

Title: **An Assessment of Two Approaches for Measuring Commercial Fishery Dependency**

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Abstract: Two economic base analysis techniques that identify and measure commercial fishery dependency at the local level are compared. The most common method, the location quotient technique, uses direct metrics of economic activity (sales, employment, wages, or value-added) to compare a local economy with a reference economy. We compared this technique with the total contribution technique a more complex and data intensive approach, which in addition to direct metrics, incorporates indirect and induced activity attributed to local support industries. This is constructed from Social Accounting Matrices contained in a commercially available regional input-output package called IMPLAN Pro. Dependency indices, which show the percentage of employment and gross regional product accounted for by the export base sales of harvesters and processors, are the basis for our comparison. The results indicate the importance of identifying and including the economic effects of supporting industries when measuring and tracking temporal changes in commercial fishery dependence. The two techniques are applied to county level data to evaluate if the rank order of the index value among coastal counties is affected by the dependence measure. This test is important because county level data available through secondary or commercial sources are not usually available at the fishing port or community level. Thus, applying economic base measures of dependence at the community level may require a consideration of tradeoffs between more precise measures of dependence and data collection costs.