**Supplement A.**

Perry et al. Flow-mediated effects on travel time, survival, and routing of juvenile Chinook salmon in a spatially complex, tidally forced river delta

**Fig. S1.** Scatter plots showing the relationship between daily discharge of the Sacraemento River at Freeport and discharge entering other channels downstream of Freeport. The grey reference line shows where discharge in a given channel is equal to discharge at Freeport. Subscripted letters in parentheses refer to the location of USGS gauging stations near telemetry stations shown in Fig. 1.

**Fig. S2.** Fraction of dishcharge entering Sutter and Steamboat Slough (top) and Delta Cross Channel and Georgiana Slough (bottom) calculated as the proportion of total inflow relative to Sacramento River discharge at Freeport.

**Fig. S3.** Posterior distributions for , the coefficient measuring the effect of flow on detection probability at each telemetry station. Points show the median of the posterior distribution, heavy lines show the 25th to 75th percentile, and thin lines show the 5th to 95th percentile. Green bars are density strips with darker regions illustrating higher posterior density. See Fig. 1 for locations of telemetry stations.

**Fig. S4**. Year-specific effects of discharge on detection probability of each telemetry station based on posterior medians of the parameters. Lines are plotted over the range of discharge observed in each year. See Fig. 1 for locations of telemetry stations.

**Fig. S5.** Reach-specific relationships between survival and fork length (shown for closed Delta Cross Channel gates and plotted at the mean discharge). The heavy magenta line shows the mean relationship and dotted lines show the random effects estimates for each release group based on medians of the joint posterior distribution. The dark gray region shows 95% credible intervals about the mean relationship. The light gray region shows the 95% confidence interval among release groups.

**Fig. S6.** Route-specific flow-survival relationships for Delta Cross Channel (DCC) open and closed. Relationships are plotted at the posterior medians of parameter distributions.