | 57 | 57 | 58 | 59 | 62 |
| 20% | 57 | 55 | 51 | 48 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 59 |
| 30% | 57 | 55 | 50 | 47 | 48 | 51 | 53 | 55 | 56 | 56 | 57 | 59 |
| 40% | 56 | 55 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 56 | 57 |
| 60% | 56 | 54 | 49 | 46 | 47 | 49 | 52 | 55 | 55 | 55 | 56 | 55 |
| 70% | 56 | 53 | 49 | 46 | 46 | 49 | 52 | 54 | 54 | 54 | 56 | 55 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 56 | 54 |
| 90% | 55 | 53 | 48 | 45 | 46 | 47 | 51 | 54 | 53 | 53 | 55 | 53 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 57 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 52 | 47 | 46 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 54 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 55 |
| Below Normal (13%) | 56 | 54 | 50 | 47 | 48 | 50 | 53 | 54 | 55 | 55 | 56 | 58 |
| Dry (24%) | 57 | 54 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 55 | 58 | 59 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 64 |

Alternative 5

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 49 | 49 | 52 | 54 | 57 | 57 | 58 | 59 | 63 |
| 20% | 57 | 55 | 51 | 48 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 59 |
| 30% | 57 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 56 | 56 | 57 | 59 |
| 40% | 56 | 55 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 56 | 57 |
| 60% | 56 | 54 | 49 | 46 | 47 | 49 | 52 | 55 | 55 | 55 | 56 | 55 |
| 70% | 55 | 53 | 49 | 46 | 46 | 49 | 52 | 54 | 54 | 54 | 56 | 55 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 56 | 54 |
| 90% | 55 | 53 | 48 | 45 | 46 | 47 | 51 | 54 | 53 | 53 | 55 | 53 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 57 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 52 | 47 | 46 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 54 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 55 |
| Below Normal (13%) | 56 | 54 | 50 | 47 | 48 | 50 | 53 | 54 | 55 | 55 | 56 | 58 |
| Dry (24%) | 57 | 54 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 55 | 57 | 59 |
| Critical (15%) | 59 | 56 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 64 |

Alternative 5 minus No Action Alternative

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|-----|-----|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.2 | 0.0 | -0.1 | 0.6 |
| 0.2 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.0 | -0.2 | 0.0 |
| 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | -0.2 | 0.0 |
| 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | -0.1 | -0.1 | 0.0 | -0.1 |
| 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 |
| 0.6 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 |
| 0.7 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.8 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | -0.1 | 0.0 | 0.0 | 0.0 |
| 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | -0.1 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Above Normal (16%) | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| Below Normal (13%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | -0.1 |
| Dry (24%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | -0.1 | -0.2 | -0.2 |
| Critical (15%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | -0.2 | -0.2 | 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.

Table B-7-4. Sacramento River at Jellys Ferry, Monthly Temperature

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 59 | 56 | 51 | 49 | 49 | 52 | 55 | 57 | 57 | 58 | 59 | 61 |
| 20% | 57 | 55 | 51 | 48 | 49 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 30% | 57 | 54 | 50 | 47 | 48 | 51 | 53 | 55 | 56 | 56 | 57 | 59 |
| 40% | 56 | 54 | 49 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 49 | 53 | 55 | 55 | 55 | 56 | 58 |
| 60% | 56 | 53 | 49 | 46 | 47 | 49 | 52 | 54 | 54 | 55 | 56 | 57 |
| 70% | 55 | 53 | 49 | 46 | 46 | 48 | 52 | 54 | 54 | 54 | 56 | 57 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 55 | 56 |
| 90% | 55 | 52 | 48 | 45 | 46 | 47 | 50 | 53 | 53 | 53 | 55 | 55 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 52 | 55 | 55 | 55 | 57 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 47 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 56 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 57 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 50 | 53 | 54 | 54 | 55 | 56 | 58 |
| Dry (24%) | 57 | 54 | 49 | 47 | 48 | 50 | 53 | 55 | 54 | 55 | 58 | 59 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 63 |

Second Basis of Comparison

No Action Alternative

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 49 | 49 | 52 | 54 | 57 | 57 | 58 | 59 | 62 |
| 20% | 57 | 55 | 51 | 48 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 59 |
| 30% | 57 | 55 | 50 | 47 | 48 | 51 | 53 | 55 | 56 | 56 | 57 | 59 |
| 40% | 56 | 55 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 56 | 57 |
| 60% | 56 | 54 | 49 | 46 | 47 | 49 | 52 | 55 | 55 | 55 | 56 | 55 |
| 70% | 56 | 53 | 49 | 46 | 46 | 49 | 52 | 54 | 54 | 54 | 56 | 55 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 56 | 54 |
| 90% | 55 | 53 | 48 | 45 | 46 | 47 | 51 | 54 | 53 | 53 | 55 | 53 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 57 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 52 | 47 | 46 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 54 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 55 |
| Below Normal (13%) | 56 | 54 | 50 | 47 | 48 | 50 | 53 | 54 | 55 | 55 | 56 | 58 |
| Dry (24%) | 57 | 54 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 55 | 58 | 59 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 64 |

No Action Alternative minus Second Basis of Comparison

| | | | | | Mont | thly Temper | rature (DEG | -F) | | | | |
|--|------|-----|------|------|------|-------------|-------------|------|-----|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 1.1 | 0.3 | -0.1 | 0.0 | -0.1 | 0.1 | -0.5 | -0.1 | 0.4 | 0.0 | -0.5 | 1.2 |
| 0.2 | -0.1 | 0.4 | 0.2 | 0.0 | -0.2 | 0.2 | 0.1 | -0.1 | 0.2 | 0.3 | 0.4 | 0.2 |
| 0.3 | 0.0 | 0.5 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | -0.1 | 0.3 | 0.1 |
| 0.4 | 0.0 | 0.5 | 0.2 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 | -0.6 |
| 0.5 | -0.2 | 0.7 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.5 | 0.1 | 0.1 | -0.8 |
| 0.6 | 0.0 | 0.6 | -0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.3 | 0.3 | -0.1 | 0.1 | -2.1 |
| 0.7 | 0.2 | 0.3 | -0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | -0.1 | 0.2 | -2.1 |
| 0.8 | 0.1 | 0.5 | -0.1 | 0.0 | 0.0 | 0.0 | 0.3 | 0.1 | 0.4 | -0.1 | 0.3 | -2.5 |
| 0.9 | 0.1 | 0.3 | -0.1 | 0.0 | 0.0 | -0.1 | 0.1 | 0.2 | 0.2 | 0.0 | 0.1 | -1.7 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.0 | 0.2 | -0.9 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.1 | 0.4 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 | -2.5 |
| Above Normal (16%) | 0.0 | 0.4 | 0.2 | -0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.3 | -0.1 | 0.2 | -1.8 |
| Below Normal (13%) | 0.2 | 0.5 | 0.3 | -0.1 | 0.0 | 0.3 | 0.1 | 0.1 | 0.3 | 0.0 | 0.4 | 0.1 |
| Dry (24%) | 0.0 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.1 | -0.1 | 0.1 |
| Critical (15%) | 0.5 | 0.3 | 0.0 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 0.1 | 0.4 | 0.9 |

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.

Table B-7-5. Sacramento River at Jellys Ferry, Monthly Temperature

| | | | | | Mont | hly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 59 | 56 | 51 | 49 | 49 | 52 | 55 | 57 | 57 | 58 | 59 | 61 |
| 20% | 57 | 55 | 51 | 48 | 49 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 30% | 57 | 54 | 50 | 47 | 48 | 51 | 53 | 55 | 56 | 56 | 57 | 59 |
| 40% | 56 | 54 | 49 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 49 | 53 | 55 | 55 | 55 | 56 | 58 |
| 60% | 56 | 53 | 49 | 46 | 47 | 49 | 52 | 54 | 54 | 55 | 56 | 57 |
| 70% | 55 | 53 | 49 | 46 | 46 | 48 | 52 | 54 | 54 | 54 | 56 | 57 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 55 | 56 |
| 90% | 55 | 52 | 48 | 45 | 46 | 47 | 50 | 53 | 53 | 53 | 55 | 55 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 52 | 55 | 55 | 55 | 57 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 47 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 56 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 57 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 50 | 53 | 54 | 54 | 55 | 56 | 58 |
| Dry (24%) | 57 | 54 | 49 | 47 | 48 | 50 | 53 | 55 | 54 | 55 | 58 | 59 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 63 |

Second Basis of Comparison

Alternative 3

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 56 | 51 | 48 | 49 | 52 | 55 | 57 | 57 | 58 | 59 | 61 |
| 20% | 57 | 55 | 50 | 48 | 48 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 30% | 57 | 54 | 50 | 47 | 48 | 51 | 53 | 55 | 56 | 56 | 57 | 59 |
| 40% | 56 | 54 | 49 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 49 | 53 | 55 | 55 | 55 | 56 | 57 |
| 60% | 56 | 53 | 49 | 47 | 47 | 49 | 52 | 54 | 54 | 55 | 56 | 57 |
| 70% | 56 | 53 | 49 | 46 | 46 | 48 | 52 | 54 | 54 | 54 | 56 | 56 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 55 | 56 |
| 90% | 55 | 52 | 48 | 45 | 46 | 47 | 51 | 53 | 53 | 54 | 55 | 55 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 57 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 47 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 56 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 57 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 50 | 53 | 54 | 54 | 55 | 56 | 57 |
| Dry (24%) | 56 | 54 | 50 | 47 | 48 | 50 | 53 | 55 | 54 | 55 | 57 | 59 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 63 |

Alternative 3 minus Second Basis of Comparison

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|-----|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.2 | 0.1 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.1 | 0.0 | -0.8 | -0.1 |
| 0.2 | -0.1 | 0.0 | 0.0 | 0.1 | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.2 |
| 0.3 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | -0.1 | 0.1 | 0.0 |
| 0.5 | -0.1 | 0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | -0.2 |
| 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 |
| 0.7 | 0.1 | 0.0 | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | -0.1 | 0.0 | 0.0 | 0.1 | -0.2 |
| 0.8 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | -0.5 |
| 0.9 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | -0.2 |
| Above Normal (16%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 |
| Below Normal (13%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.3 | -0.8 |
| Dry (24%) | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -0.2 | -0.1 |
| Critical (15%) | 0.1 | 0.1 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | -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.

Table B-7-6. Sacramento River at Jellys Ferry, Monthly Temperature

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|-------------|-------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 59 | 56 | 51 | 49 | 49 | 52 | 55 | 57 | 57 | 58 | 59 | 61 |
| 20% | 57 | 55 | 51 | 48 | 49 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 30% | 57 | 54 | 50 | 47 | 48 | 51 | 53 | 55 | 56 | 56 | 57 | 59 |
| 40% | 56 | 54 | 49 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 49 | 53 | 55 | 55 | 55 | 56 | 58 |
| 60% | 56 | 53 | 49 | 46 | 47 | 49 | 52 | 54 | 54 | 55 | 56 | 57 |
| 70% | 55 | 53 | 49 | 46 | 46 | 48 | 52 | 54 | 54 | 54 | 56 | 57 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 55 | 56 |
| 90% | 55 | 52 | 48 | 45 | 46 | 47 | 50 | 53 | 53 | 53 | 55 | 55 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 52 | 55 | 55 | 55 | 57 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 47 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 56 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 57 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 50 | 53 | 54 | 54 | 55 | 56 | 58 |
| Dry (24%) | 57 | 54 | 49 | 47 | 48 | 50 | 53 | 55 | 54 | 55 | 58 | 59 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 63 |

Second Basis of Comparison

Alternative 5

| | | | | | Mont | hly Temper | ature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 49 | 49 | 52 | 54 | 57 | 57 | 58 | 59 | 63 |
| 20% | 57 | 55 | 51 | 48 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 59 |
| 30% | 57 | 55 | 50 | 47 | 48 | 51 | 53 | 56 | 56 | 56 | 57 | 59 |
| 40% | 56 | 55 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 56 | 57 |
| 60% | 56 | 54 | 49 | 46 | 47 | 49 | 52 | 55 | 55 | 55 | 56 | 55 |
| 70% | 55 | 53 | 49 | 46 | 46 | 49 | 52 | 54 | 54 | 54 | 56 | 55 |
| 80% | 55 | 53 | 48 | 46 | 46 | 48 | 51 | 54 | 54 | 54 | 56 | 54 |
| 90% | 55 | 53 | 48 | 45 | 46 | 47 | 51 | 54 | 53 | 53 | 55 | 53 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 55 | 55 | 55 | 57 | 57 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 52 | 47 | 46 | 47 | 48 | 52 | 55 | 55 | 55 | 56 | 54 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 49 | 52 | 55 | 54 | 54 | 55 | 55 |
| Below Normal (13%) | 56 | 54 | 50 | 47 | 48 | 50 | 53 | 54 | 55 | 55 | 56 | 58 |
| Dry (24%) | 57 | 54 | 50 | 47 | 48 | 50 | 53 | 55 | 55 | 55 | 57 | 59 |
| Critical (15%) | 59 | 56 | 50 | 47 | 48 | 51 | 53 | 56 | 57 | 58 | 61 | 64 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) | | | | | | | | | | | |
|--|-----------------------------|-----|------|------|------|------|------|------|-----|------|------|------|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 1.5 | 0.3 | -0.1 | 0.0 | -0.1 | 0.0 | -0.4 | -0.1 | 0.5 | 0.0 | -0.6 | 1.7 |
| 0.2 | -0.2 | 0.3 | 0.2 | 0.1 | -0.2 | 0.2 | 0.2 | 0.0 | 0.2 | 0.3 | 0.2 | 0.2 |
| 0.3 | 0.0 | 0.5 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 |
| 0.4 | 0.0 | 0.5 | 0.2 | -0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | -0.7 |
| 0.5 | -0.1 | 0.7 | 0.1 | 0.0 | -0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.0 | 0.1 | -0.8 |
| 0.6 | 0.0 | 0.5 | -0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 | 0.3 | -0.2 | 0.1 | -2.2 |
| 0.7 | 0.0 | 0.4 | -0.2 | -0.1 | 0.0 | 0.1 | 0.2 | 0.3 | 0.3 | -0.2 | 0.2 | -2.0 |
| 0.8 | 0.0 | 0.5 | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 | 0.3 | 0.3 | -0.1 | 0.2 | -2.5 |
| 0.9 | 0.1 | 0.3 | -0.1 | 0.0 | 0.0 | -0.1 | 0.1 | 0.3 | 0.2 | 0.0 | 0.2 | -1.7 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.0 | 0.2 | -0.9 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.1 | 0.4 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.3 | -2.5 |
| Above Normal (16%) | 0.0 | 0.3 | 0.2 | -0.1 | 0.0 | 0.1 | 0.0 | 0.3 | 0.3 | -0.1 | 0.2 | -1.8 |
| Below Normal (13%) | 0.2 | 0.5 | 0.3 | 0.0 | 0.0 | 0.2 | 0.1 | 0.2 | 0.3 | 0.0 | 0.6 | 0.0 |
| Dry (24%) | 0.0 | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.2 | 0.4 | 0.4 | 0.0 | -0.3 | 0.0 |
| Critical (15%) | 0.6 | 0.3 | 0.0 | -0.2 | -0.2 | 0.0 | 0.1 | 0.2 | 0.5 | -0.1 | 0.2 | 0.9 |

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.

B.8. Sacramento River at Bend Bridge Temperature

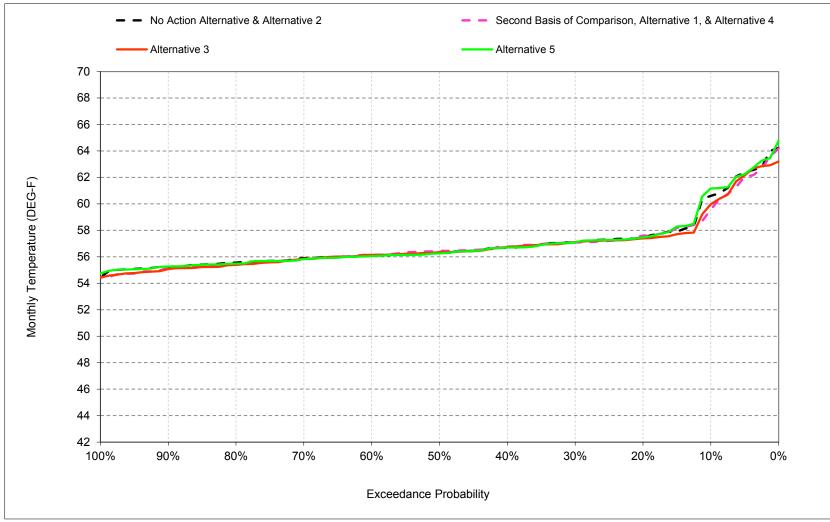


Figure B-8-1. Sacramento River at Bend Bridge, October

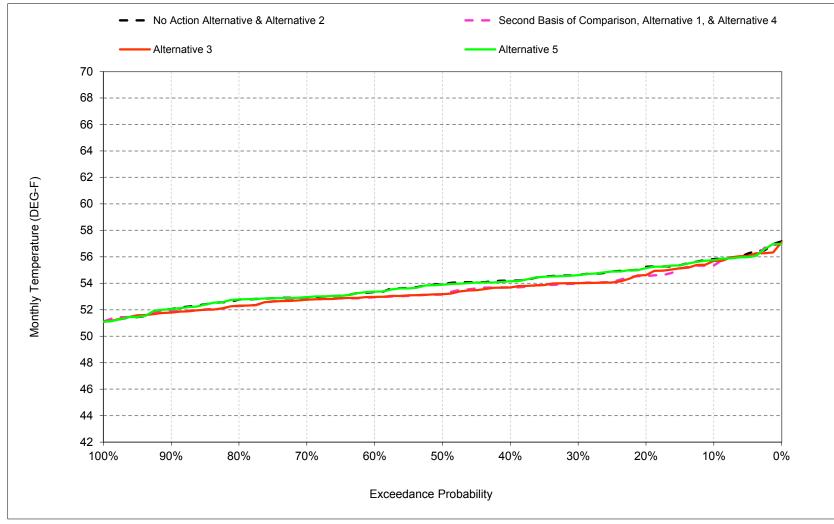


Figure B-8-2. Sacramento River at Bend Bridge, November

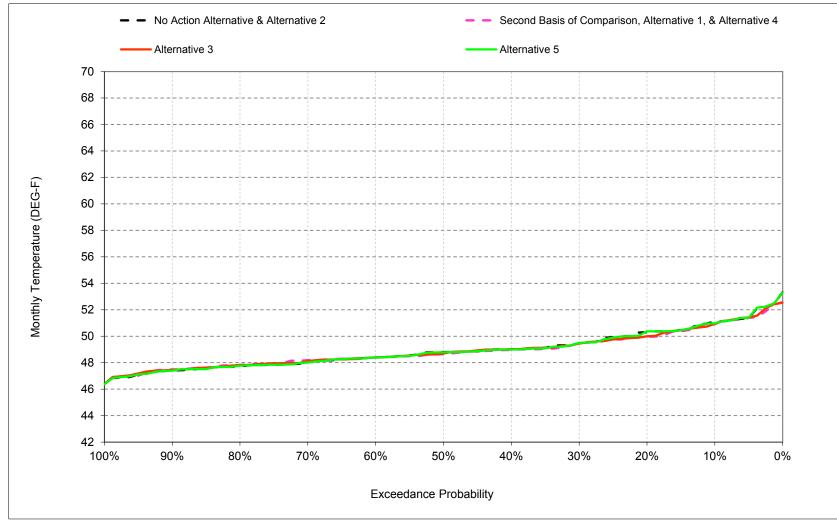


Figure B-8-3. Sacramento River at Bend Bridge, December

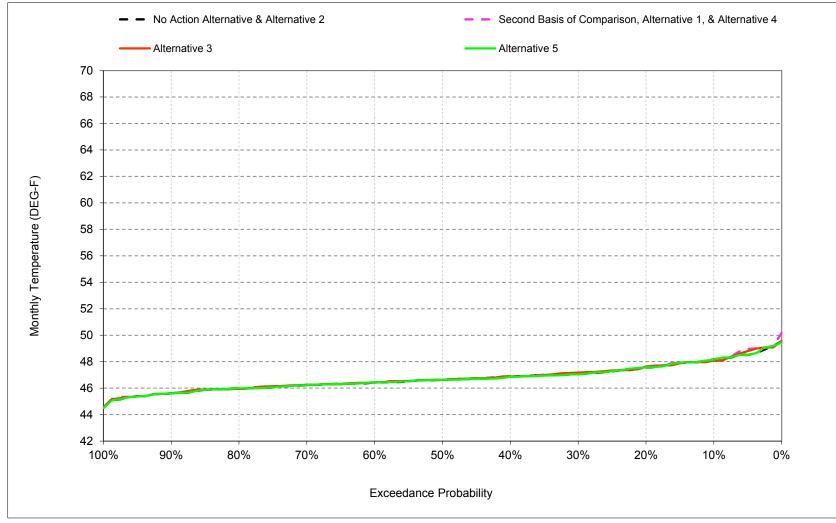


Figure B-8-4. Sacramento River at Bend Bridge, January

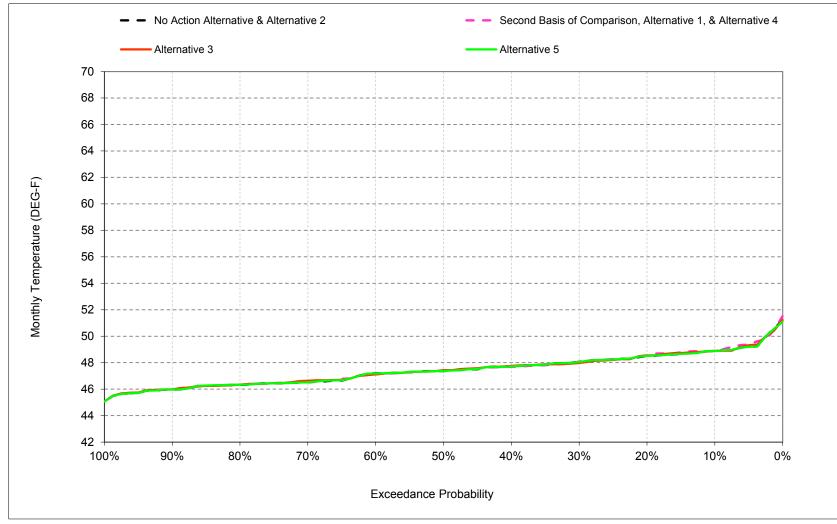


Figure B-8-5. Sacramento River at Bend Bridge, February

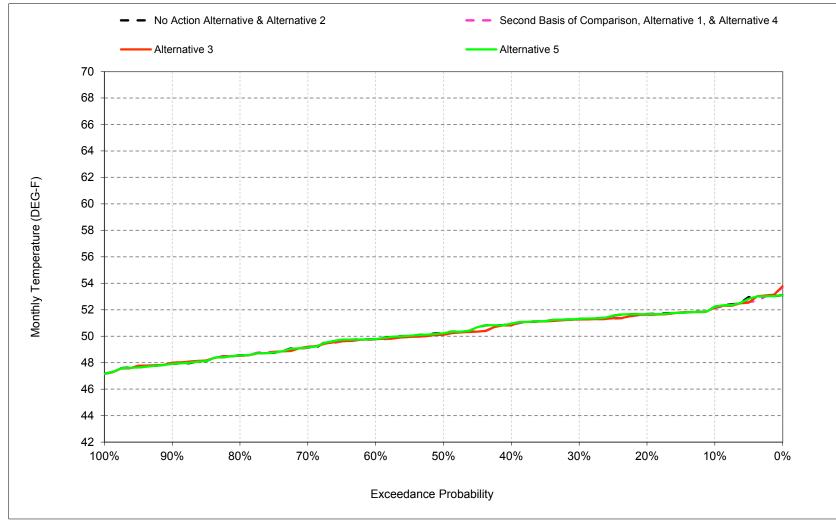


Figure B-8-6. Sacramento River at Bend Bridge, March

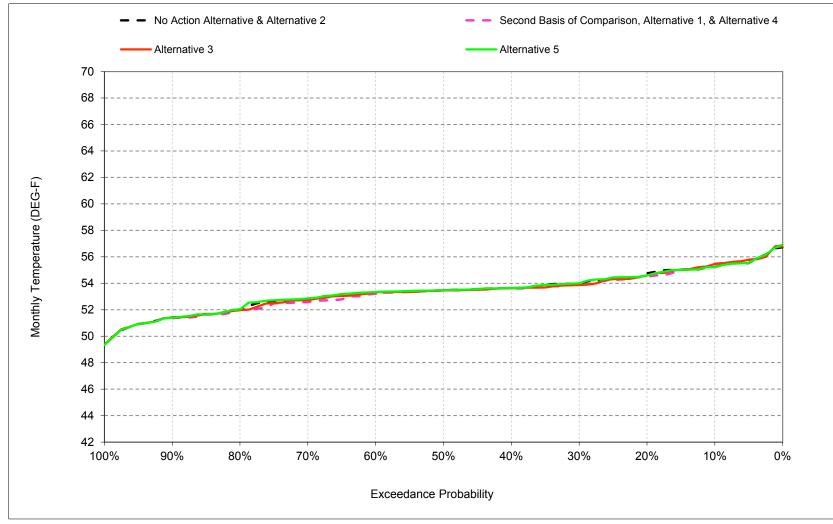


Figure B-8-7. Sacramento River at Bend Bridge, April

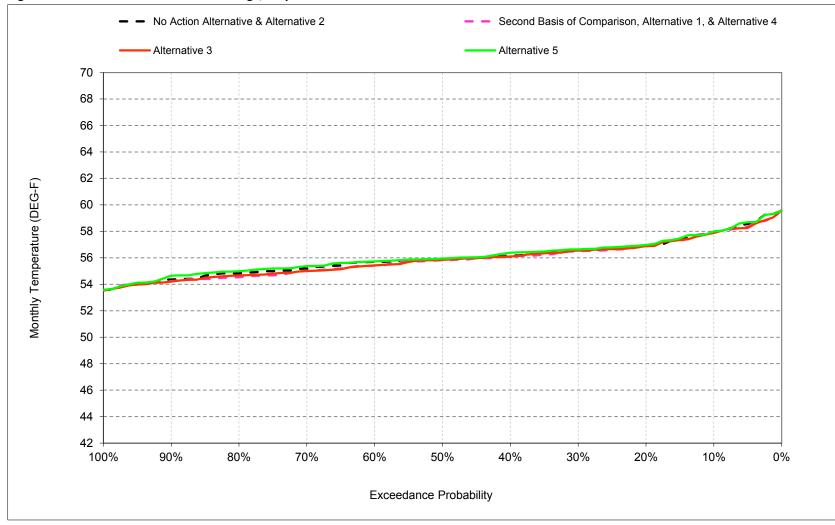


Figure B-8-8. Sacramento River at Bend Bridge, May

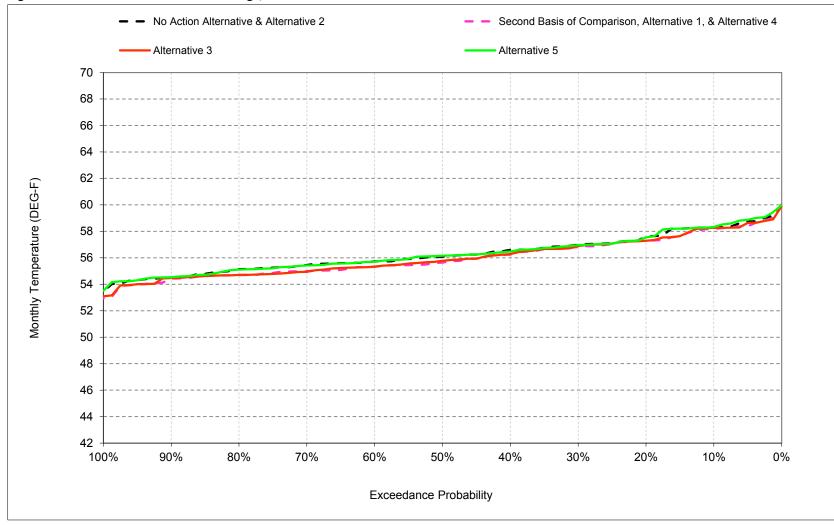


Figure B-8-9. Sacramento River at Bend Bridge, June

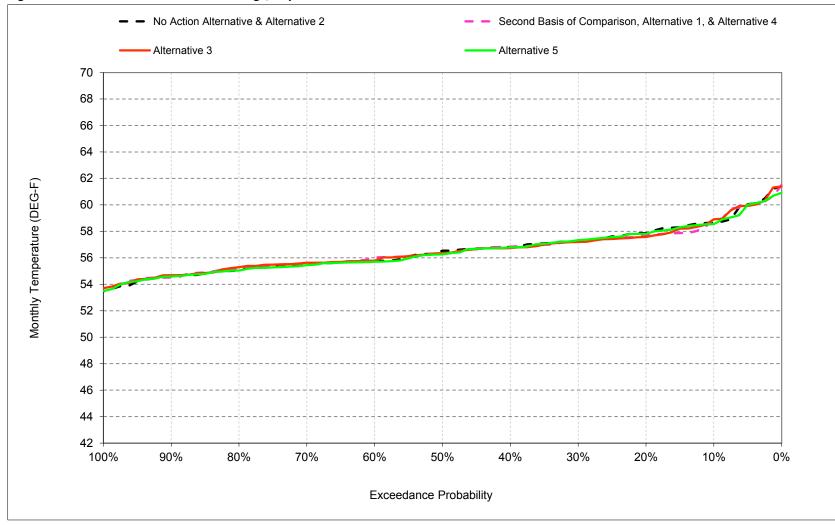


Figure B-8-10. Sacramento River at Bend Bridge, July

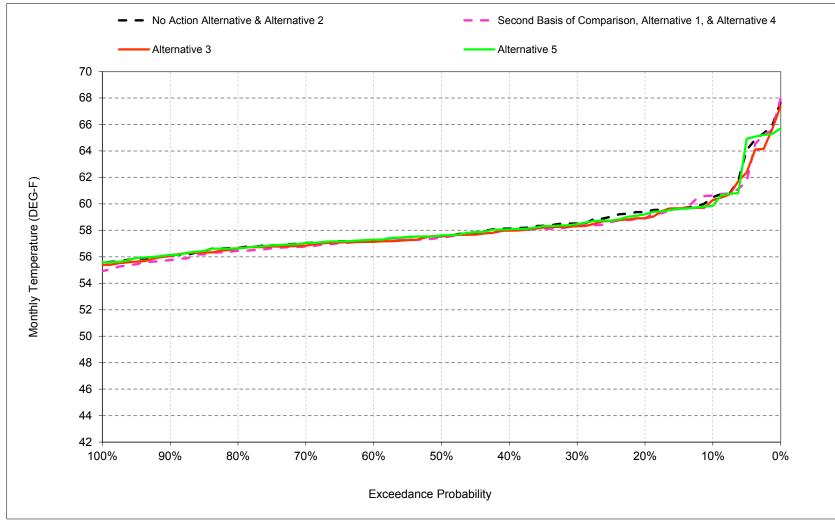


Figure B-8-11. Sacramento River at Bend Bridge, August

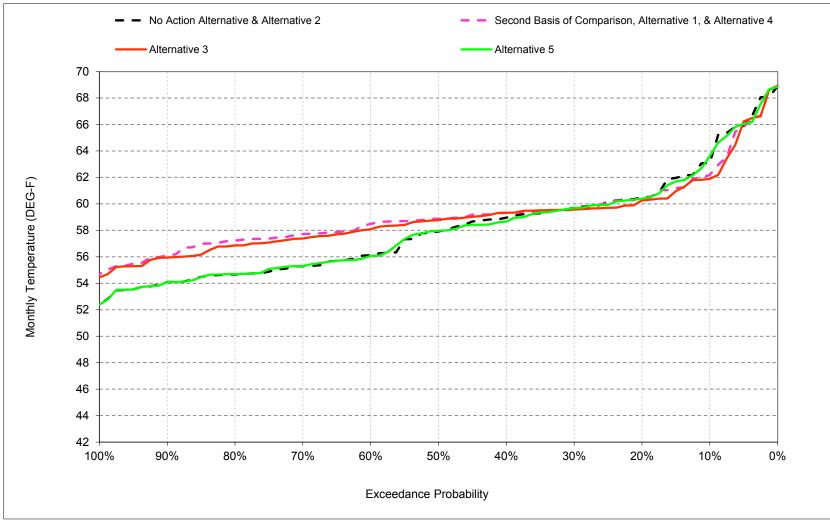


Figure B-8-12. Sacramento River at Bend Bridge, September

Table B-8-1. Sacramento River at Bend Bridge, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 60 | 63 |
| 20% | 57 | 55 | 50 | 48 | 48 | 52 | 55 | 57 | 58 | 58 | 59 | 60 |
| 30% | 57 | 55 | 49 | 47 | 48 | 51 | 54 | 57 | 57 | 57 | 59 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 59 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 58 | 58 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 56 | 56 | 56 | 57 | 56 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 55 | 57 | 55 |
| 80% | 56 | 53 | 48 | 46 | 46 | 49 | 52 | 55 | 55 | 55 | 57 | 55 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 55 | 55 | 56 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 57 | 58 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 53 | 56 | 57 | 56 | 57 | 55 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 57 | 56 |
| Below Normal (13%) | 56 | 54 | 49 | 47 | 48 | 51 | 54 | 55 | 56 | 56 | 57 | 59 |
| Dry (24%) | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 52 | 54 | 57 | 58 | 59 | 62 | 65 |

Alternative 1

| | | | | | Mont | hly Temper | ature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 55 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 61 | 62 |
| 20% | 58 | 55 | 50 | 48 | 49 | 52 | 54 | 57 | 57 | 58 | 59 | 60 |
| 30% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 50% | 56 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 57 | 59 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 55 | 55 | 56 | 57 | 59 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 56 | 57 | 58 |
| 80% | 55 | 52 | 48 | 46 | 46 | 48 | 52 | 55 | 55 | 55 | 56 | 57 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 54 | 55 | 56 | 56 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 57 | 58 | 59 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 52 | 56 | 56 | 56 | 57 | 57 |
| Above Normal (16%) | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 56 | 58 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 51 | 54 | 55 | 55 | 56 | 57 | 59 |
| Dry (24%) | 57 | 53 | 49 | 47 | 48 | 51 | 54 | 56 | 55 | 56 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 49 | 52 | 54 | 57 | 58 | 59 | 62 | 64 |

Alternative 1 minus No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -1.0 | -0.5 | -0.2 | -0.1 | 0.0 | -0.1 | 0.2 | 0.0 | -0.1 | 0.2 | 0.2 | -0.9 |
| 0.2 | 0.1 | -0.7 | -0.3 | 0.0 | 0.0 | -0.1 | -0.2 | 0.0 | -0.3 | -0.2 | -0.5 | 0.0 |
| 0.3 | 0.0 | -0.6 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.2 | 0.0 | -0.2 | -0.1 |
| 0.4 | 0.1 | -0.5 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | -0.3 | 0.0 | -0.2 | 0.4 |
| 0.5 | 0.2 | -0.8 | -0.2 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | -0.4 | -0.1 | -0.1 | 1.0 |
| 0.6 | 0.0 | -0.4 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | -0.3 | -0.4 | 0.2 | -0.1 | 2.4 |
| 0.7 | -0.1 | -0.1 | 0.2 | 0.0 | 0.0 | 0.0 | -0.2 | -0.2 | -0.4 | 0.1 | -0.2 | 2.4 |
| 0.8 | -0.1 | -0.5 | 0.1 | 0.0 | 0.0 | 0.0 | -0.2 | -0.3 | -0.4 | 0.1 | -0.3 | 2.6 |
| 0.9 | -0.1 | -0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.3 | -0.1 | -0.3 | 2.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.3 | 0.0 | -0.3 | 1.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | -0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | -0.4 | 2.8 |
| Above Normal (16%) | 0.0 | -0.4 | -0.2 | 0.1 | 0.0 | -0.1 | 0.0 | -0.2 | -0.3 | 0.1 | -0.2 | 2.0 |
| Below Normal (13%) | -0.2 | -0.5 | -0.3 | 0.1 | 0.0 | -0.3 | -0.2 | -0.2 | -0.4 | 0.0 | -0.5 | -0.1 |
| Dry (24%) | 0.0 | -0.3 | -0.2 | 0.0 | 0.0 | 0.0 | -0.2 | -0.2 | -0.4 | -0.1 | 0.1 | -0.1 |
| Critical (15%) | -0.5 | -0.3 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | -0.4 | 0.0 | -0.4 | -0.8 |

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.

Table B-8-2. Sacramento River at Bend Bridge, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 60 | 63 |
| 20% | 57 | 55 | 50 | 48 | 48 | 52 | 55 | 57 | 58 | 58 | 59 | 60 |
| 30% | 57 | 55 | 49 | 47 | 48 | 51 | 54 | 57 | 57 | 57 | 59 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 59 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 58 | 58 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 56 | 56 | 56 | 57 | 56 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 55 | 57 | 55 |
| 80% | 56 | 53 | 48 | 46 | 46 | 49 | 52 | 55 | 55 | 55 | 57 | 55 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 55 | 55 | 56 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 57 | 58 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 53 | 56 | 57 | 56 | 57 | 55 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 57 | 56 |
| Below Normal (13%) | 56 | 54 | 49 | 47 | 48 | 51 | 54 | 55 | 56 | 56 | 57 | 59 |
| Dry (24%) | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 52 | 54 | 57 | 58 | 59 | 62 | 65 |

Alternative 3

| | | | | | Mont | hly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 56 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 60 | 62 |
| 20% | 57 | 55 | 50 | 48 | 49 | 52 | 55 | 57 | 57 | 58 | 59 | 60 |
| 30% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 57 | 57 | 57 | 58 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 50% | 56 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 58 | 59 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 56 | 57 | 57 |
| 80% | 55 | 52 | 48 | 46 | 46 | 48 | 52 | 55 | 55 | 55 | 57 | 57 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 54 | 55 | 56 | 56 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 57 | 58 | 59 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 52 | 56 | 56 | 56 | 57 | 57 |
| Above Normal (16%) | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 57 | 58 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 51 | 54 | 55 | 55 | 56 | 57 | 58 |
| Dry (24%) | 57 | 53 | 49 | 47 | 48 | 51 | 54 | 56 | 55 | 56 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 52 | 54 | 57 | 58 | 60 | 62 | 64 |

Alternative 3 minus No Action Alternative

| | | | | | Mont | thly Temper | rature (DEG | i-F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | -0.6 | -0.1 | -0.2 | -0.1 | 0.0 | 0.0 | 0.2 | -0.1 | -0.1 | 0.2 | -0.2 | -1.2 |
| 0.2 | -0.1 | -0.6 | -0.3 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.3 | -0.3 | -0.5 | -0.3 |
| 0.3 | 0.0 | -0.6 | 0.0 | 0.1 | -0.1 | 0.0 | -0.1 | 0.0 | -0.1 | -0.1 | -0.2 | -0.1 |
| 0.4 | 0.0 | -0.5 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | -0.3 | -0.1 | -0.2 | 0.4 |
| 0.5 | 0.1 | -0.8 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | -0.3 | -0.1 | 0.0 | 0.9 |
| 0.6 | 0.1 | -0.4 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | -0.3 | -0.4 | 0.0 | -0.1 | 2.0 |
| 0.7 | 0.0 | -0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.2 | -0.5 | 0.1 | -0.2 | 2.1 |
| 0.8 | -0.2 | -0.5 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 | -0.4 | 0.2 | -0.1 | 2.2 |
| 0.9 | -0.2 | -0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | -0.1 | 0.1 | 0.0 | 1.8 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | -0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.3 | 0.0 | -0.2 | 0.8 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | -0.1 | -0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.2 | 2.6 |
| Above Normal (16%) | 0.0 | -0.4 | -0.2 | 0.0 | 0.0 | -0.1 | 0.0 | -0.3 | -0.2 | 0.1 | 0.0 | 2.0 |
| Below Normal (13%) | -0.2 | -0.5 | -0.3 | 0.1 | 0.0 | -0.2 | -0.1 | -0.2 | -0.3 | -0.1 | -0.1 | -1.0 |
| Dry (24%) | -0.1 | -0.4 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.4 | -0.1 | -0.2 | -0.2 |
| Critical (15%) | -0.4 | -0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | -0.3 | 0.1 | -0.5 | -0.9 |

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.

Table B-8-3. Sacramento River at Bend Bridge, Monthly Temperature

No Action Alternative

| | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|-----|-------------|-------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 60 | 63 |
| 20% | 57 | 55 | 50 | 48 | 48 | 52 | 55 | 57 | 58 | 58 | 59 | 60 |
| 30% | 57 | 55 | 49 | 47 | 48 | 51 | 54 | 57 | 57 | 57 | 59 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 59 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 58 | 58 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 56 | 56 | 56 | 57 | 56 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 55 | 57 | 55 |
| 80% | 56 | 53 | 48 | 46 | 46 | 49 | 52 | 55 | 55 | 55 | 57 | 55 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 55 | 55 | 56 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 57 | 58 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 53 | 56 | 57 | 56 | 57 | 55 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 57 | 56 |
| Below Normal (13%) | 56 | 54 | 49 | 47 | 48 | 51 | 54 | 55 | 56 | 56 | 57 | 59 |
| Dry (24%) | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 52 | 54 | 57 | 58 | 59 | 62 | 65 |

Alternative 5

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 60 | 64 |
| 20% | 57 | 55 | 50 | 48 | 48 | 52 | 55 | 57 | 57 | 58 | 59 | 60 |
| 30% | 57 | 55 | 49 | 47 | 48 | 51 | 54 | 57 | 57 | 57 | 58 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 58 | 58 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 56 | 56 | 56 | 57 | 56 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 55 | 57 | 55 |
| 80% | 55 | 53 | 48 | 46 | 46 | 49 | 52 | 55 | 55 | 55 | 57 | 55 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 55 | 55 | 56 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 58 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 53 | 56 | 57 | 56 | 57 | 55 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 57 | 56 |
| Below Normal (13%) | 56 | 54 | 49 | 47 | 48 | 51 | 54 | 55 | 56 | 56 | 57 | 59 |
| Dry (24%) | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 52 | 54 | 57 | 58 | 59 | 62 | 65 |

Alternative 5 minus No Action Alternative

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|------|------|------|-----|------|-------------|------------|-----|------|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.6 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.6 | 0.4 |
| 0.2 | 0.0 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | -0.1 | -0.1 | -0.2 | -0.1 |
| 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 |
| 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | -0.1 | 0.0 | -0.1 | -0.3 |
| 0.5 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.2 | 0.0 | 0.1 |
| 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 |
| 0.7 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | -0.1 | 0.0 | 0.1 |
| 0.8 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | -0.1 | 0.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Above Normal (16%) | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| Below Normal (13%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | -0.1 |
| Dry (24%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | -0.1 | -0.3 | -0.2 |
| Critical (15%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | -0.2 | -0.2 | 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.

Table B-8-4. Sacramento River at Bend Bridge, Monthly Temperature

| | | | | | Mont | hly Temper | rature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|------------|-------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 55 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 61 | 62 |
| 20% | 58 | 55 | 50 | 48 | 49 | 52 | 54 | 57 | 57 | 58 | 59 | 60 |
| 30% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 50% | 56 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 57 | 59 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 55 | 55 | 56 | 57 | 59 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 56 | 57 | 58 |
| 80% | 55 | 52 | 48 | 46 | 46 | 48 | 52 | 55 | 55 | 55 | 56 | 57 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 54 | 55 | 56 | 56 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 57 | 58 | 59 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 52 | 56 | 56 | 56 | 57 | 57 |
| Above Normal (16%) | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 56 | 58 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 51 | 54 | 55 | 55 | 56 | 57 | 59 |
| Dry (24%) | 57 | 53 | 49 | 47 | 48 | 51 | 54 | 56 | 55 | 56 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 49 | 52 | 54 | 57 | 58 | 59 | 62 | 64 |

Second Basis of Comparison

No Action Alternative

| | | | | | Mont | thly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|-------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 60 | 63 |
| 20% | 57 | 55 | 50 | 48 | 48 | 52 | 55 | 57 | 58 | 58 | 59 | 60 |
| 30% | 57 | 55 | 49 | 47 | 48 | 51 | 54 | 57 | 57 | 57 | 59 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 59 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 58 | 58 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 56 | 56 | 56 | 57 | 56 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 55 | 57 | 55 |
| 80% | 56 | 53 | 48 | 46 | 46 | 49 | 52 | 55 | 55 | 55 | 57 | 55 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 55 | 55 | 56 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 57 | 58 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 53 | 56 | 57 | 56 | 57 | 55 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 57 | 56 |
| Below Normal (13%) | 56 | 54 | 49 | 47 | 48 | 51 | 54 | 55 | 56 | 56 | 57 | 59 |
| Dry (24%) | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 52 | 54 | 57 | 58 | 59 | 62 | 65 |

No Action Alternative minus Second Basis of Comparison

| | | | | | Mon | thly Temper | rature (DEG | i-F) | | | | |
|--|------|-----|------|------|------|-------------|-------------|------|-----|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 1.0 | 0.5 | 0.2 | 0.1 | 0.0 | 0.1 | -0.2 | 0.0 | 0.1 | -0.2 | -0.2 | 0.9 |
| 0.2 | -0.1 | 0.7 | 0.3 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.3 | 0.2 | 0.5 | 0.0 |
| 0.3 | 0.0 | 0.6 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.2 | 0.1 |
| 0.4 | -0.1 | 0.5 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.3 | 0.0 | 0.2 | -0.4 |
| 0.5 | -0.2 | 0.8 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.4 | 0.1 | 0.1 | -1.0 |
| 0.6 | 0.0 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.3 | 0.4 | -0.2 | 0.1 | -2.4 |
| 0.7 | 0.1 | 0.1 | -0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.4 | -0.1 | 0.2 | -2.4 |
| 0.8 | 0.1 | 0.5 | -0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.4 | -0.1 | 0.3 | -2.6 |
| 0.9 | 0.1 | 0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 | 0.1 | 0.3 | -2.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.0 | 0.3 | -1.0 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.4 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.4 | -2.8 |
| Above Normal (16%) | 0.0 | 0.4 | 0.2 | -0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.3 | -0.1 | 0.2 | -2.0 |
| Below Normal (13%) | 0.2 | 0.5 | 0.3 | -0.1 | 0.0 | 0.3 | 0.2 | 0.2 | 0.4 | 0.0 | 0.5 | 0.1 |
| Dry (24%) | 0.0 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.4 | 0.1 | -0.1 | 0.1 |
| Critical (15%) | 0.5 | 0.3 | 0.0 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.4 | 0.8 |

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.

Table B-8-5. Sacramento River at Bend Bridge, Monthly Temperature

| Statistic | | | | | Mont | hly Temper | rature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|------------|-------------|------|-----|-----|-----|-----|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 55 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 61 | 62 |
| 20% | 58 | 55 | 50 | 48 | 49 | 52 | 54 | 57 | 57 | 58 | 59 | 60 |
| 30% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 50% | 56 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 57 | 59 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 55 | 55 | 56 | 57 | 59 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 56 | 57 | 58 |
| 80% | 55 | 52 | 48 | 46 | 46 | 48 | 52 | 55 | 55 | 55 | 56 | 57 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 54 | 55 | 56 | 56 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 57 | 58 | 59 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 52 | 56 | 56 | 56 | 57 | 57 |
| Above Normal (16%) | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 56 | 58 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 51 | 54 | 55 | 55 | 56 | 57 | 59 |
| Dry (24%) | 57 | 53 | 49 | 47 | 48 | 51 | 54 | 56 | 55 | 56 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 49 | 52 | 54 | 57 | 58 | 59 | 62 | 64 |

Second Basis of Comparison

Alternative 3

| | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 56 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 60 | 62 |
| 20% | 57 | 55 | 50 | 48 | 49 | 52 | 55 | 57 | 57 | 58 | 59 | 60 |
| 30% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 57 | 57 | 57 | 58 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 50% | 56 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 58 | 59 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 55 | 55 | 56 | 57 | 58 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 56 | 57 | 57 |
| 80% | 55 | 52 | 48 | 46 | 46 | 48 | 52 | 55 | 55 | 55 | 57 | 57 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 54 | 55 | 56 | 56 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 57 | 58 | 59 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 52 | 56 | 56 | 56 | 57 | 57 |
| Above Normal (16%) | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 57 | 58 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 51 | 54 | 55 | 55 | 56 | 57 | 58 |
| Dry (24%) | 57 | 53 | 49 | 47 | 48 | 51 | 54 | 56 | 55 | 56 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 52 | 54 | 57 | 58 | 60 | 62 | 64 |

Alternative 3 minus Second Basis of Comparison

| Statistic | | | | | Mon | thly Temper | rature (DEG | -F) | | | | |
|--|------|------|------|------|------|-------------|-------------|------|------|------|------|------|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | 0.0 | -0.4 | -0.3 |
| 0.2 | -0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.3 |
| 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 |
| 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 |
| 0.5 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | -0.1 |
| 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.4 |
| 0.7 | 0.1 | 0.0 | -0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | -0.3 |
| 0.8 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.2 | -0.4 |
| 0.9 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.3 | 0.2 | 0.3 | -0.2 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.2 | -0.2 |
| Above Normal (16%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 |
| Below Normal (13%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.3 | -0.9 |
| Dry (24%) | -0.2 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -0.3 | -0.1 |
| Critical (15%) | 0.0 | 0.1 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | -0.2 | -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.

Table B-8-6. Sacramento River at Bend Bridge, Monthly Temperature

| | | | | | Mont | hly Temper | rature (DEG | i-F) | | | | |
|--|-----|-----|-----|-----|------|------------|-------------|------|-----|-----|-----|-----|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 60 | 55 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 61 | 62 |
| 20% | 58 | 55 | 50 | 48 | 49 | 52 | 54 | 57 | 57 | 58 | 59 | 60 |
| 30% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 57 | 57 | 58 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 50% | 56 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 57 | 59 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 55 | 55 | 56 | 57 | 59 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 56 | 57 | 58 |
| 80% | 55 | 52 | 48 | 46 | 46 | 48 | 52 | 55 | 55 | 55 | 56 | 57 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 54 | 55 | 56 | 56 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 57 | 58 | 59 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 52 | 56 | 56 | 56 | 57 | 57 |
| Above Normal (16%) | 57 | 53 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 56 | 58 |
| Below Normal (13%) | 56 | 53 | 49 | 47 | 48 | 51 | 54 | 55 | 55 | 56 | 57 | 59 |
| Dry (24%) | 57 | 53 | 49 | 47 | 48 | 51 | 54 | 56 | 55 | 56 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 49 | 52 | 54 | 57 | 58 | 59 | 62 | 64 |

Second Basis of Comparison

Alternative 5

| Statistic | | | | | Mont | hly Temper | ature (DEG | -F) | | | | |
|--|-----|-----|-----|-----|------|------------|------------|-----|-----|-----|-----|-----|
| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 10% | 61 | 56 | 51 | 48 | 49 | 52 | 55 | 58 | 58 | 59 | 60 | 64 |
| 20% | 57 | 55 | 50 | 48 | 48 | 52 | 55 | 57 | 57 | 58 | 59 | 60 |
| 30% | 57 | 55 | 49 | 47 | 48 | 51 | 54 | 57 | 57 | 57 | 58 | 60 |
| 40% | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 58 | 59 |
| 50% | 56 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 58 | 58 |
| 60% | 56 | 53 | 48 | 46 | 47 | 50 | 53 | 56 | 56 | 56 | 57 | 56 |
| 70% | 56 | 53 | 48 | 46 | 47 | 49 | 53 | 55 | 55 | 55 | 57 | 55 |
| 80% | 55 | 53 | 48 | 46 | 46 | 49 | 52 | 55 | 55 | 55 | 57 | 55 |
| 90% | 55 | 52 | 47 | 46 | 46 | 48 | 51 | 54 | 55 | 55 | 56 | 54 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 56 | 56 | 58 | 58 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 54 | 51 | 47 | 46 | 47 | 49 | 53 | 56 | 57 | 56 | 57 | 55 |
| Above Normal (16%) | 57 | 54 | 49 | 47 | 47 | 50 | 53 | 56 | 55 | 55 | 57 | 56 |
| Below Normal (13%) | 56 | 54 | 49 | 47 | 48 | 51 | 54 | 55 | 56 | 56 | 57 | 59 |
| Dry (24%) | 57 | 54 | 49 | 47 | 48 | 51 | 54 | 56 | 56 | 57 | 59 | 60 |
| Critical (15%) | 59 | 55 | 50 | 47 | 48 | 52 | 54 | 57 | 58 | 59 | 62 | 65 |

Alternative 5 minus Second Basis of Comparison

| | | | | | Mon | thly Temper | ature (DEG | i-F) | | | | |
|--|------|-----|------|------|------|-------------|------------|------|-----|------|------|------|
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ^a | | | | | | | | | | | | |
| 0.1 | 1.6 | 0.4 | 0.1 | 0.1 | 0.0 | 0.1 | -0.2 | 0.0 | 0.1 | -0.3 | -0.8 | 1.3 |
| 0.2 | -0.1 | 0.6 | 0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | -0.1 |
| 0.3 | 0.0 | 0.6 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 0.4 | -0.1 | 0.5 | 0.0 | -0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.2 | -0.1 | 0.1 | -0.7 |
| 0.5 | -0.2 | 0.7 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.5 | 0.0 | 0.2 | -0.9 |
| 0.6 | -0.1 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.3 | 0.4 | -0.2 | 0.1 | -2.5 |
| 0.7 | 0.0 | 0.2 | -0.2 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.4 | -0.1 | 0.2 | -2.4 |
| 0.8 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 0.4 | -0.1 | 0.2 | -2.5 |
| 0.9 | 0.1 | 0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 0.1 | 0.4 | -2.0 |
| Long Term | | | | | | | | | | | | |
| Full Simulation Period ^b | 0.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 | 0.0 | 0.2 | -1.1 |
| Water Year Types ^c | | | | | | | | | | | | |
| Wet (32%) | 0.1 | 0.4 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.4 | -2.8 |
| Above Normal (16%) | 0.0 | 0.3 | 0.2 | -0.1 | 0.0 | 0.1 | 0.0 | 0.3 | 0.3 | -0.1 | 0.2 | -2.0 |
| Below Normal (13%) | 0.2 | 0.5 | 0.3 | -0.1 | 0.0 | 0.2 | 0.2 | 0.2 | 0.4 | 0.0 | 0.6 | 0.0 |
| Dry (24%) | 0.0 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.2 | 0.4 | 0.4 | 0.1 | -0.3 | 0.0 |
| Critical (15%) | 0.5 | 0.3 | 0.0 | -0.2 | -0.2 | 0.0 | 0.1 | 0.2 | 0.5 | -0.2 | 0.1 | 0.8 |

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.