

*Potential Winter Growth of Chinook Salmon in a Tidally Influenced Area of the Columbia River.*

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Little is known about the contribution of winter feeding to the energy budgets of juvenile salmon in tidal freshwater area of the lower Columbia River. However, tidal freshwater habitats may play an important role in energy acquisition, growth, and ultimately survival during winter. To assess this hypothesis, we applied a bioenergetics model for Chinook salmon to data collected as part of the Tidal Freshwater Monitoring project. The purpose of this analysis was to simulate potential growth during winter conditions in habitats near the Sandy River Delta (rkm 219–235). In this contribution, we present results from our bioenergetics synthesis and discuss potential consequences of overwinter feeding for juvenile Chinook salmon in tidal freshwater habitats of the lower Columbia River.