Essential Fish Habitat project status report

Reporting date: 10/23/12

Project number: 2012 - 3

Title: Determinants of juvenile Tanner crab growth from different nursery embayments

PIs: Ryer, Copeman, Spencer, Ottmar, Iseri

Funding year: 2012

Funding amount: $87K

Status: ☐ Complete ☒ Incomplete, on schedule ☐ Incomplete, behind schedule

Planned completion date if incomplete: Field data analysis will be completed by 03/13. Lipid and other chemical analysis will be completed by 06/13. Manuscript anticipated during 2014.

Reporting: Have the project results been reported? Not yet.

Results: What is the most important result of the study?

Data and field samples have yet to be analyzed; however, it is clear that for the 3rd straight year, juvenile Tanner crabs at Womens Bay were larger by the end of the summer than at Pillar Creek Cove, or the other 2 sites (Holiday Beach and Kalsin Bay) which we were also able to opportunistically sample. Our laboratory experiment, wherein we manipulated the total lipid content of food, as well as the particular fatty acids, did not reveal any significant differences in growth between treatments. However, growth in this experiment was very low compared to that exhibited during a temperature-growth experiment conducted during 2011. This leads us to suspect that the gelatized food pellets utilized in this study were either unpalatable to the juvenile crabs, or were mechanically difficult for them to consume, resulting low feeding and sub-optimal growth. This sub-optimal growth may have interfered with or masked possible treatment effects. We are currently running an experiment comparing growth of juvenile Tanner crabs on several different pelletized diets. Depending upon results, we may undertake the dietary lipid growth experiment again in 2013.