

Figure S1. Comparison of ERA5-Land and the bias-adjusted ClimEx dataset for the historical period, for a) the water budget $P - PET$ (mm) and b) the anomalies compared to the 30-year monthly average.

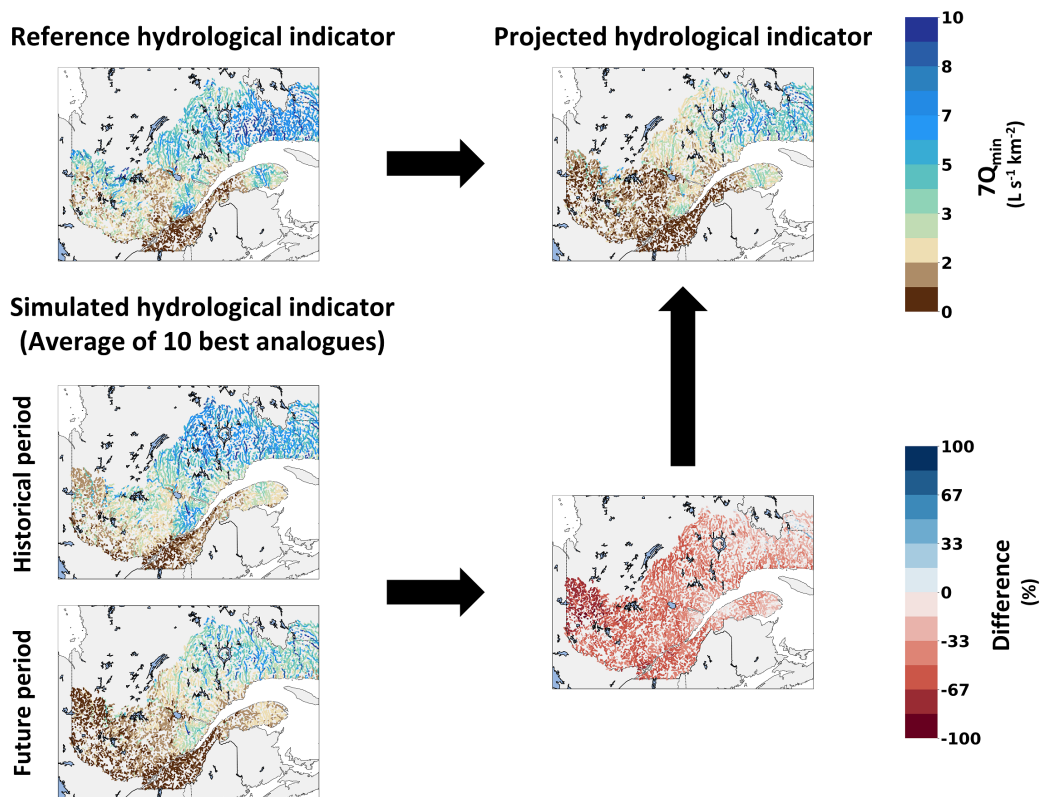


Figure S2. Diagram of the building process for the future hydrological indicators. The difference between simulated analogues from future and historical scenarios is used to project the reference hydrological indicator in the future.

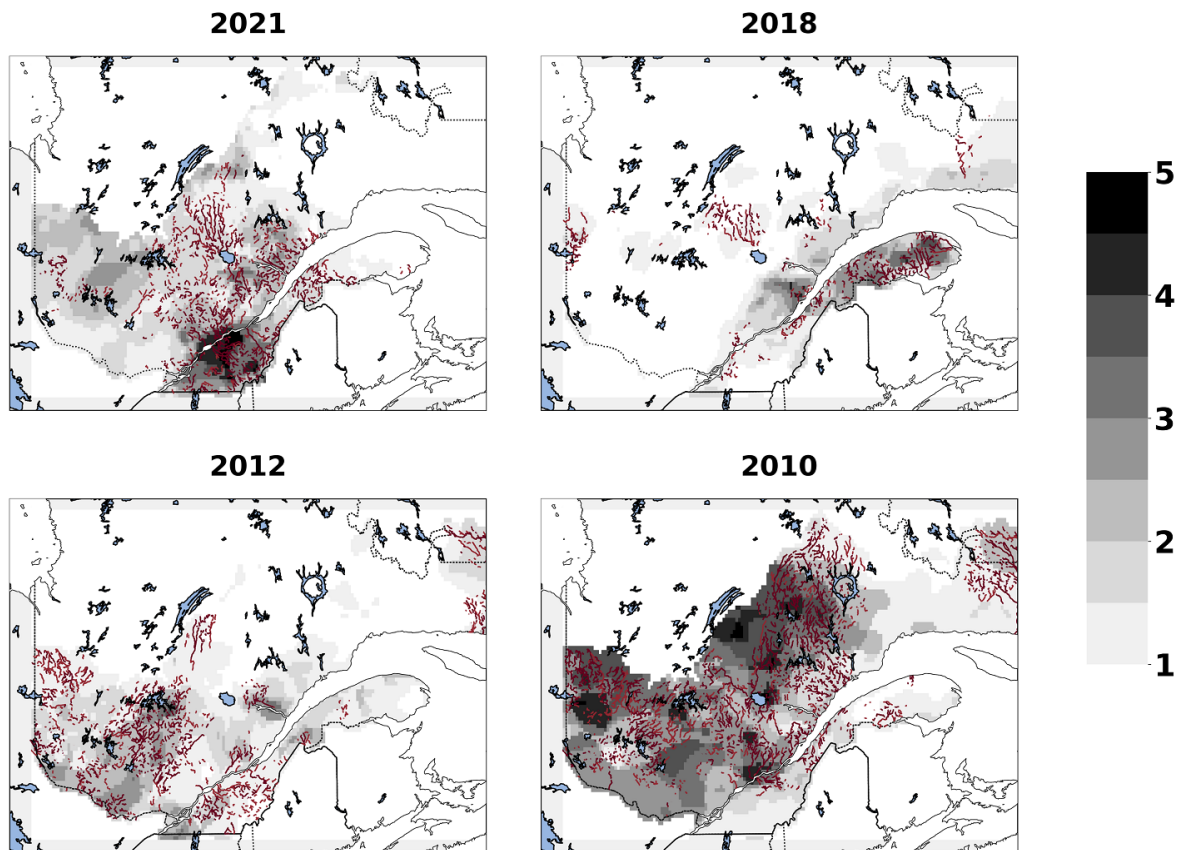


Figure S3. Sum of all weights used during the assessment of candidate analogues (Fig. 3) for four years with intense hydrological drought conditions. The river reaches where the $7Q_{min}$ is within the worst 3 years for the period 1992-2021 are shown in red.

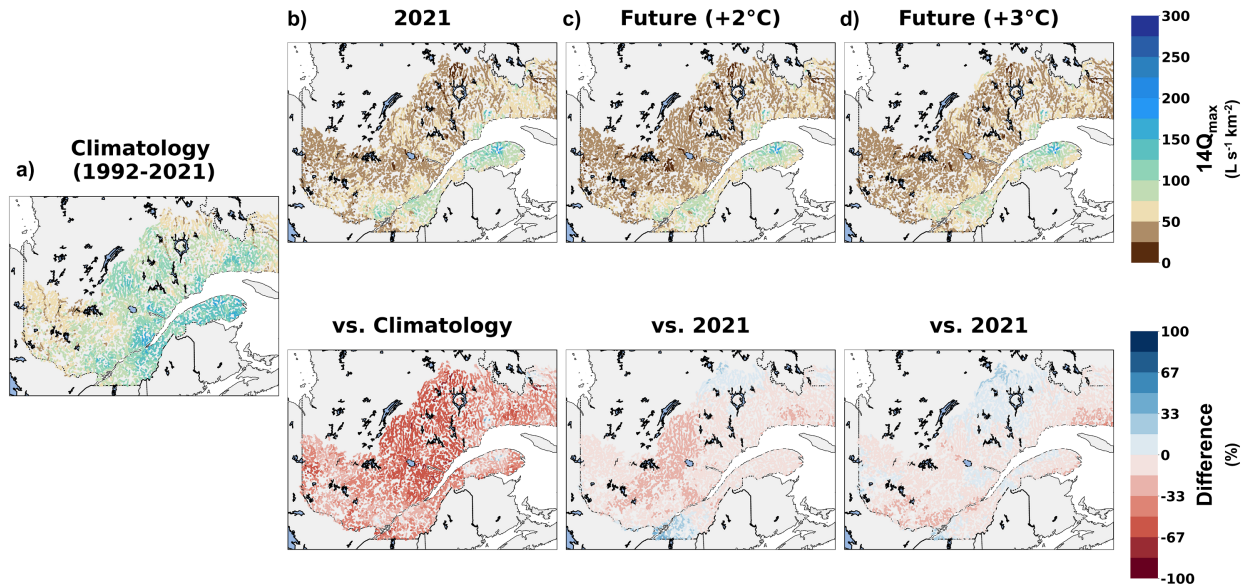


Figure S4. Hydrological indicator $14Q_{max}$ for a) 1992-2021 climatology, b) in 2021, c) for the 2021 event under a +2°C global temperature rise and d) for the 2021 event under a +3°C global temperature rise. The top row displays the absolute values, whereas the bottom row illustrates the differences relative to either the climatology or the 2021 low-water episode.

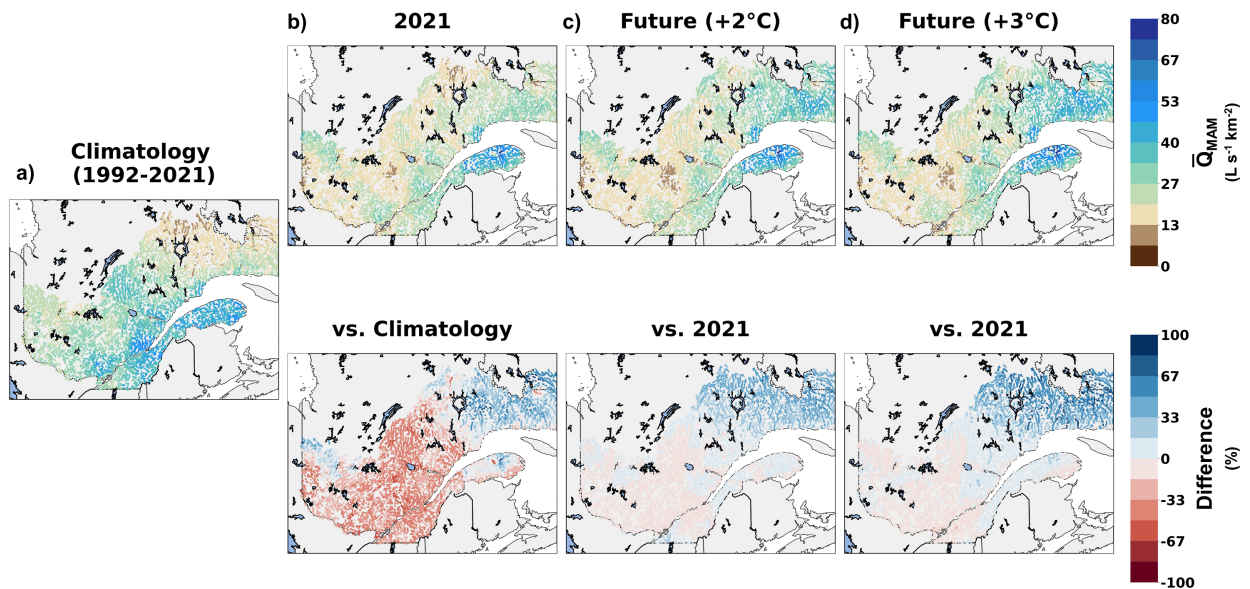


Figure S5. Same as Fig. S4, but for \overline{Q}_{MAM} .

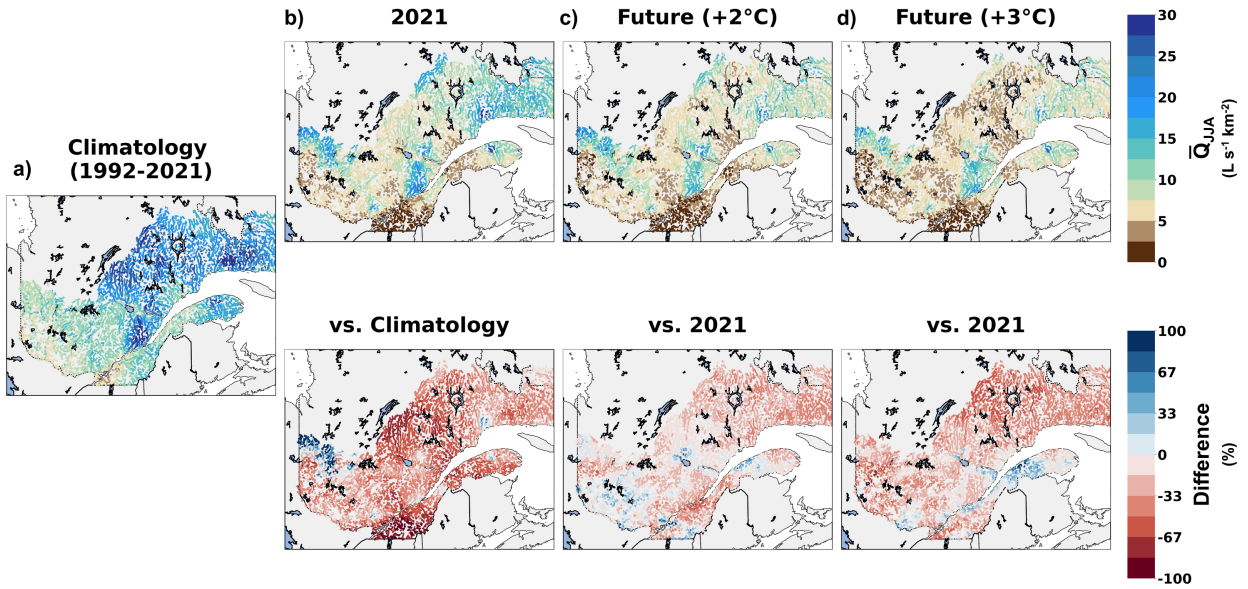


Figure S6. Same as Fig. S4, but for \overline{Q}_{JJA} .

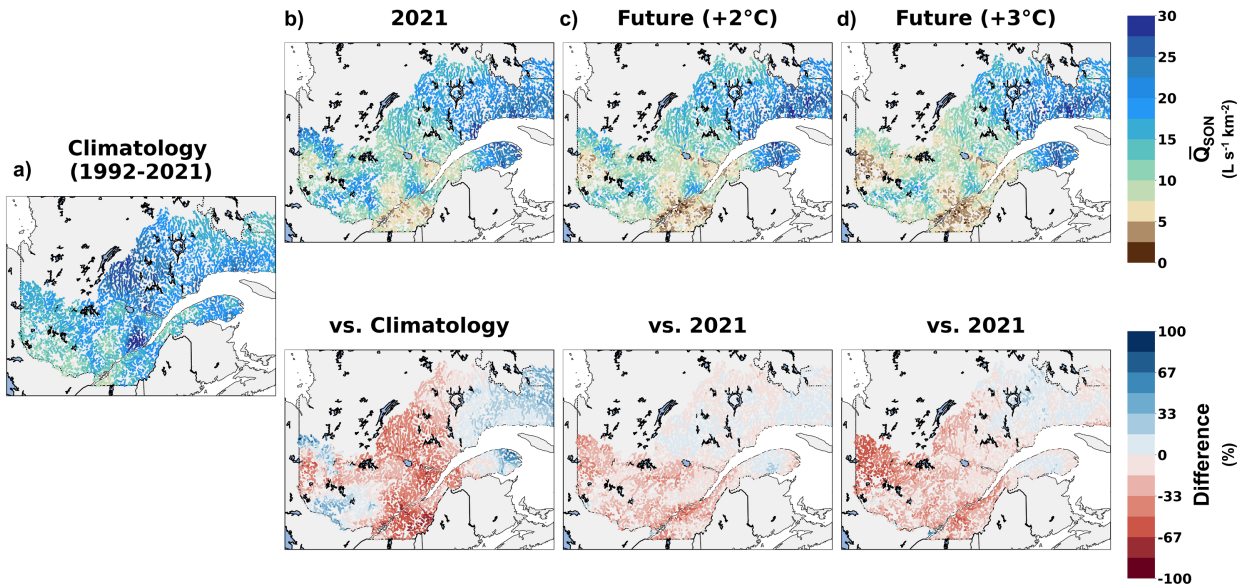


Figure S7. Same as Fig. S4, but for \overline{Q}_{SON} .

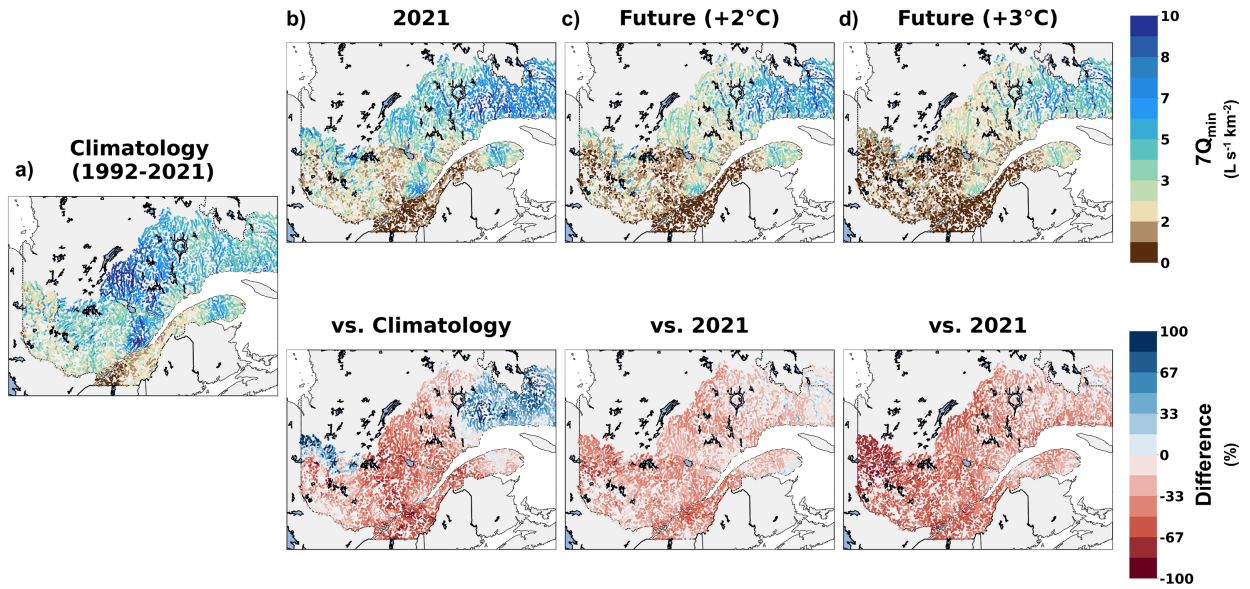


Figure S8. Same as Fig. S4, but for 7Q_{min}.

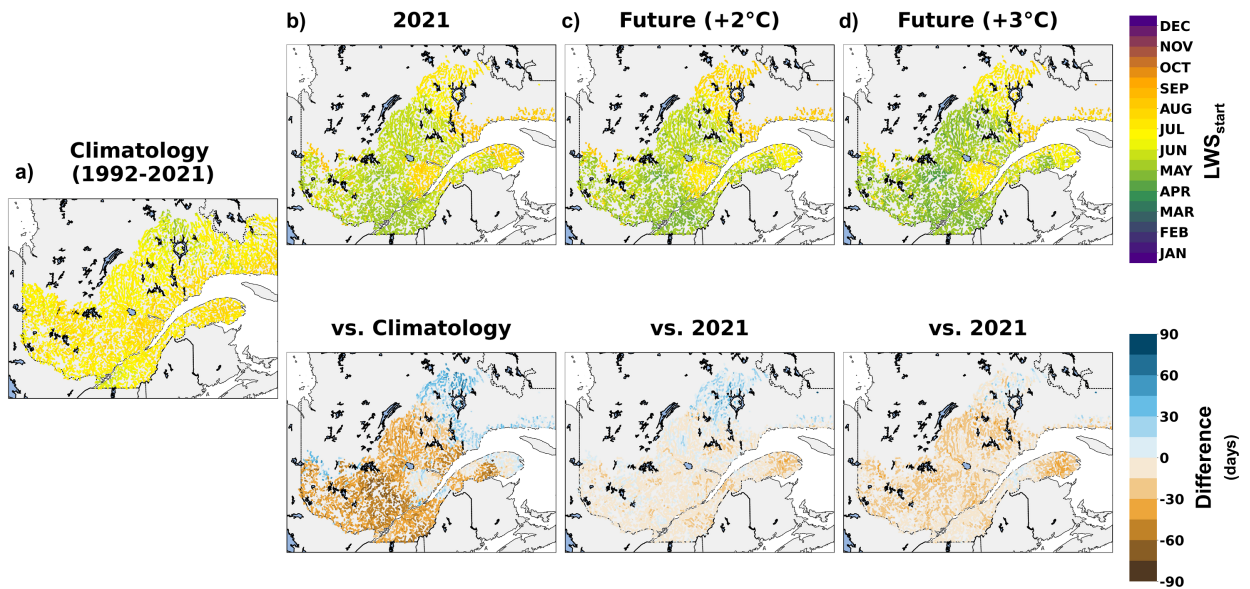


Figure S9. Same as Fig. S4, but for LWS_{start}.

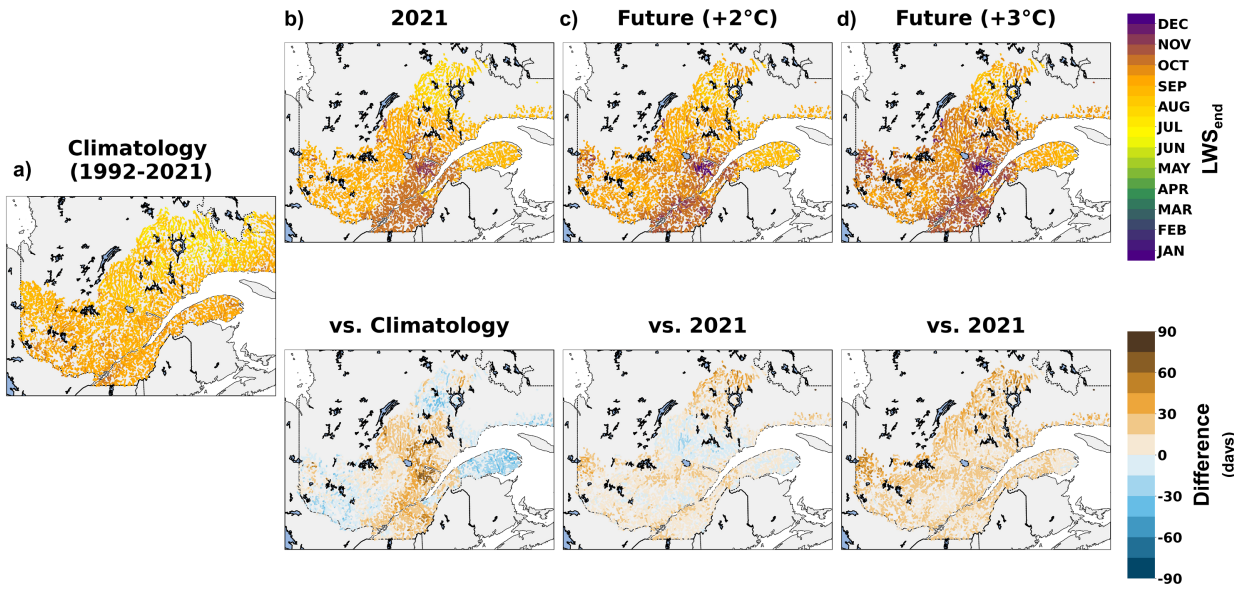


Figure S10. Same as Fig. S4, but for LWS_{end} .

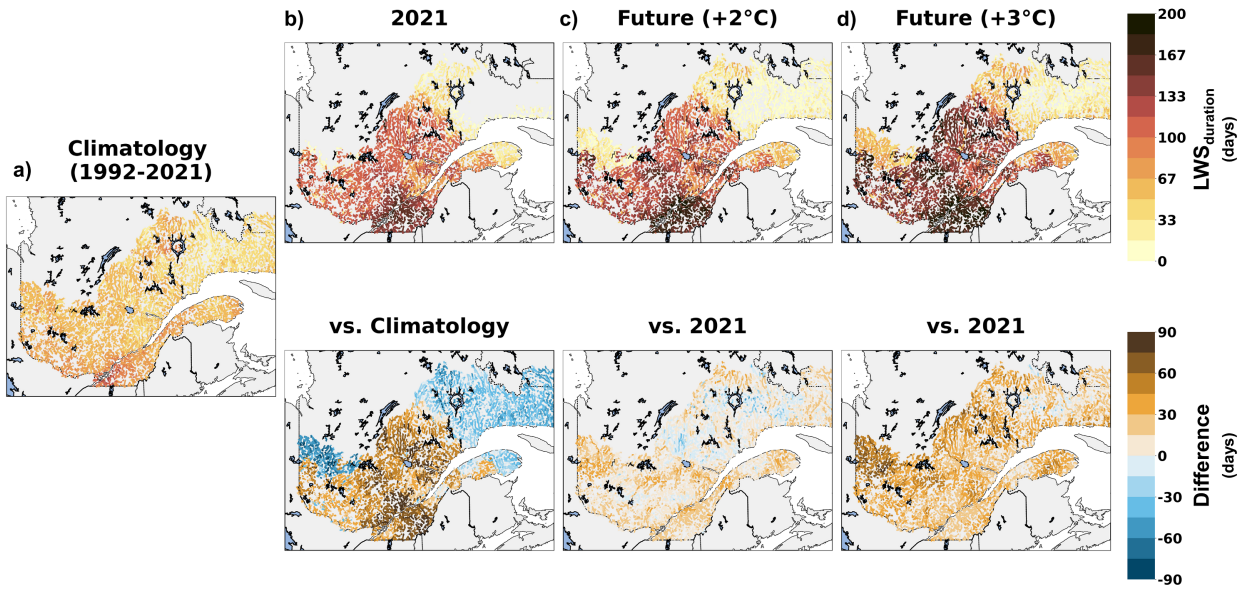


Figure S11. Same as Fig. S4, but for $LWS_{duration}$.

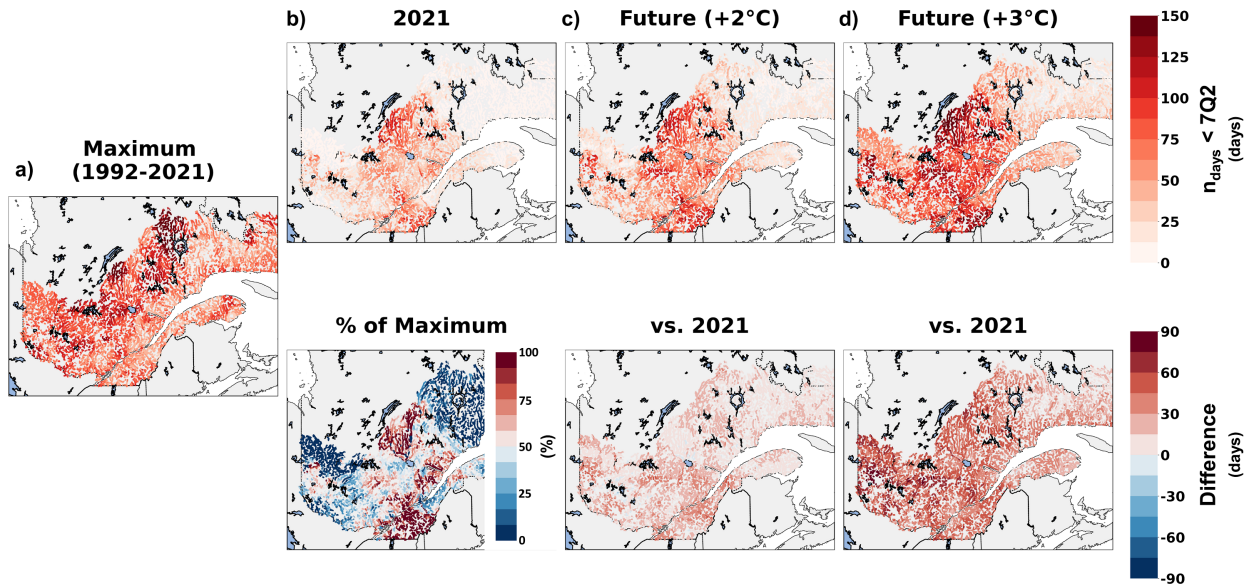


Figure S12. Hydrological indicator $n_{days < 7Q2}$ for a) the maximum of the 1992-2021 period, b) in 2021, c) for the 2021 event under a +2°C global temperature rise and d) for the 2021 event under a +3°C global temperature rise. The top row displays the absolute values, whereas the bottom row illustrates the differences relative to either the historical maximum or the 2021 low-water episode.

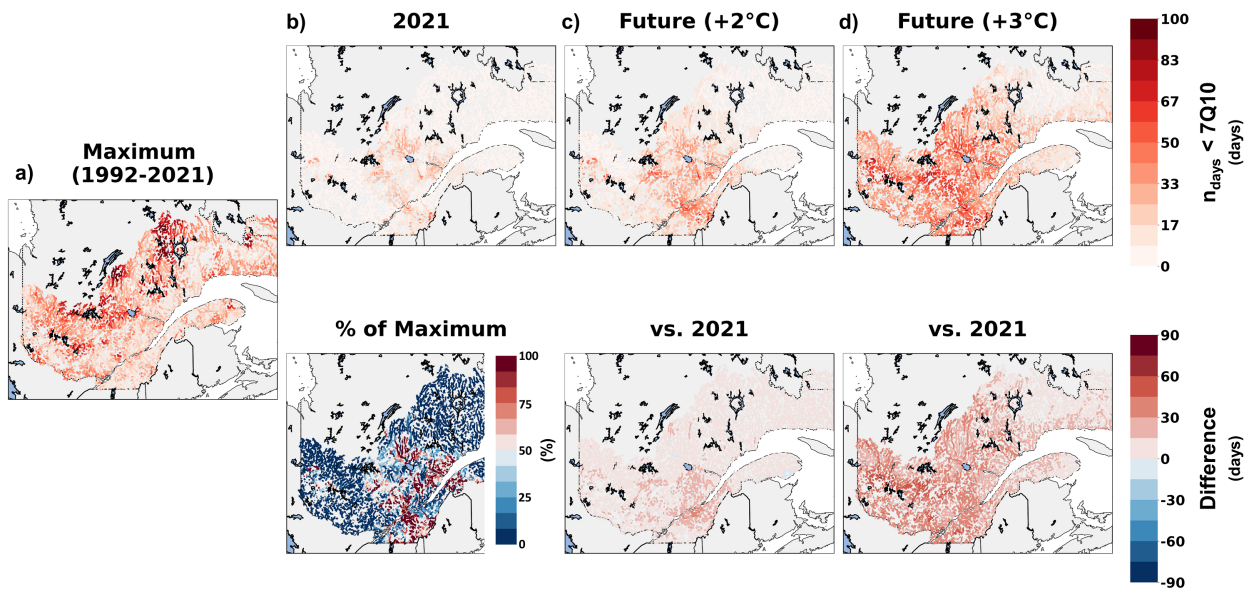


Figure S13. Same as Fig. S12, but for $n_{days < 7Q10}$.