

APPENDIX 5A, SECTION E
MODELING TECHNICAL APPENDIX –
ATTACHMENT 4 –MARTIN AND ANDERSON
MODEL RESULTS FOR NO PROJECT
ALTERNATIVE AND ALTERNATIVES AT 2040

This page intentionally left blank

5A-E. Appendix 5A, Section E Modeling Technical Appendix – Attachment 4 – Martin and Anderson Model Results for No Project Alternative.....	E-1
E.1 Martin and Anderson Results	E-2
E.2 References	E-40
 Figures	
Figure 5A-E4.1.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Long-Term Average, No Project Alternative versus Alternative 2b/4b (2040)	E-10
Figure 5A-E4.1.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Long-Term Average, No Project Alternative versus Alternative 2c/4c (2040)	E-11
Figure 5A-E4.1.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Long-Term Average, No Project Alternative versus Alternative 1/3 (2040)	E-12
Figure 5A-E4.1.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Long-Term Average, No Project Alternative versus Alternative 2a/4a (2040)	E-13
Figure 5A-E4.1.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Long-Term Average, No Project Alternative versus Alternative 5 (2040)	E-14
Figure 5A-E4.2.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Wet Water Year, No Project Alternative versus Alternative 2b/4b (2040)	E-15
Figure 5A-E4.2.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Wet Water Year, No Project Alternative versus Alternative 2c/4c (2040)	E-16
Figure 5A-E4.2.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Wet Water Year, No Project Alternative versus Alternative 1/3 (2040)	E-17
Figure 5A-E4.2.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Wet Water Year, No Project Alternative versus Alternative 2a/4a (2040)	E-18
Figure 5A-E4.2.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Wet Water Year, No Project Alternative versus Alternative 5 (2040)	E-19
Figure 5A-E4.3.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Above Normal Water Year, No Project Alternative versus Alternative 2b/4b (2040)	E-20
Figure 5A-E4.3.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Above Normal Water Year, No Project Alternative versus Alternative 2c/4c (2040)	E-21
Figure 5A-E4.3.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Above Normal Water Year, No Project Alternative versus Alternative 1/3 (2040)	E-22
Figure 5A-E4.3.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Above Normal Water Year, No Project Alternative versus Alternative 2a/4a (2040)	E-23

1	Figure 5A-E4.3.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
2	(Percentage), Above Normal Water Year, No Project Alternative versus Alternative 5	
3	(2040)	E-24
4	Figure 5A-E4.4.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
5	(Percentage), Below Normal Water Year, No Project Alternative versus Alternative 2b/4b	
6	(2040)	E-25
7	Figure 5A-E4.4.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
8	(Percentage), Below Normal Water Year, No Project Alternative versus Alternative 2c/4c	
9	(2040)	E-26
10	Figure 5A-E4.4.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
11	(Percentage), Below Normal Water Year, No Project Alternative versus Alternative 1/3	
12	(2040)	E-27
13	Figure 5A-E4.4.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
14	(Percentage), Below Normal Water Year, No Project Alternative versus Alternative 2a/4a	
15	(2040)	E-28
16	Figure 5A-E4.4.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
17	(Percentage), Below Normal Water Year, No Project Alternative versus Alternative 5	
18	(2040)	E-29
19	Figure 5A-E4.5.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
20	(Percentage), Dry Water Year, No Project Alternative versus Alternative 2b/4b (2040)	E-30
21	Figure 5A-E4.5.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
22	(Percentage), Dry Water Year, No Project Alternative versus Alternative 2c/4c (2040)	E-31
23	Figure 5A-E4.5.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
24	(Percentage), Dry Water Year, No Project Alternative versus Alternative 1/3 (2040)	E-32
25	Figure 5A-E4.5.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
26	(Percentage), Dry Water Year, No Project Alternative versus Alternative 2a/4a (2040)	E-33
27	Figure 5A-E4.5.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
28	(Percentage), Dry Water Year, No Project Alternative versus Alternative 5 (2040).....	E-34
29	Figure 5A-E4.6.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
30	(Percentage), Critical Water Year, No Project Alternative versus Alternative 2b/4b (2040)	E-35
31	Figure 5A-E4.6.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
32	(Percentage), Critical Water Year, No Project Alternative versus Alternative 2c/4c (2040)	E-36
33	Figure 5A-E4.6.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
34	(Percentage), Critical Water Year, No Project Alternative versus Alternative 1/3 (2040).....	E-37
35	Figure 5A-E4.6.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
36	(Percentage), Critical Water Year, No Project Alternative versus Alternative 2a/4a (2040).....	E-38
37	Figure 5A-E4.6.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality	
38	(Percentage), Critical Water Year, No Project Alternative versus Alternative 5 (2040)	E-39
39		

Tables

Table 5A-E4.1-A. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Exceedance Probabilities for Annual Average Mortality (percentage), No Project Alternative	E-2
Table 5A-E4.1-B. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), No Project Alternative	E-2
Table 5A-E4.1-C. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 2b/4b (2040)	E-2
Table 5A-E4.1-D. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 2b/4b (2040)	E-3
Table 5A-E4.1-E. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Difference in Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 2b/4b (2040) minus No Project Alternative	E-3
Table 5A-E4.1-F. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 2b/4b (2040) minus No Project Alternative	E-3
Table 5A-E4.2-A. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 2c/4c (2040)	E-4
Table 5A-E4.2-B. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 2c/4c (2040)	E-4
Table 5A-E4.2-C. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Difference in Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 2c/4c (2040) minus No Project Alternative	E-4
Table 5A-E4.2-D. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 2c/4c (2040) minus No Project Alternative	E-5
Table 5A-E4.3-A. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 1/3 (2040)	E-5
Table 5A-E4.3-B. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 1/3 (2040)	E-5
Table 5A-E4.3-C. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Difference in Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 1/3 (2040) minus No Project Alternative	E-6
Table 5A-E4.3-D. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 1/3 (2040) minus No Project Alternative	E-6
Table 5A-E4.4-A. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 2a/4a (2040)	E-6
Table 5A-E4.4-B. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 2a/4a (2040)	E-7

1	Table 5A-E4.4-C. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality,	
2	Difference in Exceedance Probabilities for Annual Average Mortality (percentage),	
3	Alternative 2a/4a (2040) minus No Project Alternative	E-7
4	Table 5A-E4.4-D. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality,	
5	Annual Average Mortality (percentage), Alternative 2a/4a (2040) minus No Project	
6	Alternative	E-7
7	Table 5A-E4.5-A. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality,	
8	Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 5	
9	(2040)	E-8
10	Table 5A-E4.5-B. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality,	
11	Annual Average Mortality (percentage), Alternative 5 (2040)	E-8
12	Table 5A-E4.5-C. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality,	
13	Difference in Exceedance Probabilities for Annual Average Mortality (percentage),	
14	Alternative 5 (2040) minus No Project Alternative.....	E-8
15	Table 5A-E4.5-D. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality,	
16	Annual Average Mortality (percentage), Alternative 5 (2040) minus No Project	
17	Alternative	E-9
18		

Appendix 5A, Section E
Modeling Technical Appendix – Attachment 4 –
Martin and Anderson Model Results for No Project
Alternative and Alternatives at 2040

This attachment provides a summary of Martin and Anderson model results for simulations conducted for the Delta Conveyance Project Final Environmental Impact Report (EIR).

E.1 Martin and Anderson Results

Table 5A-E4.1-A. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Exceedance Probabilities for Annual Average Mortality (percentage), No Project Alternative

Probability of Exceedance	Martin	Anderson
10%	0.41	0.22
20%	0.24	0.12
30%	0.10	0.08
40%	0.06	0.03
50%	0.04	0.02
60%	0.03	0.02
70%	0.02	0.01
80%	0.01	0.01
90%	0.01	0.00

Table 5A-E4.1-B. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), No Project Alternative

Average	Martin	Anderson
Full Simulation Period	0.14	0.10
Wet Water Years	0.03	0.01
Above Normal Water Years	0.04	0.02
Below Normal Water Years	0.09	0.05
Dry Water Years	0.18	0.10
Critical Water Years	0.66	0.54

Table 5A-E4.1-C. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 2b/4b (2040)

Probability of Exceedance	Martin	Anderson
10%	0.42	0.22
20%	0.22	0.12
30%	0.12	0.08
40%	0.07	0.03
50%	0.04	0.02
60%	0.03	0.02
70%	0.02	0.01
80%	0.01	0.01
90%	0.01	0.00

Table 5A-E4.1-D. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 2b/4b (2040)

Average	Martin	Anderson
Full Simulation Period	0.14	0.10
Wet Water Years	0.03	0.01
Above Normal Water Years	0.04	0.02
Below Normal Water Years	0.09	0.06
Dry Water Years	0.16	0.10
Critical Water Years	0.65	0.54

Table 5A-E4.1-E. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Difference in Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 2b/4b (2040) minus No Project Alternative

Probability of Exceedance	Martin	Anderson
10%	0.01	0.01
20%	-0.03	0.00
30%	0.02	0.00
40%	0.00	0.00
50%	0.00	0.00
60%	0.00	0.00
70%	0.00	0.00
80%	0.00	0.00
90%	0.00	0.00

Table 5A-E4.1-F. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 2b/4b (2040) minus No Project Alternative

Average	Martin	Anderson
Full Simulation Period	0.00	0.00
Wet Water Years	0.00	0.00
Above Normal Water Years	0.00	0.00
Below Normal Water Years	0.00	0.00
Dry Water Years	-0.02	-0.01
Critical Water Years	-0.01	-0.01

Table 5A-E4.2-A. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 2c/4c (2040)

Probability of Exceedance	Martin	Anderson
10%	0.41	0.22
20%	0.22	0.12
30%	0.11	0.08
40%	0.06	0.03
50%	0.04	0.02
60%	0.03	0.02
70%	0.02	0.01
80%	0.01	0.01
90%	0.01	0.00

Table 5A-E4.2-B. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 2c/4c (2040)

Average	Martin	Anderson
Full Simulation Period	0.14	0.10
Wet Water Years	0.03	0.01
Above Normal Water Years	0.04	0.02
Below Normal Water Years	0.09	0.05
Dry Water Years	0.16	0.10
Critical Water Years	0.65	0.54

Table 5A-E4.2-C. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Difference in Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 2c/4c (2040) minus No Project Alternative

Probability of Exceedance	Martin	Anderson
10%	0.00	0.00
20%	-0.03	0.00
30%	0.00	0.00
40%	0.00	0.00
50%	0.00	0.00
60%	0.00	0.00
70%	0.00	0.00
80%	0.00	0.00
90%	0.00	0.00

Table 5A-E4.2-D. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 2c/4c (2040) minus No Project Alternative

Average	Martin	Anderson
Full Simulation Period	0.00	0.00
Wet Water Years	0.00	0.00
Above Normal Water Years	0.00	0.00
Below Normal Water Years	0.00	0.00
Dry Water Years	-0.02	-0.01
Critical Water Years	-0.01	-0.01

Table 5A-E4.3-A. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 1/3 (2040)

Probability of Exceedance	Martin	Anderson
10%	0.41	0.22
20%	0.20	0.12
30%	0.11	0.08
40%	0.06	0.03
50%	0.04	0.02
60%	0.03	0.02
70%	0.02	0.01
80%	0.01	0.01
90%	0.01	0.00

Table 5A-E4.3-B. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 1/3 (2040)

Average	Martin	Anderson
Full Simulation Period	0.13	0.10
Wet Water Years	0.03	0.01
Above Normal Water Years	0.04	0.02
Below Normal Water Years	0.09	0.05
Dry Water Years	0.16	0.10
Critical Water Years	0.62	0.51

Table 5A-E4.3-C. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Difference in Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 1/3 (2040) minus No Project Alternative

Probability of Exceedance	Martin	Anderson
10%	0.00	0.00
20%	-0.04	-0.01
30%	0.00	0.00
40%	0.00	0.00
50%	0.00	0.00
60%	0.00	0.00
70%	0.00	0.00
80%	0.00	0.00
90%	0.00	0.00

Table 5A-E4.3-D. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 1/3 (2040) minus No Project Alternative

Average	Martin	Anderson
Full Simulation Period	-0.01	-0.01
Wet Water Years	0.00	0.00
Above Normal Water Years	0.00	0.00
Below Normal Water Years	0.00	0.00
Dry Water Years	-0.02	0.00
Critical Water Years	-0.04	-0.03

Table 5A-E4.4-A. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 2a/4a (2040)

Probability of Exceedance	Martin	Anderson
10%	0.41	0.22
20%	0.21	0.12
30%	0.10	0.08
40%	0.06	0.03
50%	0.04	0.02
60%	0.03	0.02
70%	0.02	0.01
80%	0.01	0.01
90%	0.01	0.00

Table 5A-E4.4-B. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 2a/4a (2040)

Average	Martin	Anderson
Full Simulation Period	0.13	0.09
Wet Water Years	0.03	0.01
Above Normal Water Years	0.04	0.02
Below Normal Water Years	0.09	0.05
Dry Water Years	0.15	0.10
Critical Water Years	0.61	0.50

Table 5A-E4.4-C. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Difference in Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 2a/4a (2040) minus No Project Alternative

Probability of Exceedance	Martin	Anderson
10%	0.00	0.00
20%	-0.04	0.00
30%	0.00	0.00
40%	0.00	0.00
50%	0.00	0.00
60%	0.00	0.00
70%	0.00	0.00
80%	0.00	0.00
90%	0.00	0.00

Table 5A-E4.4-D. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 2a/4a (2040) minus No Project Alternative

Average	Martin	Anderson
Full Simulation Period	-0.01	-0.01
Wet Water Years	0.00	0.00
Above Normal Water Years	0.00	0.00
Below Normal Water Years	0.00	0.00
Dry Water Years	-0.03	-0.01
Critical Water Years	-0.05	-0.04

Table 5A-E4.5-A. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 5 (2040)

Probability of Exceedance	Martin	Anderson
10%	0.41	0.22
20%	0.20	0.12
30%	0.11	0.08
40%	0.06	0.03
50%	0.04	0.02
60%	0.03	0.02
70%	0.02	0.01
80%	0.01	0.01
90%	0.01	0.00

Table 5A-E4.5-B. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual Average Mortality (percentage), Alternative 5 (2040)

Average	Martin	Anderson
Full Simulation Period	0.14	0.10
Wet Water Years	0.03	0.01
Above Normal Water Years	0.04	0.02
Below Normal Water Years	0.09	0.05
Dry Water Years	0.16	0.10
Critical Water Years	0.62	0.51

Table 5A-E4.5-C. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Difference in Exceedance Probabilities for Annual Average Mortality (percentage), Alternative 5 (2040) minus No Project Alternative

Probability of Exceedance	Martin	Anderson
10%	0.00	0.00
20%	-0.04	-0.01
30%	0.00	0.00
40%	0.00	0.00
50%	0.00	0.00
60%	0.00	0.00
70%	0.00	0.00
80%	0.00	0.00
90%	0.00	0.00

1 **Table 5A-E4.5-D. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality, Annual**
 2 **Average Mortality (percentage), Alternative 5 (2040) minus No Project Alternative**

Average	Martin	Anderson
Full Simulation Period	-0.01	-0.01
Wet Water Years	0.00	0.00
Above Normal Water Years	0.00	0.00
Below Normal Water Years	0.00	0.00
Dry Water Years	-0.02	-0.01
Critical Water Years	-0.04	-0.03

3

Figure 5A-E4.1.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Long-Term Average, No Project Alternative versus Alternative 2b/4b (2040)

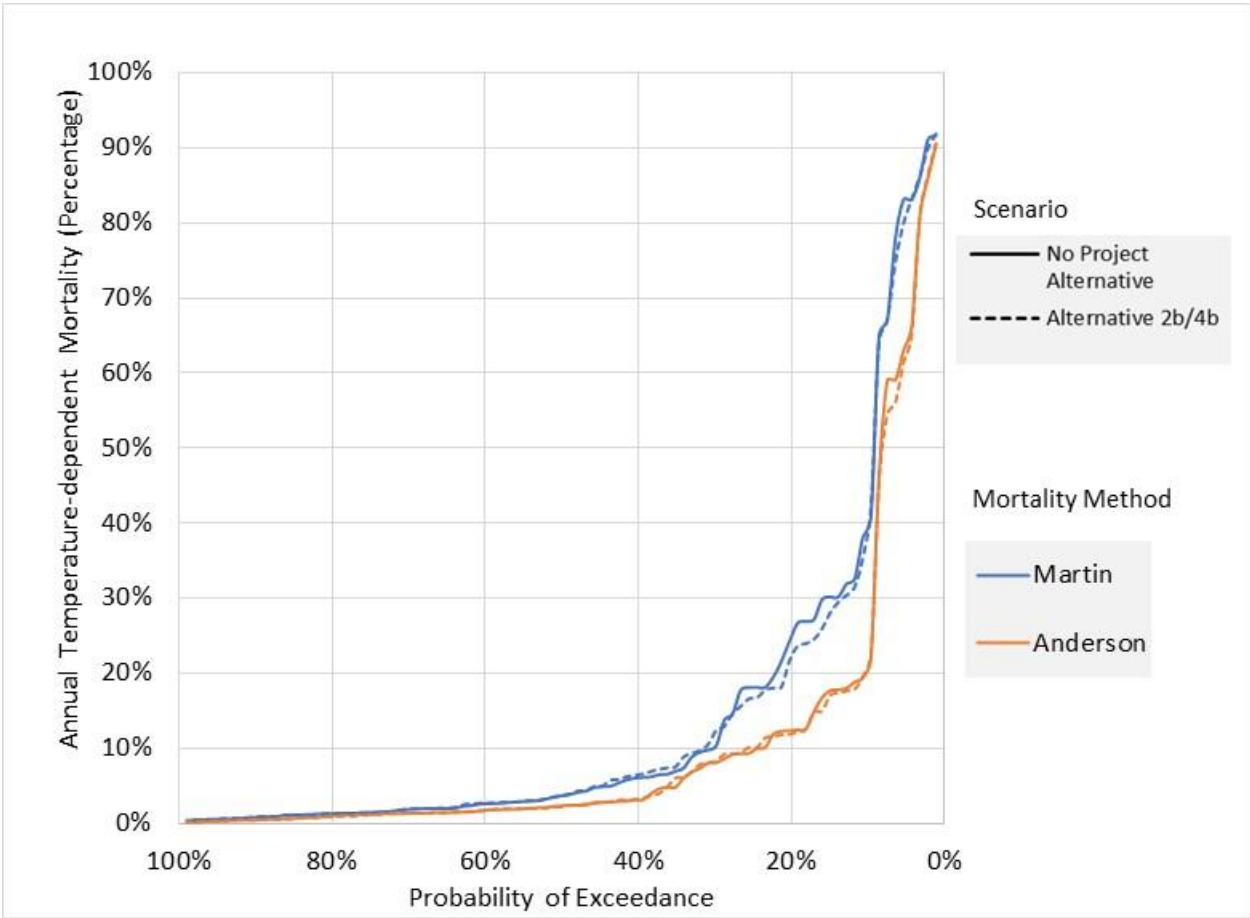


Figure 5A-E4.1.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Long-Term Average, No Project Alternative versus Alternative 2c/4c (2040)

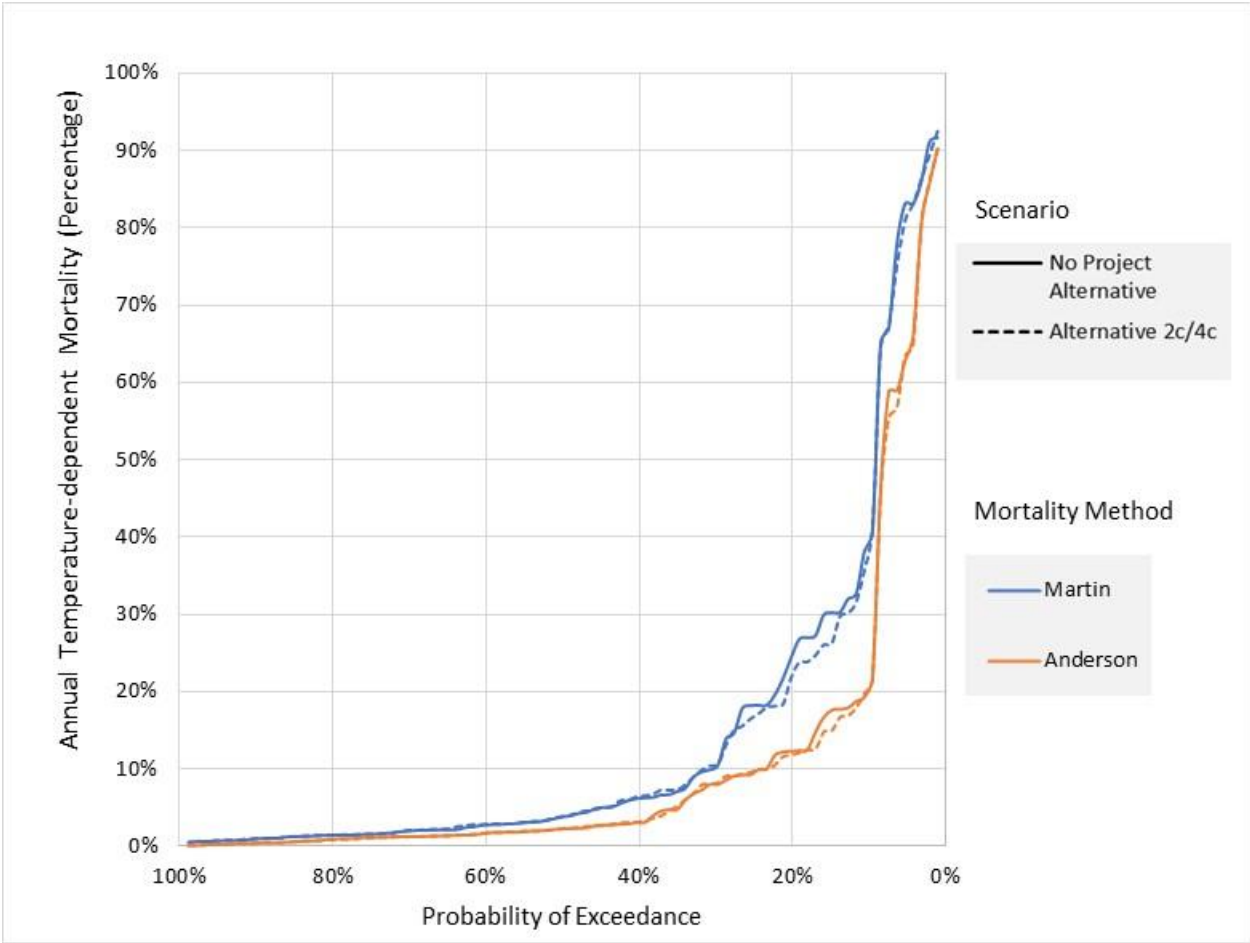


Figure 5A-E4.1.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Long-Term Average, No Project Alternative versus Alternative 1/3 (2040)

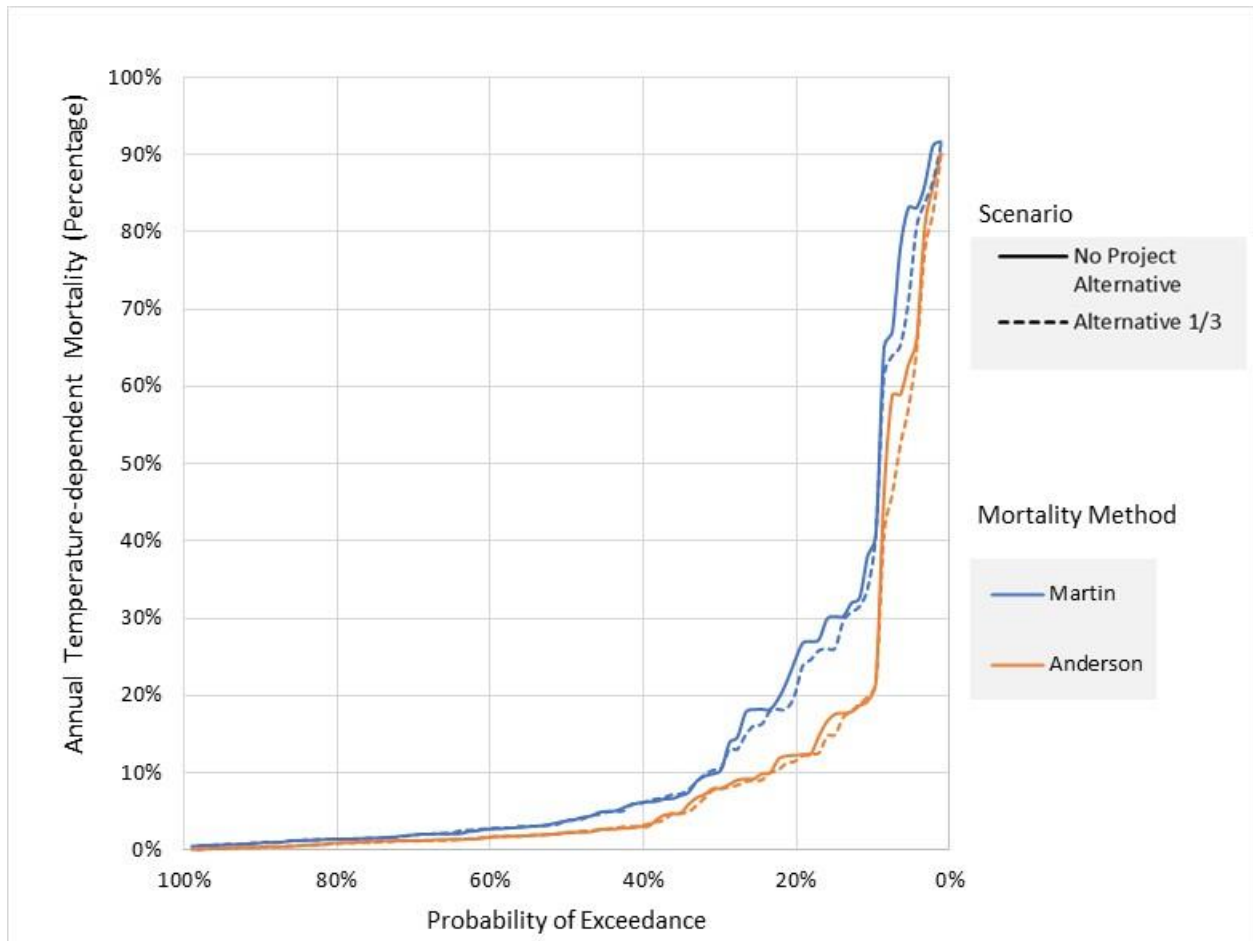


Figure 5A-E4.1.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Long-Term Average, No Project Alternative versus Alternative 2a/4a (2040)

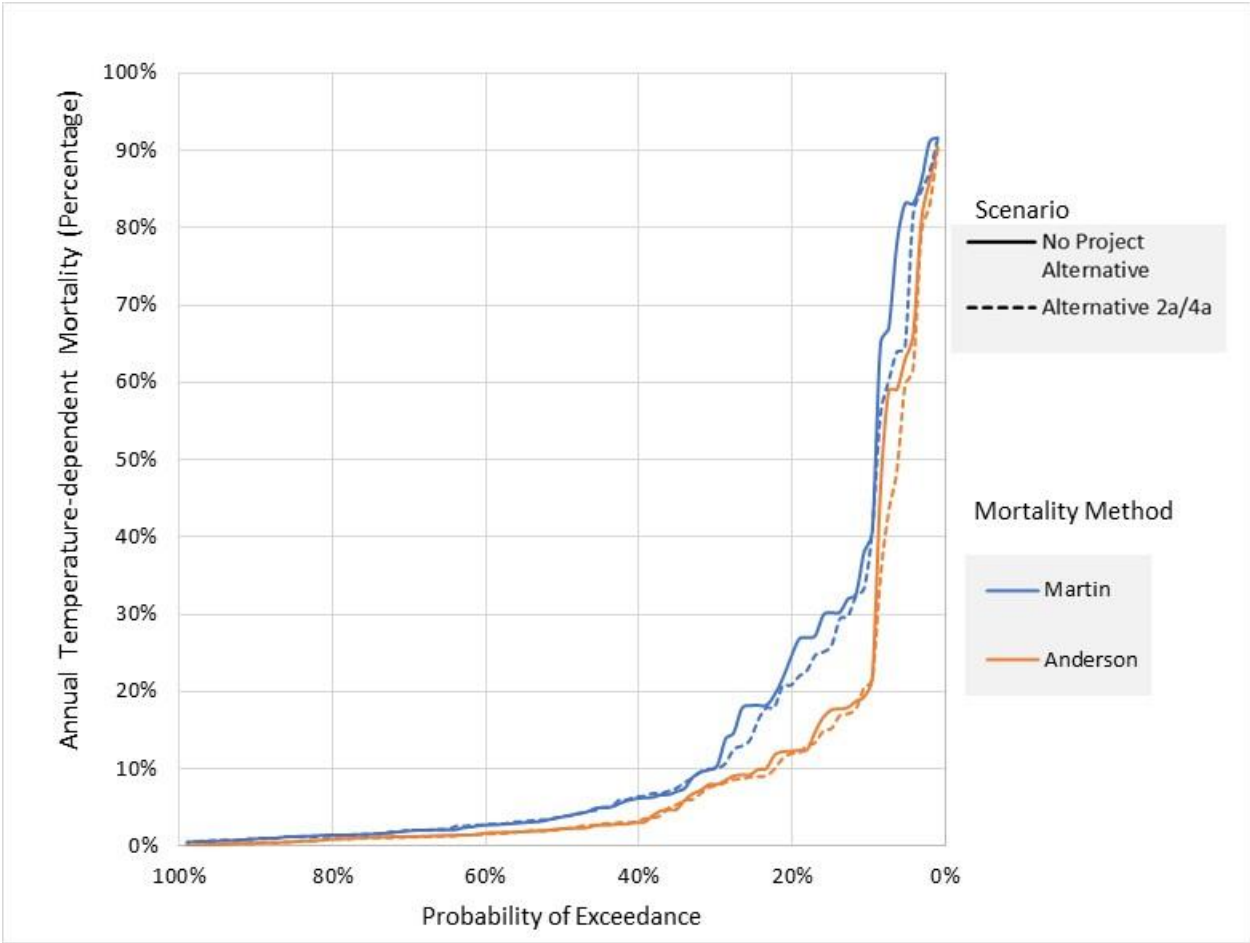


Figure 5A-E4.1.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Long-Term Average, No Project Alternative versus Alternative 5 (2040)

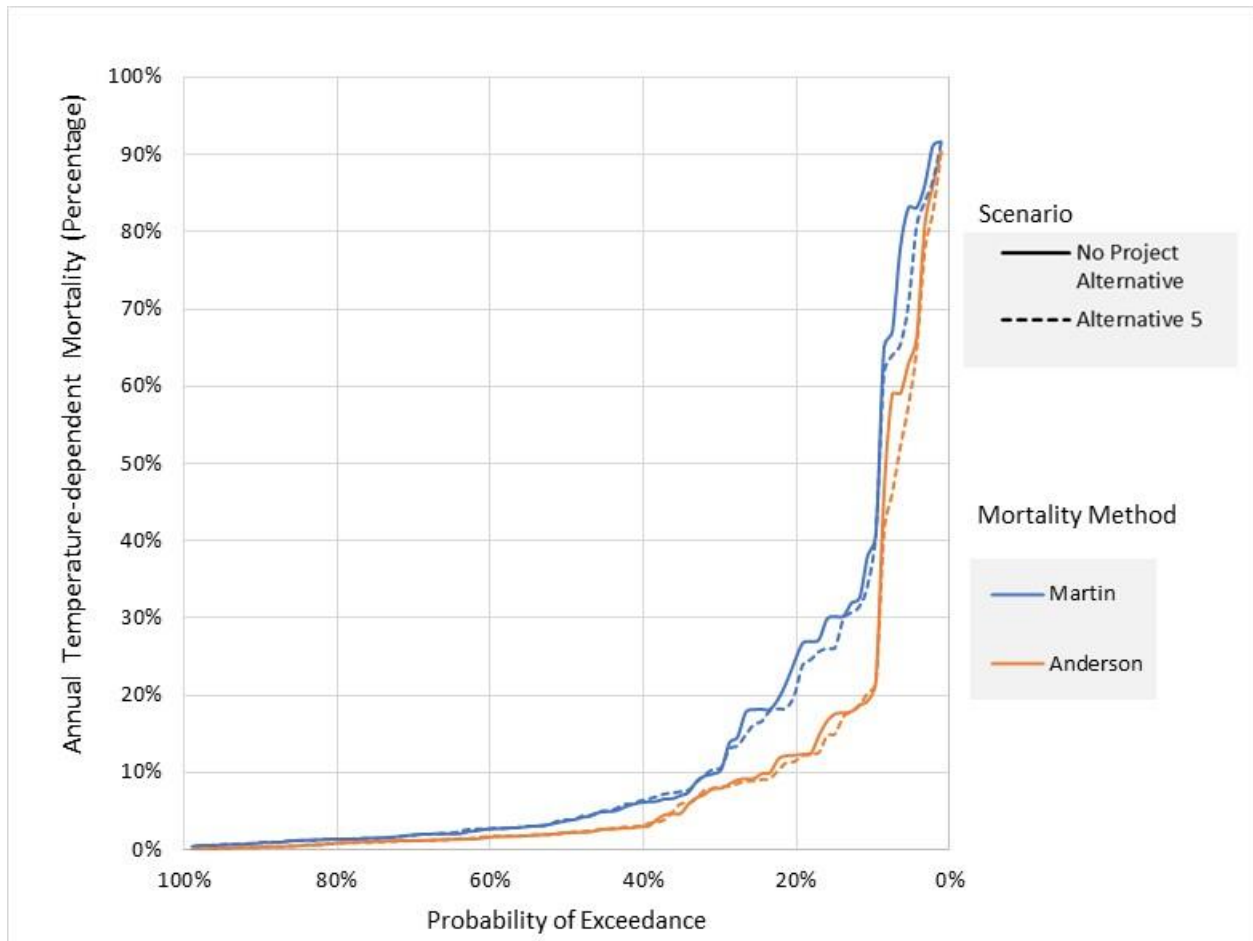


Figure 5A-E4.2.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Wet Water Year, No Project Alternative versus Alternative 2b/4b (2040)

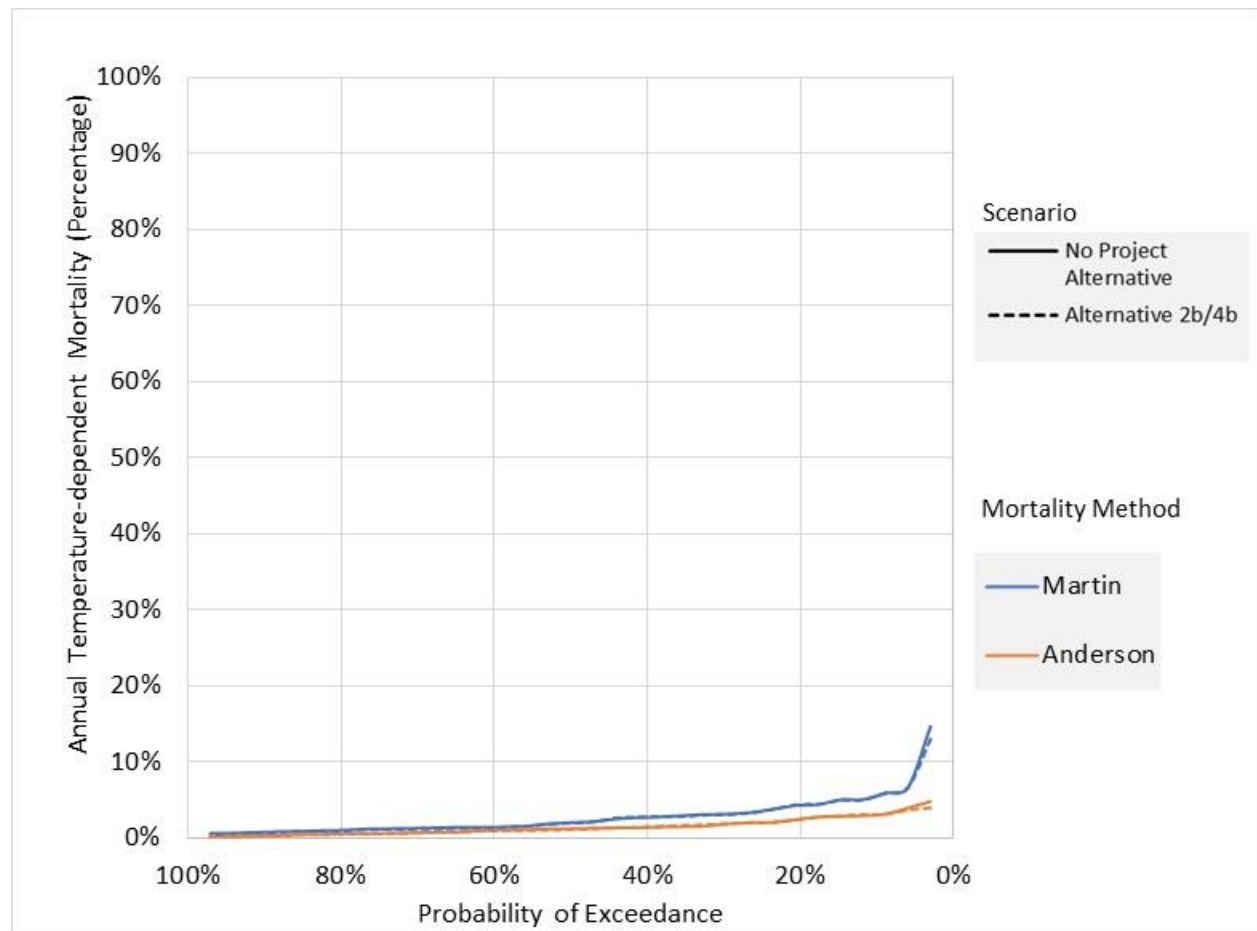


Figure 5A-E4.2.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Wet Water Year, No Project Alternative versus Alternative 2c/4c (2040)

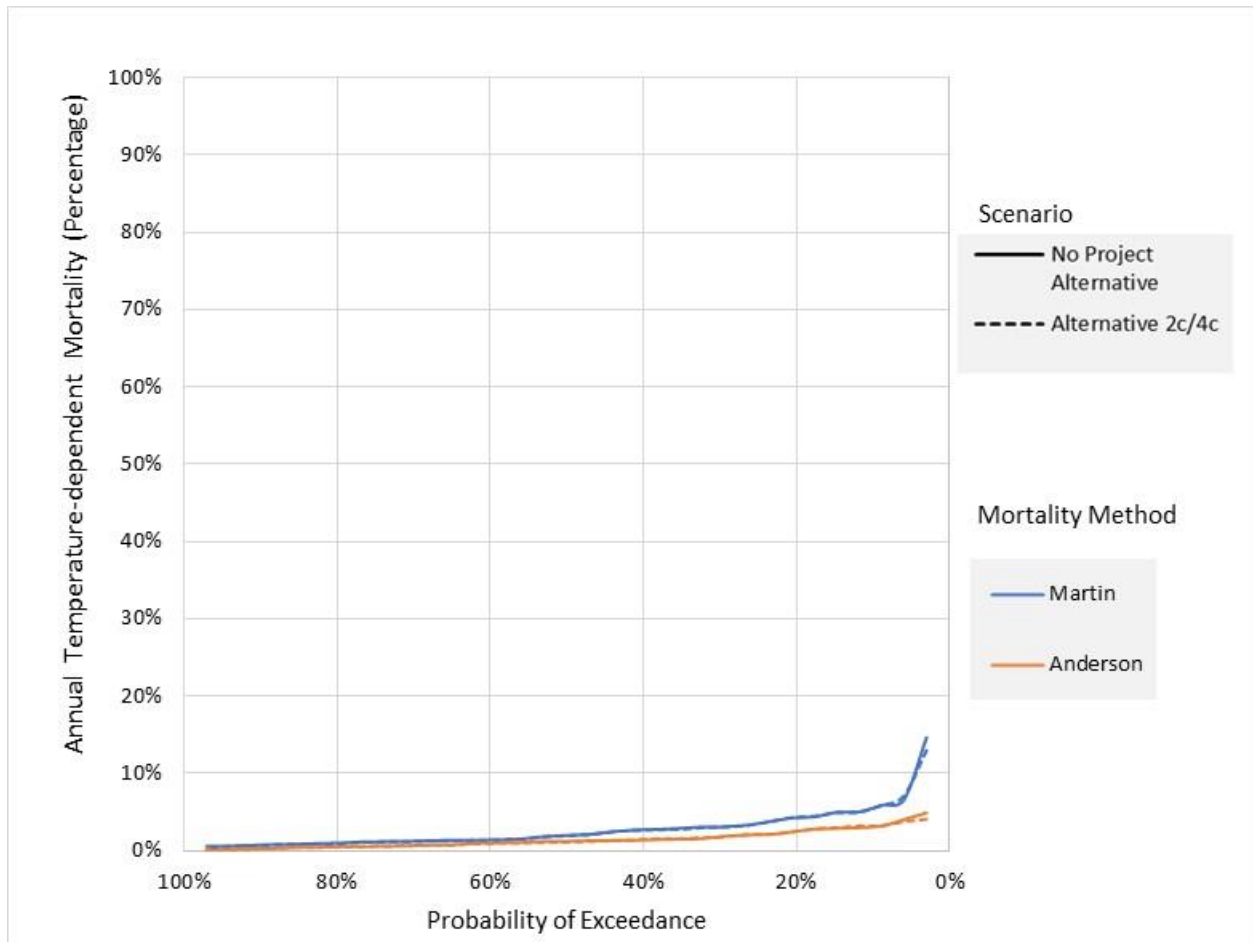


Figure 5A-E4.2.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Wet Water Year, No Project Alternative versus Alternative 1/3 (2040)

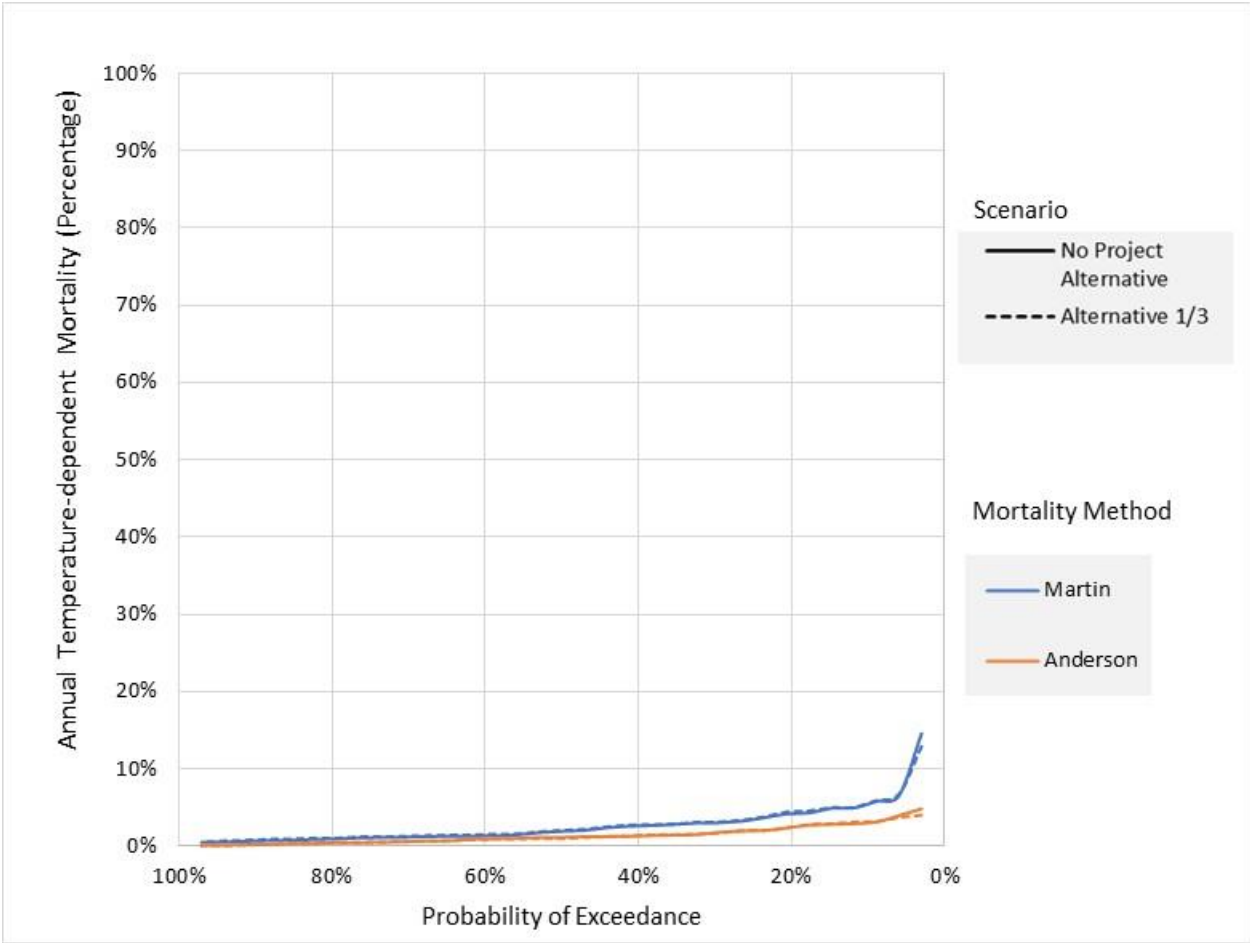


Figure 5A-E4.2.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Wet Water Year, No Project Alternative versus Alternative 2a/4a (2040)

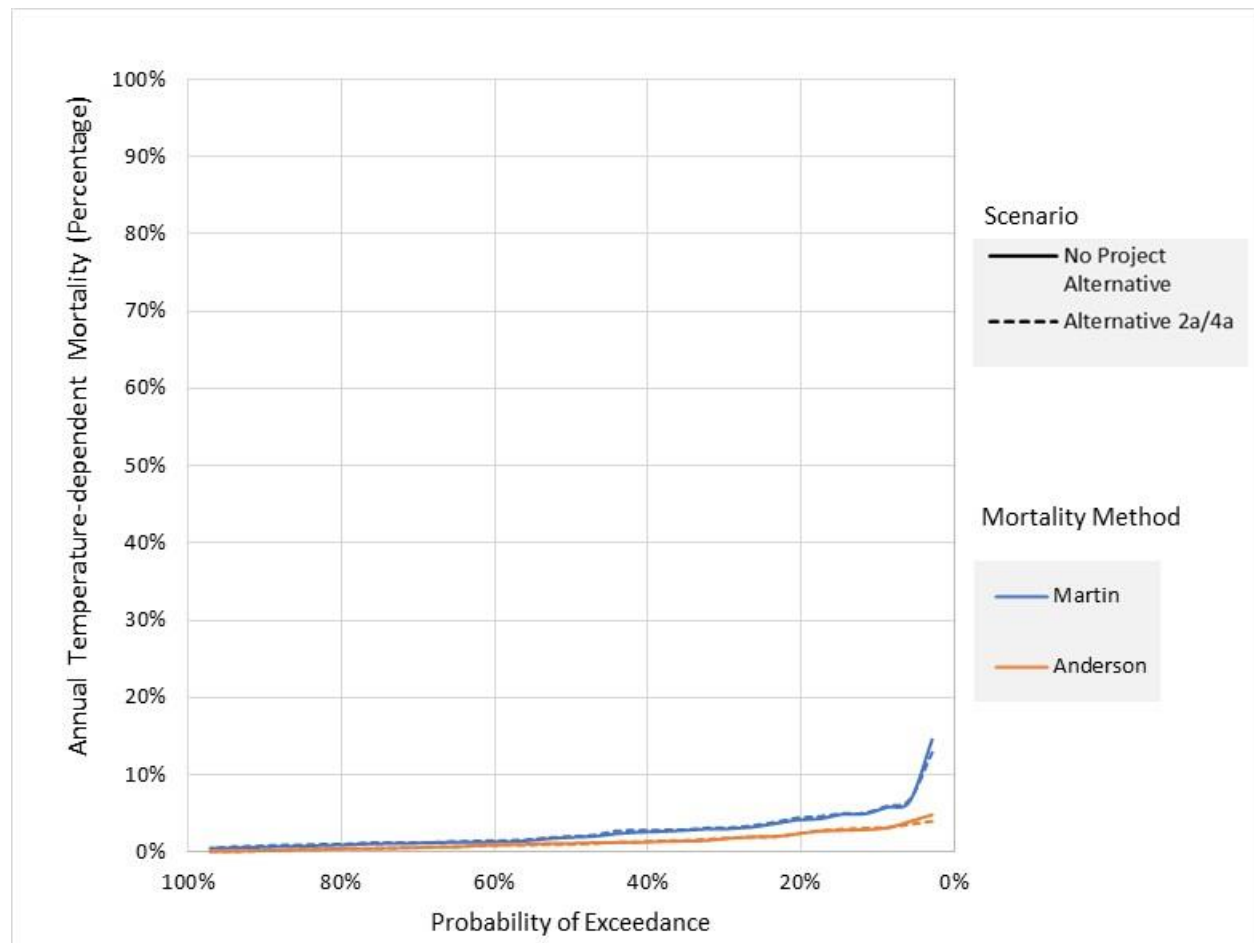


Figure 5A-E4.2.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Wet Water Year, No Project Alternative versus Alternative 5 (2040)

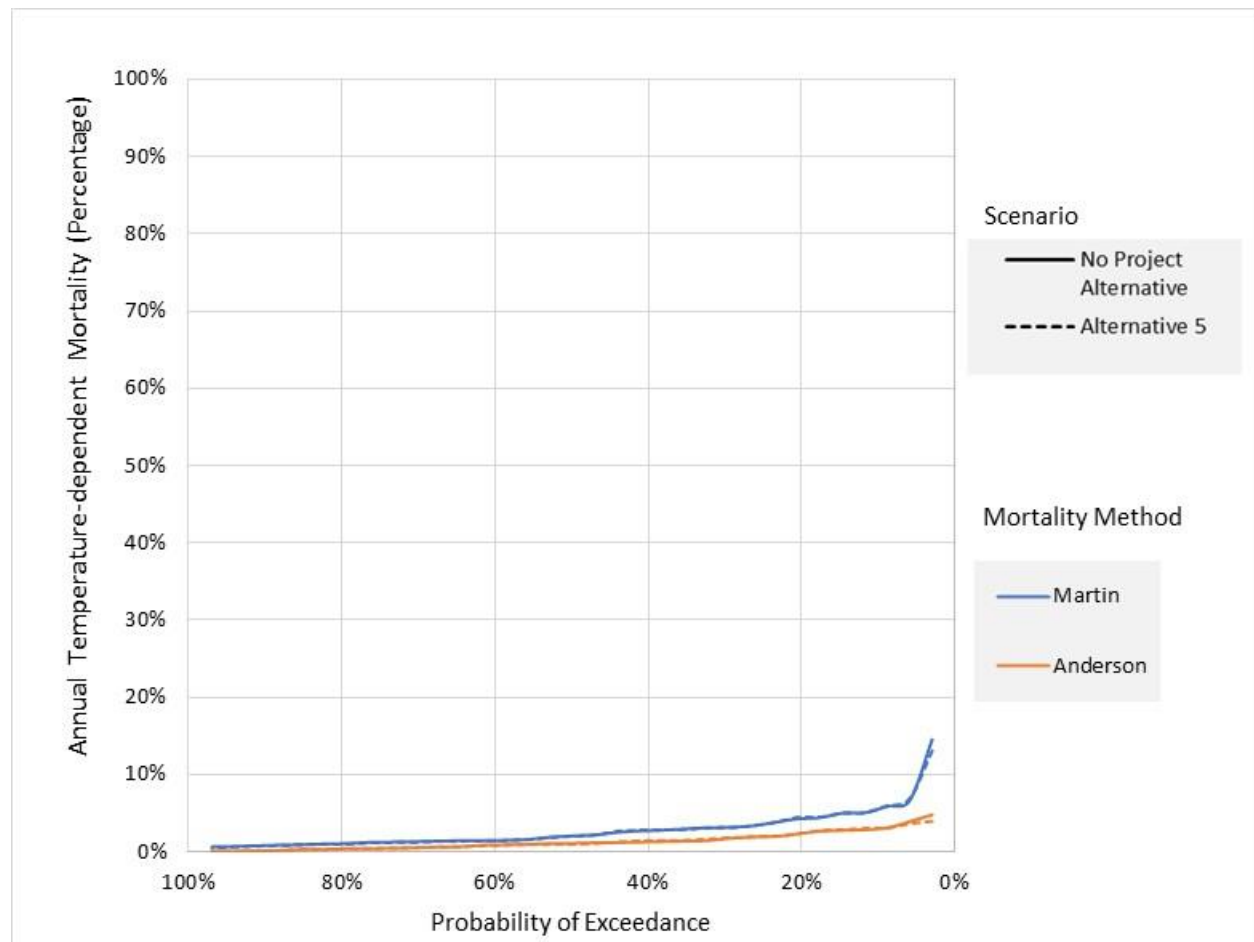


Figure 5A-E4.3.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Above Normal Water Year, No Project Alternative versus Alternative 2b/4b (2040)

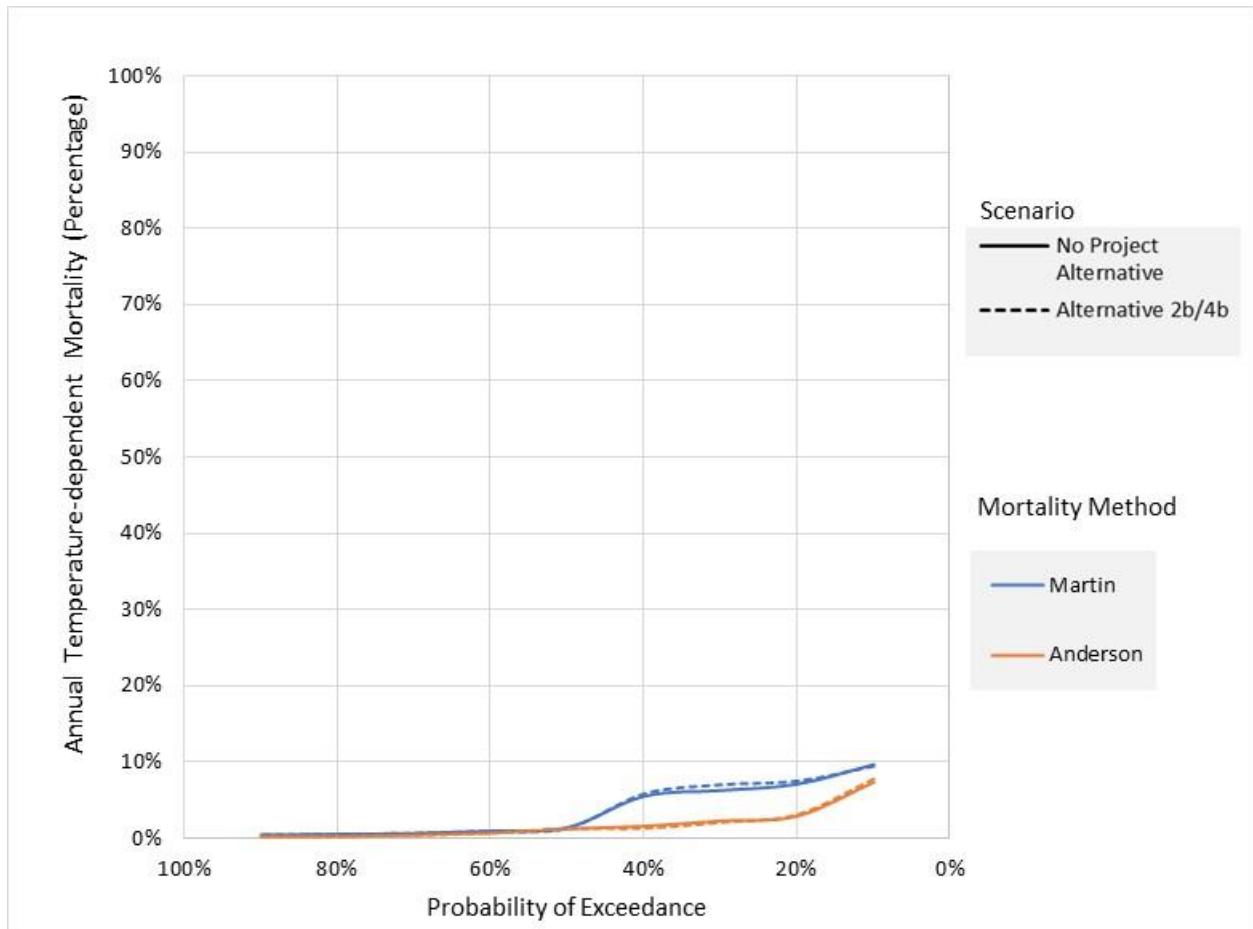


Figure 5A-E4.3.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Above Normal Water Year, No Project Alternative versus Alternative 2c/4c (2040)

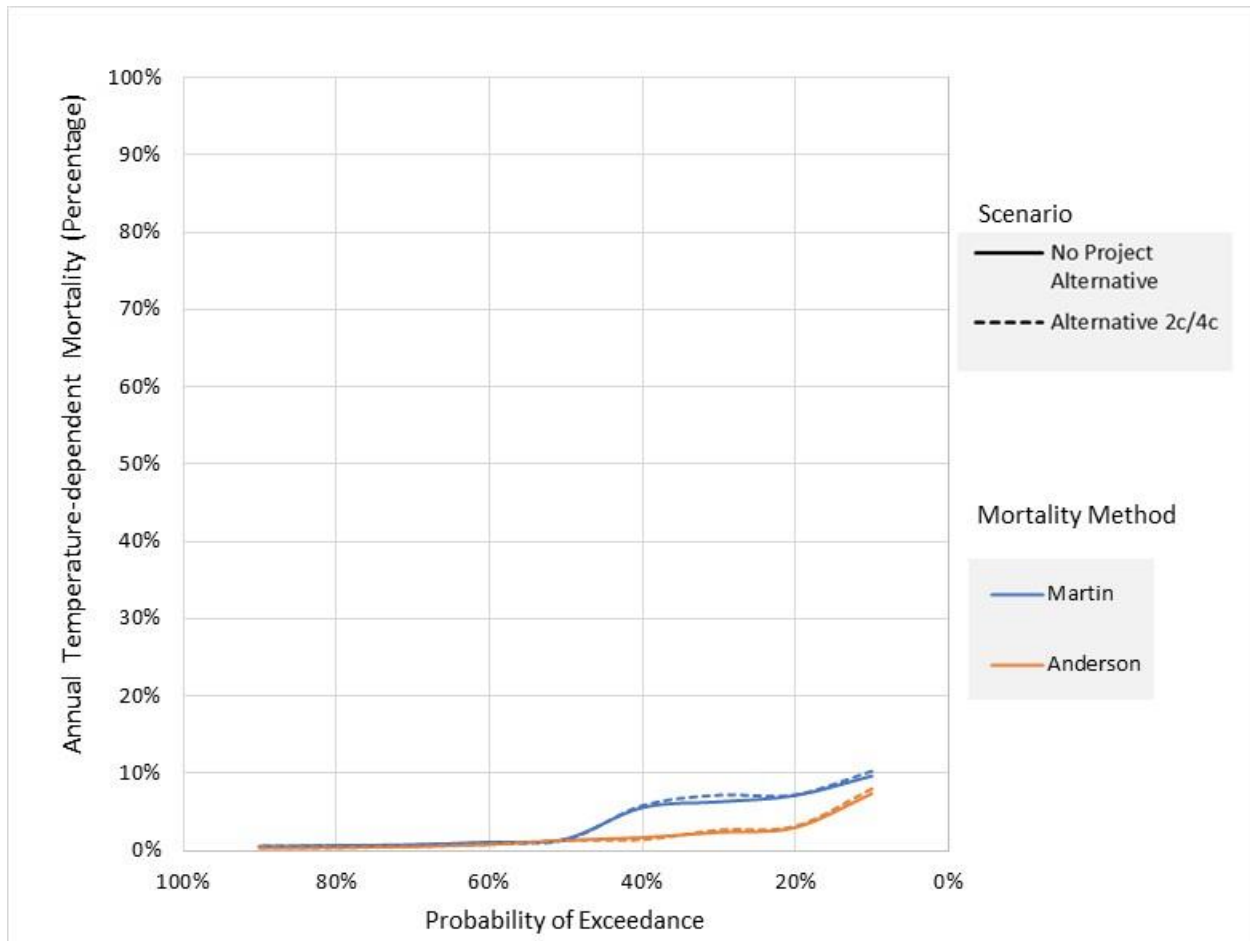


Figure 5A-E4.3.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Above Normal Water Year, No Project Alternative versus Alternative 1/3 (2040)

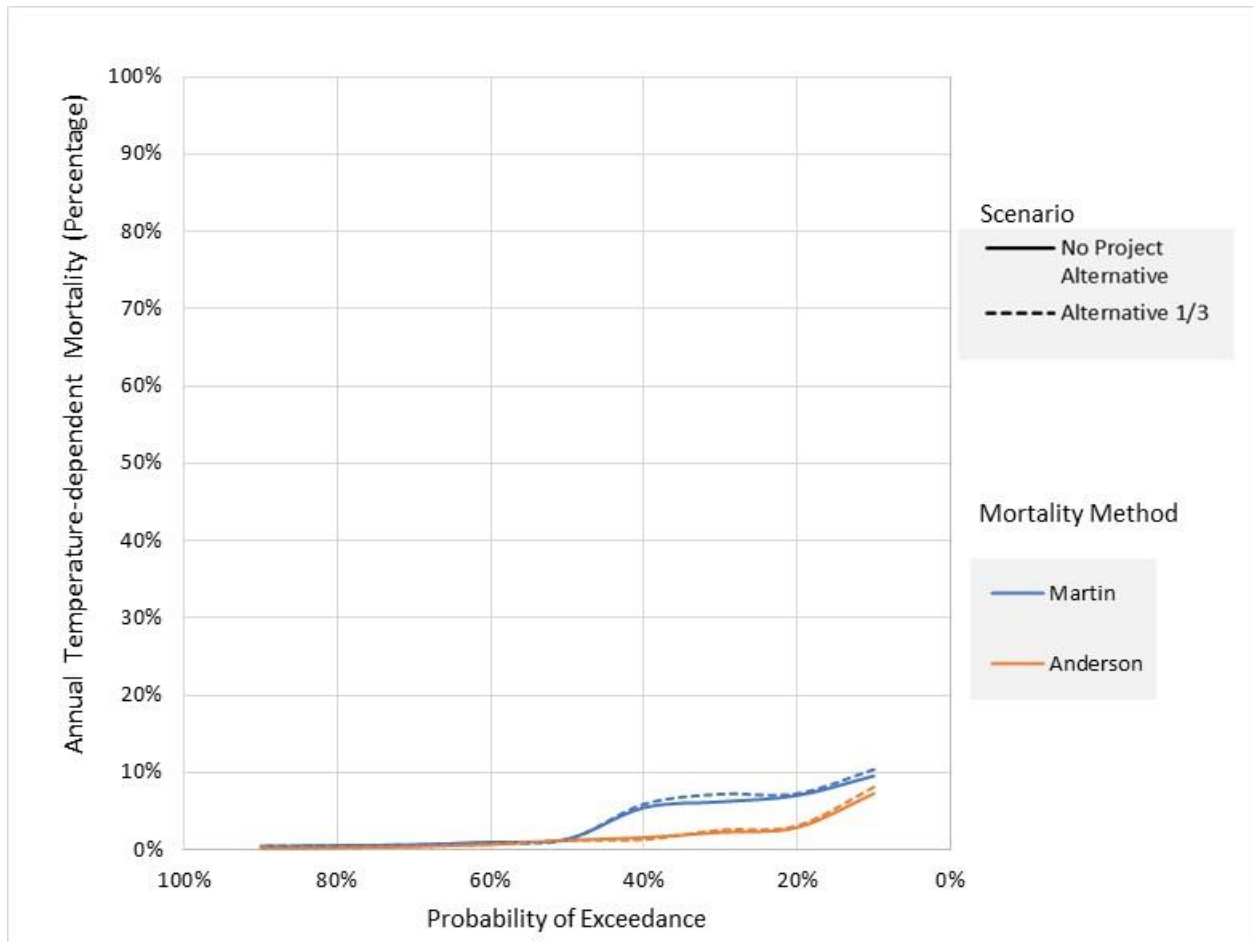


Figure 5A-E4.3.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Above Normal Water Year, No Project Alternative versus Alternative 2a/4a (2040)

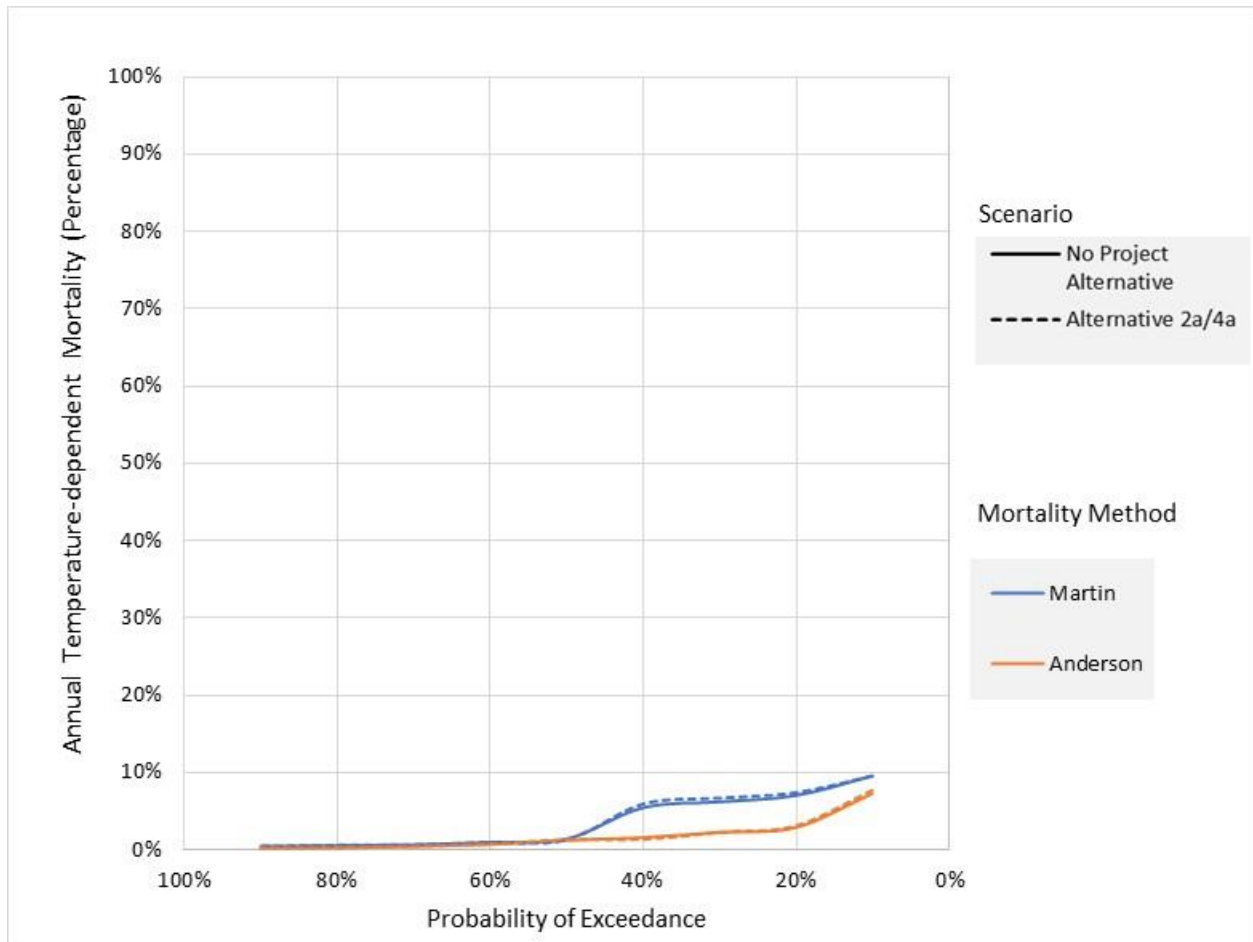


Figure 5A-E4.3.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Above Normal Water Year, No Project Alternative versus Alternative 5 (2040)

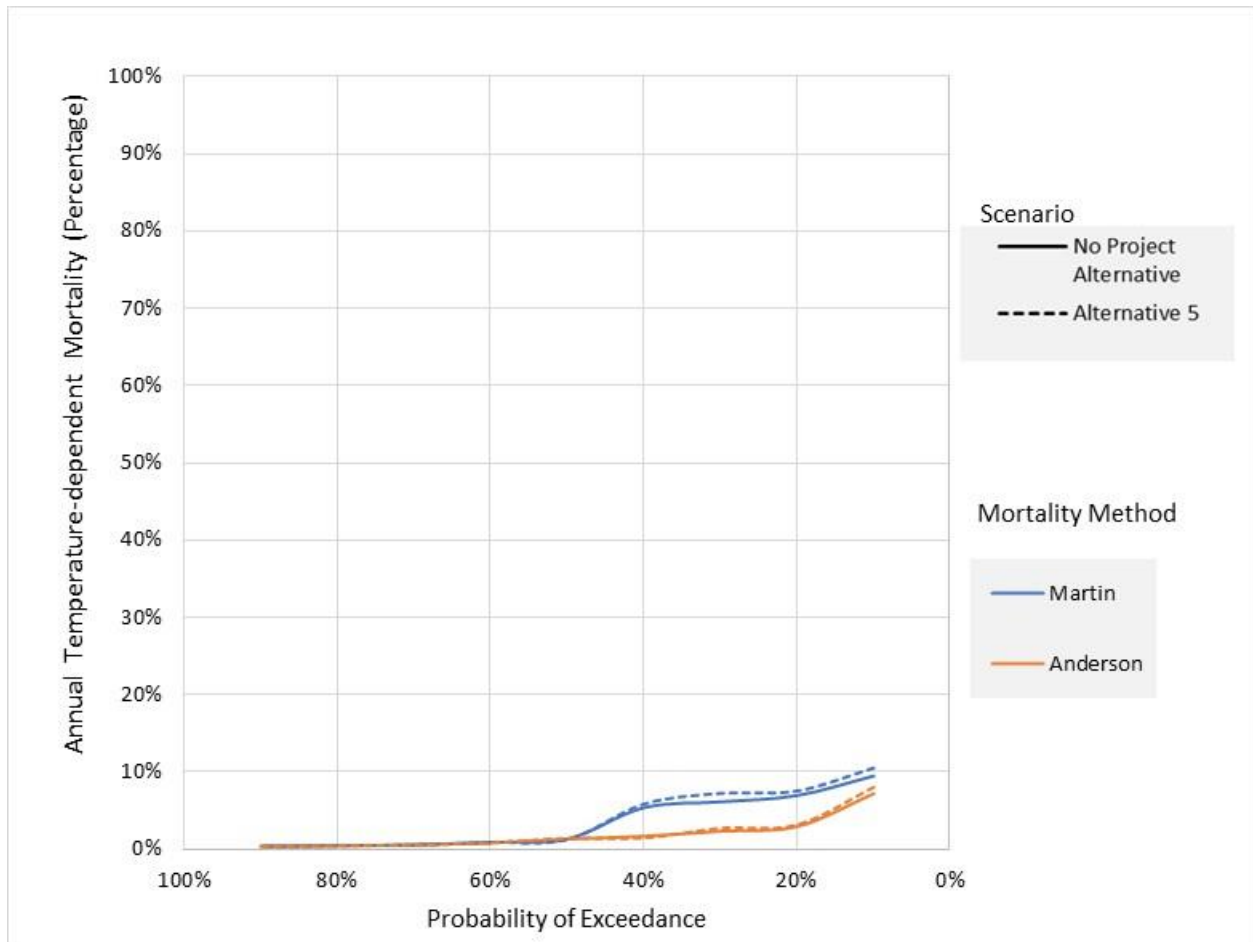


Figure 5A-E4.4.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Below Normal Water Year, No Project Alternative versus Alternative 2b/4b (2040)

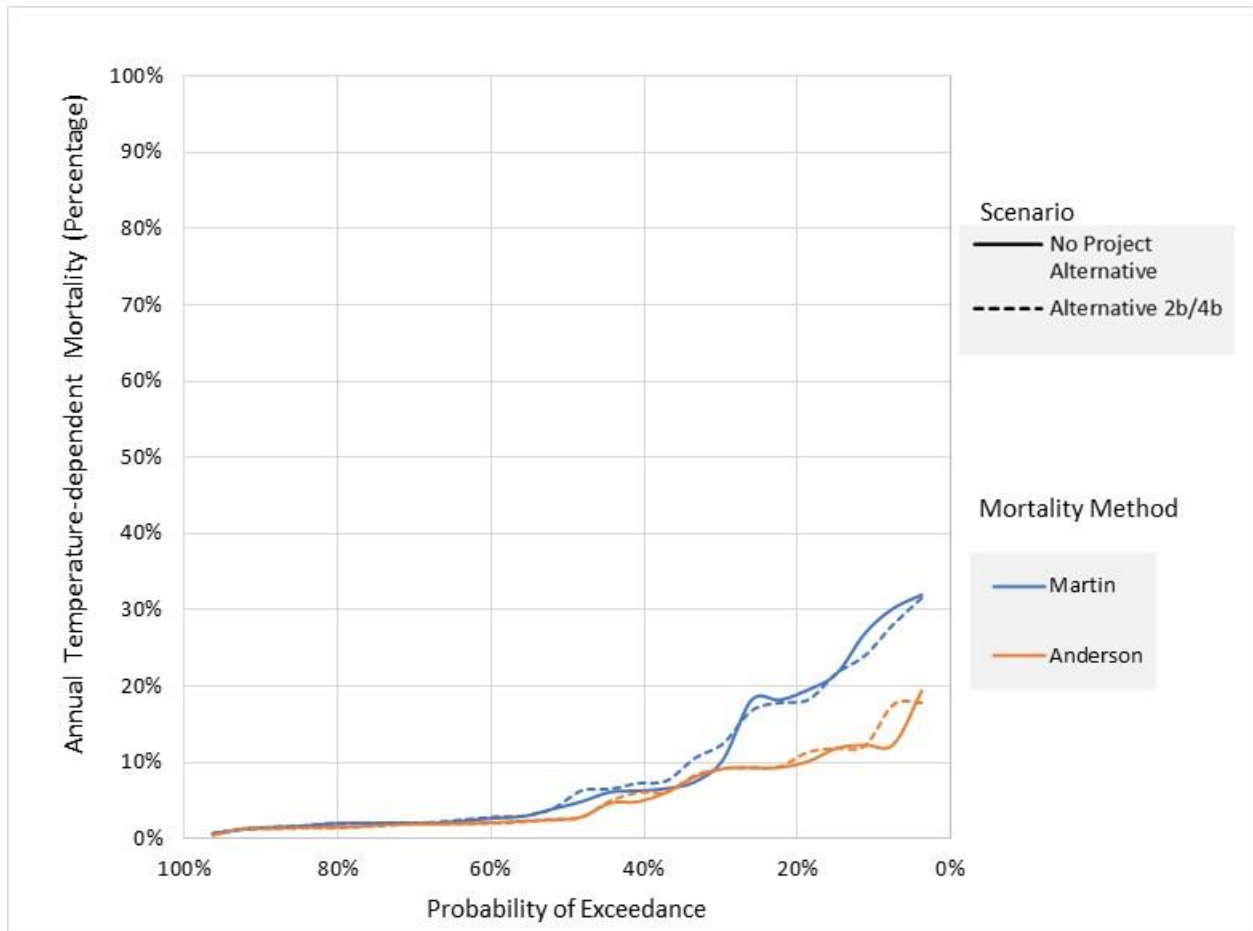


Figure 5A-E4.4.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Below Normal Water Year, No Project Alternative versus Alternative 2c/4c (2040)

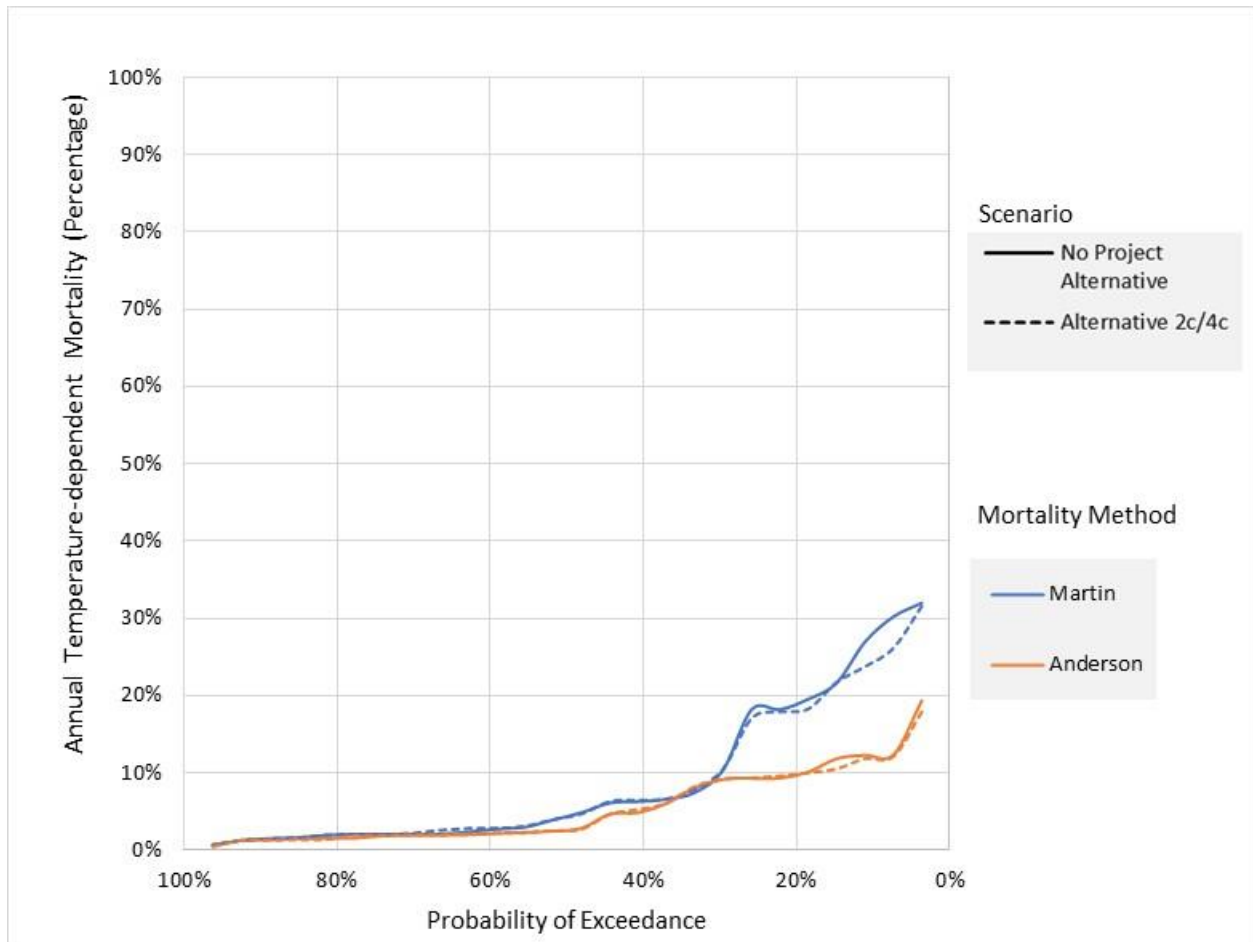


Figure 5A-E4.4.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Below Normal Water Year, No Project Alternative versus Alternative 1/3 (2040)

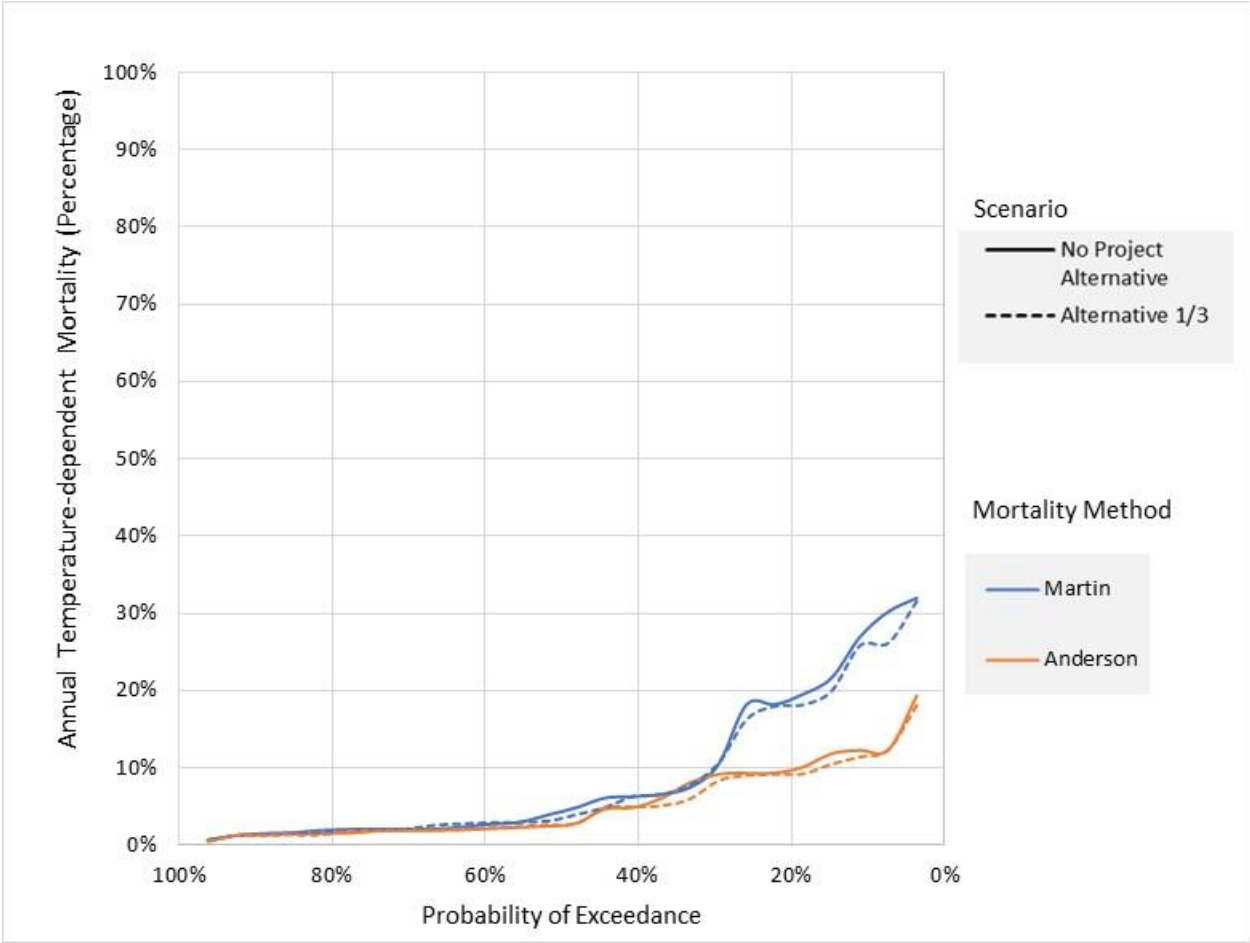


Figure 5A-E4.4.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Below Normal Water Year, No Project Alternative versus Alternative 2a/4a (2040)

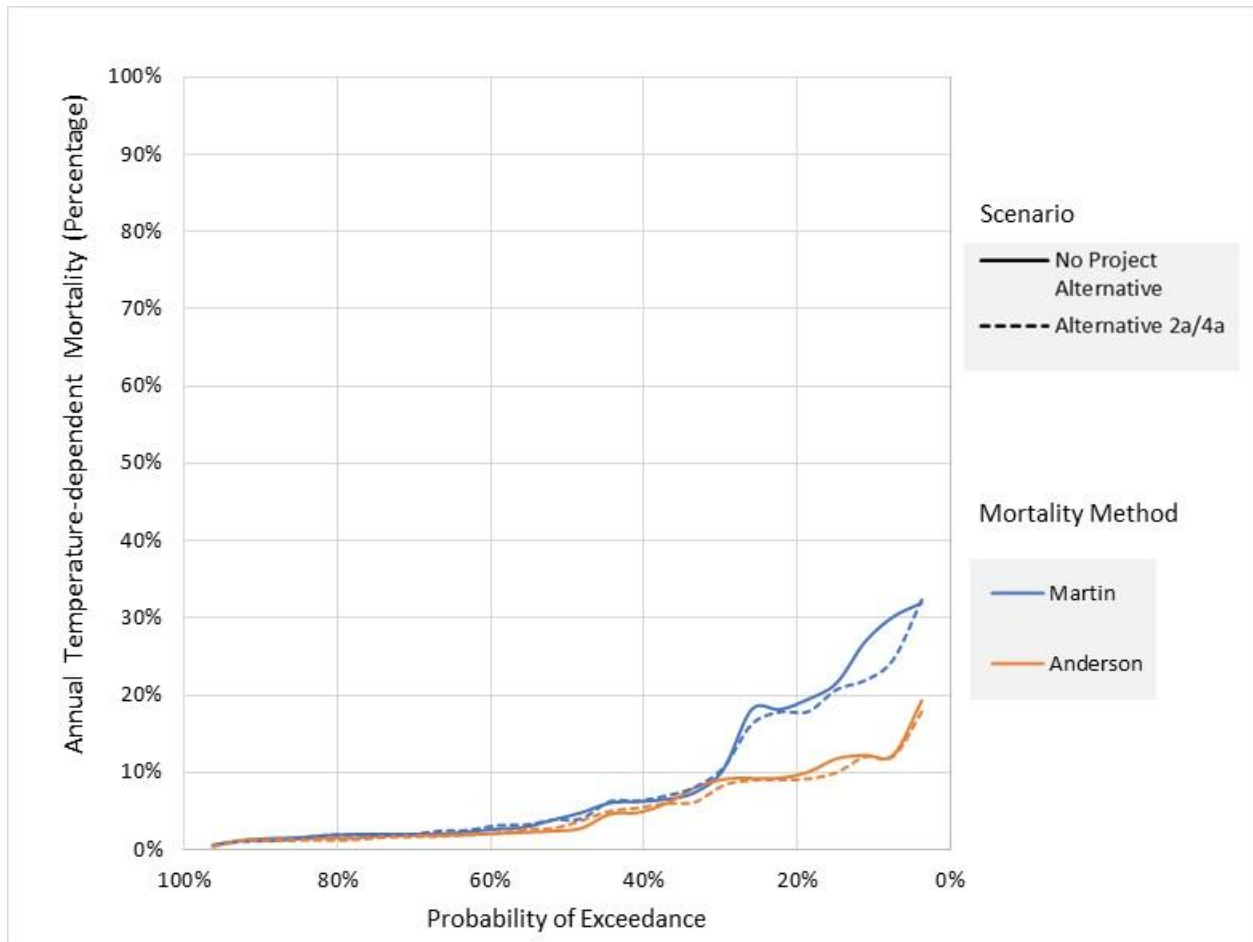


Figure 5A-E4.4.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Below Normal Water Year, No Project Alternative versus Alternative 5 (2040)

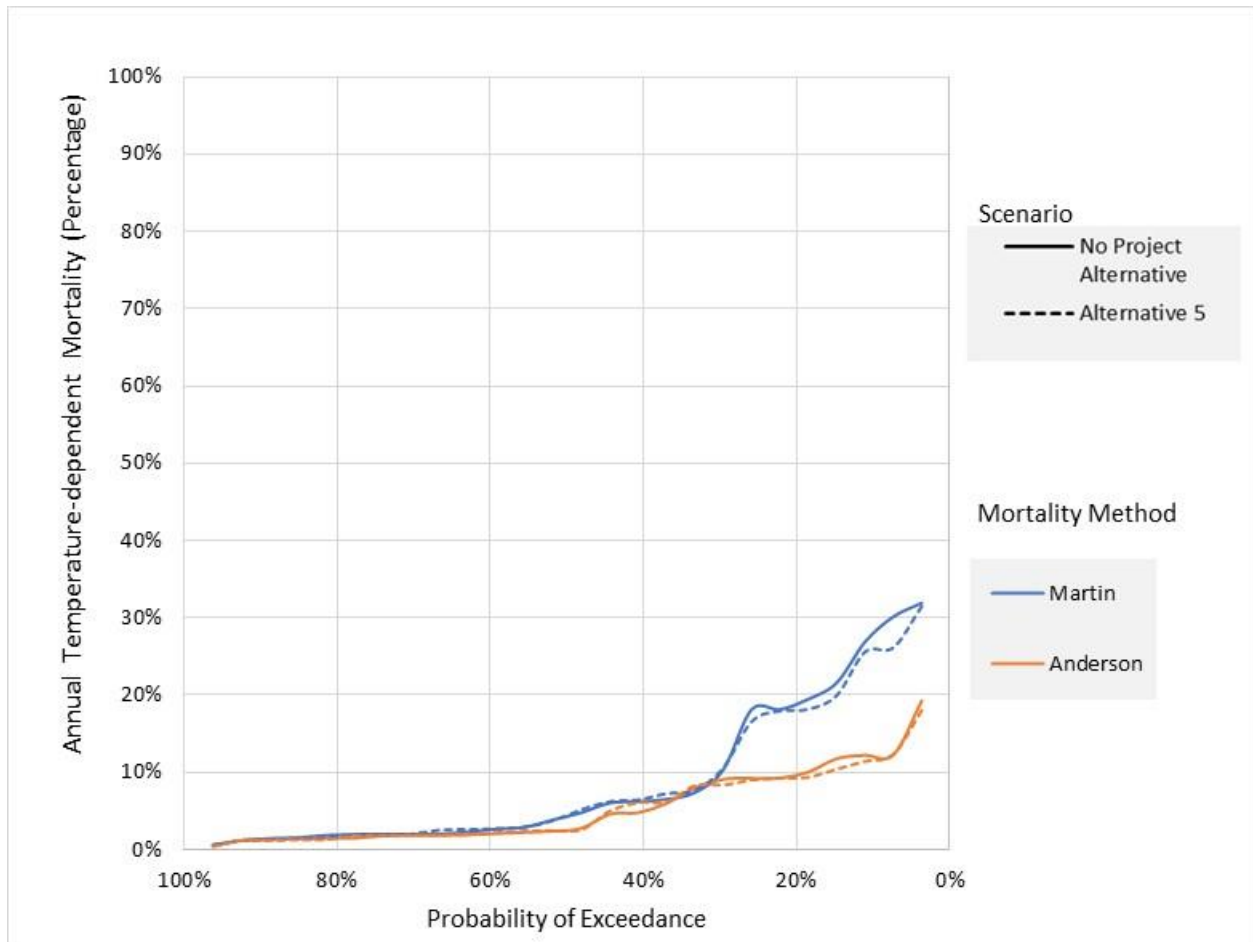


Figure 5A-E4.5.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Dry Water Year, No Project Alternative versus Alternative 2b/4b (2040)

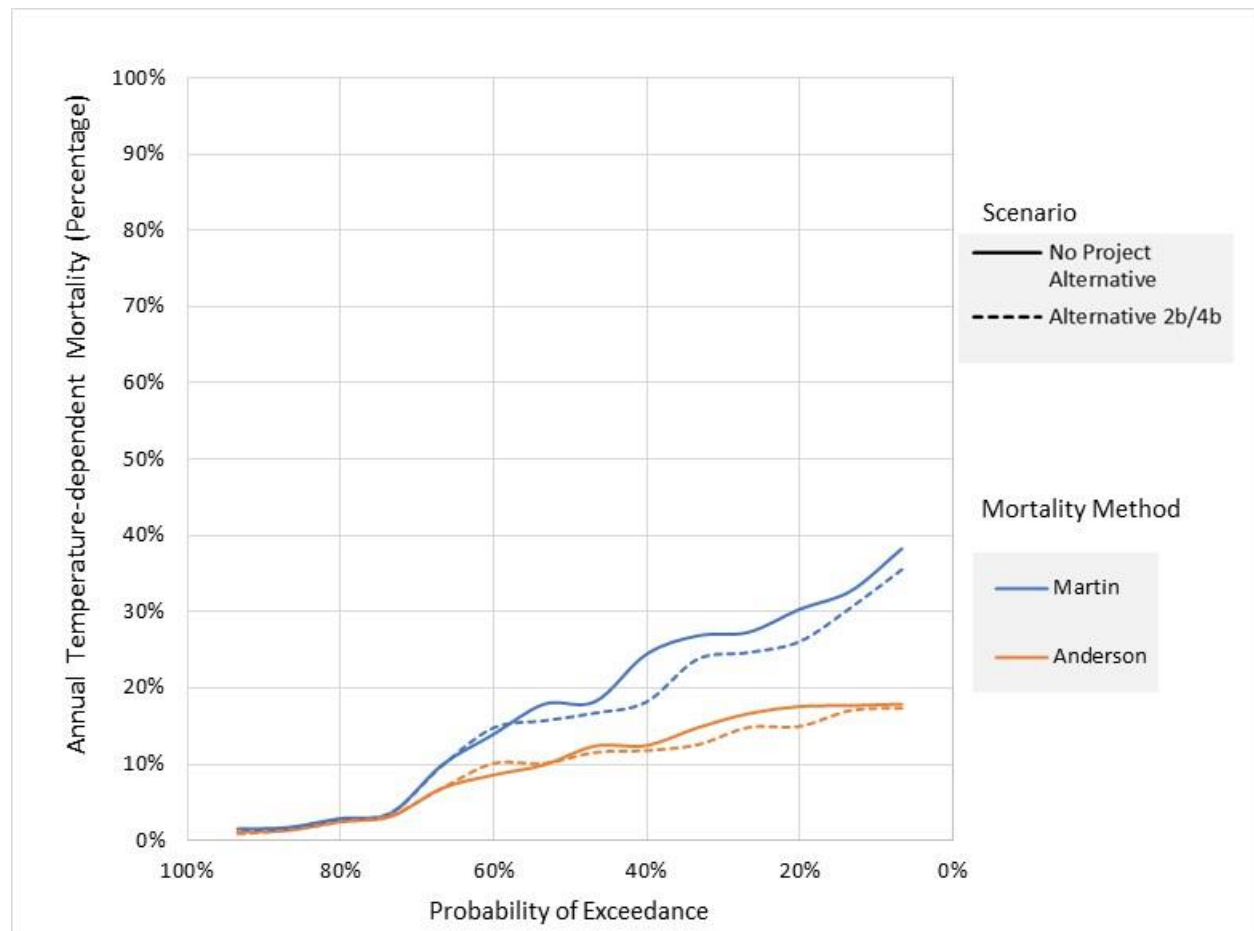


Figure 5A-E4.5.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Dry Water Year, No Project Alternative versus Alternative 2c/4c (2040)

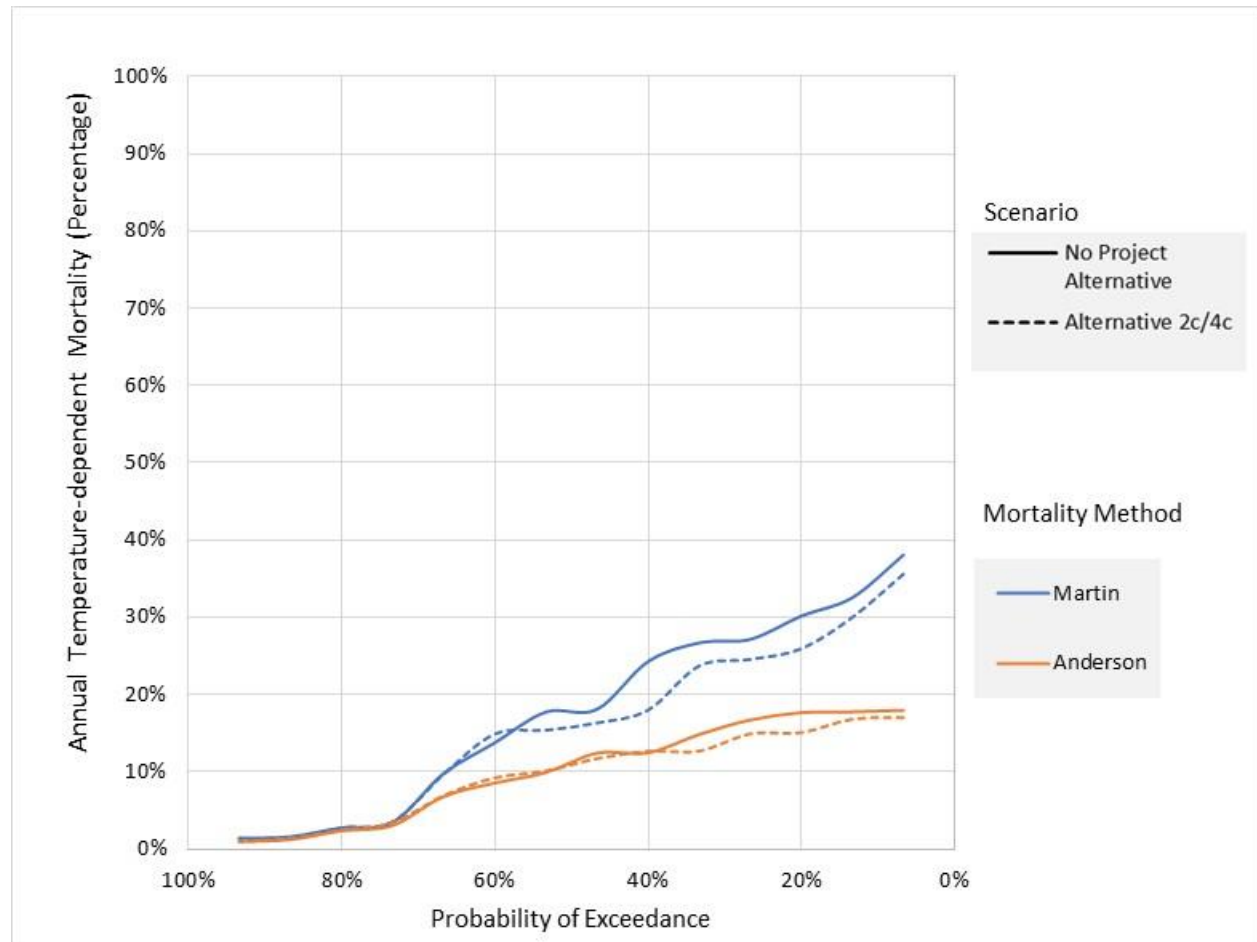


Figure 5A-E4.5.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Dry Water Year, No Project Alternative versus Alternative 1/3 (2040)

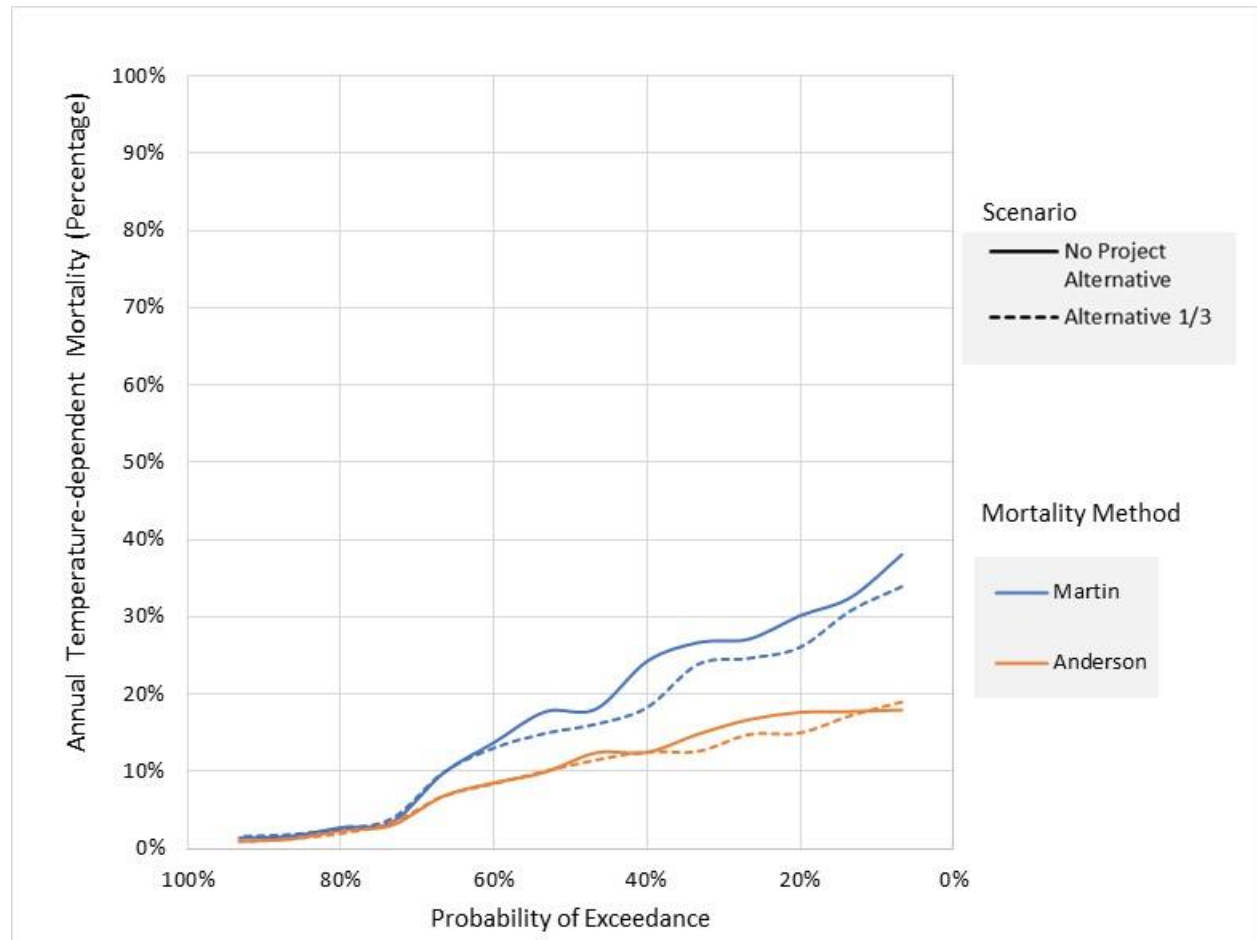


Figure 5A-E4.5.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Dry Water Year, No Project Alternative versus Alternative 2a/4a (2040)

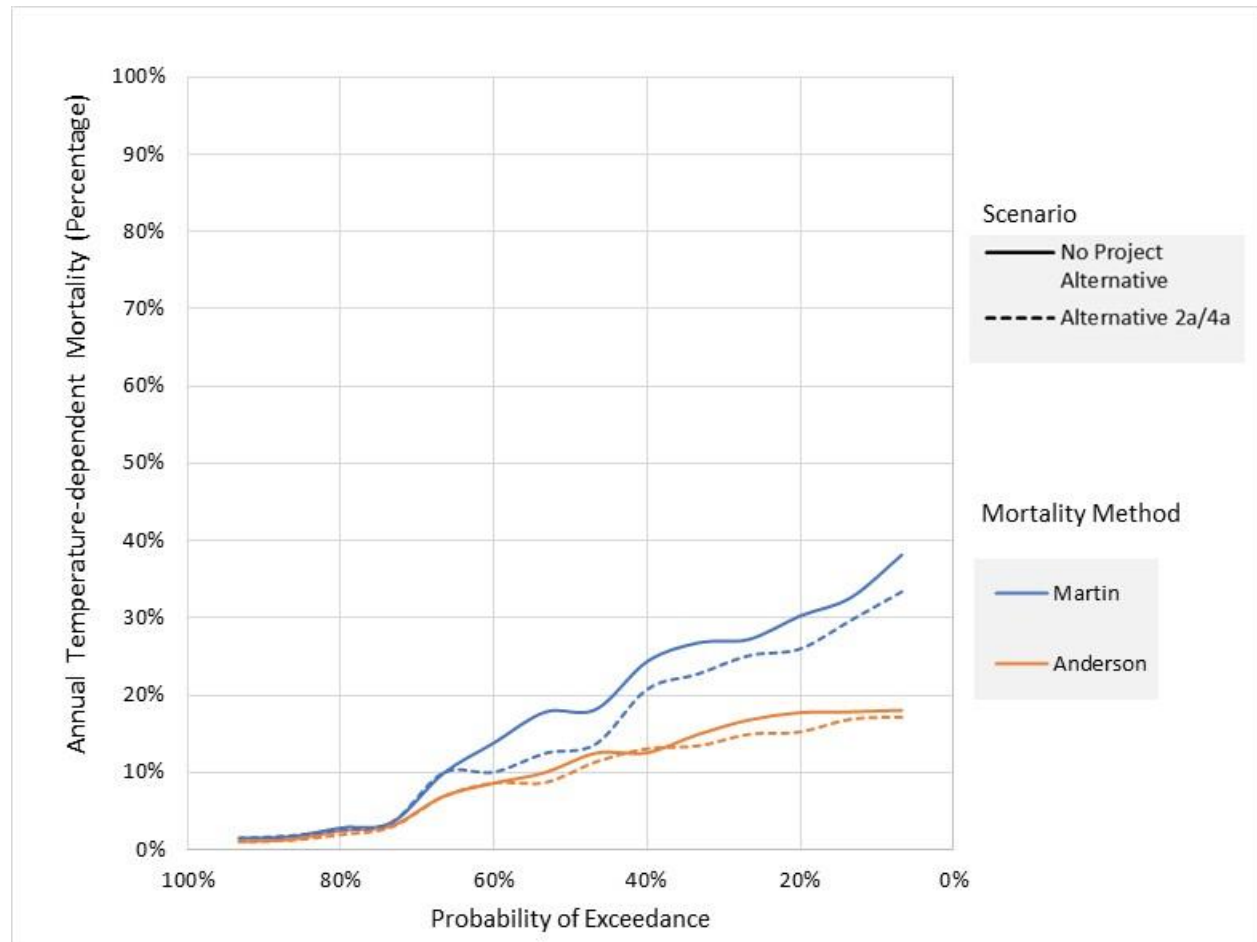


Figure 5A-E4.5.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Dry Water Year, No Project Alternative versus Alternative 5 (2040)

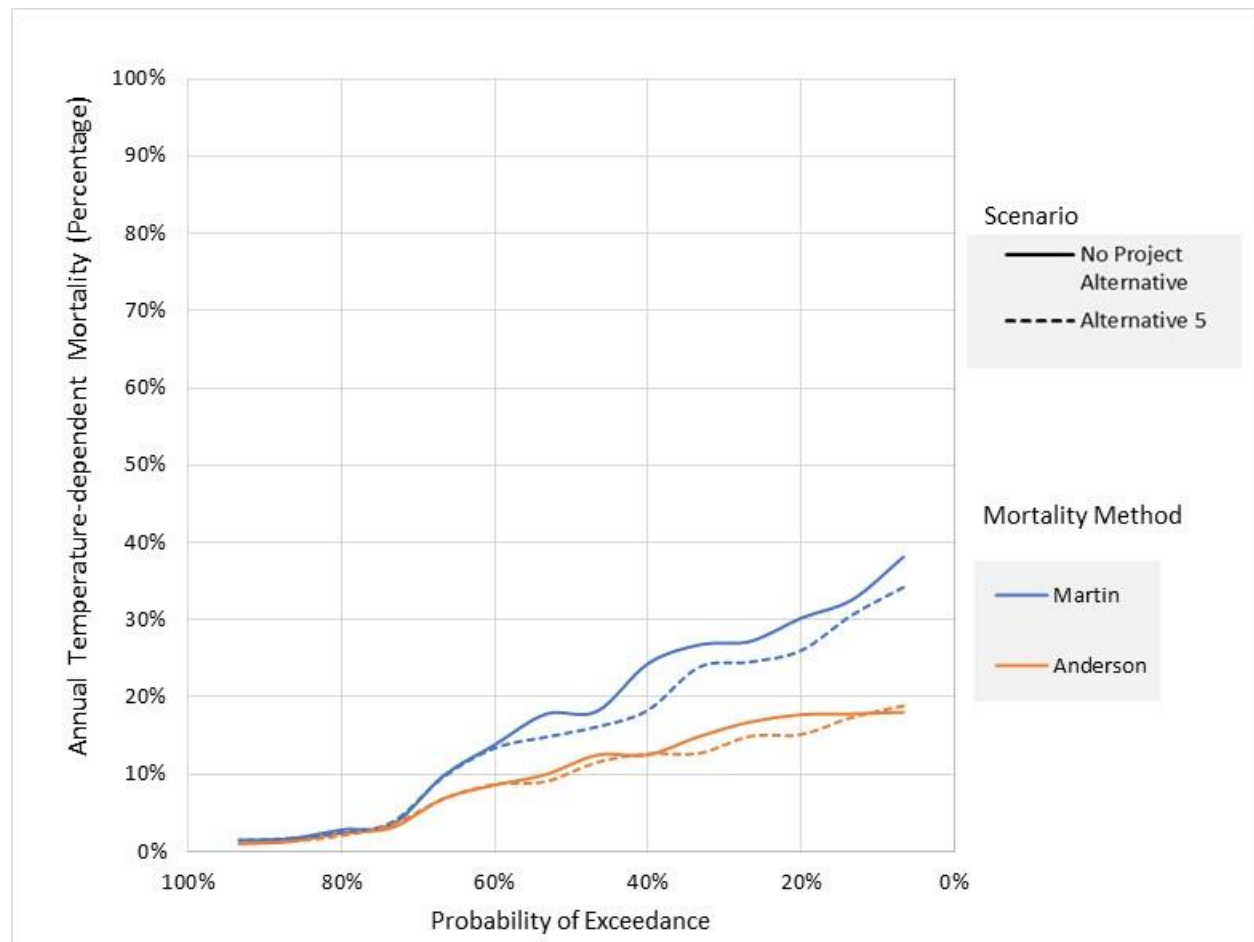


Figure 5A-E4.6.1. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Critical Water Year, No Project Alternative versus Alternative 2b/4b (2040)

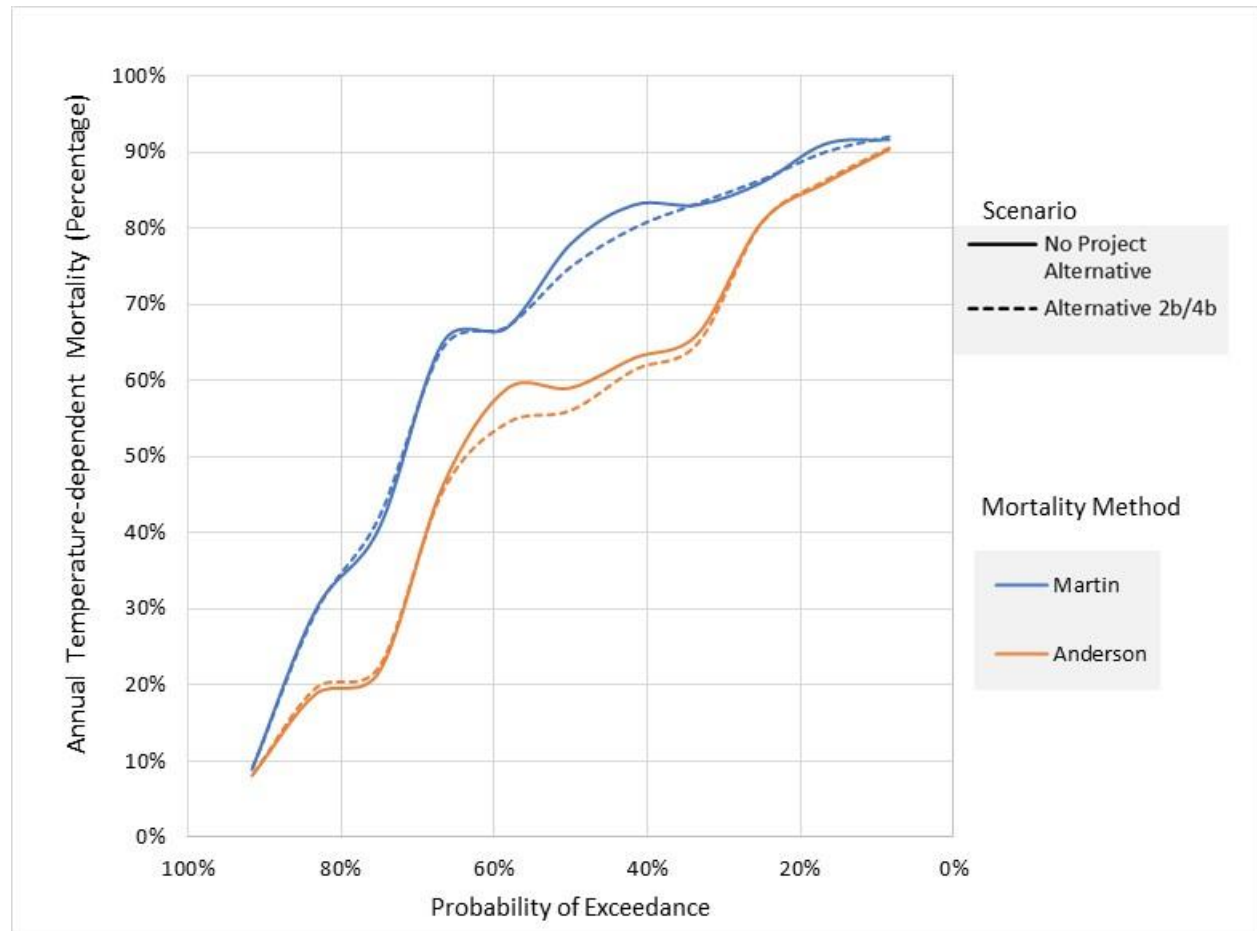


Figure 5A-E4.6.2. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Critical Water Year, No Project Alternative versus Alternative 2c/4c (2040)

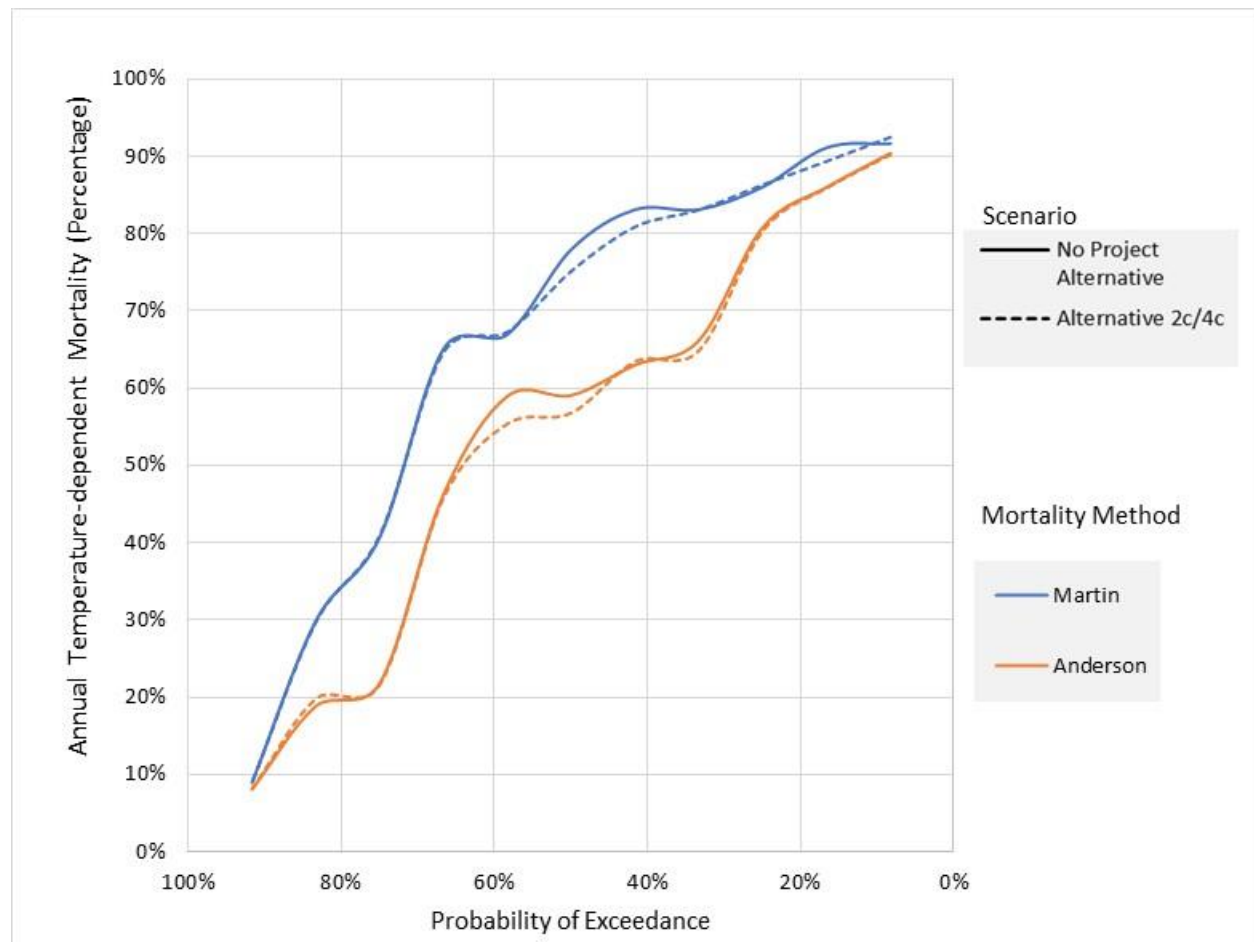


Figure 5A-E4.6.3. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Critical Water Year, No Project Alternative versus Alternative 1/3 (2040)

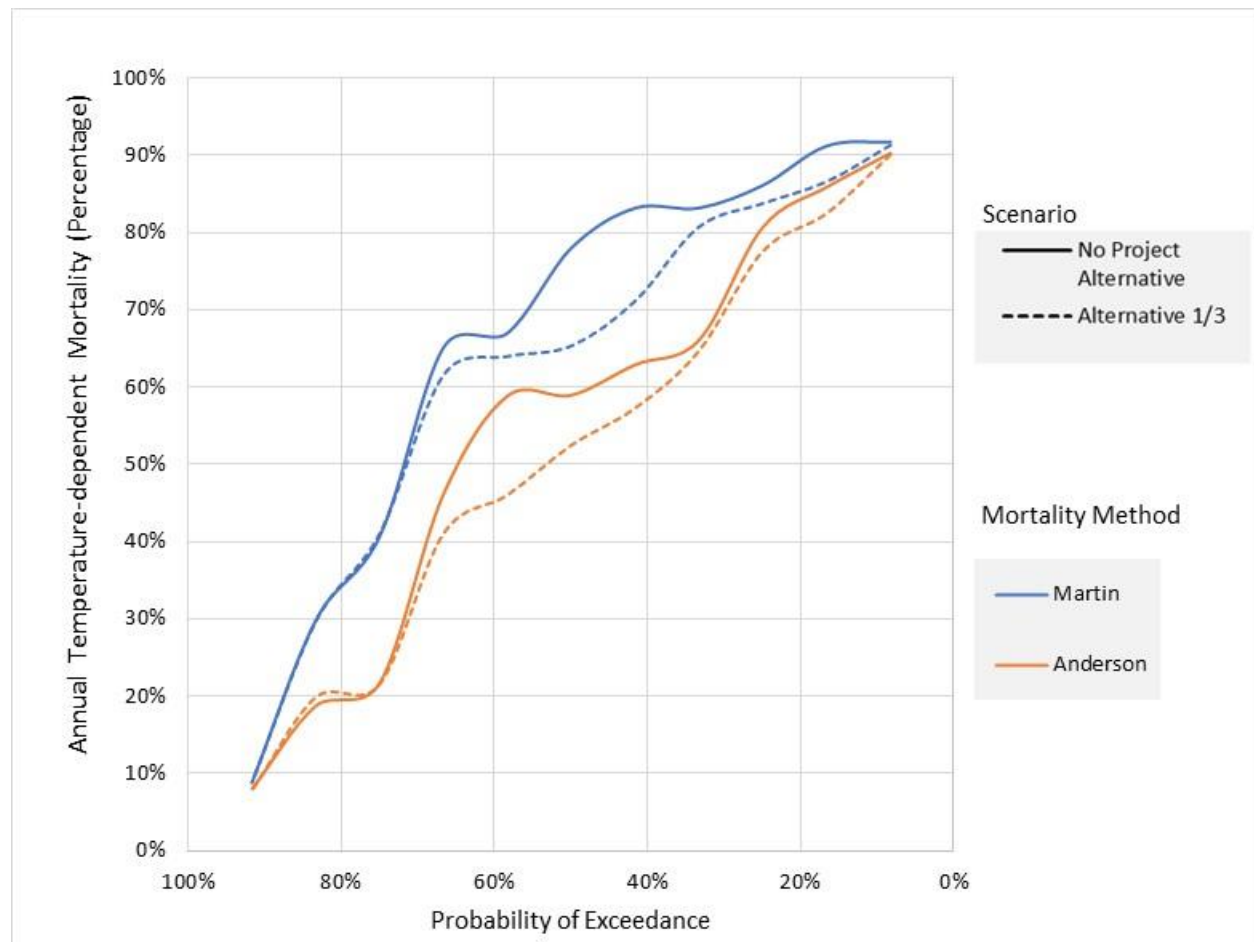


Figure 5A-E4.6.4. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Critical Water Year, No Project Alternative versus Alternative 2a/4a (2040)

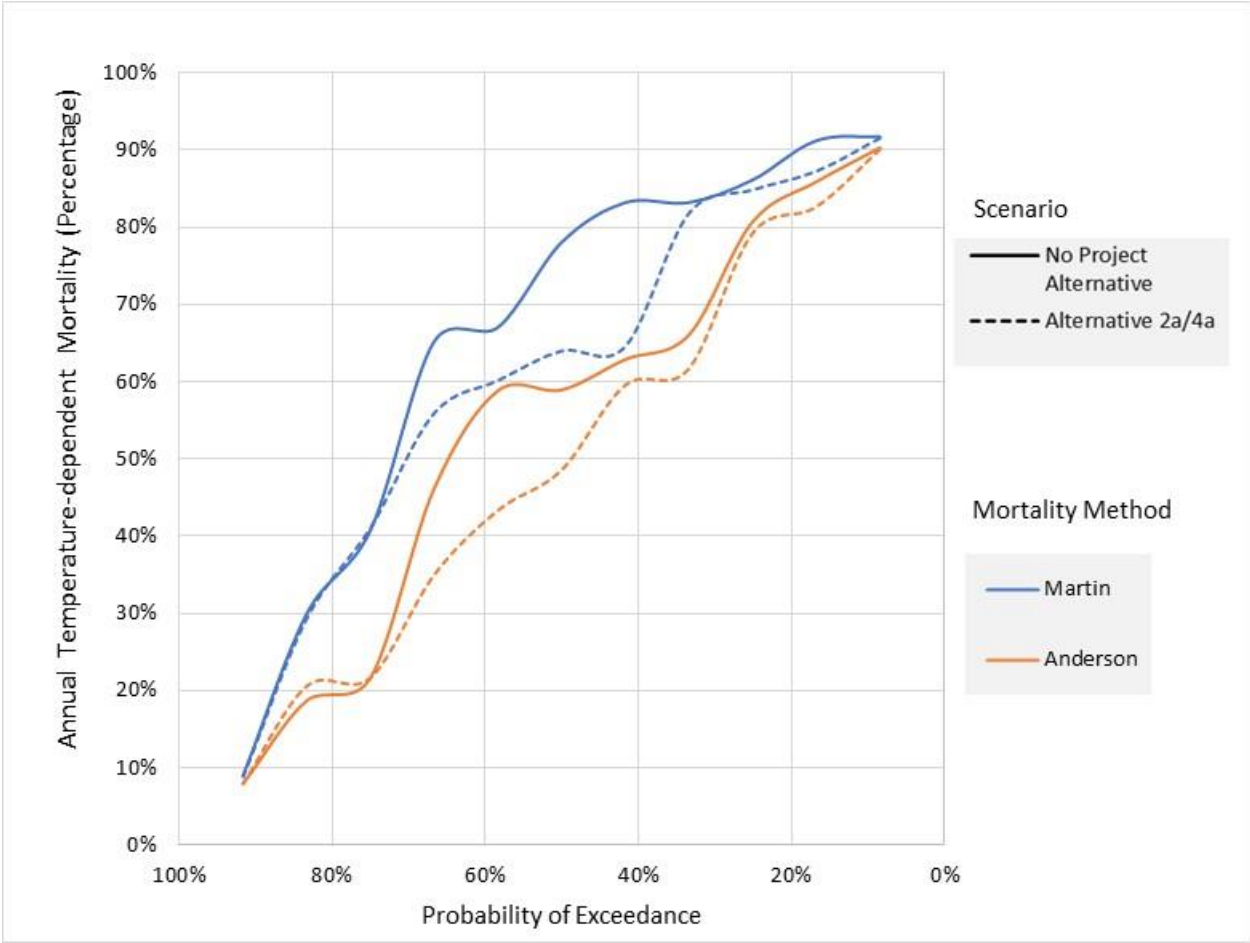
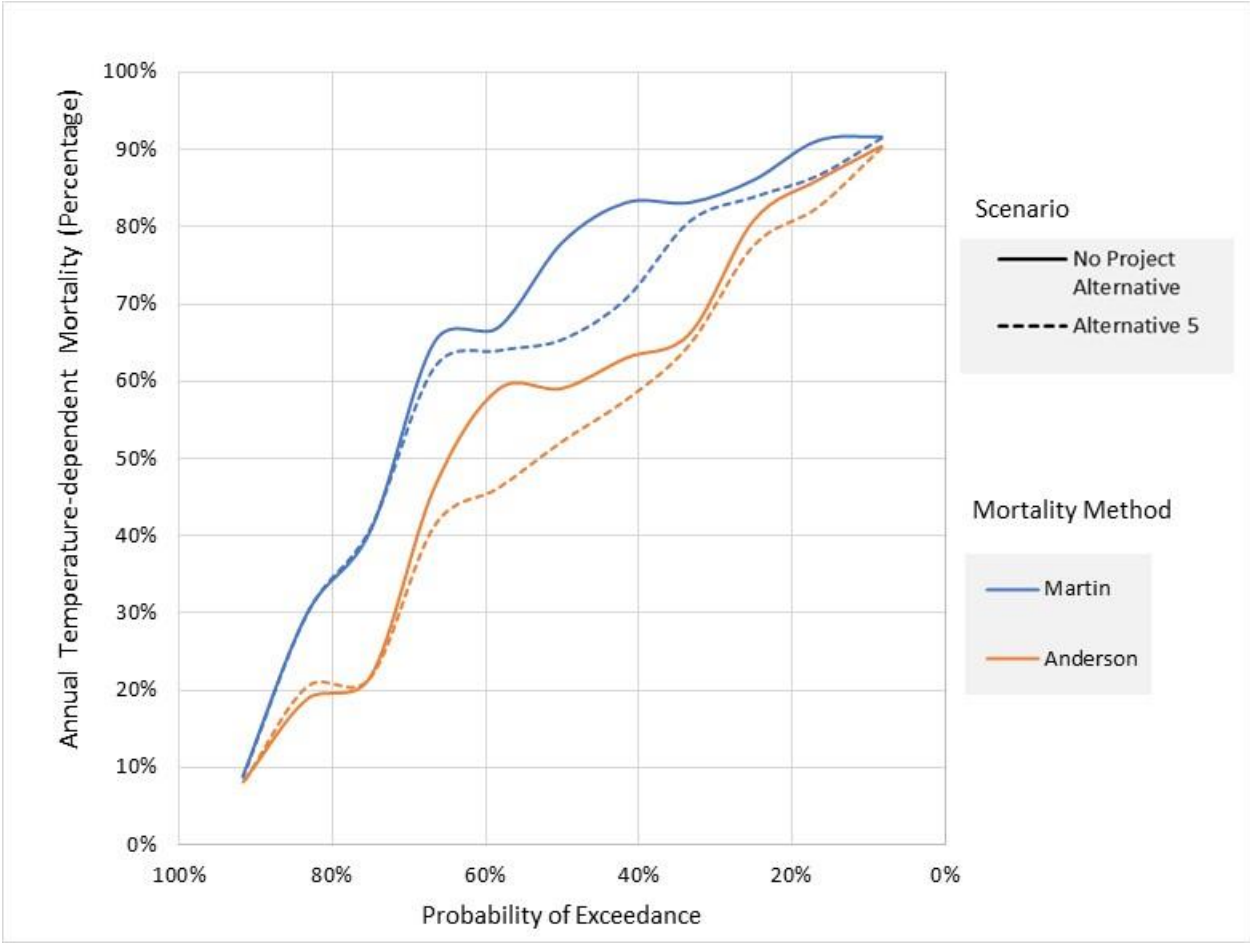


Figure 5A-E4.6.5. Annual Temperature-Dependent Winter-Run Chinook Salmon Mortality (Percentage), Critical Water Year, No Project Alternative versus Alternative 5 (2040)



E.2 References

State Water Resources Control Board. 1999. Water Right Decision 1641. December. Available:
https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641.pdf. Accessed: August 26, 2021