



Economic Activity Associated with SCeMFIS Supported Fishery Products

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Commercial fishery product landings begin the product development, processing and distribution changes which create additional economic value and impacts beyond the initial landed value and economic impact. The scope and extent of economic impacts are evaluated for SCeMFIS at each level along the entire market chain of distribution from the fishermen in the harvest sector, through final sale to consumers generally by retail markets and restaurants.

The distinct market sectors for which data are presented are:

1. Harvesting sector – fishermen
2. Primary wholesaling and processing sector – initial phase of distribution typically unloading vessels and/or purchasing directly from the harvesters.
3. Import-export operations – receive and or prepare product for shipment and brokering.
4. Secondary wholesaling or distributing sector – all distribution, storage, packing or repacking that takes place between the wholesale market or processor and the final retail point of sale.
5. Foodservice – all activities resulting in the sale of prepared foods to the end consumer, such as restaurants.
6. Retail markets - establishments selling seafood for at-home consumption. Includes supermarkets, independent grocers, and specialty seafood markets.

As the products leave the boat and are sold initially they are further marketed at the levels noted above. At each level the initial purchase price is increased to a product sale price which reflects the added value provided by that function. Along each step of the market chain, the value of the fishery product is increased by virtue of that additional sectors value added function. *At each market sector the value-added activity in itself has not only a discreet markup value but it also generates discreet additional direct¹ and indirect² economic impacts associated with that function.* The direct activity, for example canning a product, requires the purchase of inputs such as cans which constitute new and discreet indirect impact. In that way each market sector's value added amount generates its own economic impact.

¹ Direct impacts occur in the industry sector under consideration. In this case they include activities that occur on fishing vessels, in seafood wholesale and processing plants or the various retail and distribution functions which handle SCeMFIS related products.

² Indirect impacts relate to the purchase of inputs by the direct industry sector needed to perform its value added function.

Table 1 reflects this hierarchy of sales and associated economic impact as measured by the traditional measure of dollars of output for the combined surfclam and ocean quahog fisheries. Employment and income are other measures of economic impact being used to assess the economic impacts of SCeMFIS related fisheries such as herein.

Sector	\$ Gross Markup	Direct Impact	Indirect Impact	Total Impacts
Harvest	\$54,873,000	\$54,873,000	\$26,262,000	\$81,135,000
Primary Wholesale/Processing	\$168,427,000	\$168,427,000	\$109,367,000	\$277,794,000
Secondary Wholesale/Distribution	\$188,638,000	\$188,638,000	\$104,720,000	\$293,358,000
Final Retail	\$117,710,000	\$117,710,000	\$61,249,000	\$178,959,000
Final Food Service	\$269,753,000	\$269,753,000	\$207,332,000	\$477,085,000
Total	\$799,401,000	\$799,401,000	\$508,930,000	\$1,308,331,000

Table 2 reflects this hierarchy of margined-sales and associated economic impact as measured by the mark up margin for the combined surfclam and ocean quahog fisheries. Employment and income are other measures of economic impact being used to assess the economic impacts of SCeMFIS related fisheries such as herein.

Sector	\$ Net Markup	Direct Impact	Indirect Impact	Total Impacts
Harvest	\$54,873,000	\$54,873,000	\$26,262,000	\$81,135,000
Primary Wholesale/Processing	\$113,554,000	\$113,554,000	\$73,735,567	\$187,289,567
Secondary Wholesale/Distribution	\$20,211,000	\$20,211,000	\$11,219,881	\$31,430,881
Final Retail	\$87,483,000	\$87,483,000	\$45,520,740	\$133,003,740
Final Food Service	\$109,353,750	\$109,353,750	\$84,049,229	\$193,402,979
Total	\$385,474,750	\$385,474,750	\$240,787,417	\$626,262,167

³ Initial harvest value and value added chain assumptions: <http://www.st.nmfs.noaa.gov/commercial-fisheries/fus/fus14/index> . in conjunction with earlier estimates for Ocean Clams by A.T. Kearney and N.F.I.

Economic Impact estimates based upon Implan social accounting and economic impact analysis software, version 3, available at www.lmplan.com.