Tentative Title: “Perceptions of Fin-fish Aquaculture: a multi-scalar policy perspective”

Fin-fish aquaculture presents a problem for planners and policy-makers. While there are negative environmental impacts and questions regarding aquaculture’s sustainability, there are also benefits such as increased local food production. Solutions balancing these detriments and benefits are often obscured by ingrained perceptions of aquaculture leading to exclusionary or suppressive outcomes and a lack of exploration into aquaculture's value within various contexts. To examine these perceptions, I developed a multi-scalar series of studies at the national, regional, and individual levels. The national study surveyed Sea Grant professionals to collect data summarizing stakeholder perceptions using key-informant technique. A positive relationship between reported awareness and reported perception of aquaculture was found. In addition, specifically ecological impacts were the most frequently mentioned concern while increased local food production was the most frequently reported perceived benefit. A regional study executed in northwestern Washington using stakeholder interviews further examined the nuance of aquaculture perception. Interviewees uniformly agreed with the detriments and benefits found in the national study results and that public awareness of these are lacking. However, disagreement was found in regard to how the risks and benefits should be handled in regulatory frameworks and policies. The final study tested the change in student awareness and perceptions of aquaculture in an educational setting using pre-post-surveys. Awareness and perception were found to have a positive relationship although the change was slight - a 3.5 awareness units to 1 perception unit ratio. However, when asked to rate their believed change in awareness and perception, students reported a 1 to 1 ratio. Write-in data also suggested substantial knowledge acquisition via increased word count and amount of detail given from pre-to post survey. The collected results of the three studies suggest aquaculture awareness and perceptions are context-dependant. Nuances in national data also suggest there are socio-economic factors at play in public perceptions. Comments made by regional interviewees show a lack of awareness of these nuances leading to "knee-jerk" reactions to aquaculture development. Lastly, these studies have shown increased awareness has an impact on perceptions of aquaculture. Rather than moving them uniformly toward positive, findings suggest this movement is a more subtle movement toward explicit understandings of the trade-offs aquaculture presents. This is key knowledge for policy- and decision-makers engaging with the public to create balanced and sustainable regulatory frameworks and policies.