

Figure S1: Spatial patterns of water crowding in 2010 and for five different population scenarios in 2100 under current water availability, i.e. assuming no climate change.



Figure S2: Proportion of total population more likely than not exposed to critical change in mean annual discharge, number of drought months, 10-year flood peak, and any of these, at different levels of ΔT_{glob} .



Figure S3: Proportion of population in different water crowing classes affected by critical change in mean annual discharge, number of drought months, 10-year flood peak, and any of these. Total number of people in each crowding class given on the y-axis, the proportion of people affected in each class is given on the x-axis.



Figure S4: Proportion of population in two aggregated water crowing classes affected by critical change in mean annual discharge, number of drought months, 10-year flood peak, and any of these. Total number of people in each crowding class given on the y-axis, the proportion of people affected in each class is given on the x-axis.



Figure S5: Map of world regions.



Figure S6: Proportion of population in 2100 in different world regions affected by high population pressure (total length of bar) and severe hydrological change for different metrics of hydrological change and five different population scenarios.



Figure S7: Relative change in MAD compared to control simulation for a ΔT_{glob} (above pre-industrial level) of 2.5 °C. Color hues show the multimodel mean change, and saturation shows the agreement on the sign of change across all GCMs (percentage of GCMs agreeing on the sign). Because ΔT_{glob} for the control simulation is 0.6 °C, the changes are representative for 1.9 °C additional warming relative to the control simulation and can thus be compared to the changes for 2 °C additional warming shown in Fig. 1 in Schewe et al. (2014).