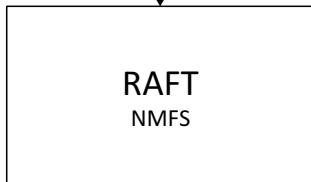




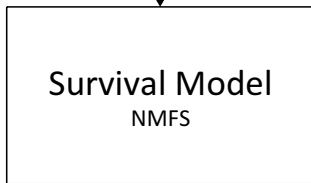
Temperature
and flow
scenarios

Keswick flow and temp

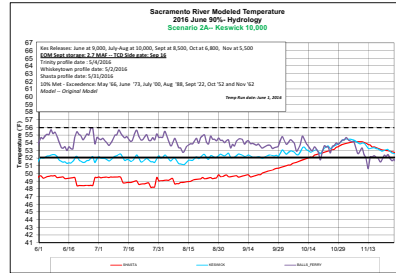


Temperature
forecast for
entire river

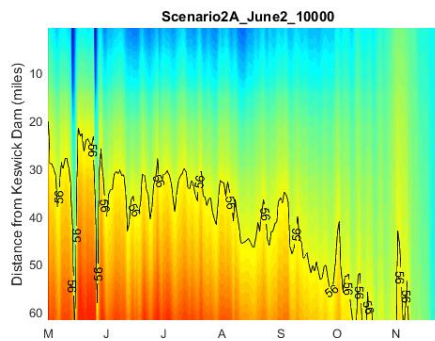
Egg temperature exposure



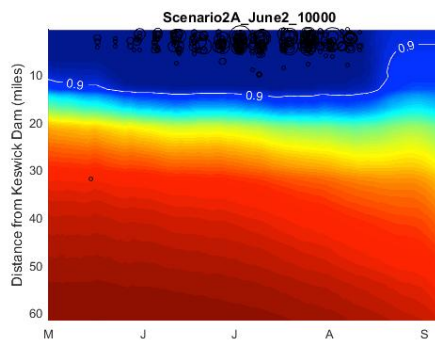
Temperature
dependent
egg survival



High
uncertainty

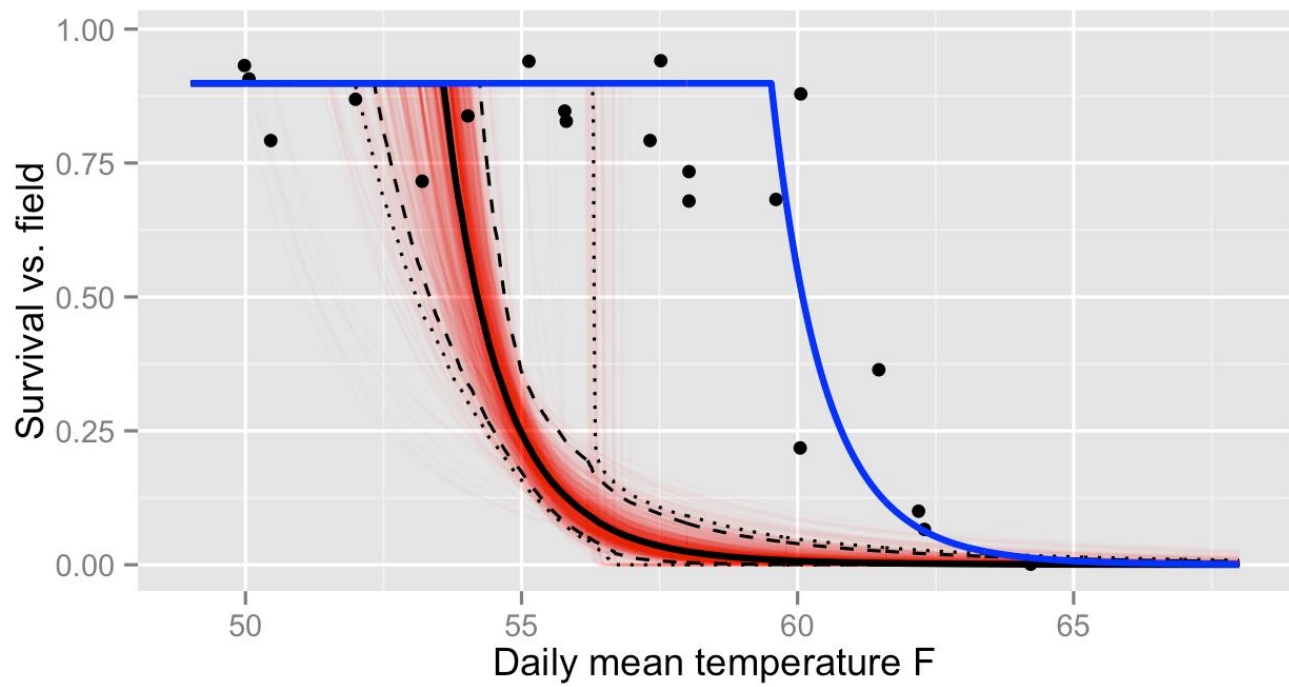


Low
uncertainty



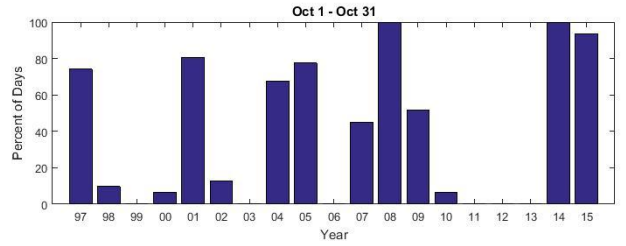
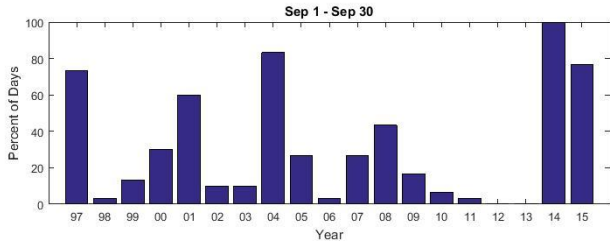
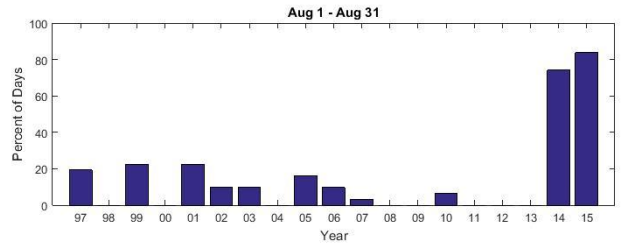
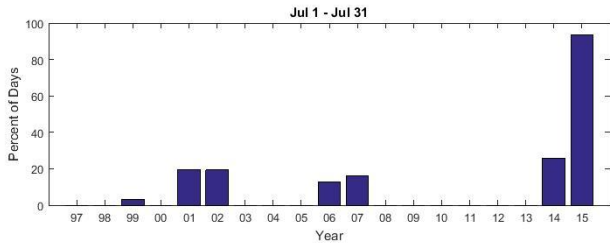
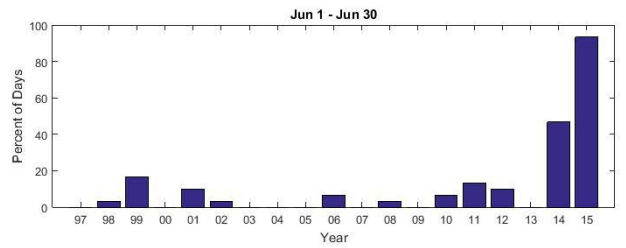
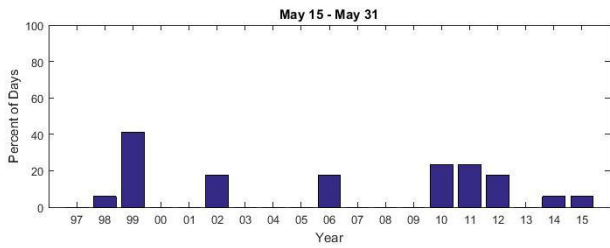
Low-
Moderate
uncertainty

Mortality increases rapidly past the critical temperature



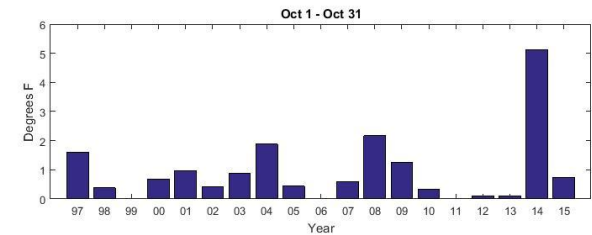
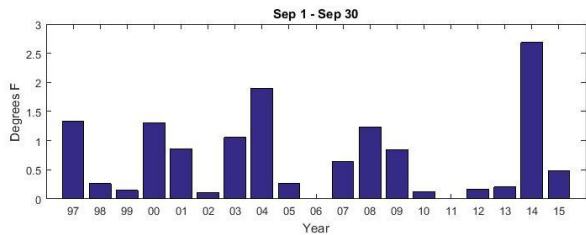
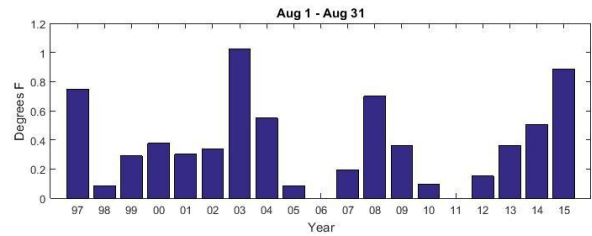
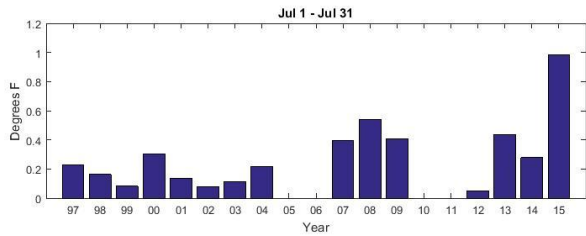
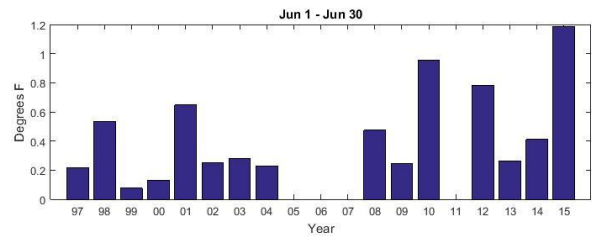
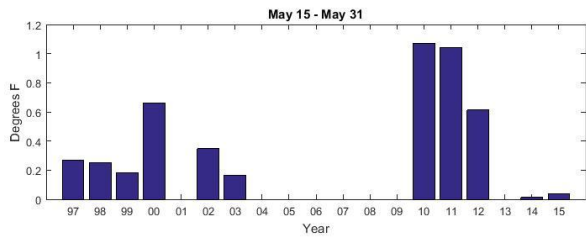
Actual temperatures often exceed compliance targets set at start of season – frequency of exceedance

Percent of Days >56 Degrees at Changed Compliance Point (1997-2015)

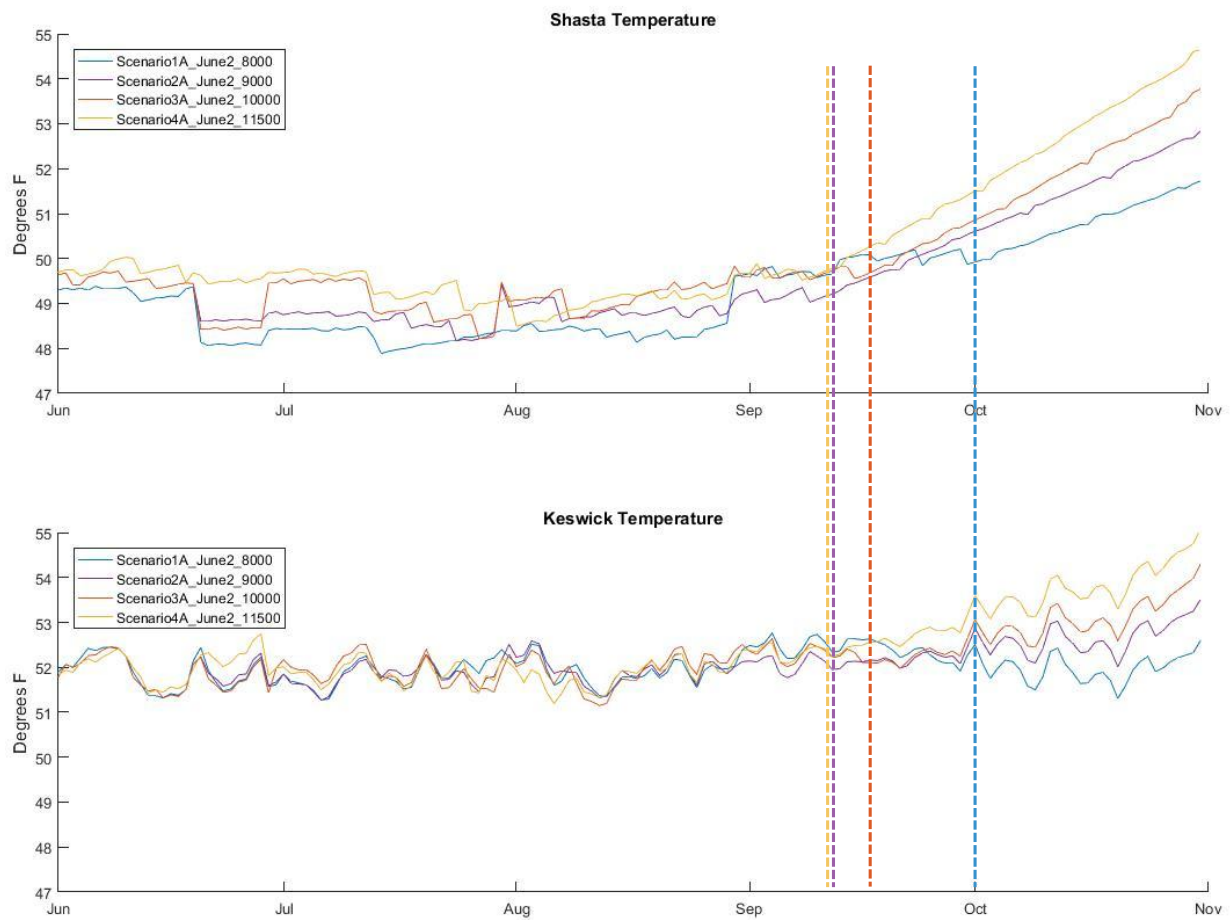


Actual temperatures often exceed compliance targets set at start of season – magnitude of exceedance

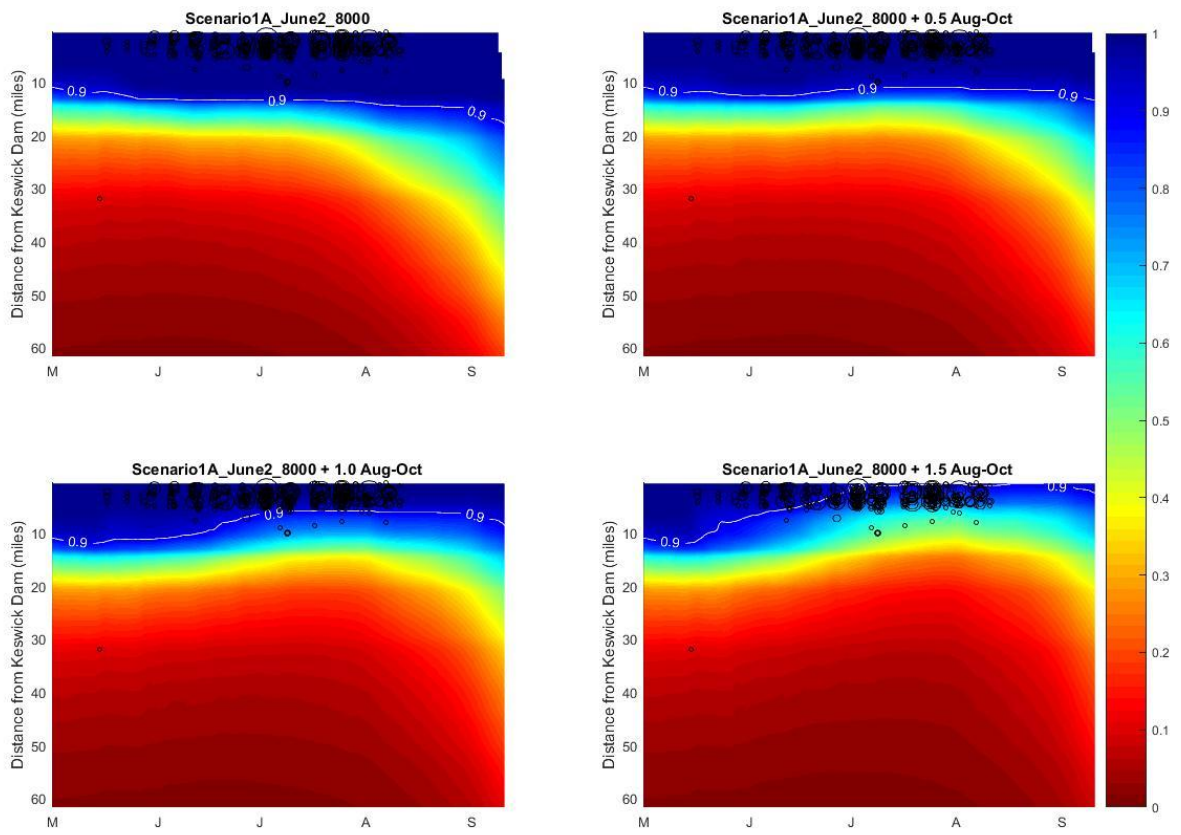
Average Degrees Above 56 at Start of Season Compliance Point (of Days that are >56)



Temperatures increase rapidly after side gate operation



Predicted Survival using Median Survival Parameters



Mortality Estimates from 1000 Monte Carlo Simulations

