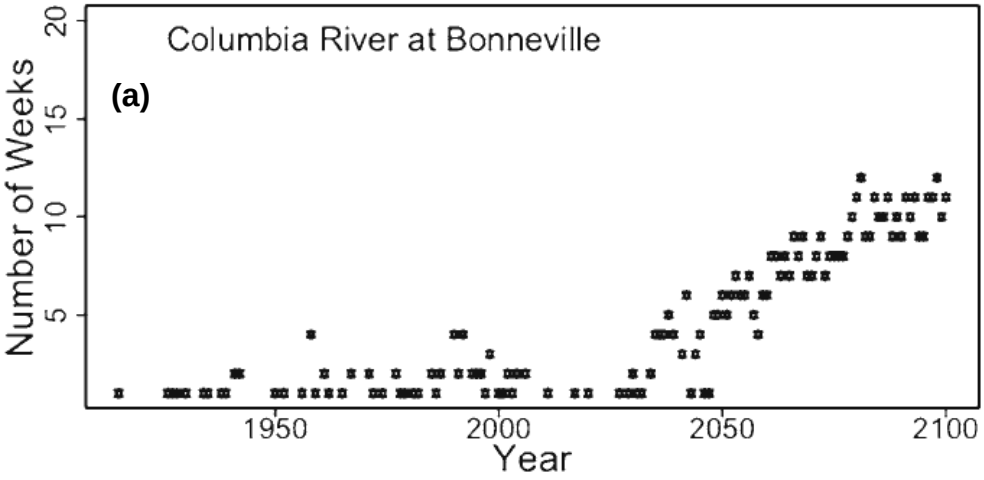
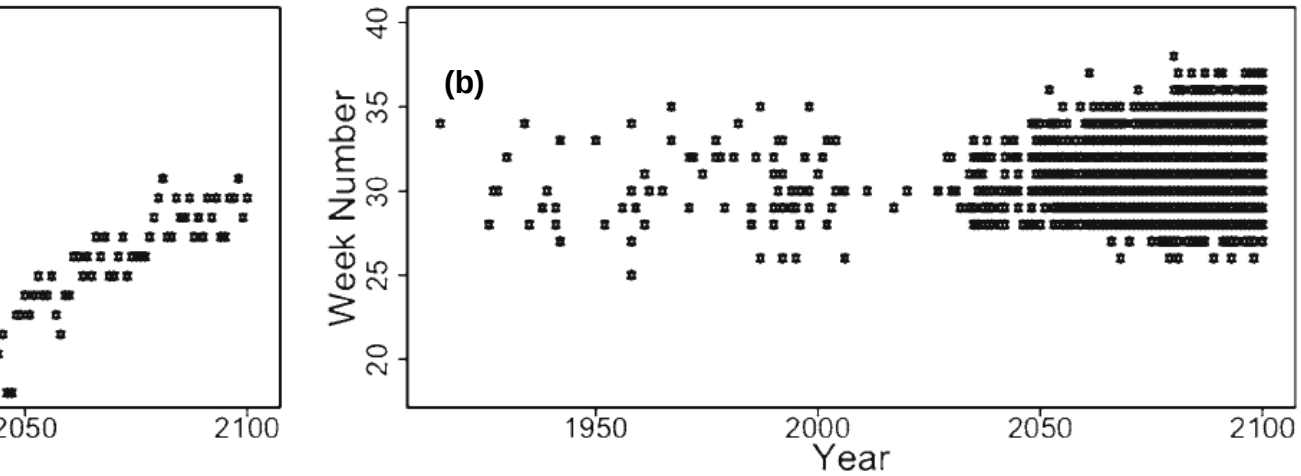
Appendix C: Graphic representations of climate change projections for Washington state (from Mantua et al. 2010).



Number of weeks each year when water temperature exceeds 21°C (70°F) at Bonneville Dam



Weeks of year when water temperature exceeds 21°C (70°F) at Bonneville Dam

Figure C1. (a) Number of weeks and time of the year (Week Number) when water temperatures in the mainstem Columbia River at Bonneville Dam are projected to exceed 21°C (70°F) based on the composite A1B emissions scenario (Fig. 5d from Mantua et al. 2010).

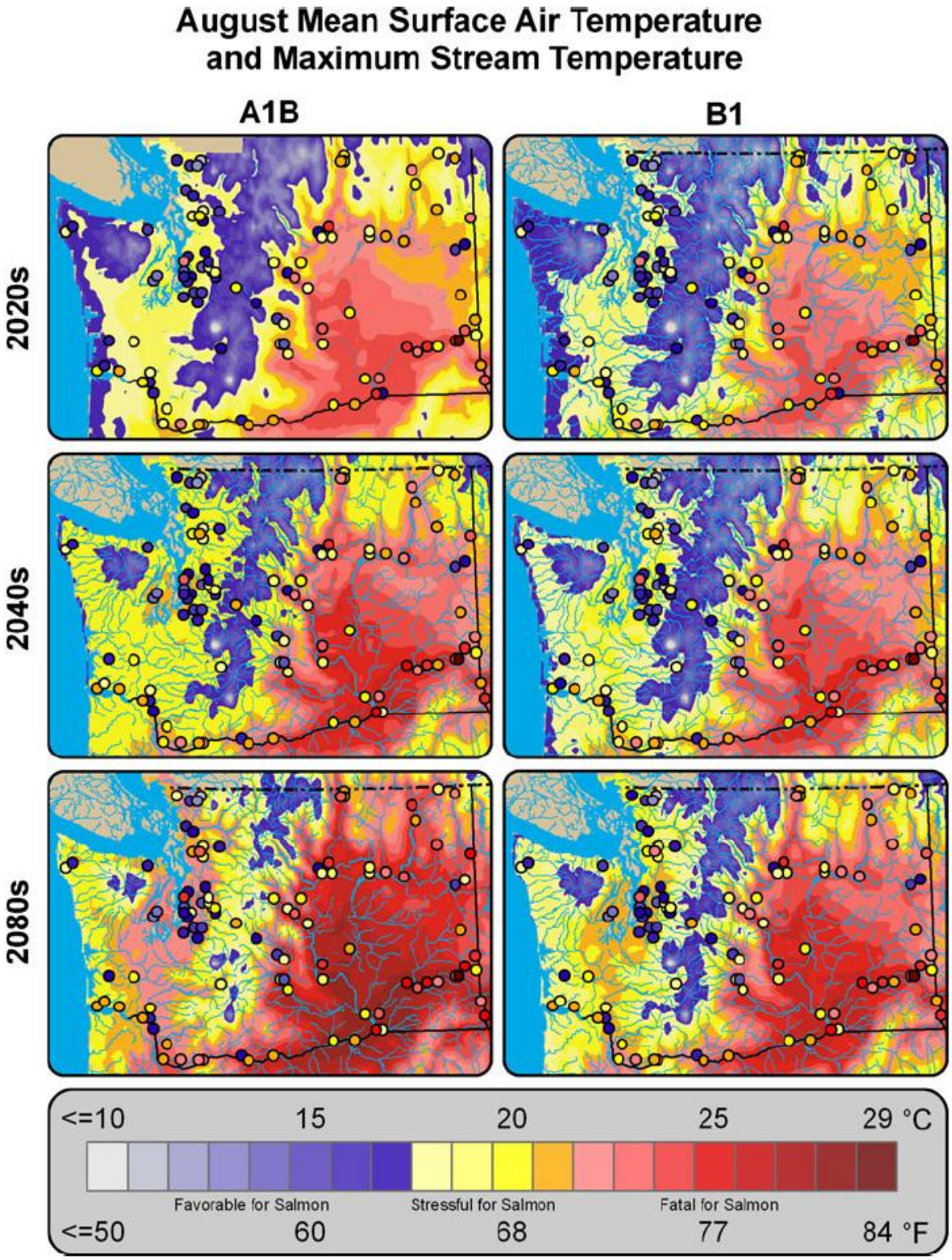


Figure C2. Projected mean air temperatures (colored shading) and projected maximum water temperatures (colored circles) throughout Washington state, including the mainstem Columbia River for the A1B and B1 emission scenarios (Fig. 2 of Mantua et al. 2010).

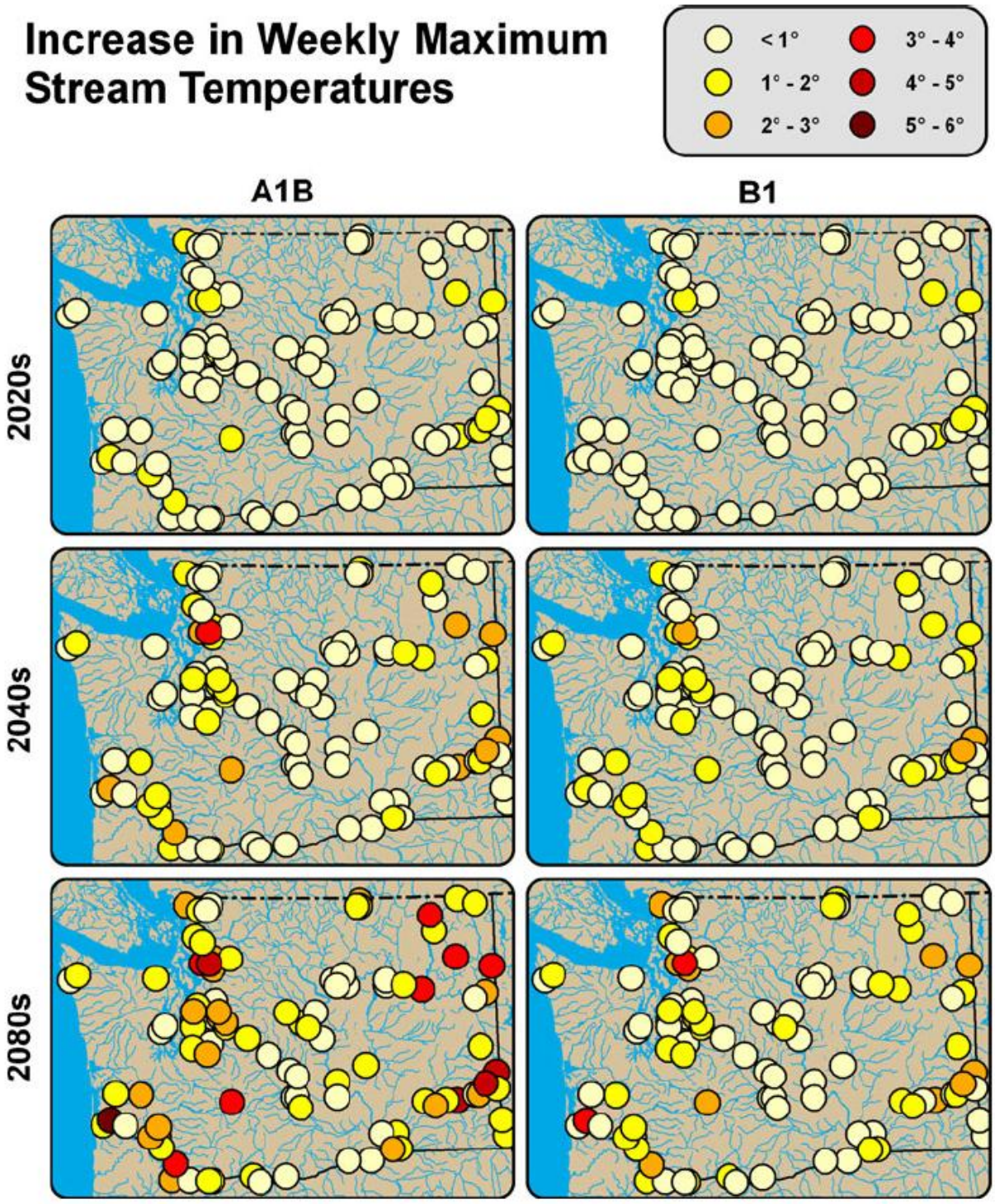


Figure C3. Projected percent increase in the annual maximum weekly water temperatures (^{o}C) relative to the 1980s throughout Washington state, including the mainstem Columbia River (Fig. 3 of Mantua et al. 2010).

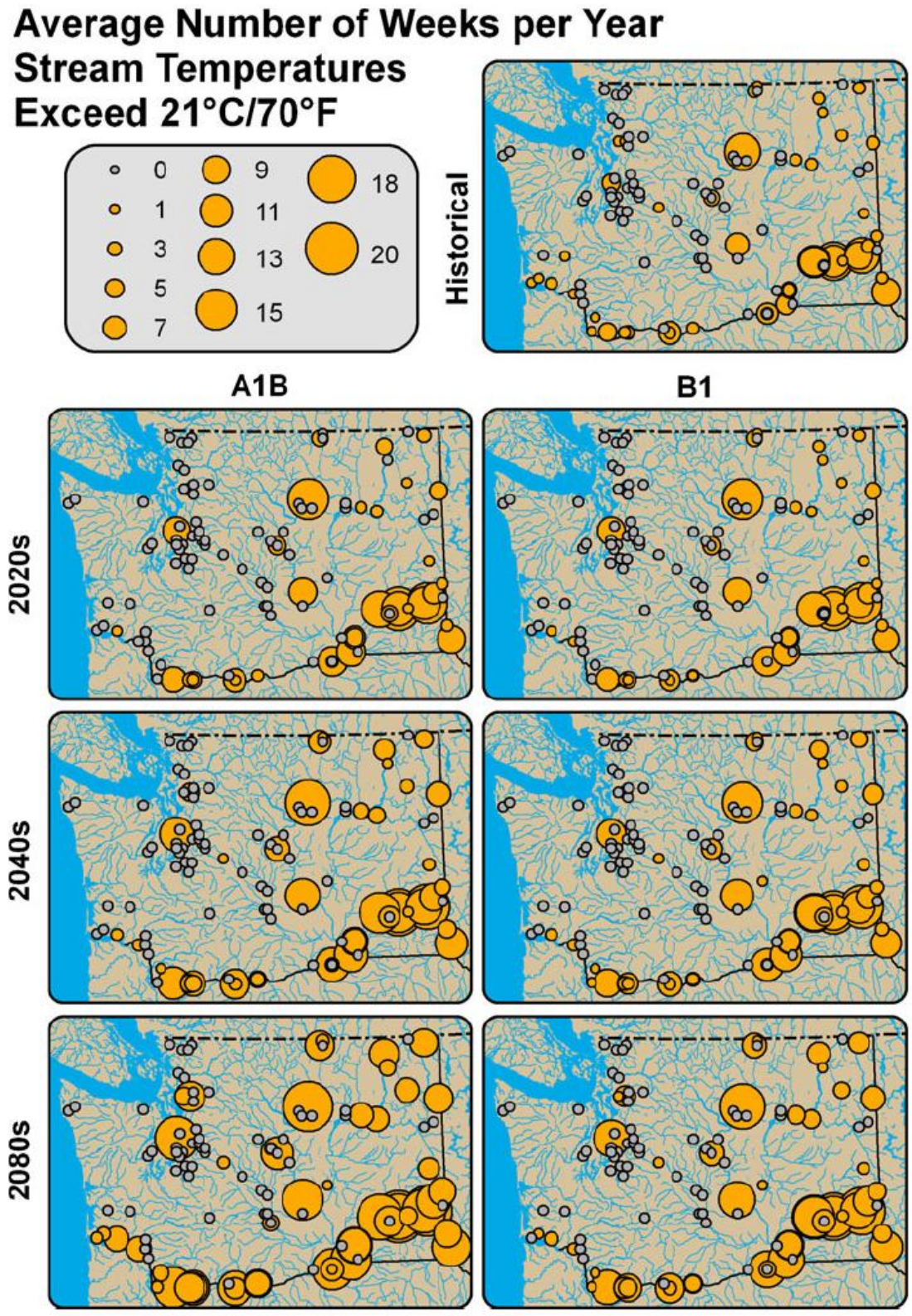


Figure C4. Average number of weeks per year when water temperatures in Washington state, including the mainstem Columbia River, are projected to exceed 21°C (70°F) for the A1B and B1 emission scenarios relative to the historic average for the 1980's (Fig. 6 of Mantua et al. 2010).

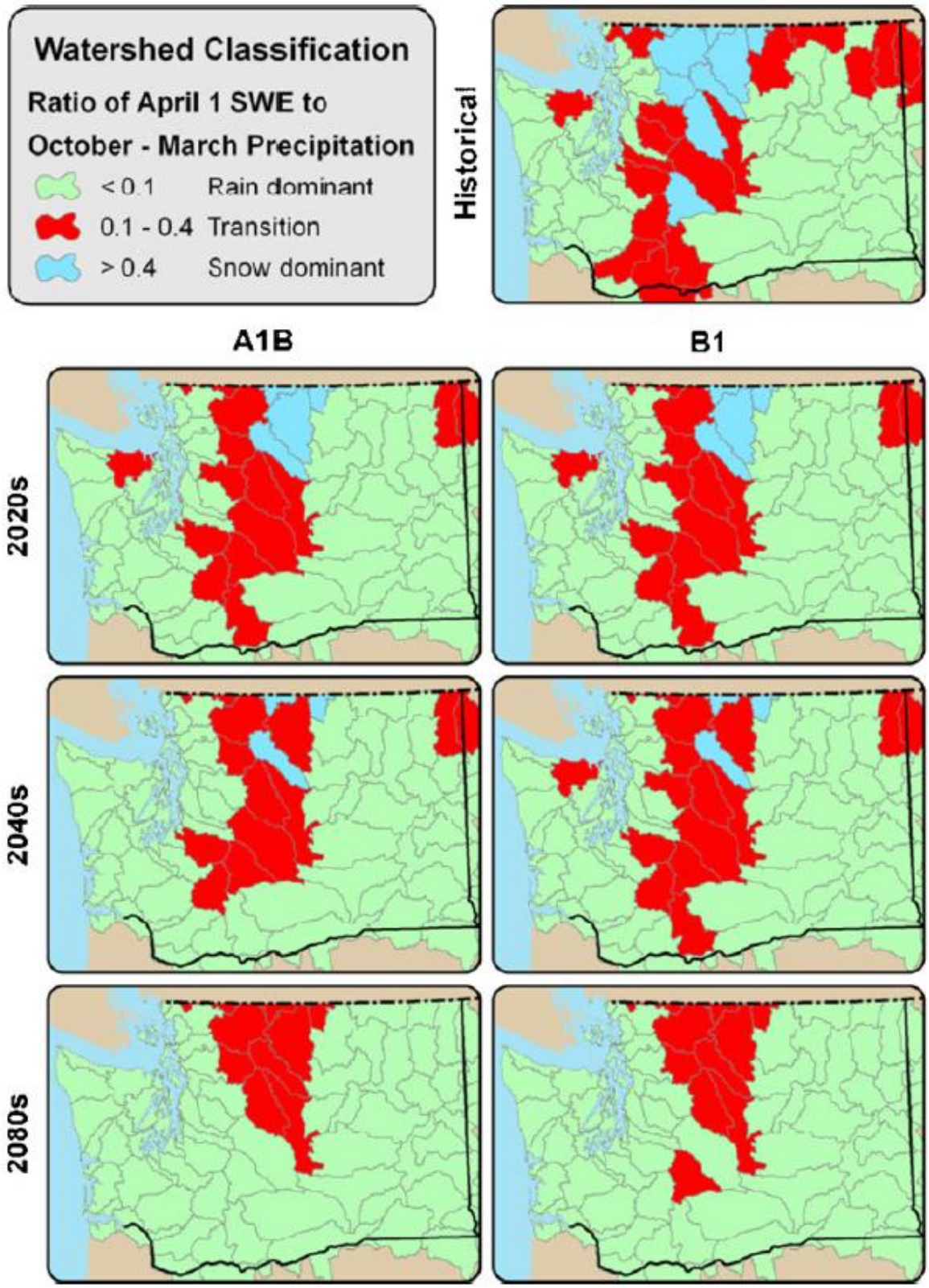


Figure C5. Modeled increase in rain-dominant watersheds and decrease in snow-dominant watersheds in Washington state resulting from climate change projections 2020-2090 (Fig. 7 of Mantua et al 2010).

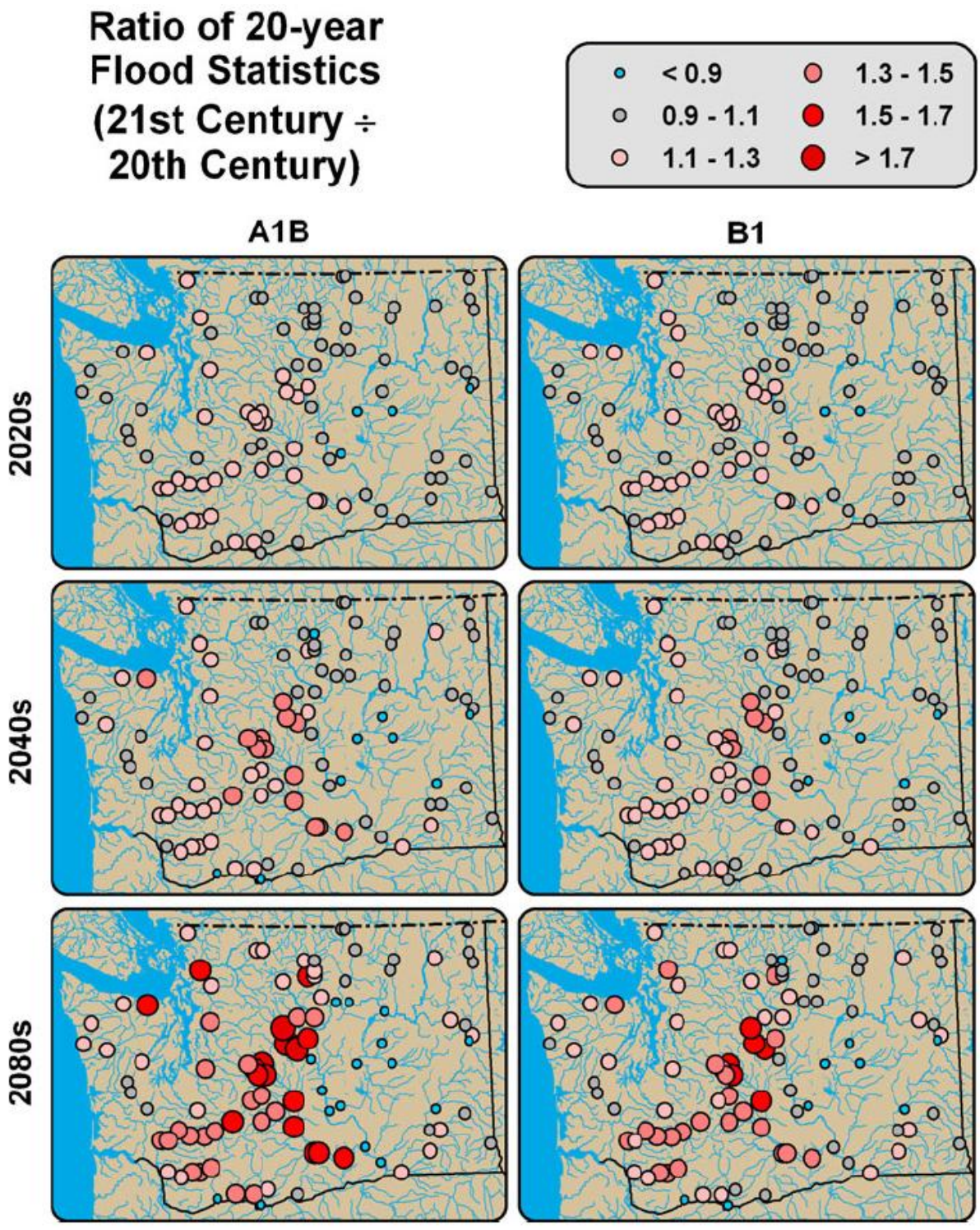


Figure C6. Projected climate-model increases in the frequency of 20-year flood events in watersheds throughout Washington state, including the mainstem Columbia River, relative to the 20th Century for each of three time periods (2020s, 2040s, 2080) and two composite emission scenarios (Fig. 9 of Mantua et al. 2010).

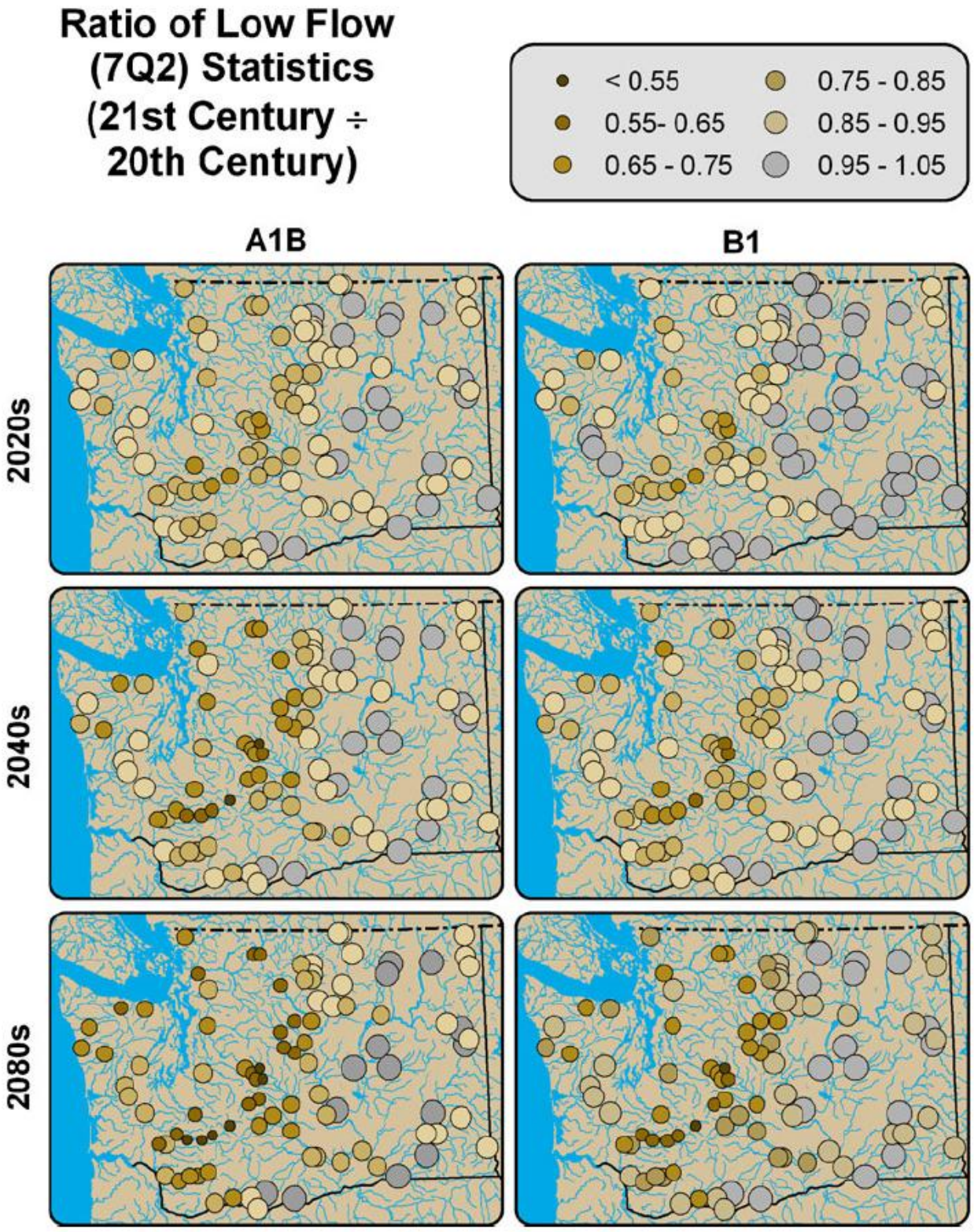


Figure C7. Projected changes in low flows throughout Washington state, including the mainstem Columbia River, that are expected to occur at least once every two years for a minimum of seven consecutive days (7Q2 statistics).