

FISHING INDUSTRY
ECONOMIC ACTIVITY TRENDS
in the NEWPORT, OREGON AREA
Update 2019

Executive Summary





1. Introduction

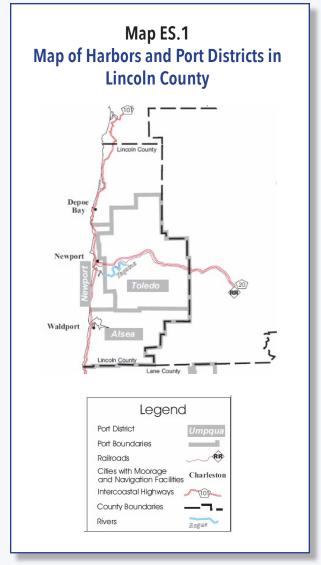
The Newport, Oregon area is a regional support center for a large commercial and recreational fishing industry. This report describes the extent of industry activity and the importance of the industry to the local and State economy. This report is an update using most recent information available for the Newport, Oregon area fishing industry. Harvest and processing data and economic contribution calculation trends are through Year 2019; other indicator data repeats this reports previous version compilations.

2. Setting

The Newport Area is geographically defined in the report to encompass Lincoln County. Map ES.1 shows Lincoln County harbors and the three port district boundaries within the county. A continually active commercial fleet and many small and large processing business are located on Yaquina Bay. There are a few commercial fishing deliveries at Depoe Bay and some invertebrates (Dungeness crab and ghost shrimp) are commercially harvested in Alsea Bay. Depoe and Alsea bays fishing activity is nearly all from recreational fishing. Depoe Bay is the origin of many ocean private and charter boat fishing and touring trips. Alsea Bay is heavily fished inriver; no protective jetties allow bar crossings for ocean trips. The Siletz River Bay and other lower river tributaries in Lincoln County are included in the marine recreational fishing trip tabulations.

3. Commercial Fishing Activity

There were 331 commercial fishing vessels that made 4,788 deliveries in the Newport Area in 2019: 311 delivered at Yaquina Bay, 19 delivered at Depoe Bay, and 11 delivered at Alsea Bay (some of the Depoe Bay and Alsea Bay





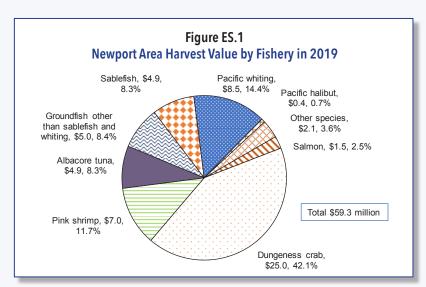
vessels also delivered at Yaquina Bay). Of the unique vessels making deliveries, 264 would be defined as homeport vessels (port group where plurality of harvest value is delivered). Eighty-seven of the unique vessels made deliveries worth at least \$250 thousand in 2019. The average revenue per vessel making deliveries of \$500 or more in 2019 was \$186 thousand. The average length for vessels in 2019 was 48 feet. Forty percent of the vessels are longer than or equal to 50 feet. Some of the vessels participate in distant water fisheries (example fisheries are catcher vessels delivering in the West Coast at-sea whiting fishery and Alaska fisheries) and another 35 vessels that use the Yaquina Bay for moorage, repairs, and provisioning, but do not make deliveries locally.

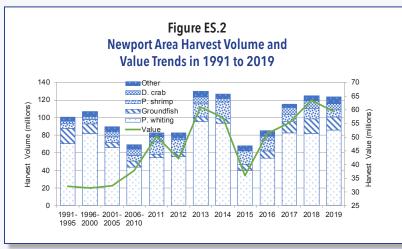
ommercial landings totaled \$59 million harvest value (1st highest harvest value at any Oregon port and 14th highest harvest value in the nation) in 2019. Figure ES.1 and ES.2 show the species group shares in 2019 and recent (years 1991 through 2019) harvest value trends. Of the

\$59 million harvest value, 42 percent was Dungeness crab, 14 percent whiting, 8 percent sablefish, 12 percent pink shrimp, 8 percent albacore tuna, 8 percent other groundfish, 3 percent salmon, and 5 percent other. The mix of species being delivered is variable in any given year. For example, ocean salmon fishing was better in 2014 and represented 10 percent of landings revenue.

The number of processors accepting the deliveries in the Newport Area was 69 in 2019 which included 13 vessels selling direct to the public. There were 21 processors whose purchases were more than \$100 thousand and 6 that purchased more than \$5 million. The economic value added from processing is estimated to be \$46 million.

The included sectors measured by economic contribution in commercial fishing are about three-fifths from commercial harvesting and processing and two-fifths from participation in distant water fisheries in 2019.



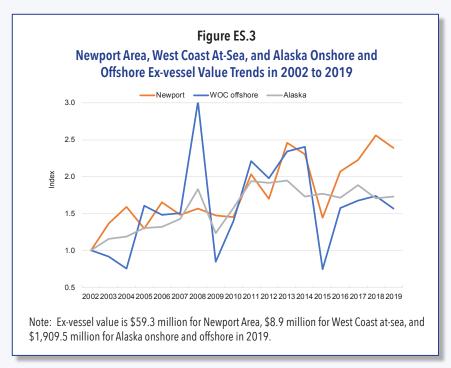






Distant water fisheries revenue accruing to the Newport Area includes crew, captains, permit owners, processor workers, etc. affiliated with vessels home-based in Newport as well as those not affiliated with local vessels. Vessels participating in these fisheries transit to Yaquina Bay for repairs, upgrades, and provisioning. Crews and captains sometimes accompany the visits to assist and will make local retail purchases for meals, lodging, etc. Distant water fisheries locations include deliveries made in the West Coast offshore fishery, other West Coast states, western Pacific (highly migratory species fishery), and Alaska. Real harvest value trends for Alaska fisheries and West Coast offshore fishery compared to the Newport Area are shown on Figure ES.3. The Newport Area fisheries have generally been on the

rise since 2002. The West Coast offshore fishery has been up and down during the same period. Alaska fisheries harvest value has been relatively steady in recent years. Distant water fisheries proportion of fishing industry economic contribution has decreased in recent years. Lincoln County resident participation as crew members in Alaska fisheries increased between 2012 and 2017, but fell between 2017 and 2019. Resident registered boat license counts decreased by one-third over the period 2012-2019. With rising fuel costs to commute and tax incentives to use Alaska registration, it could be vessel business license addresses may not reflect ownership residence. More investigation is needed to find out why distant water fisheries impacts are in a recent downward trend.



4. Recreational Fishing Activity

Numerous ocean recreational fishing trips take place within the Newport Area:

TARGET	AREAS				
SPECIES	Yaquina Bay	Depoe Bay	Alsea Bay	Lower Rivers	All Areas
Finfish Ocean	64	29			93
Ocean and bay crabbing and clamming	26		12		38
Ocean touring					9
Inriver				110	110

Notes:

- 1. Trips are in thousands. There is no updated serial data source for all trip categories. Data year for most trips are 2019, however some trip categories such as crabbing and clamming are mixed years.
- 2. Inriver trips are for non-resident fish on the lower Yaquina, Siletz, Alsea, and other rivers.
- 3. Ocean crabbing trips are over 90 percent of all trips when crabbing occurs.
- 4. Ocean touring trips includes trips whose purpose is whale watching.



T otal ocean and lower river fishing trip spending in 2019 is estimated to be \$23 million. (Spending estimates from ocean touring participants was not available.)

Some recreational trip spending must be acknowledged for having substitution, i.e. local resident spending may occur for recreational pursuits if fishing opportunities were not available. This is in contrast to commercial fishing which is a true accounting of natural resource use, i.e. there is not substitute spending if the harvesting opportunities from fish abundances or fleet/processor infrastructure were curtailed.



5. Commercial and Recreational Fishing Economic Contribution



5.1 Definitions

Total economic contribution estimates rely on economic input-output models to reveal how business and individuals spending ends up generating direct, indirect, and induced economic impacts in the local and state economy. The models include the calculations for the multiplier effect. Several models were relied upon to round up the estimates for the commercial, recreational, and other connected and related industry categories. Years 2016 to 2019 economic contributions were estimated using IO-PAC developed by the National Marine Fisheries Service (NMFS) Pacific Northwest Science Center. Previous years were estimated using the FEAM originally developed by Hans Radtke and William Jensen and continually updated to reflect current conditions with sponsorship by the Pacific Fishery Management Council (PFMC) and

Oregon Department of Fish and Wildlife (ODFW). Oneoff major construction projects such as for upgrades to the Port of Toledo shipyard, construction of the Oregon State University (OSU) Marine Studies Initiative building, etc. are precluded in the economic contribution modeling. Modeling scope is to account for day-to-day and usual economic activity rather than extraordinary impulses from onetime activities. Recreational economic contributions are for trip spending; capital items are not included in estimates.

Economic contribution measurements include income, jobs, and output. Income is the wages, salaries, and proprietorship revenue accruing to households that traces its origin to the fishing industry. Jobs are the simple calculation of total generated income divided by the average earnings per full and part-time jobs in the study region. The U.S. Bureau of Economic Analysis provides statistics for regional earnings from all industries and the average earnings per job. Income and jobs measurements are probably the most useful to policy makers as they are identifiable and comparative. Economic value added is provided for the local processing that occurs in the Newport Area. Industry output is a technical term that is not analogous to sales. It is a measure of annual production with only the margins of some sectors included. For manufacturers, the value would be sales plus/minus change in inventory. For service sectors production would be sales. For retail, wholesale, and transportation, output is margins. Margins represent the value in delivering commodities from producers' establishments to purchasers. The output measurement tends to convey an inflated notion of economic activity by including non-local cash flows and is subject to double counting.



5.2 Model Results

5.2.1. Direct Activity

Economic contributions from the commercial fishing industry in 2019 are estimated to be \$155 million income, about 3,300 jobs, and \$328 million output in the local economy. The share of generated income from primary processing which includes fish meal production and hauled-in fish resource processing is 28 percent for Newport Area in 2019. There is one large aquaculture operation within the Newport Area and for confidentiality reasons the economic contributions are included in the related and connected activity category.

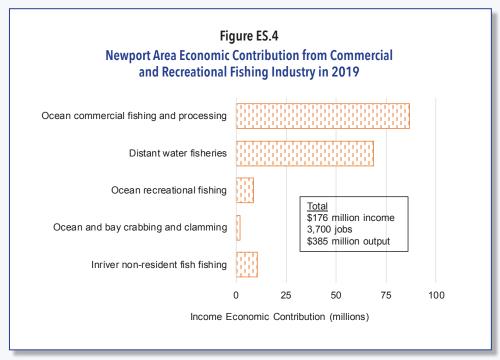
Economic contributions from marine recreational fishing (includes finfish and ocean and bay crabbing and clamming) in 2019 was \$21 million income, 444 jobs, and \$57 million output. Figure ES.4 shows economic contributions using the income measurement for the different commercial and recreational fishing sectors. The total commercial and marine recreational economic contribution to the local economy is \$176 million income, about 3,700 jobs, and \$385 million output in 2019.

The same commercial and recreational fisheries economic contributions measured at the state level economy is \$245 million income in 2019. The difference between the economic contribution amounts for the two levels of economies is due to where first and follow-on rounds of spending occur. Examples are recreational



spending by out-of-area visitors will occur where trips originate. Commercial spending from suppliers can occur within the State but outside of Lincoln County. Economic contribution at the national level will be even higher to account for out-of-state purchasing such as for fuel supplies.

The commercial and recreational fishing industry contributed income represents about 16 percent of the area's total annual earnings in 2019. The next highest identified industry when looking at 2012 data would have been tourism at 16 percent followed by timber at 12 percent. (Year 2012 data is referenced because it is the analysis year used in a study that defined composite and comparable local industry categories.)



5.2.2 Related, Connected, and Associated Activities

There are fishing industry related and connected activities that include mariculture; gearmanufacturing; boat building at private businesses operating at the Port of Toledo owned boatyard and businesses located elsewhere on the Yaquina River; supply and services businesses; research and education agencies; and, management and enforcement. Economic contribution estimates for these activities represented another 18 percent of the area's total annual earnings based on 2012 data.

There is also associated activities, such as visitors attracted to the Newport Area due to the working waterfronts and the marine environment. Visitors are

interested in the mix of production (seafood processors, shipping, and related businesses) and consumption (retail gift shops, restaurants, etc.) businesses. There are aquariums and visitor centers located at cities within the Newport Area. The visitors are attracted to witness and learn as well as observe and advance conservation efforts. In parlance of the tourism industry, visitor participation is in history, culture, culinary, and ecotourism segments. There are difficulties in quantifying the spending and economic contributions attributed to these tourism industry segments (see inset box description for examples). It would be of interest to assess resident and visitor consumer spending on local harvest products, but a consumer survey and econometric modeling would be necessary. Study time and budget resources did not allow for the assessment.



5.2.3 Activities Summation

Using the 2019 fishing industry income and the 2012 related and connected activities income (expressed in 2019 dollars), the total income would be \$346 million which represents about 7,400 jobs. (Total 2019 jobs in Lincoln County was 26,869. Jobs includes wage and salary employment, self-employed, employment at private households, employment on farms, and employment at other organizations not covered by unemployment insurance programs.) Associated economic activity, once investigated and modeled, would be extra economic contributions to these summation estimates.

Examples of Fishing Industry Associated Businesses

Two examples of associated economic activity that can escape modeling scope are described. The first example is retail fish markets that purchase local catch from fishermen and sell local caught seafood to the public. The harvesting and buying activities would be included in models, but purchasers spending for the retail services and other reasons (meals, lodging, fuel, etc.) are not. This example plays out at seafood restaurants whose venue is based on local catch in sustainable fisheries validated by traceability schemes. Local Ocean Seafood and South Beach Fish Market are businesses in the Yaquina Bay area that are instances. While it would only seem reasonable that the economic activity associated with this fish natural resource use be included in economic modeling, unfortunately data sources currently prevent tracking beyond

primary processing. Such sector omissions need to be acknowledged and recognized for contributing to sustaining the presence and fishing heritage in the community.

A second example are crew, families and friends that accompany vessels being constructed, repaired, or provisioned in the Newport Area. Expenditures for labor and supplies for the vessel expenditures are ostensibly included, but the visitor spending does not always have data tracking. The spending can be considerable when vessels are under major repairs and upgrades. A case is the recent overhaul of the F/V Pegasus that was under construction for 10 months at the Port of Toledo Shipyard. An informal survey by this report's sponsor has made conservative estimate that spending for this type of secondary activity was \$3.1 million in 2018.

6. Overview

The study provided fishing industry economic activity and contribution measure descriptions to better understand importance to the Newport Area and state economy. Commercial fishing, seafood processing, and recreational fishing was assessed as were related and connected businesses. The economic contribution measures include the multiplier effects. The integration of the fishing industry with other industries such as tourism was explained, but providing numerical estimates was beyond the scope of the study. There are even other aspects of economic involvement deserving mention but study scope did not include modeling. For example, fishing industry businesses add to the local property tax assessment base. In turn, industry workers require housing, transportation facilities, and schools which through property zoning and subsidies may have offsetting impacts. Seafood processing requires a lot of fresh water and discharge treatment which may challenge available capacities. The fishing industry dominates water dependent zoned land in the Newport Area. Land and improvements may have



publicly desired alternative uses. There are pluses and minus to consider when looking at single industry impacts and more detailed research and more complex analysis would be required to understand economic and social linkages.





The economic activity and economic contribution estimates are summarized as follows:

- The Newport Area is defined to be harbors within Lincoln County, Oregon.
- There were 331 commercial fishing vessels that made 4,788 deliveries in the Newport Area in 2019. Of the unique vessels making deliveries, 264 would be considered homeport vessels (port group where plurality of harvest value is delivered). The deliveries had a \$59 million harvest value (1st highest harvest value at any Oregon port and 14th highest harvest value in the nation) in 2019. The most valuable fishery at 42 percent was for Dungeness crab. Groundfish including onshore landed Pacific whiting was 31 percent in 2017. Pink shrimp was 12 percent.
- Local processing generated \$46 million in economic value added to landed and hauled-in fish resources in 2019.
- Recreational fishing activity from pursuing finfish and invertebrates was especially important at Depoe and Alsea bays within the Newport Area. Total ocean and lower river recreational fishing spending in the Newport Area was estimated to be \$23 million in 2019.

(Spending and economic contribution estimates from some marine fishing, including locations on shorelines, and ocean touring, including whale watching trips, was not available.)

- The total economic contribution from commercial and recreational fishing to the local economy is \$176 million income, about 3,700 jobs, and \$385 million output in 2019. The contributed income represents about 16 percent of the region's total annual earnings. The same economic contributions at the state level economy is \$245 million income. The state level economy value is higher because of local economy leakage effects, i.e. some purchasing occurs outside of Lincoln County.
- The economic contribution estimates for fishing industry related and connected activities represented another 18 percent of the area's total annual earnings in 2012. Using the 2019 fishing industry income and the 2012 related and connected activities income (expressed in 2019 dollars), the total income would be \$346 million which represents about 7,400 jobs. (Total 2019 jobs in Lincoln County was 26,869.)
- Working waterfronts and the marine environment are visitor attractions. The visitors are attracted to witness and learn as well as observe and advance conservation



efforts. There are difficulties in quantifying the spending and economic contributions attributed to these segments of the tourism industry. It would be of interest to assess resident and visitor consumer spending on local harvest products, but a consumer survey and econometric modeling would be necessary.

The fishing industry direct and related/connected businesses rely on public infrastructure such as docks and fuel stations (operated and maintained by ports and the City at Depoe Bay), waterway improvements (jetties, navigation channels, and breakwaters maintained by U.S. Army Corps of Engineers), and protection of marine-dependent land uses (local government planning departments). A collaborative relationship must exist between the public infrastructure providers and the private sector for the fishing industry to thrive. There can be fundamental infrastructure requirements for the continuation and development of a prospering fishing industry in the Newport Area that falling short could signal challenges for industry viability. The report descriptions will assist public agencies and private investors in making the necessary trade-off decisions for the continued support of the fishing industry.



