



**Figure S2.** Estimated spawning seasons each year of the study period (1970-2014). Light gray bars are the period from ice-out to peak spawn and modeled at a water temperature of 10 C. Dark gray bars are the period from peak spawn to swim-up of newly hatched larvae, with peak hatch occurring 1 day before swim-up. Water temperatures were estimated using a linear model based on average air temperature (Matuszek and Shuter 1996), and egg development time was predicted via degree-days.