## 3. Cumulative degree days summary results for Grande Ronde River summer steelhead under long-term average temperatures for the Columbia River

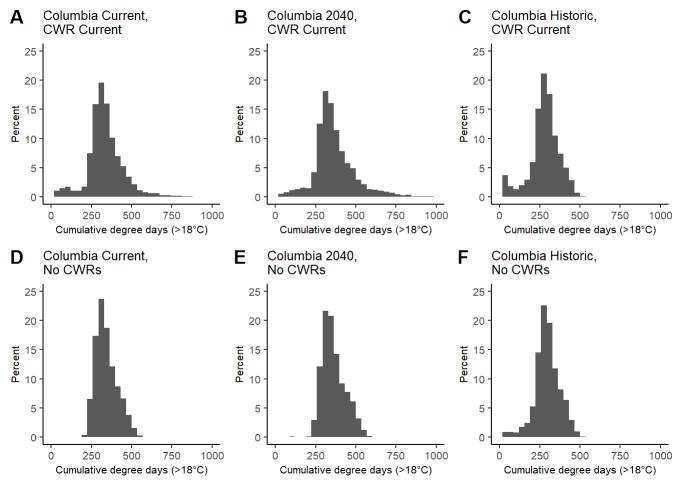


Fig. 3.1 Histograms of modeled Grande Ronde River summer steelhead accumulated degrees day over 18°C from Bonneville to the Snake River confluence in the Columbia River.

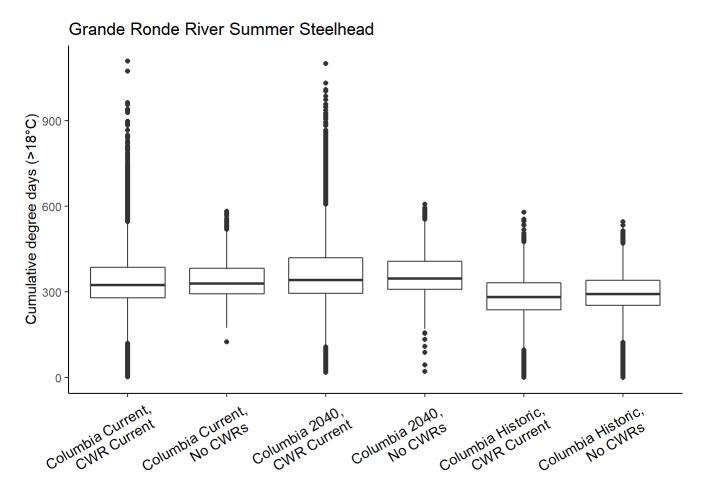


Fig. 3.2 Boxplots of modeled Grande Ronde River summer steelhead accumulated degrees day over 18°C from Bonneville to the Snake River confluence in the Columbia River.

Table 3.1 Cumulative degree days (>18°C) used across different HexSim thermalscapes summarized for Grande Ronde River Summer Steelhead.

Scenario	Minimum	25% quantile	Median	75% quantile	Maximum
Columbia 2040, CWR Current	19	296	343	421	1101
Columbia Historic, CWR Current	1	238	284	332	580
Columbia Current, CWR Current	2	280	325	387	1109
Columbia 2040, No CWRs	21	309	347	407	607
Columbia Historic, No CWRs	1	254	293	340	546
Columbia Current, No CWRs	126	294	330	384	583

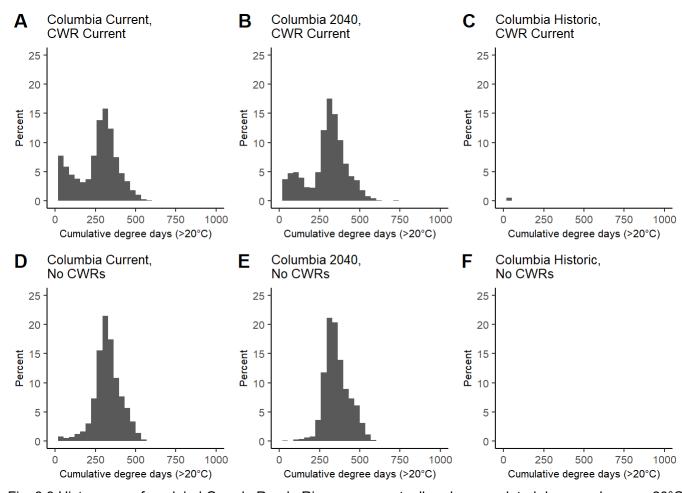


Fig. 3.3 Histograms of modeled Grande Ronde River summer steelhead accumulated degrees day over 20°C from Bonneville to the Snake River confluence in the Columbia River.

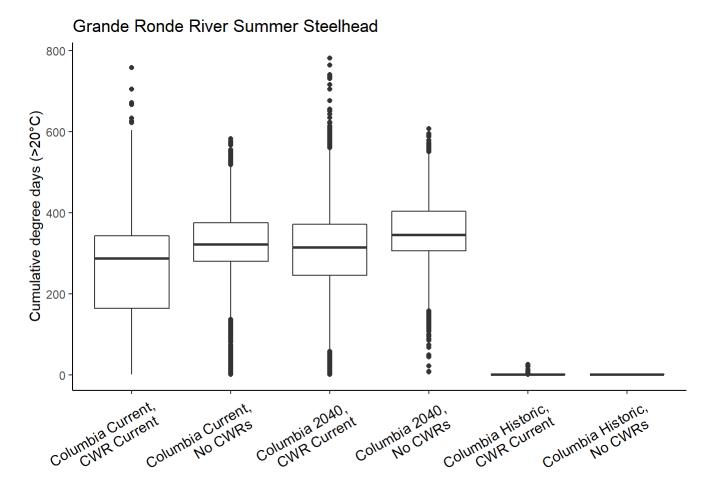


Fig. 3.4 Boxplots of modeled Grande Ronde River summer steelhead accumulated degrees day over 20°C from Bonneville to the Snake River confluence in the Columbia River.

Table 3.2 Cumulative degree days (>20°C) used across different HexSim thermalscapes summarized for Grande Ronde River Summer Steelhead.

Scenario	Minimum	25% quantile	Median	75% quantile	Maximum
Columbia 2040, CWR Current	1	246	315	372	781
Columbia Historic, CWR Current	1	1	1	1	25
Columbia Current, CWR Current	1	164	287	343	758
Columbia 2040, No CWRs	7	305	345	404	607
Columbia Historic, No CWRs	1	1	1	1	1
Columbia Current, No CWRs	1	280	322	375	583

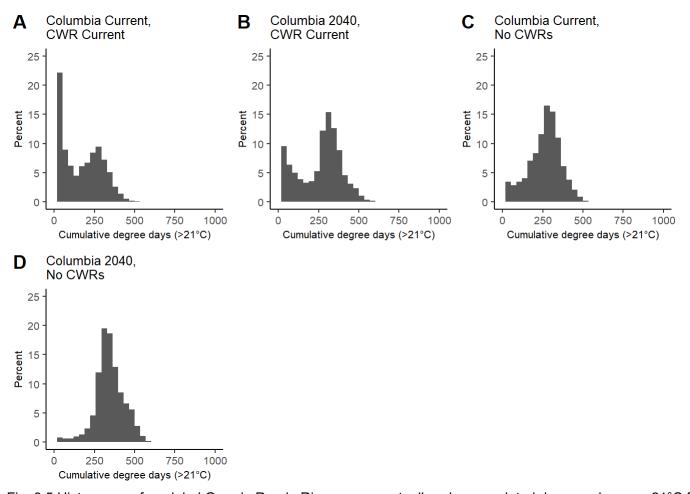


Fig. 3.5 Histograms of modeled Grande Ronde River summer steelhead accumulated degrees day over 21°C from Bonneville to the Snake River confluence in the Columbia River.

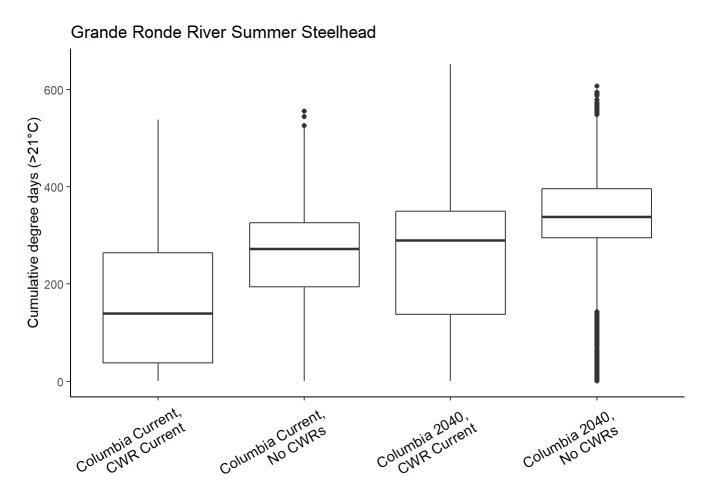


Fig. 3.6 Boxplots of modeled Grande Ronde River summer steelhead accumulated degrees day over 21°C from Bonneville to the Snake River confluence in the Columbia River.

Table 3.3 Cumulative degree days (>21°C) used across different HexSim thermalscapes summarized for Grande Ronde River Summer Steelhead.

Scenario	Minimum	25% quantile	Median	75% quantile	Maximum
Columbia 2040, CWR Current	1	137	290	349	652
Columbia Current, CWR Current	1	38	139	264	538
Columbia 2040, No CWRs	1	295	338	396	607
Columbia Current, No CWRs	1	194	272	326	555

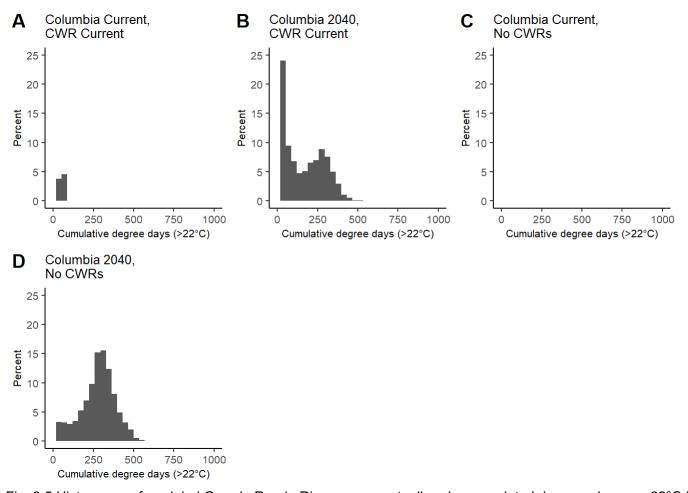


Fig. 3.5 Histograms of modeled Grande Ronde River summer steelhead accumulated degrees day over 22°C from Bonneville to the Snake River confluence in the Columbia River.

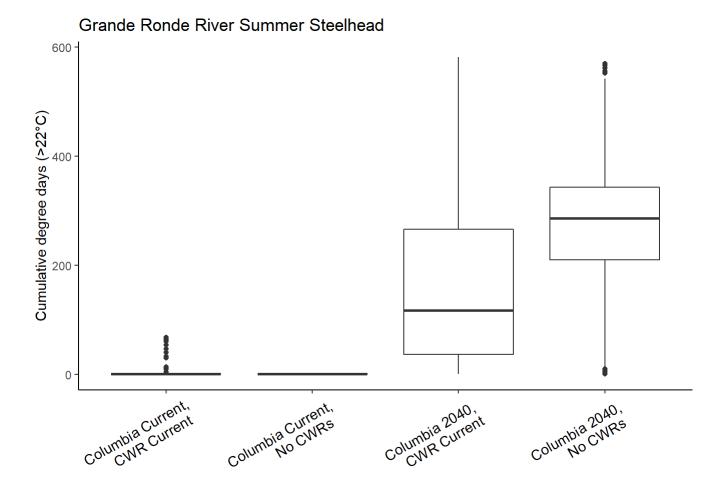


Fig. 3.6 Boxplots of modeled Grande Ronde River summer steelhead accumulated degrees day over 22°C from Bonneville to the Snake River confluence in the Columbia River.

Table 3.3 Cumulative degree days (>22°C) used across different HexSim thermalscapes summarized for Grande Ronde River Summer Steelhead.

Scenario	Minimum	25% quantile	Median	75% quantile	Maximum
Columbia 2040, CWR Current	1	37	118	266	582
Columbia Current, CWR Current	1	1	1	1	68
Columbia 2040, No CWRs	1	210	286	344	570
Columbia Current, No CWRs	1	1	1	1	1