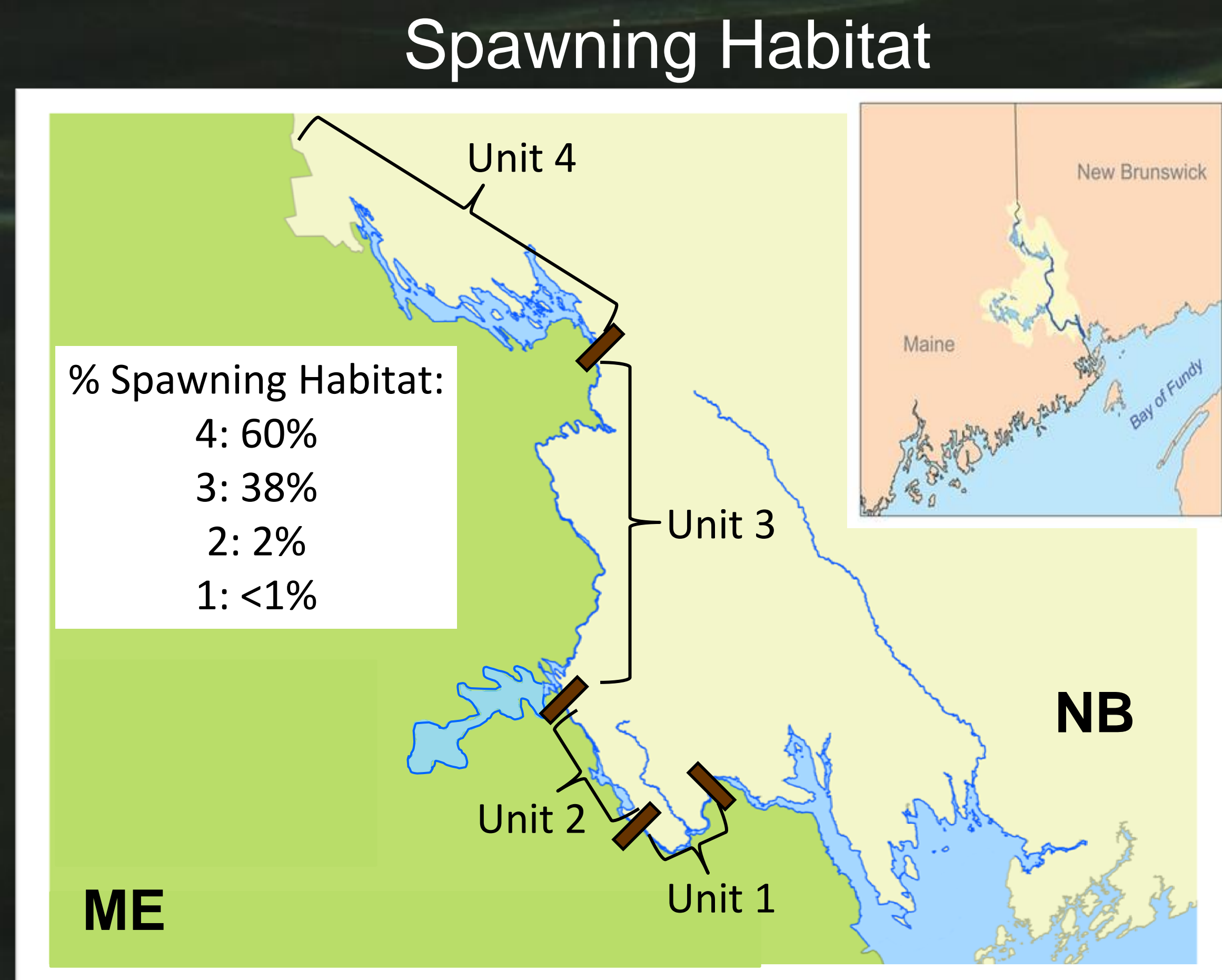


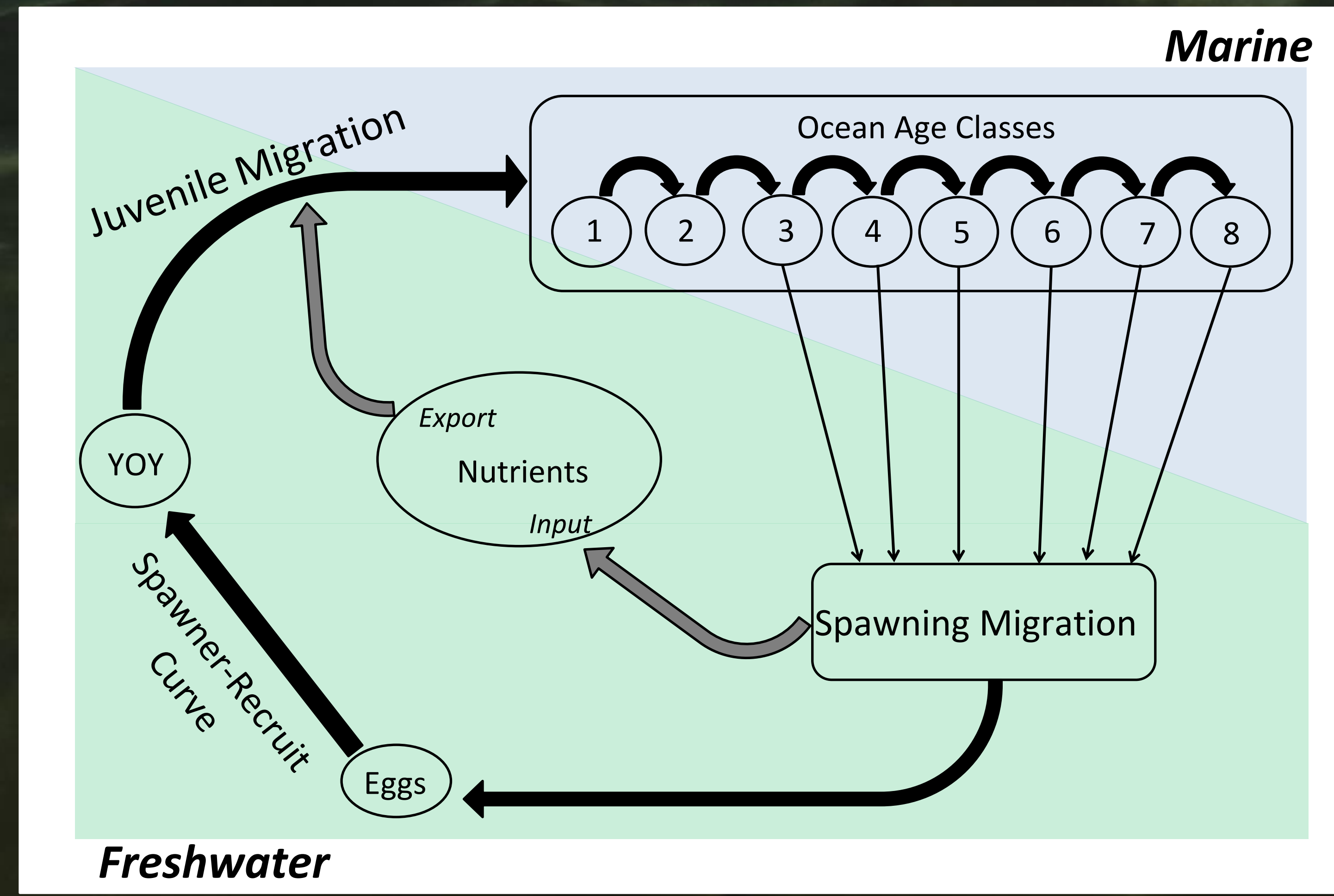
Betsy Barber<sup>1</sup>, Joseph Zydlewski<sup>2,1</sup>, Jamie Gibson<sup>3</sup>

<sup>1</sup>University of Maine, Department of Wildlife, Fisheries, and Conservation Biology, Orono, ME; <sup>2</sup>U.S. Geological Survey, Maine Cooperative Fish and Wildlife Research Unit, University of Maine, Orono, ME; <sup>3</sup>Fisheries and Oceans Canada, Dartmouth, NS, Canada

## Data Inputs



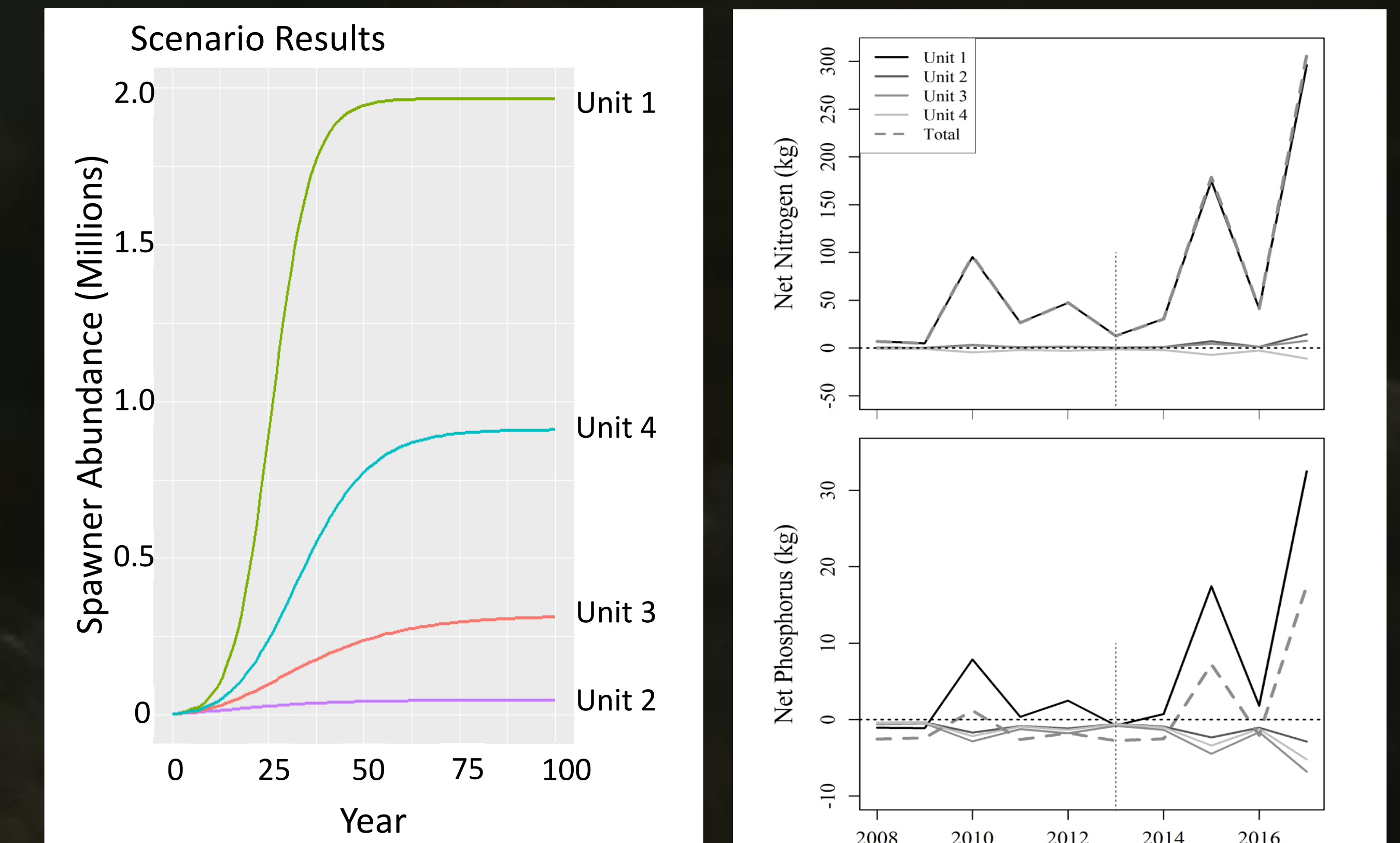
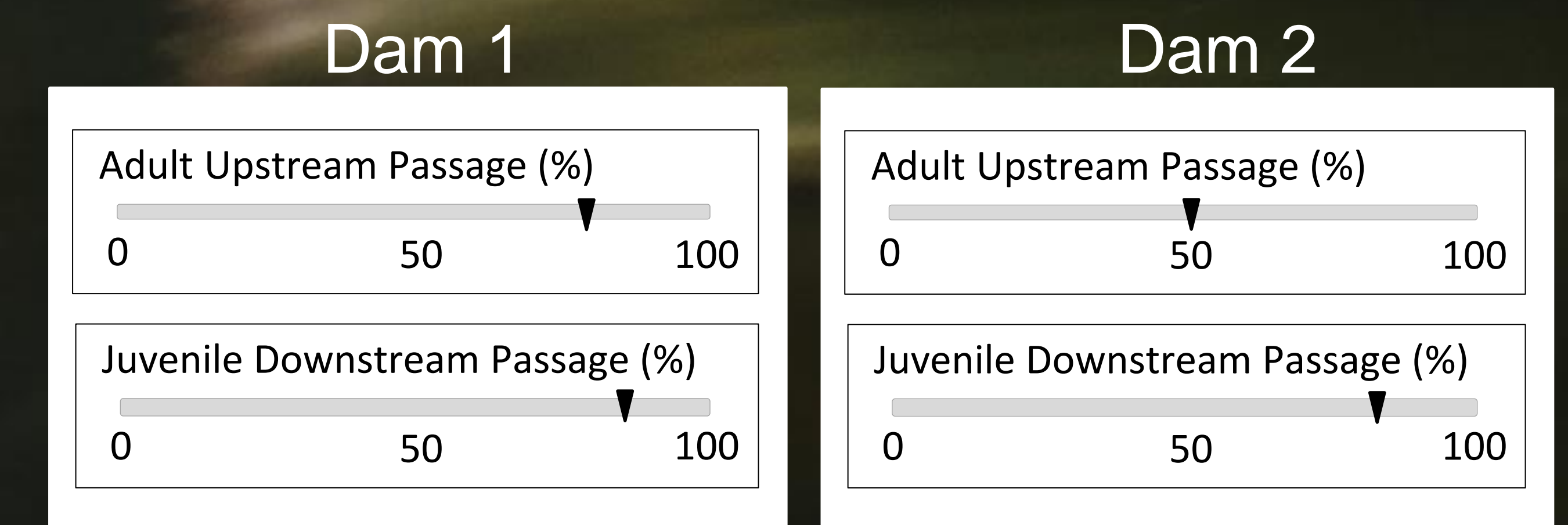
## Model Development



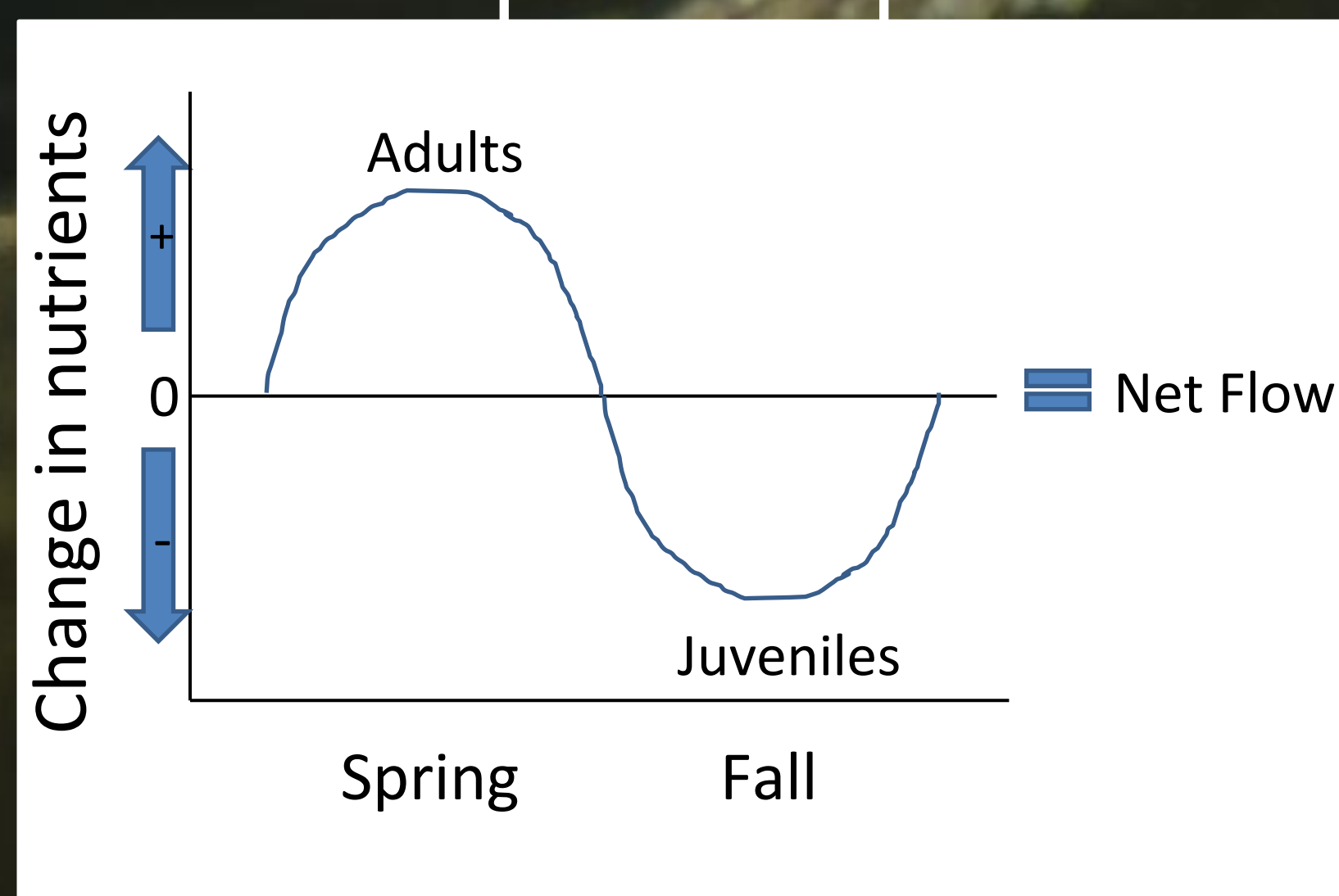
## Interactive Web Application

Shiny  
by RStudio

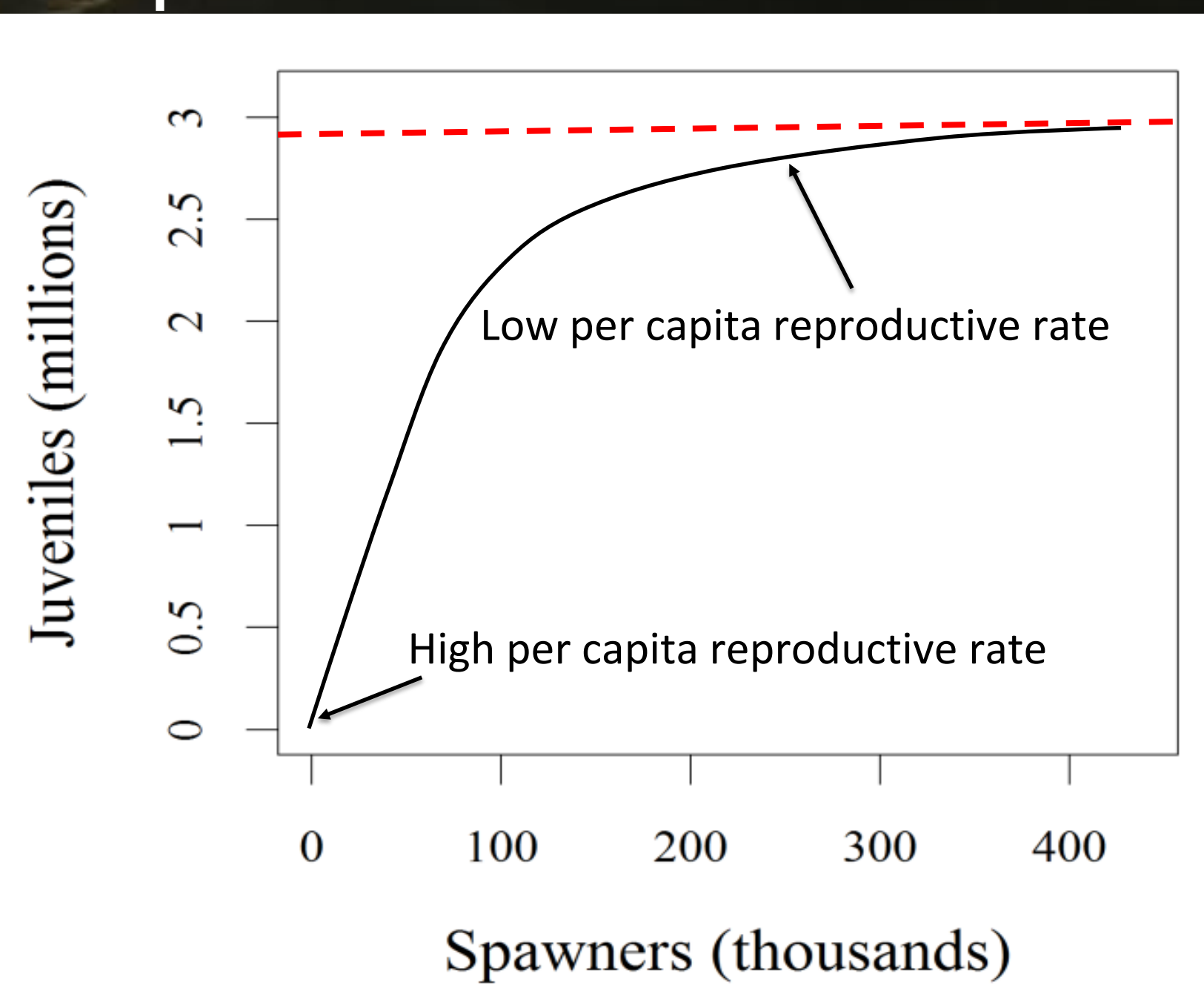
### 1) Changes in Passage Efficiency at Dams



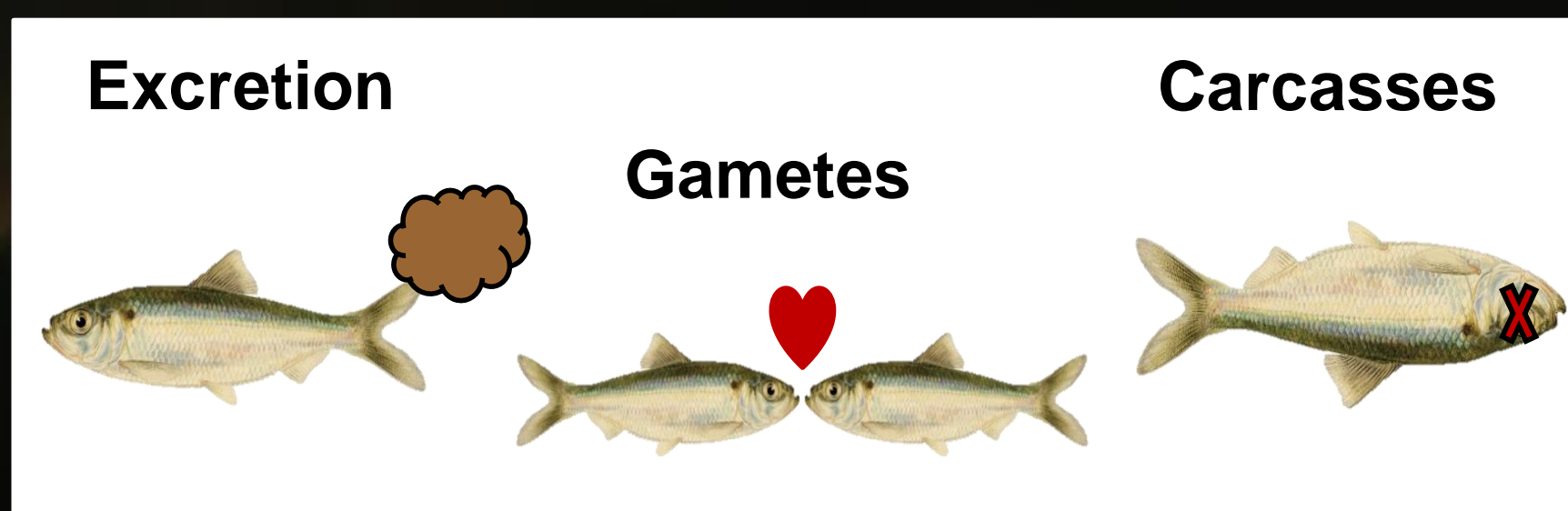
### Temporal Aspect



### Spawner-Recruit Curve



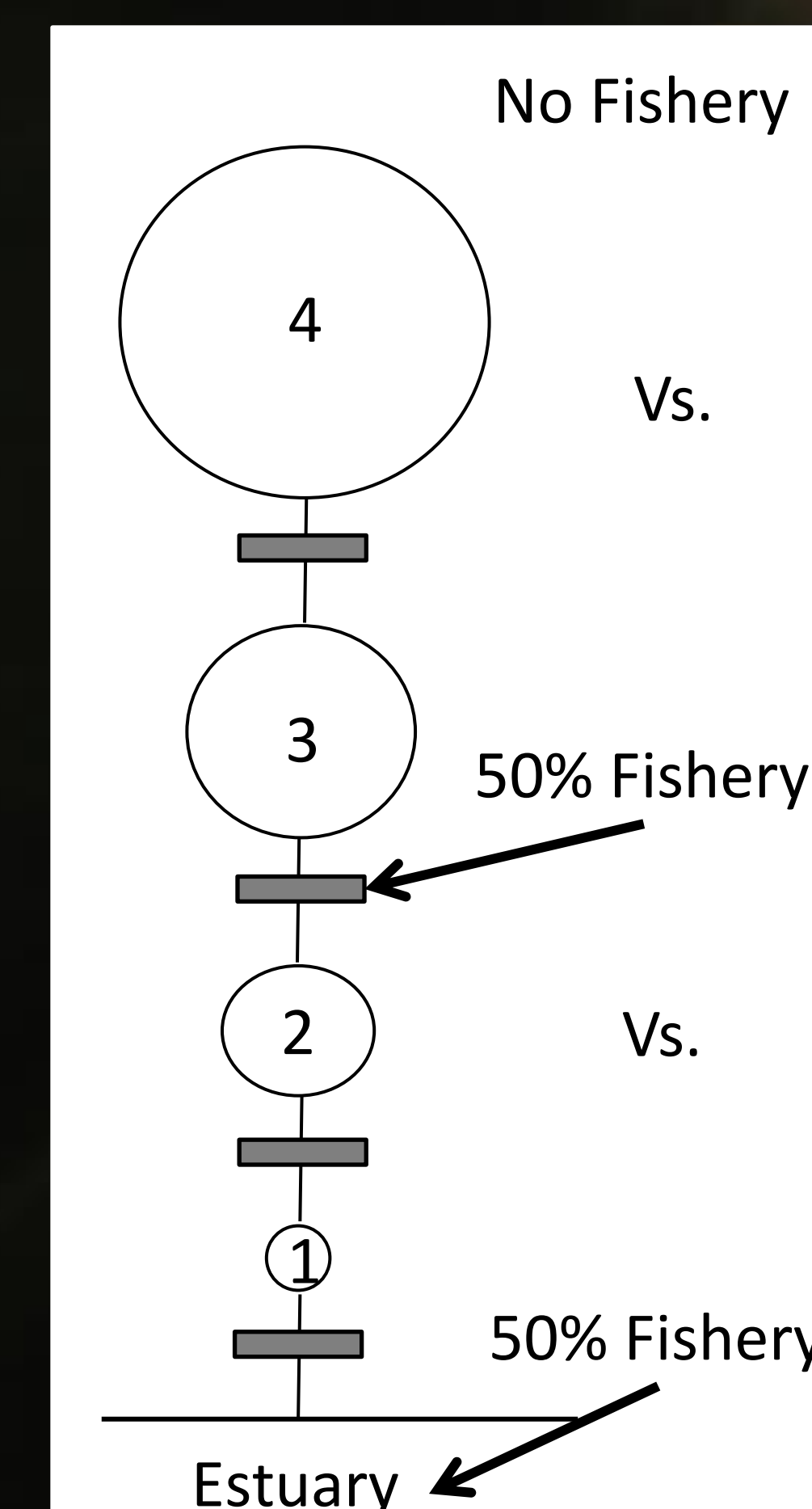
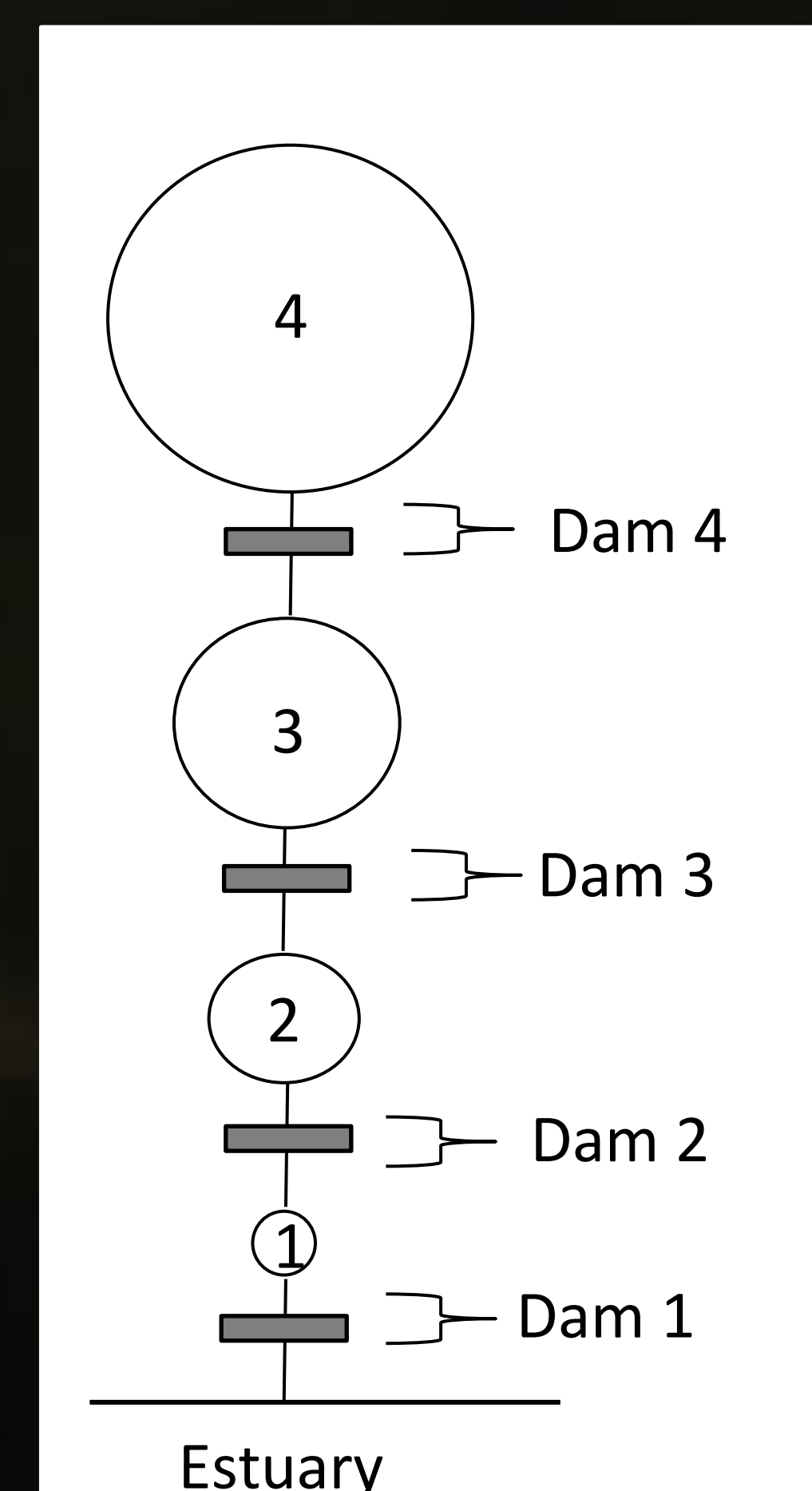
### Nutrient Sources



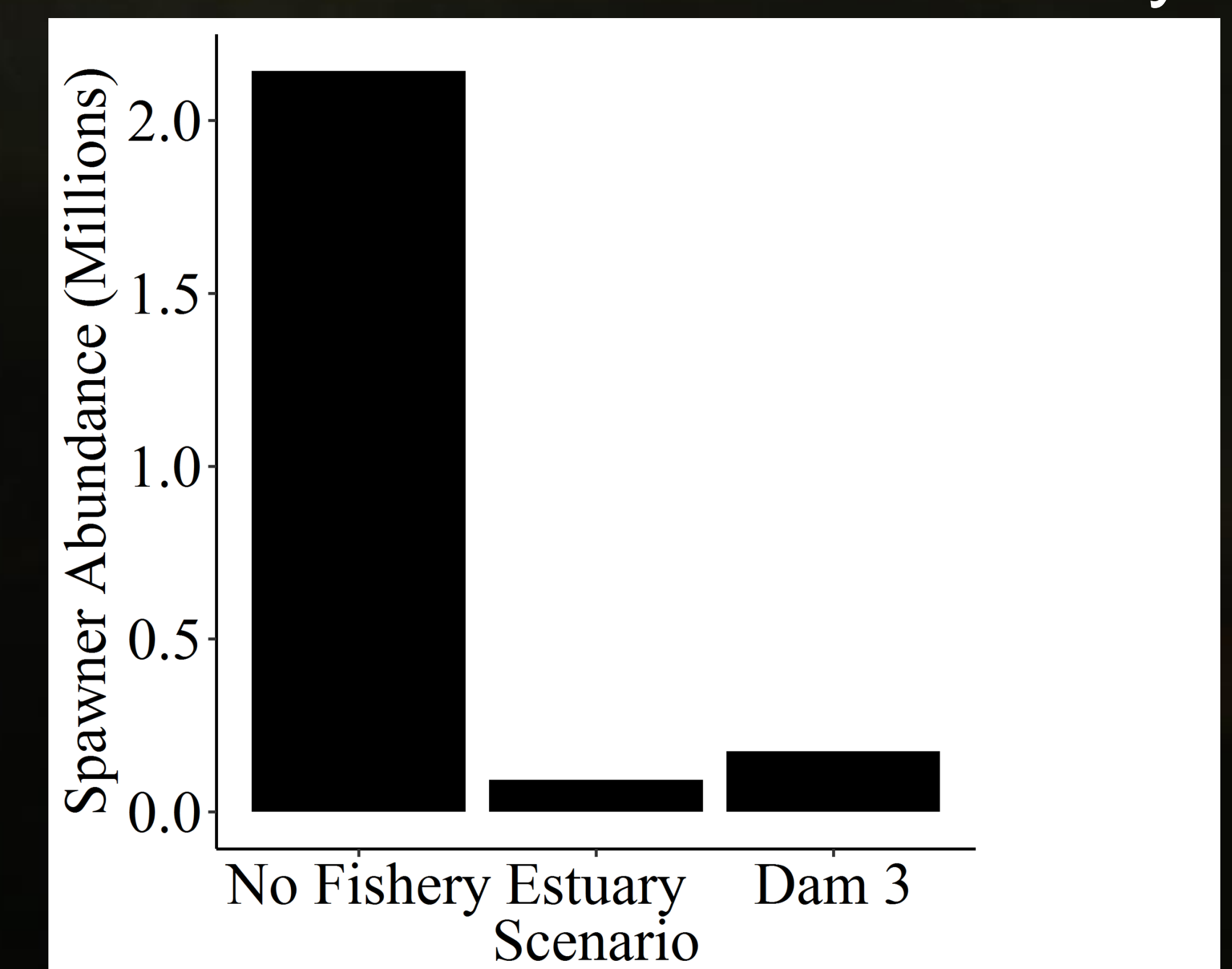
## Address Management Questions:

1) Changes in Passage Efficiency at Dams

2) Location of Commercial Fishery



### 2) Location of Commercial Fishery



Acknowledgements:

