

17. Energy use, CWR use, and survivorship results for Snake River Fall Chinook Salmon under year 2017 temperatures for the Columbia River with simulated additional coldwater refuges

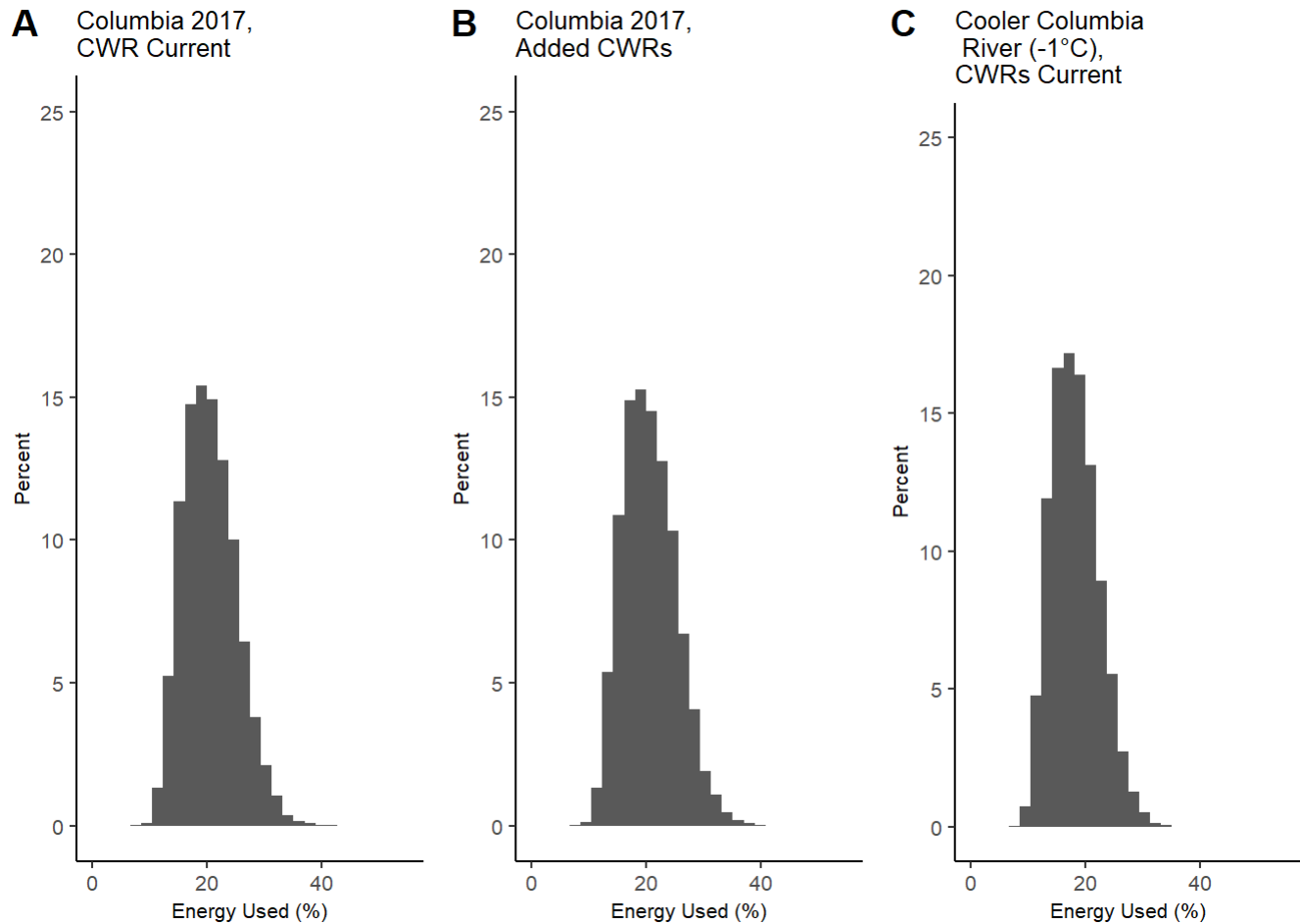


Fig. 17.1 Histogram of percent energy lost for modeled Snake River Fall Chinook Salmon migrating through four different modeled thermalscapes.

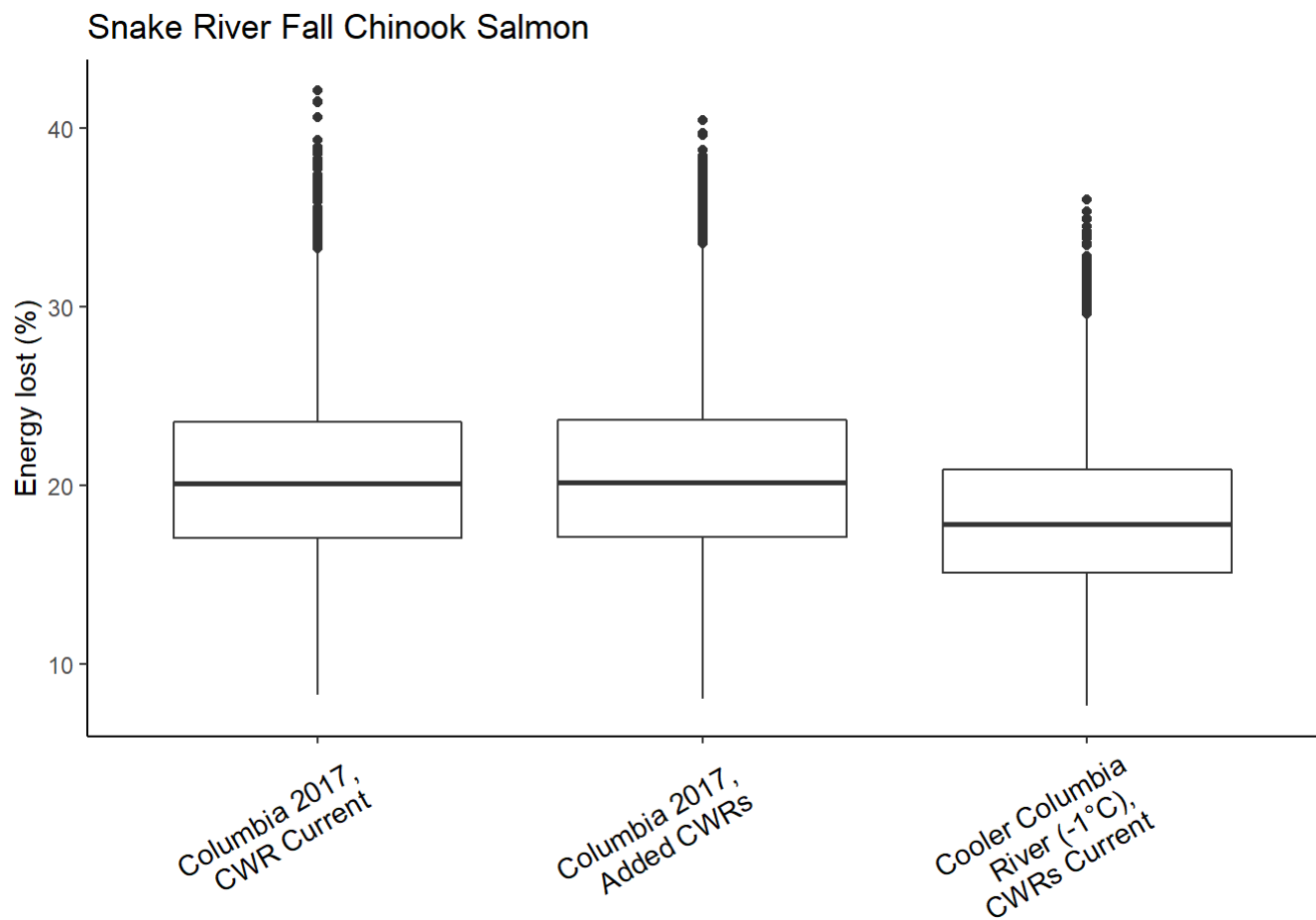


Fig. 17.2 Boxplot of percent energy lost for modeled Snake River Fall Chinook Salmon migrating through four different modeled thermalscapes.

Table 17.1 Percent energy used across different HexSim thermalscapes summarized for Snake River Fall Chinook Salmon.

Scenario	Minimum	25% quantile	Median	75% quantile	Maximum
Columbia 2017, CWR Current	8.3	17.1	20.1	23.5	42.1
Cooler Columbia River (-1°C), CWRs Current	7.7	15.1	17.9	20.9	36.0
Columbia 2017, Added CWRs	8.1	17.1	20.2	23.7	40.4

Table 17.2 Model output for hours residing in cold water refuges summarized for Snake River Fall Chinook Salmon.

Scenario	CWR Residence (h/individual)
Columbia 2017,CWR Current	21
Cooler Columbia River (-1°C), CWRs Current	13
Columbia 2017, Added CWRs	38

Table 17.3 Model output for percent of individuals dying from acute temperature stress summarized for Snake River Fall Chinook Salmon.

Scenario	Total mortality
Columbia 2017,CWR Current	0.32
Cooler Columbia River (-1°C), CWRs Current	0.02
Columbia 2017, Added CWRs	0.33