9. Cumulative degree days summary results for Grande Ronde River summer steelhead under year 2017 temperatures for the Columbia River

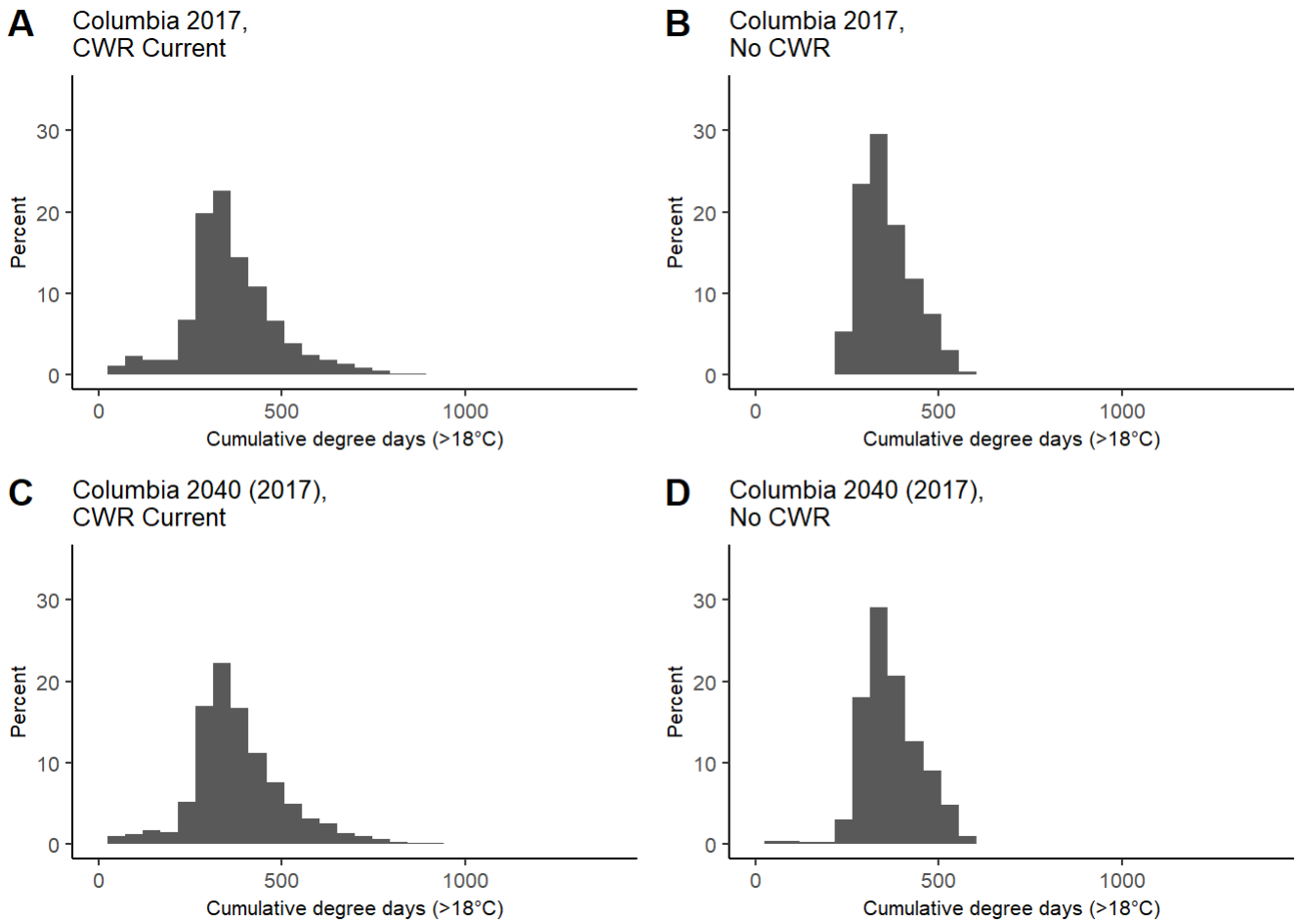

Fig. 9.1 Histograms of modeled Grande Ronde River summer steelhead accumulated degrees day over 18°C from Bonneville to the Snake River confluence in the Columbia River.

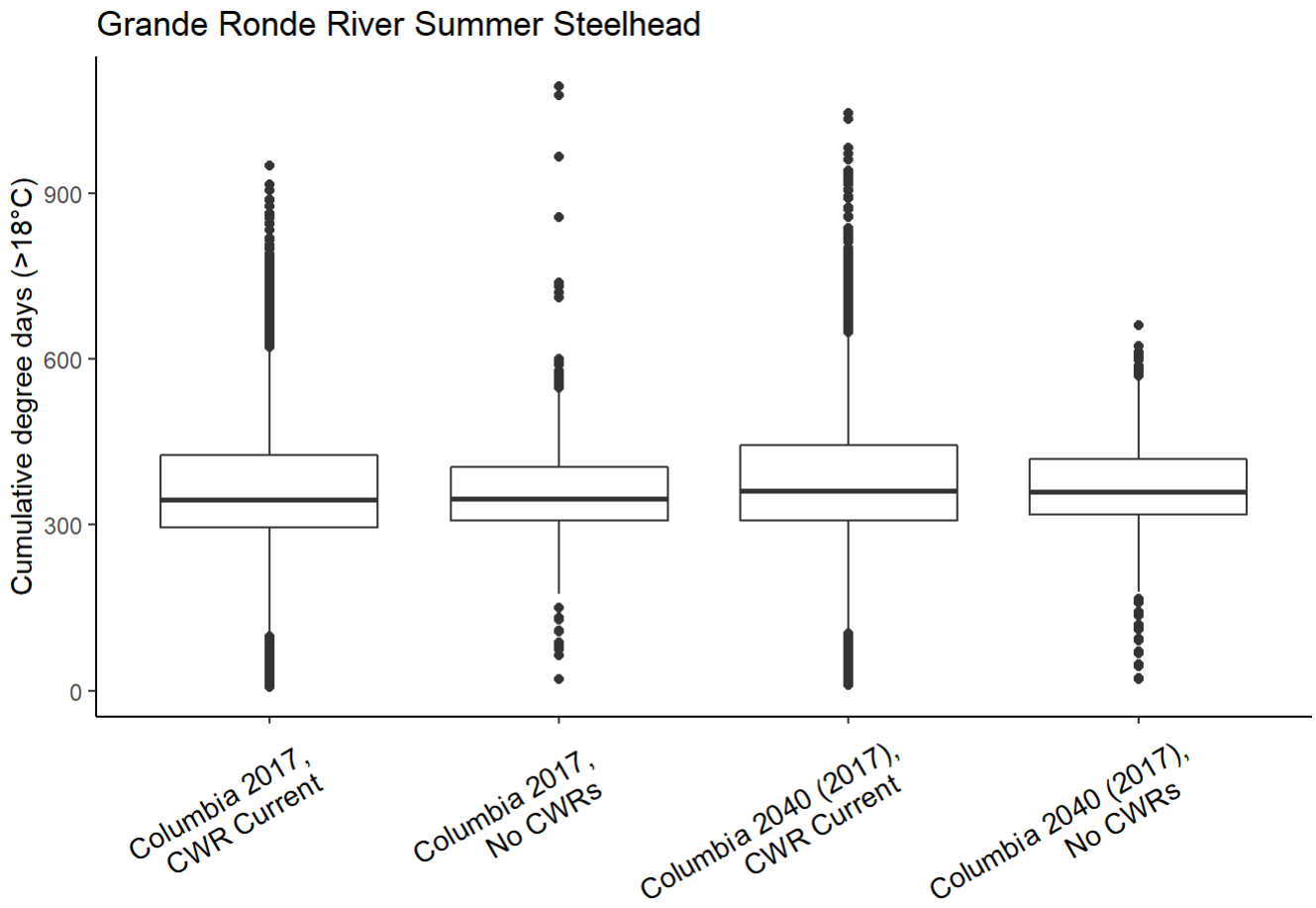

Fig. 9.2 Boxplots of modeled Grande Ronde River summer steelhead accumulated degrees day over 18°C from Bonneville to the Snake River confluence in the Columbia River.

Table 9.1 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 2017, CWR Current	7	295	346	426	950
Columbia 2017, No CWR	21	308	347	404	1093
Columbia 2040 (2017), CWR Current	11	308	362	444	1044
Columbia 2040 (2017), No CWR	22	318	359	418	661

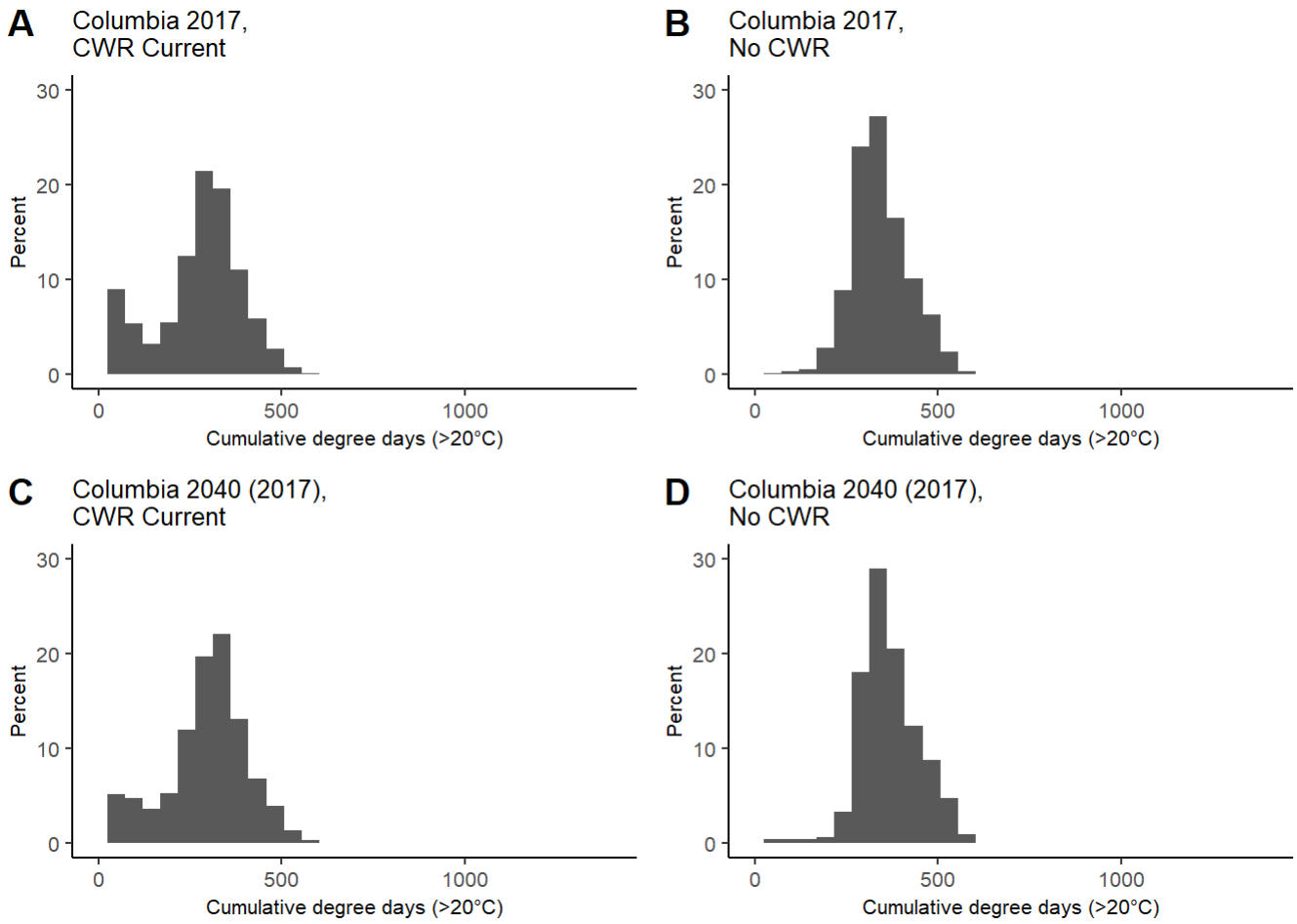

Fig. 9.3 Histograms of modeled Grande Ronde River summer steelhead accumulated degrees day over 20°C from Bonneville to the Snake River confluence in the Columbia River.

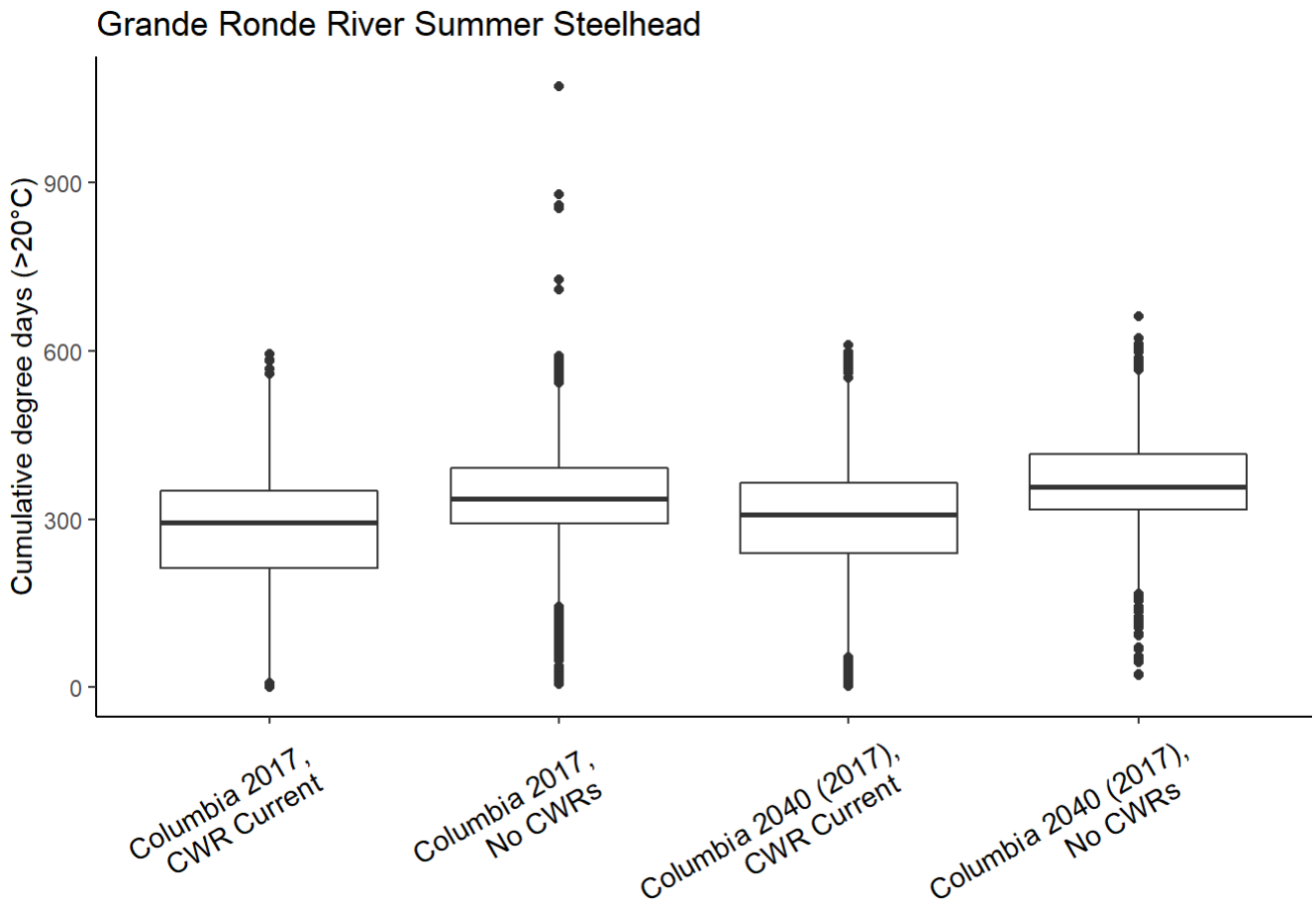

Fig. 9.4 Boxplots of modeled Grande Ronde River summer steelhead accumulated degrees day over 18°C from Bonneville to the Snake River confluence in the Columbia River.

Table 9.2 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 2017, CWR Current	1	213	294	351	596
Columbia 2017, No CWR	5	293	336	392	1072
Columbia 2040 (2017), CWR Current	2	240	308	364	610
Columbia 2040 (2017), No CWR	22	316	358	416	661

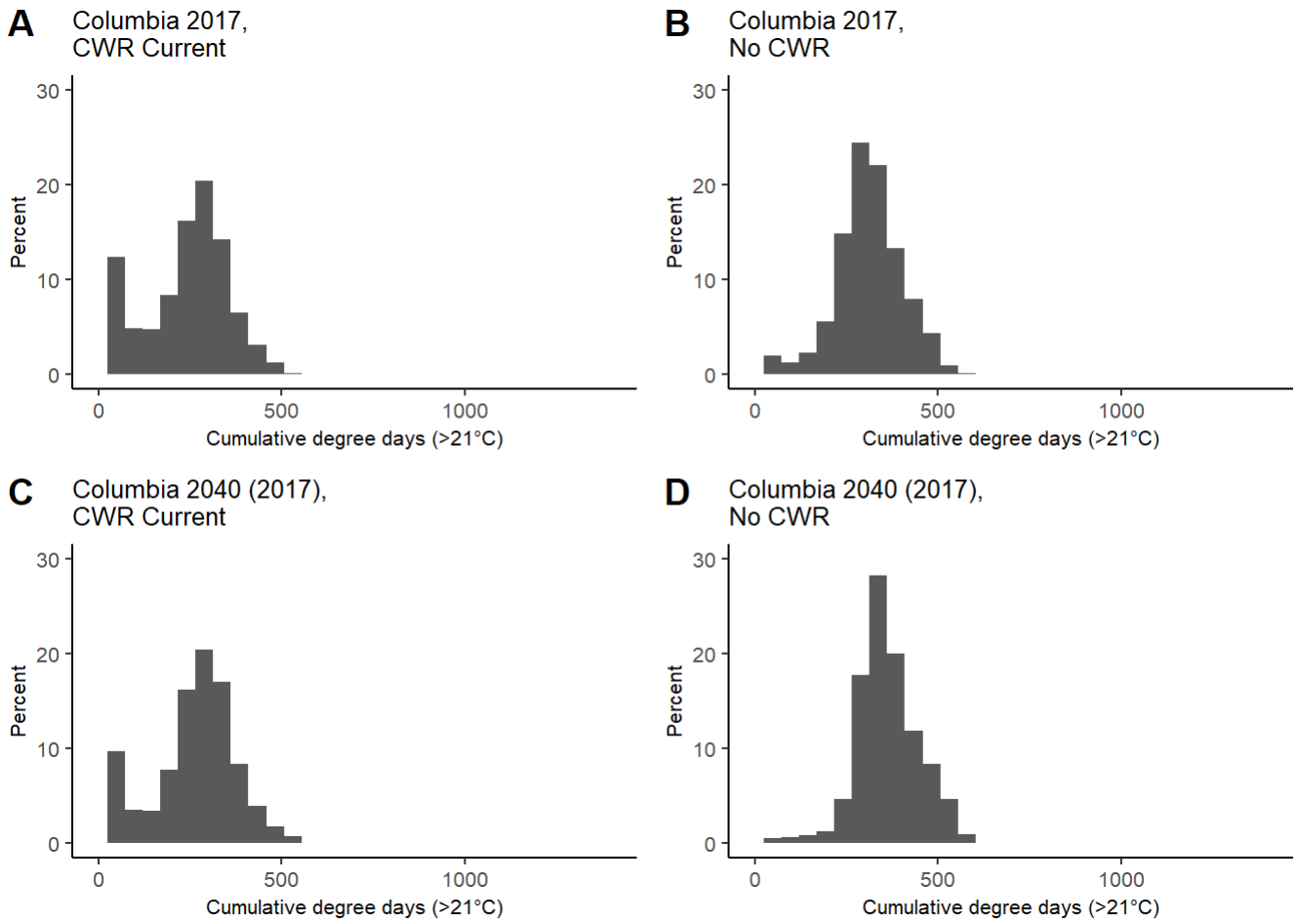

Fig. 9.5 Histograms of modeled Grande Ronde River summer steelhead accumulated degrees day over 21°C from Bonneville to the Snake River confluence in the Columbia River.

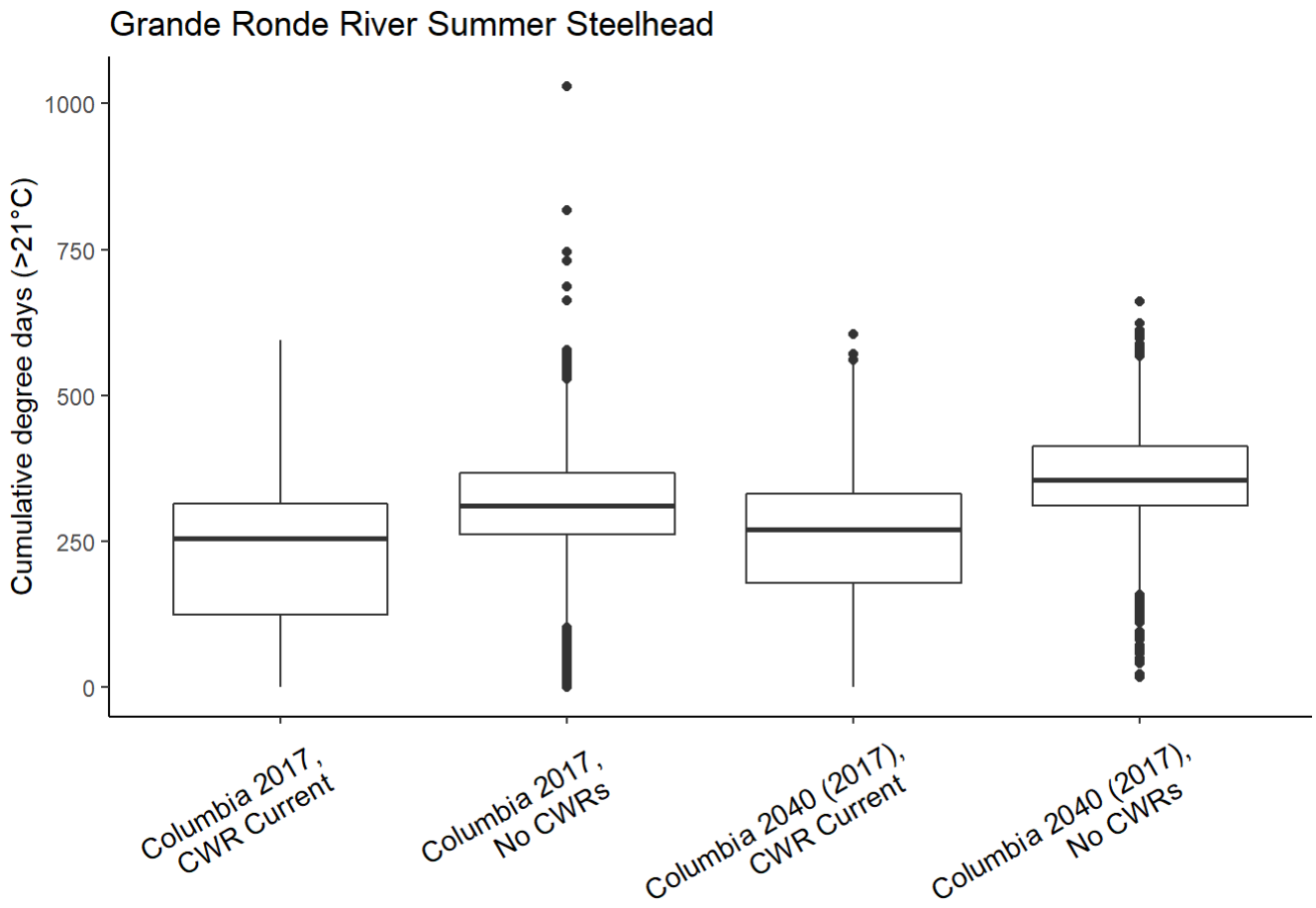

Fig. 9.6 Boxplots of modeled Grande Ronde River summer steelhead accumulated degrees day over 21°C from Bonneville to the Snake River confluence in the Columbia River.

Table 9.3 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 2017, CWR Current	1	124	255	315	596
Columbia 2017, No CWR	1	262	312	368	1030
Columbia 2040 (2017), CWR Current	1	179	271	332	606
Columbia 2040 (2017), No CWR	17	312	355	414	661

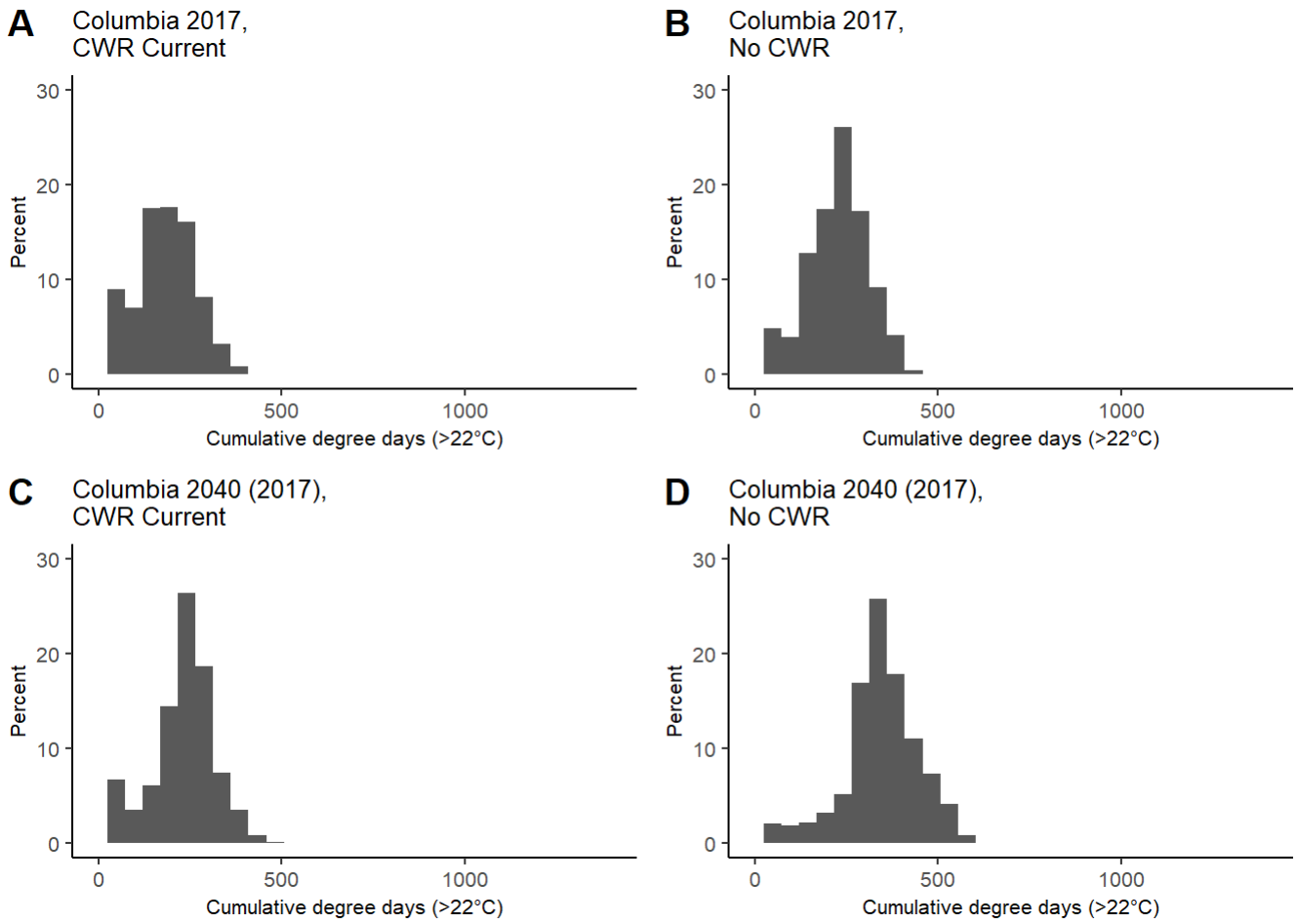

Fig. 9.7 Histograms of modeled Grande Ronde River summer steelhead accumulated degrees day over 22°C from Bonneville to the Snake River confluence in the Columbia River.

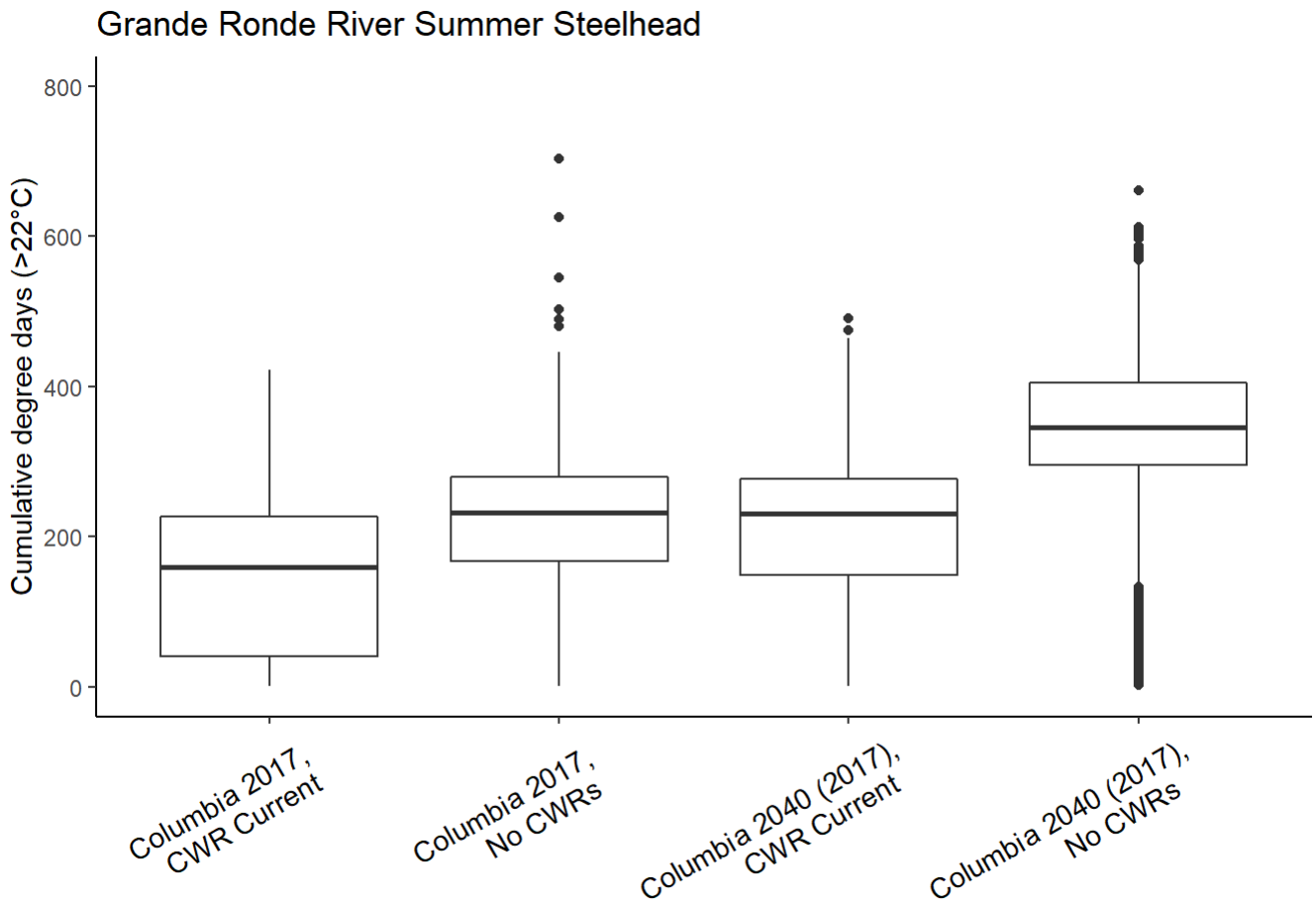

Fig. 9.8 Boxplots of modeled Grande Ronde River summer steelhead accumulated degrees day over 22°C from Bonneville to the Snake River confluence in the Columbia River.

Table 9.4 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 2017, CWR Current	1	41	160	227	422
Columbia 2017, No CWR	1	168	232	280	703
Columbia 2040 (2017), CWR Current	1	149	231	277	491
Columbia 2040 (2017), No CWR	2	296	346	405	661