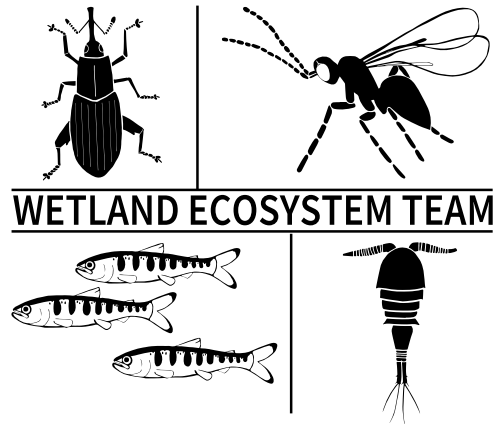


Juvenile Chinook Diets at Environmental Monitoring Program Sites in the Lower Columbia Estuary



W



Wetland Ecosystem Team – School of Aquatic and Fishery Sciences, University of Washington
Nearshore and Estuarine Ecology

presented by: Kerry Accola, Jason Toft, Jeff Cordell

@uw_wetlandecosystemteam

<http://depts.washington.edu/wetlab/>

Columbia River Estuary Conference





Ilwaco Slough

Welch Island

Whites Island

Campbell Slough

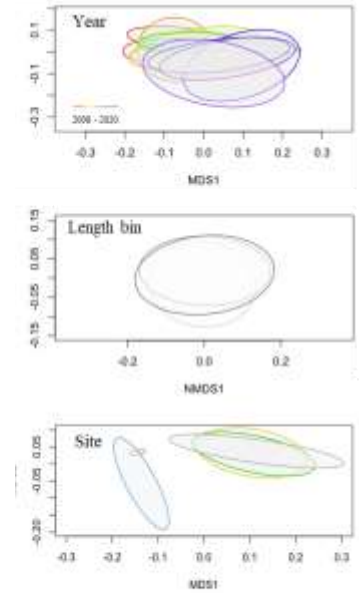
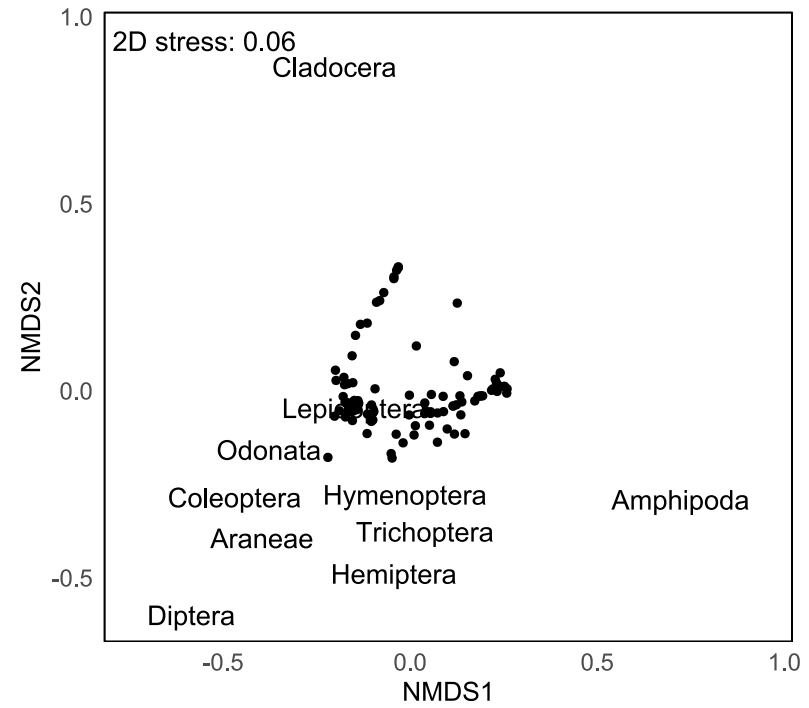
Franz Lake

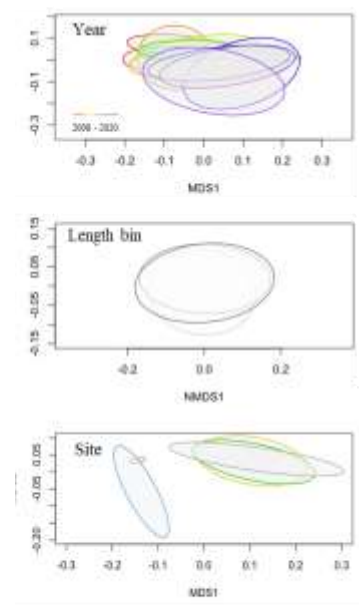
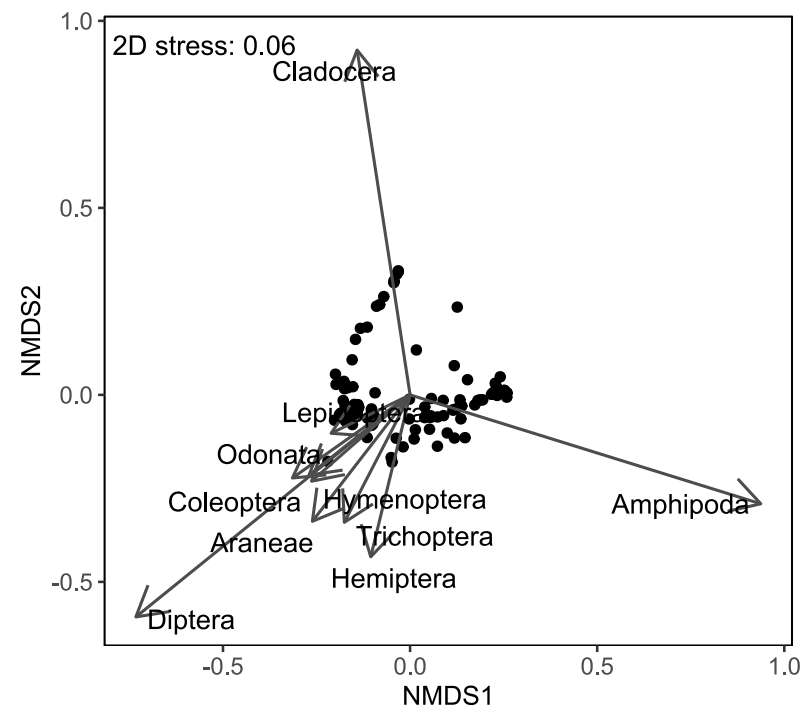
Index of Relative Importance
= *Frequency * (% Numeric + % Gravimetric)*

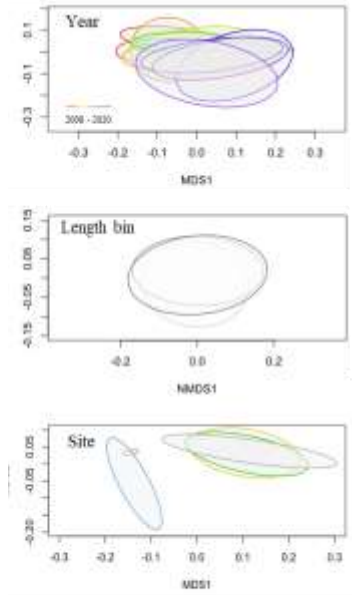
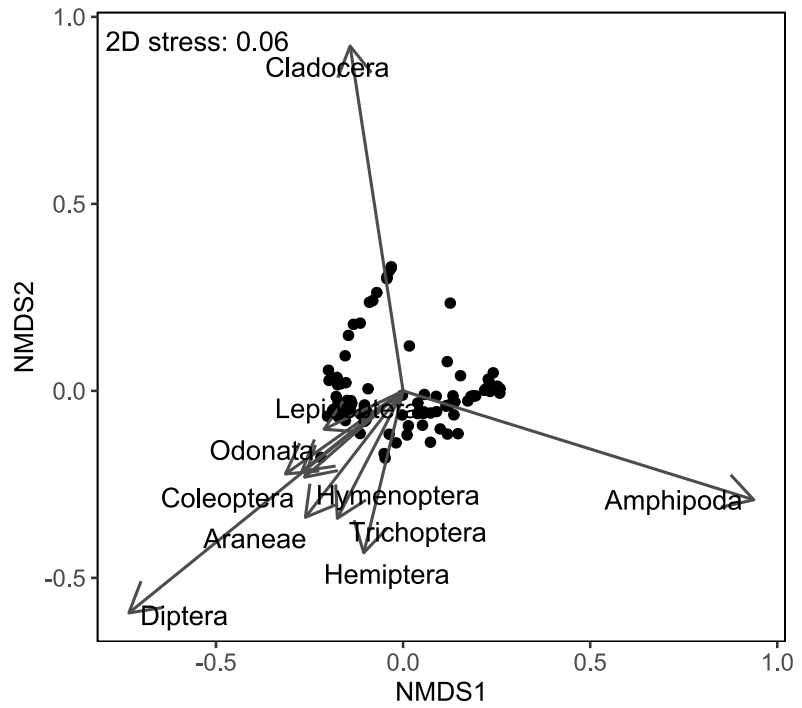
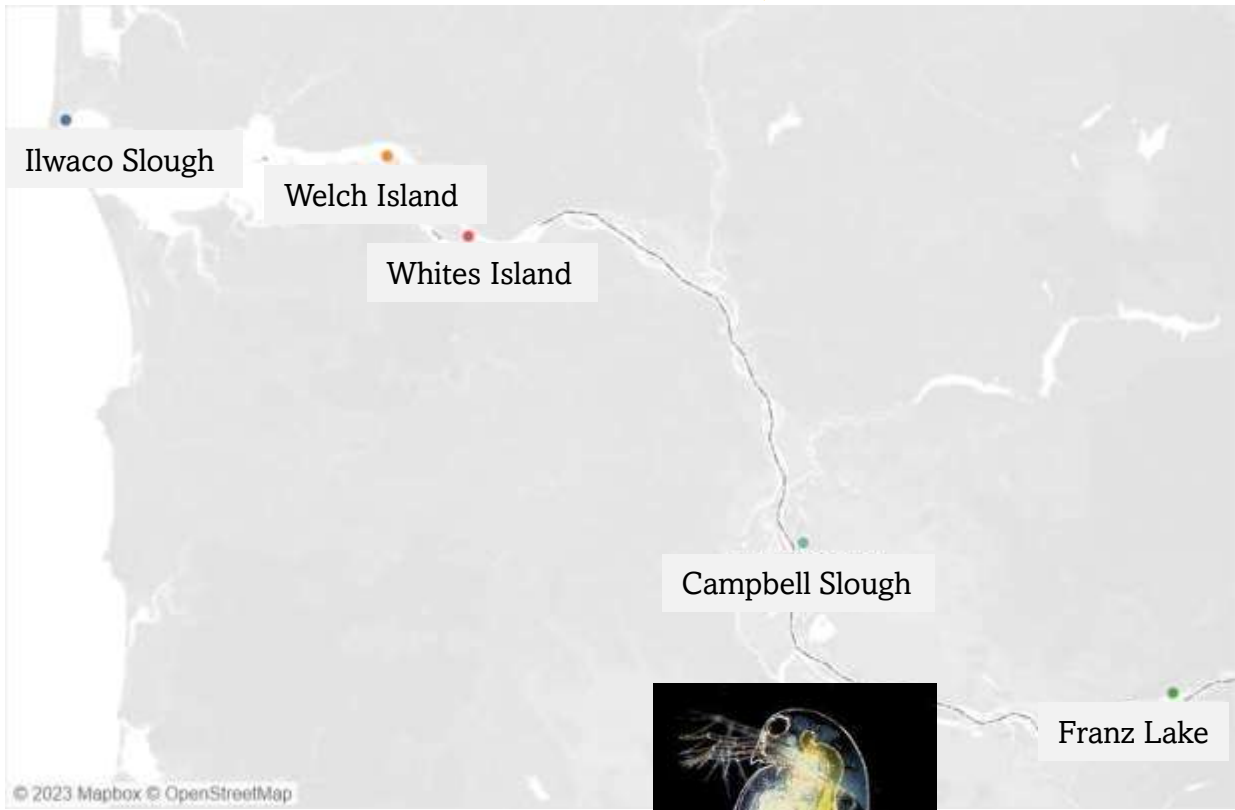


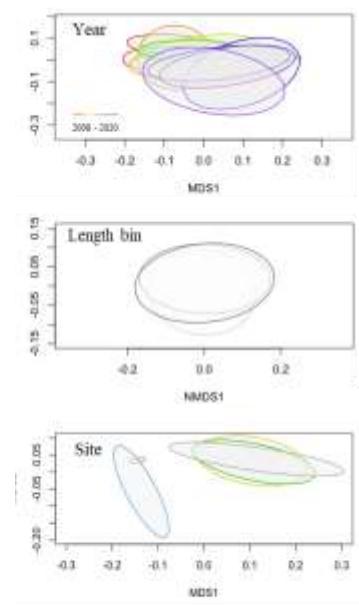
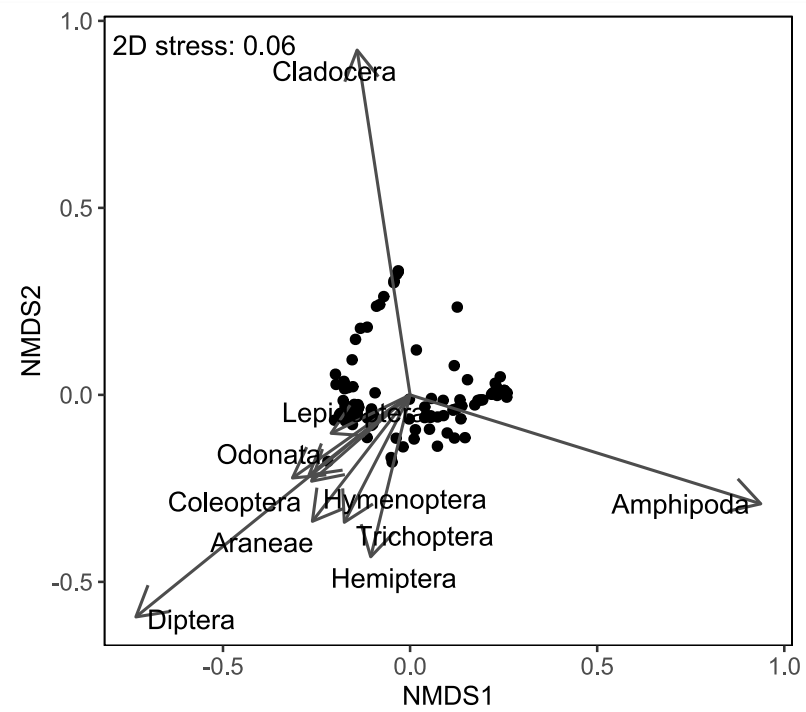


Index of Relative Importance
 = *Frequency * (% Numeric + % Gravimetric)*

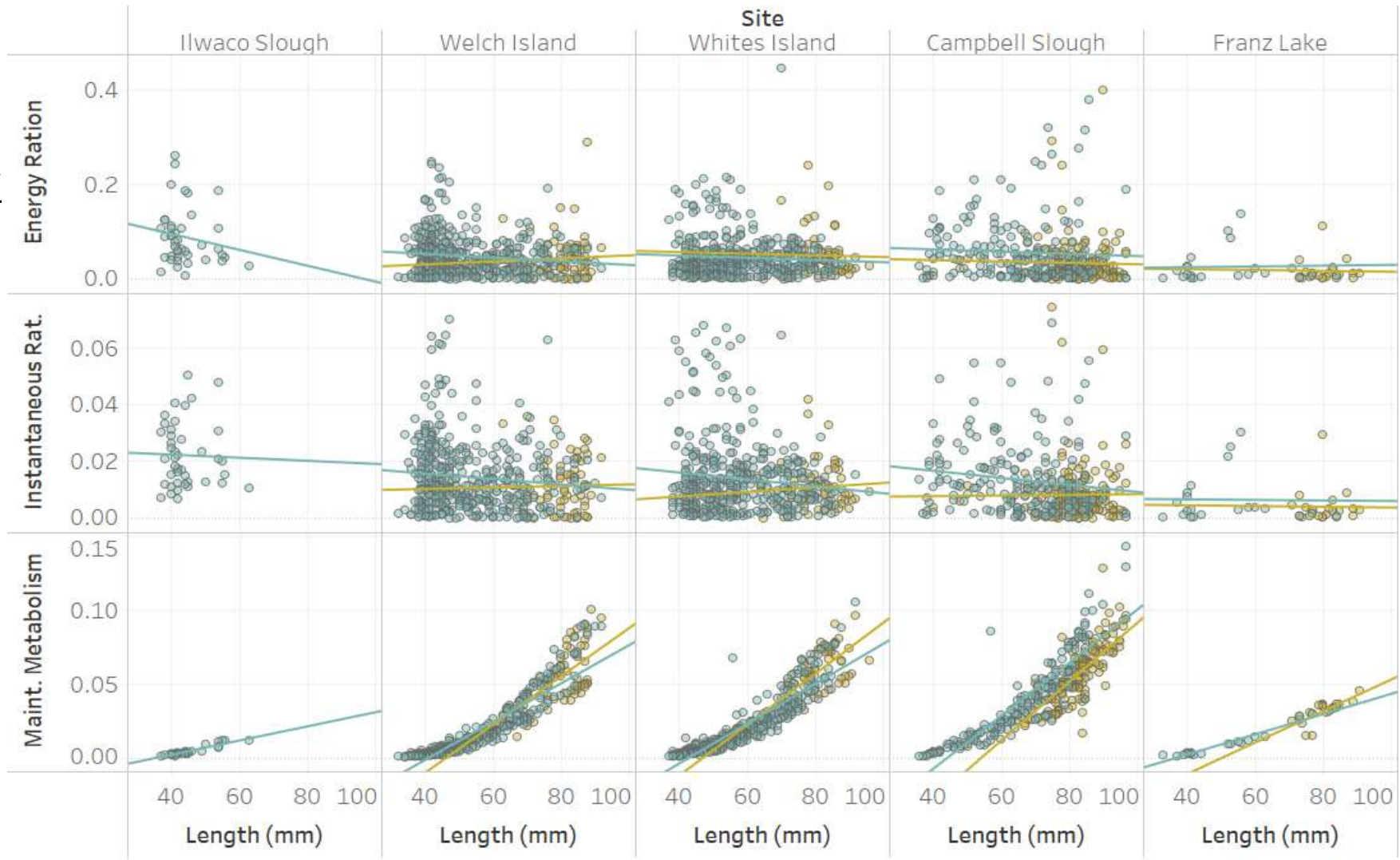








“Caloric Intake”
 $\frac{\text{sum of prey energy density}}{\text{fish weight}}$

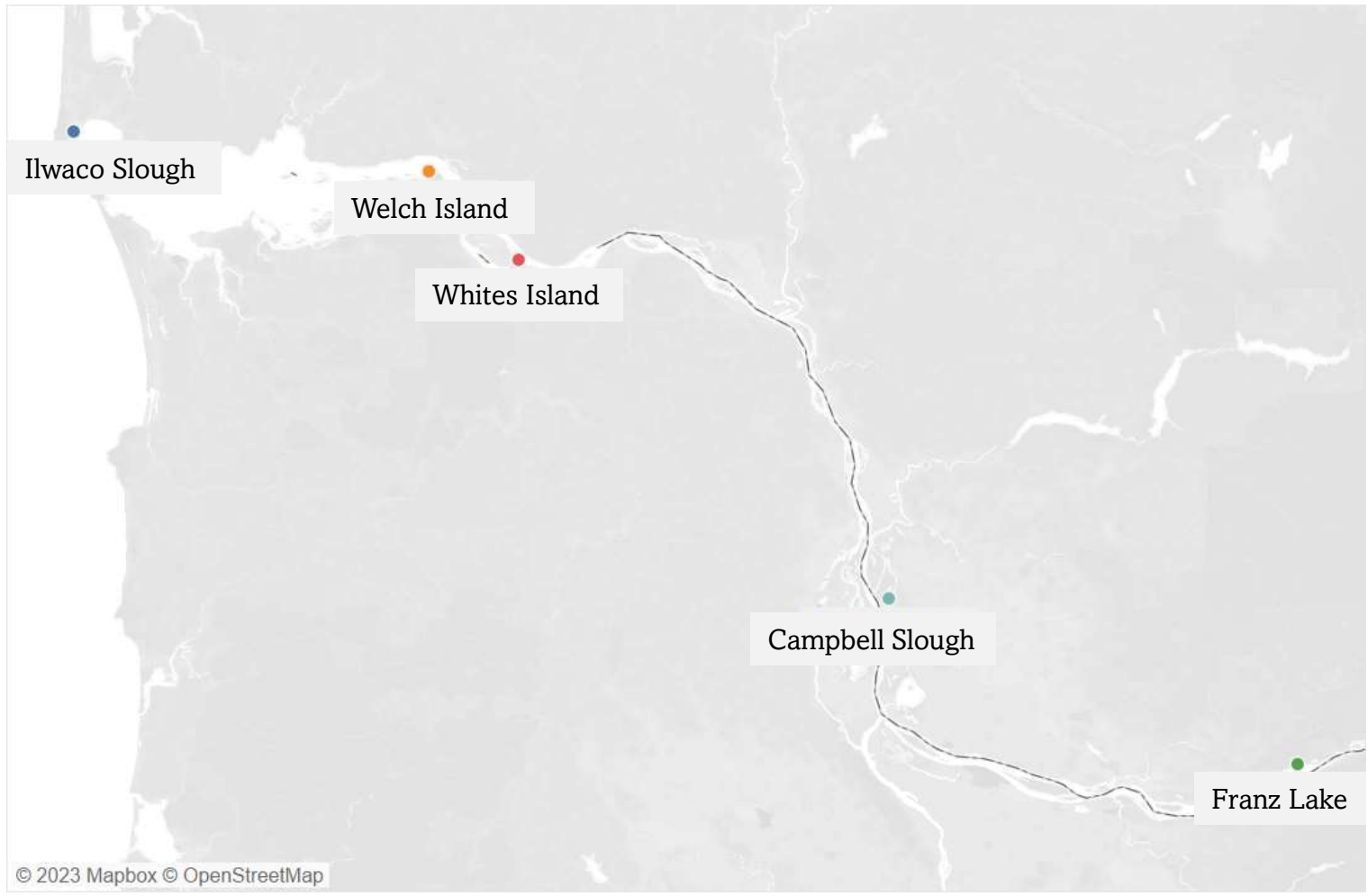


“Stomach Fullness”
 $\frac{\text{sum of prey weight}}{\text{fish weight}}$

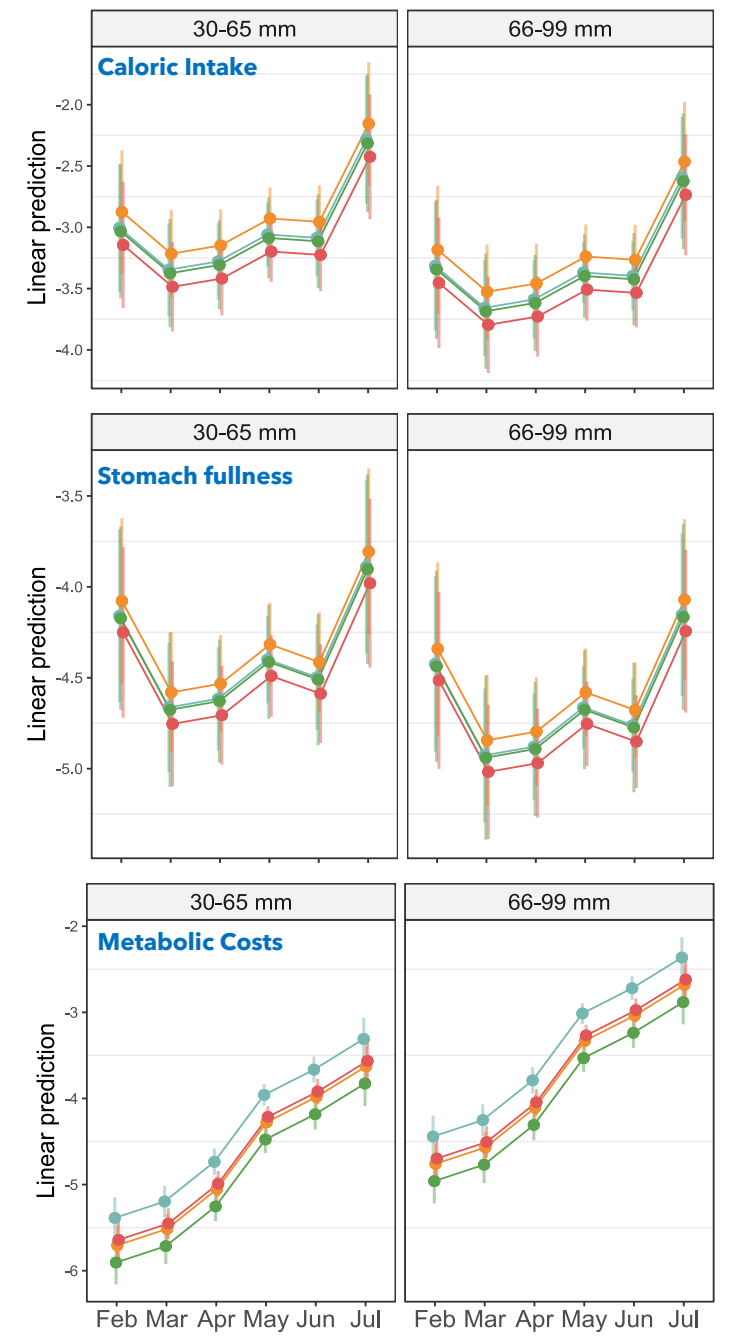
“Metabolic Costs”
 $j_m * e^{dt} * W$

Marked (1) or Unmarked (0)

- 0 Natural
- 1 Hatchery



● Campbell Slough ● Franz Lake ● Welch Island ● Whites Island



SUMMARY

Top Prey



Calories, Fullness, Metabolic costs

Increases from spring to summer

Foraging may offset metabolic costs

Top Sites

Highest densities at **Welch Island**, Whites Island, Campbell Slough; peaks in May

Smaller fish fare better for diets; no difference between hatchery and natural





Thank you!

@uw_wetlandecosystemteam

Email: kaccola@uw.edu