Mid-Atlantic

- Delaware
- Maryland
- New Jersey
- New York
- Virginia



Management Context

The Mid-Atlantic Region includes the states of New York, New Jersey, Delaware, Maryland, and Virginia. Federal fisheries in this region are managed by the Mid-Atlantic Fishery Management Council (MAFMC) and NOAA Fisheries (NMFS) under seven fishery management plans (FMPs). Two of these FMPs are developed with the New England Fishery Management Council (NEFMC). The MAFMC is the lead Council for the Dogfish FMP and the NEFMC is the lead for the Monkfish FMP.

Mid-Atlantic Fishery Management Plans

- 1. Atlantic Mackerel, Squids, and Butterfish
- 2. Bluefish
- 3. Spiny Dogfish (with the NEFMC)
- 4. Summer Flounder, Scup, and Black Sea Bass
- 5. Surfclam and Ocean Quahog
- 6. Tilefish
- 7. Monkfish (with the NEFMC)

Of the stocks or stock complexes covered in these fishery management plans, scup and Atlantic butterfish are currently considered overfished. Scup is currently subject to overfishing.

Currently, there is one limited access privilege program (LAPP), a type of catch share program, in the Mid-Atlantic Region: the surfclam and ocean quahog individual fishing quota (IFQ) program. This LAPP was implemented in 1990 and had an ex-vessel value of \$49.0 million in 2007. A second catch share program for the tilefish fishery is scheduled to be implemented in November 2009.

Commercial Fisheries

Mid-Atlantic fishermen earned over \$402 million for their catch in 2007, and harvested over 728 million pounds of finfish and shellfish. Sea scallop was a significant component of ex-vessel revenue, generating \$147 million in 2007 or 37% of total revenue. Despite accounting for just 3.1% of the total landings in the Mid-Atlantic, sea scallops averaged \$6.42 per pound in 2007, the highest annual price of any key species or species group. In terms of landings, menhaden accounted for 64% of total landings in the Mid-Atlantic, over 469 million pounds in 2007. This low value species had an average ex-vessel price of \$0.07 per pound in 2007, and contributed 7.7% to total revenue in the region.

In 2007, total revenue in New Jersey was the highest with fishermen generating \$153 million for their catch. Total landings in Virginia (484 million pounds) contributed 67% to total landings in the Mid-Atlantic. Menhaden made up over 87% of these landings. In terms of finfish revenue and catch, Virginia fishermen generated the most and received \$46 million for 452 million pounds harvested in 2007. Fishermen in New Jersey accounted for most of the shellfish revenue (\$127 million) and landings (89 million pounds). New

York, Maryland, and Delaware followed in both revenue generated and catch harvested.

Key Mid-Atlantic Commercial Species

- · Striped bass
- Atlantic surf clam
- · Quahog clam
- Blue crab
- Summer flounder
- American lobster
- Menhaden
- · Eastern oyster
- Sea scallop
- Squid

Economic Impacts

In 2007, the Mid-Atlantic Region's seafood industry generated over a billion dollars in sales in New Jersey (\$1.9 billion), New York (\$1.8 billion) and Virginia (\$1.4 billion). Most of the seafood industry-related jobs in this region were also sustained in these states with 40,000 full- and part-time jobs in New York, 37,000 jobs in New Jersey, and 33,000 jobs in Virginia. Maryland (11,000 jobs) and Delaware (1,600 jobs) followed in terms of employment supported by the seafood industry. New Jersey also led the region in income impacts with over a billion dollars generated by the seafood industry in 2007.

Landings Revenue

Ex-vessel revenue for finfish and shellfish totaled \$402 million in 2007, a 13% increase (-5.7% in real terms) from landings revenue in 1998 (\$356 million), and an 11% increase over revenue generated in 2006 (\$362 million). New Jersey and Virginia fishermen generated most of the 2007 revenue with \$153 million and \$131 million, respectively. Shellfish revenue contributed 74% to total revenue in the Mid-Atlantic, totaling \$298 million in 2007. This was a 26% increase over 1998 totals (\$236 million) and a 12% increase over 2006 (\$267 million). Finfish revenue decreased from \$120 million in 1998 to \$104 million in 2007, a 14% decrease over this period. However, finfish revenue from 2006-2007 increased 8.5% from \$96 million to \$104 million.

Total revenue trends over the 10 year time period varied by state. Total revenue generated by fishermen in New Jersey (57%, 31% in real terms), Delaware (30%, 8.4% in real terms), and Virginia (16%, -3.6% in real terms) increased from 1998-2007. These increases were largely due to shellfish revenue. New Jersey shellfish revenue increased 78% (48% in real terms). Virginia (58%, 32% in real terms) and Delaware (44%, 20% in real terms) also experienced large increases.

Despite significant increases in sea scallop revenue from 1998-2007 generated in New York and Maryland (76,140% and 19,964%, respectively), total shellfish revenue decreased 35% (-46% in real terms) in New York and 12% (-27% in real terms) in Maryland. This mirrored declines in total revenue

from 1998-2007. New York experienced a 28% (-40% in real terms) decrease in total revenue, while Maryland's revenue decreased 9.8% (-25% in real terms).

In contrast to shellfish revenue, finfish revenue declined in current and/or real terms across the Mid-Atlantic: Virginia (-23%, -36% in real terms), Delaware (-12%, -26% in real terms), New York (-9.9%, -25% in real terms), New Jersey (-0.8%, -17% in real terms), and Maryland (0.5%, -16% in real terms).

Sea scallop contributed more to the Mid-Atlantic's total revenue in 2007 than any other key species or group: \$147 million or 37% of total revenue. This was a 382% increase (302% in real terms) from 1998 sea scallop revenue (\$30 million) and a 22% increase (15% in real terms) from 2006 (\$120 million). Striped bass (43%, 19% in real terms), American lobster (-73%, -77% in real terms), and squid (-62%, -68% in real terms) also experienced large changes in revenue between 1998 and 2007.

At the state level, key species or groups with large changes in landings revenue between 1998 and 2007 include: striped bass (75% increase), spot (65%), and weakfish (-89%) in Delaware; sea scallop (19,964%), menhaden (182%), Eastern oyster (-67%), and white perch (-53%) in Maryland; sea scallop (688%), Atlantic herring (106%), and quahog clam (-89%) in New Jersey; sea scallop (76,140%), Atlantic surf clam (138%), softshell clam (129%), scups or porgies (113%), Eastern oyster (94%), and lobster (-85%) in New York; and sea scallop (204%), catfishes and bullhead (175%), spot (107%), and blue crab (-46%) in Virginia.

Landings

Fishermen in the Mid-Atlantic landed over 728 million pounds of finfish and shellfish in 2007. This was a 21% decrease from the 916 million pounds landed in 1998, and a 9.1% increase from the 667 million pounds landed in 2006. Finfish accounted for 76% of total landings (553 million pounds) in 2007, despite a 20% decrease from 1998 (693 million pounds). From 2006-2007, finfish landings increased 13%. Shellfish landings decreased 22% from 223 million pounds in 1998 to 175 million pounds in 2007. These landings decreased 2.3% between 2006 and 2007.

Finfish landings between 1998 and 2007 decreased in all five states across the Mid-Atlantic. The largest decreases were in Delaware where landings decreased 68% and in New York which had a 48% decrease in landings. These decreases were followed by New Jersey (-23%), Virginia (-18%), and Maryland (-16%).

Shellfish landings across the Mid-Atlantic Region also declined over the 10 year time period. The largest decreases were in Maryland (-24%), followed by Virginia (-22%), New York (-21%), New Jersey (-21%), and Delaware (-11%).

Of the Mid-Atlantic's key species and groups, menhaden's contribution to total landings was the most significant with 469 million pounds landed in 2007. Menhaden accounted for 64% of total landings that year. This was a 14% decrease from 1998 (547 million pounds) but a 17% increase from 2006 (401 million pounds). Fishermen in Virginia harvested the majority of menhaden, 89% of the total landed in 2007 (420 million pounds).

Of the Mid-Atlantic's key species and species groups, only sea scallop (345%), Atlantic surf clam (11%), and striped bass (2.2%) increased in total landings from 1998-2007. Decreases in landings totals were experienced for all other key species or groups with the largest decrease in American lobster (-84%), squid (-83%), and Eastern oyster (-69%) landings. Landings totals in 2007 increased for menhaden (17%), Eastern oyster (13%), and quahog clam (9%) relative to 2006 totals.

Commercial Fish Facts

Landings revenue

- On average, the key species and species groups accounted for <u>82% of total revenue</u> in the Mid-Atlantic Region.
- <u>Sea scallops</u> contributed the most to landings revenue in the region, <u>averaging \$103 million</u> over the 10 year time period. In 2007, fishermen in New Jersey generated most of this revenue, contributing 53% to the \$147 million generated from sea scallops that year.
- <u>Squid</u> had the largest annual increase in revenue from 1998-2007, <u>increasing 120%</u> from \$6.5 million to \$14 million (2003-2004). <u>American lobster</u> had the largest annual decrease in revenue, <u>decreasing 47%</u> from 1999-2000.

Landings

- Key species and species groups in the Mid-Atlantic Region contributed an average of <u>83% annually to</u> total landings.
- Menhaden was a significant contributor to landings, averaging 438 million pounds or 58% of total landings from 1998-2007. New Jersey fishermen harvested the majority of this species.
- Landings of <u>squid increased 298%</u> from 2003-2004, only to <u>decrease 70%</u> from 2004-2005. These changes were the largest annual increase and decrease of any key species or group in the region.

Prices

- Quahog clam (\$5.82 per pound), <u>Eastern oyster</u> (\$5.28), <u>sea scallop</u> (\$5.20), and <u>American lobster</u> (\$4.29) had the highest average ex-vessel prices over the time period.
- Menhaden (\$0.07 per pound), Atlantic surf clam (\$0.55), and squid (\$0.61) had the lowest average ex-vessel prices from 1998-2007.
- <u>Squid</u> prices were variable over the 10 year time period, <u>decreasing 45%</u> from 2003-2004, the largest annual decrease, only to <u>increase 121%</u> from 2004-2005, the largest annual increase.

Prices

With the exception of quahog clam, 2007 ex-vessel prices for the Mid-Atlantic's key species and species groups were higher than their 10 year average price per pound. Between 1998 and 2007, Eastern oyster, squid, and American lobster experienced the largest increases in price per pound, increasing 150% (109% in real terms), 121% (84% in real terms), and 70% (42% in real terms), respectively.

Key species or groups with declining price trends from 1998-2007 in current and/or real terms were: quahog clam (-20%, -33% in real terms), menhaden (-13%, -27% in real terms), and sea scallop (8.3%, -9.6% in real terms).

Relative to ex-vessel prices in 2006, prices for seven of the ten key species and species groups increased in 2007. Blue crab (30%), Eastern oyster (29%), and summer flounder (22%) had the largest increases. Price per pound for quahog clam (-13%), striped bass (-4%), and sea scallop (-2%) declined between 2006 and 2007.

At the state level, key species or groups with large changes in ex-vessel price from 1998-2007 include: weakfish (139%) and spot (81%) in Delaware; Eastern oyster (214%), Atlantic croaker (76%), and clams or bivalves (-15%) in Maryland; American lobster (63%), summer flounder (60%), and Atlantic herring (-18%) in New Jersey; Eastern oyster (270%), sea scallop (245%), softshell clam (141%), and scups or porgies (-43%) in New York; and catfishes and bullhead (165%), goosefish (153%), black sea bass (118%), spot (108%), and menhaden (-25%) in Virginia.

Recreational Fishing

There were 3.4 million resident recreational fishermen who took a fishing trip in the Mid-Atlantic Region in 2007. Over 94% of these anglers were residents of a regional coastal county. Of the 23 million fishing trips taken in 2007, over 55% of them were taken from a private or rental boat. Atlantic croaker and summer flounder were the most caught key species or species group with over 21 million of each harvested or released in 2007. Together, these key species accounted for 45% of fish caught by anglers in the Mid-Atlantic.

Key Mid-Atlantic Recreational Species

- Striped bass
- Summer flounder
- Bluefish
- Winter flounderPorgies (scup)
- Drum (Atlantic croaker)
- Black sea bass
- Drum (spot)
- Black sea bass
 Alack sea bass
- Drum (weakfish)
- Wrasses (tautog)

Economic Impacts and Expenditures

Recreational fishing activities in New Jersey supported more jobs than any other state in the Mid-Atlantic with

approximately 11,000 full- and part-time jobs supported in 2007. Maryland (9,200 jobs), Virginia (7,300 jobs), New York (6,500 jobs), and Delaware (1,800 jobs) followed in terms of employment impacts from recreational fishing activities. The majority of these jobs were related to durable equipment expenditures (versus trip-related expenditures): 74% of jobs in Maryland; 71% of jobs in New York; 67% of jobs in Virginia; 66% of jobs in New Jersey; and 51% of jobs in Delaware.

In terms of employment impacts related to fishing trips taken by anglers, industries that provided services for shore-based fishing trips supported most of the trip-related full- and part-time jobs in Maryland (1,100 jobs) and Delaware (420 jobs). In New York, trip-related employment impacts were related to the for-hire boat industry (750 jobs). Private or rental boat trips supported most of the trip-related jobs in Virginia (1,800 jobs) and New Jersey (1,700 jobs).

The contribution of recreational fishing activities in the Mid-Atlantic are also reported in terms of state level sales and value-added impacts, and direct expenditures on fishing trips and durable equipment. In 2007, in-state sales and value-added impacts were highest in New Jersey (\$1.8 billion in sales impacts; \$931 million in value-added impacts) and Maryland (\$1.3 billion; \$650 million). New York (\$979 million; \$511 million), Virginia (\$823 million; \$433 million), and Delaware (\$273 million; \$125 million) followed in terms of sales and value-added impacts. Across the region, these economic impacts were largely generated from durable equipment expenditures made by anglers (versus trip-related impacts).

Total fishing trip and durable equipment expenditures generated \$4.9 billion across the Mid-Atlantic in 2007. Approximately 79% of these expenditures were related to durable equipment purchases. Vehicle (\$1.4 billion), fishing tackle (\$990 million), and boat-related expenses (\$908 million) accounted for the majority of durable equipment expenditures. Expenditures by Mid-Atlantic residents related to fishing trips totaled \$642 million. Most of these purchases were related to fishing trips taken from a private or rental boat (59% of trip-related expenditures by residents). The region's nonresident anglers generated \$380 million in triprelated expenditures with most of these expenses related to private or rental boat trips (47% of triprelated expenditures by non-residents).

Participation

In 2007, there were 3.4 million resident recreational fishermen from either a coastal or non-coastal county in the Mid-Atlantic Region.¹ This was a 96%

¹At the state level, out-of-state anglers are estimated. However at the region level, out-of-region anglers are not estimated thus only Mid-Atlantic Region resident anglers are discussed here. In *Fisheries Economics of the U.S., 2006*

increase from 1998 (1.8 million anglers) and an 11% increase from 2006 (3.1 million anglers). In 2007, 94% of total anglers who fished in the Mid-Atlantic were residents of a coastal county. The number of coastal county anglers in 2007 increased 95% relative to 1998 (1.7 million anglers) and increased 12% relative to 2006 (2.9 million anglers). Non-coastal county angler participation increased 108% relative to 1998 (102,000 anglers) and decreased 5.4% relative to 2006 (224,000 anglers). Approximately 42% of total anglers who fished in the Mid-Atlantic took a fishing trip in the state of Maryland.

The majority of recreational fishermen in Maryland, New Jersey, New York, and Virginia were residents of a coastal county within their respective state. These anglers accounted for 83% of total anglers in New York, 62% of anglers in New Jersey, 58% of anglers in Maryland, and 55% of anglers in Virginia. In contrast, the majority of anglers who fished in Delaware were out-of-state residents (60% of total anglers). Anglers from the Mid-Atlantic's non-coastal counties² comprised a minority of total anglers in 2007: 1.3% of anglers in New Jersey, 3.7% of anglers in New York, 5.4% of total anglers in Maryland, and 9.1% of anglers in Virginia.

Fishing Trips

Resident and non-resident anglers took 22.7 million fishing trips in 2007. This was a 57% increase from 1998 (14.5 million trips) and a 6.4% increase from 2006 (21.4 million trips). In 2007, most fishing trips were taken from a private or rental boat: 12.6 million trips or 55% of total fishing trips taken in the Mid-Atlantic. Shore-based fishing trips were also popular with 8.8 million trips taken in 2007, followed by 1.4 million fishing trips taken from a for-hire boat.

Most of the fishing trips in the region were taken in New Jersey (33% of total trips in the region) and New York (27% of total trips). In these states, a private or rental boat trip was the most popular fishing mode: 49% of trips taken in New Jersey and 52% of trips taken in New York. This mode also accounted for the majority of trips taken in Virginia (67% of trips), Maryland (60% of total trips), and Delaware (56% of trips). Shore-based trips were the second most popular fishing mode in these states: 44% of trips in New Jersey, 40% of trips in Delaware, 40% of trips in New York, 34% of trips in Maryland, and 31% of trips in Virginia.

Harvest and Release

Of the Mid-Atlantic Region's key species and species groups, Atlantic croaker and summer flounder were the most often caught by anglers. In 2007, 22 million Atlantic croaker and 21 million summer flounder were caught by anglers fishing in the region. Together, these

(FEUS 2006), angler participation totals from 1997-2006 incorrectly included out-of-state anglers at the region level. In this report, the 1998-2007 angler participation totals excludes these anglers therefore the annual region totals reported here are smaller than those reported in FEUS 2006.

²All resident anglers in Delaware are considered coastal county anglers.

species accounted for 45% of the key species or species groups caught by recreational anglers and both species were more often released than harvested. In terms of where these fish were caught, the majority of Atlantic croaker were caught in Virginia (79% of fish caught in the region) and most of the summer flounder were caught in New Jersey (40% of fish caught).

Recreational Fishing Facts

Participation

- In the Mid-Atlantic, an average of <u>2.5 million resident</u> <u>anglers</u> fished annually from 1998-2007. Most of these anglers fished in Maryland and New Jersey.
- The region's coastal county residents made up 94% of total anglers in 2007. These anglers averaged 93% of total anglers annually over the time period.
- Non-coastal county resident anglers increased 61% from 2004-2005, the largest annual increase in participation in the Mid-Atlantic. Coastal county residents decreased 28% from 2001-2002, the largest annual decrease.

Fishing trips

- An average of 19 million fishing trips were taken annually in the Mid-Atlantic between 1998 and 2007. Most of these trips were taken in New Jersey and New York.
- <u>Private or rental boat</u> trips accounted for <u>12.6 million</u> <u>fishing trips</u> in 2007. This mode of fishing trip made up 55% of trips taken that year.
- The largest annual increase in fishing trip mode was a 43% increase in private or rental boat trips from 1999-2000. The largest annual decrease was a 23% decrease in shore-based fishing trips from 2001-2002.

Harvest and release

- The most caught key species or species group in the Mid-Atlantic were <u>summer flounder</u> and <u>Atlantic</u> <u>croaker</u>. Anglers caught an average of <u>20 million</u> of each fish annually from 1998-2007. Most of these fish were released rather than harvested.
- Most of the Mid-Atlantic's key species or groups were released by anglers rather than harvested. <u>Striped</u> <u>bass</u> (83% released), <u>summer flounder</u> (81%), and <u>black sea bass</u> (79%) are examples.
- Key species or groups more often harvested by anglers were <u>spot</u> (67% harvested), <u>winter flounder</u> (62%), and <u>scup</u> (51%).
- Scup had the largest annual increase in catch, increasing 233% from 1999-2000. Wrasses or tautog had the largest annual decrease in catch, decreasing 63% from 2002-2003.

In 2007, only two of the Mid-Atlantic's key species or groups were most often harvested rather than released by anglers: spot (73% harvested) and winter flounder (79% harvested). Summer flounder (87% released), black sea bass (83% released), and striped bass (83% released) were examples of key species or groups with a large percentage of fish released rather than harvested.

Most of the Mid-Atlantic's key species and groups experienced large changes in catch totals between 1998 and 2007. Scup (284% increase), spot (189%), wrasses or tautog (169%), bluefish

(161%), and black sea bass (90%) all experienced large increases in recreational catch. Only weakfish and winter flounder showed decreases in total recreational catch with a 74% and 51% decrease, respectively.

Between 2006 and 2007, large changes in catch totals were observed for spot (64% increase), winter flounder (50% decrease), and weakfish (-43%). All other key species and species groups experienced changes in catch totals ranging from a 25% decline in striped bass caught and a 29% increase in bluefish caught.

At the state level, summer flounder was the most caught key species or species group in 2007 with 8.5 million fish caught in New Jersey, 6.0 million fish caught in New York, and 1.2 million fish caught in Delaware. Atlantic croaker was the key species most often caught by recreational fishermen in Virginia with 17.3 million fish caught in 2007. In Maryland, there were 8.1 million white perch caught by anglers, the key species most often caught in this state.

Marine Economy³

The Mid-Atlantic's gross domestic product by state was \$2.2 trillion in 2006. Employee compensation totaled \$1.3 trillion and annual payroll totaled \$814 billion. These economic measures increased 52%, 25%, and 47%, respectively, between 1998 and 2006, and 6.0%, 6.8%, and 6.5% between 2005 and 2006. Over 1.1 million establishments employed approximately 17 million full- and part-time employees across the region in 2006. This was a 8.5% increase in establishment numbers and a 11% increase in employee numbers from 1998-2006. A small increase in these numbers occurred from 2005-2006 (0.8% and 2.0%, respectively).

In 2006, New York had the highest establishment and employee numbers, annual payroll, employee compensation, and gross state product levels in the Mid-Atlantic. New York's approximately 516,000 establishments employed 7.5 million employees in 2006. Gross state product in New York was \$1.0 trillion, followed by New Jersey (\$448 billion), Virginia (\$369 billion), Maryland (\$258 billion), and Delaware (\$60 billion).

Among the Mid-Atlantic states where data was available, ⁴ New Jersey had the highest commercial fishing location quotient (CFLQ) at 0.89 in 2006. This was a 24% decrease from 2001 and a 9.2% decrease from 2005. New Jersey's CFLQ suggests that the level of employment in commercial fishing-related industries is lower than the level of employment in these industries nationwide. ⁵ Across the Mid-Atlantic, the CFLQ was lower than the national baseline of 1.0: 0.71 in Maryland (4.1% decrease relative to 2001), 0.48 in

Virginia (26% increase relative to 2001), and 0.12 in New York (46% decrease relative to 2001).

Seafood Sales and Processing

In 2006, there were 220 nonemployer firms engaged in seafood product preparation and packaging with annual receipt totals of \$14 million. Respectively, this was a 206% and 246% increase (205% in real terms) relative to 1998 levels. Most of these firms were located in Virginia and this state experienced the largest increases from 1998-2006 in this industry: 517% increase in firm numbers and 1.637% increase in annual receipt totals.

Employer establishments engaged in seafood product preparation and packaging totaled 84 in 2006. These establishments employed approximately 2,900 full-and part-time workers and generated \$96 million in annual payroll. Regionwide, there was a 21% decrease in establishments engaged in this industry, a 21% decrease in employees, and a 16% increase in annual payroll totals.

At the state level, most of these establishments were located in Virginia (33 establishments in 2006). However, Maryland employed more people (1,100 versus 870 workers in VA) and had a slightly higher annual payroll (\$28.9 million versus \$28.5 million in VA). Modest changes in this industry occurred in these states from 1998-2006: a 32% decrease in establishments in Maryland, a 43% decrease in employees in Virginia, and a 33% increase in annual payroll in Maryland.

The Mid-Atlantic's seafood wholesale annual payroll totals increased 21% from 1998-2006 to \$174 million in 2006. Despite this, establishment and employee numbers decreased (-23% and -17%, respectively) to 485 establishments and 4,300 full-and part-time employees. These trends were mirrored at the state level with the largest declines in Delaware (57% decrease in establishments), Maryland (37% decrease in establishments, 31% decrease in employees), and Virginia (44% decrease in employees). The largest increase was observed in Maryland (40% increase in annual payroll).

In 2006, there were 446 seafood retail nonemployer firms with total annual receipts of \$50 million across the region. This was a 14% decrease in firm numbers regionwide from 1998-2006, despite a 50% increase in firms located in Delaware. In terms of annual receipts, these totals increased 17% relative to 1998 totals, with the largest state level increases in Virginia (112%) and Maryland (43%). Approximately 46% of these firms were located in New York.

Employer establishments engaged in seafood retail increased 28% across the Mid-Atlantic to 704 establishments in 2006. Most of these establishments were located in New York (55%). Regionwide, this industry employed over 3,000 full-

³Data for 2007 was unavailable for this report therefore 2006 information is reported in this section.

⁴The CFLQ for Delaware was not available for this report. ⁵The CFLQ for the U.S. is 1.0. This provides a national baseline from which state CFLQs can be compared.

and part-time workers with an annual payroll of \$61 million in 2006. From 1998-2006, employee numbers increased 70% and annual payroll totals increased 106% (82% in real terms). Large and modest increases were also experienced at the state level. The largest changes were in Delaware (55% increase in establishments), and Maryland (65% increase in employees, 109% increase in annual payroll).

Transport, Support, and Marine Operations

Marina industries had the highest number of establishments in this industry sector with 936 establishments regionwide in 2006. This was a 2% decrease relative to 1998 levels. Most of these industries were located in New York. Ship and boat building industries employed the most people in 2006 (25,000 full- and part-time workers) and had the highest annual payroll (\$1.1 billion). Employment numbers decreased 4% from 1998-2006, with a 34% decrease in employment in Maryland. Annual payroll totals increased 12% over this time period (-1% in real terms) with a 43% increase in New Jersey and a 35% decrease in Maryland.

Other industries with large and modest changes from 1998-2006 were: coastal and Great Lakes freight transportation (200% increase in establishments in Delaware); deep sea passenger transportation (100% increase in New York, 80% increase regionwide); marina industries (46% increase in employees and 104% increase in annual payroll regionwide); marine cargo handling (37% decrease in New York); port and harbor operations (175% increase in establishments in Maryland); and ship and boat building (75% decrease in establishments in Delaware).

2007 Economic Impacts of the Mid-Atlantic Region Seafood Industry (thousands of dollars)

| | Total Landings Revenue | Total Sales Impacts | Total Income Impacts | Total Job Impacts |
|------------|---------------------------|------------------------|-------------------------|----------------------|
| Delaware | 7,578 | 73,890 | 39,266 | 1,582 |
| Maryland | 52,273 | 594,294 | 298,185 | 11,041 |
| New Jersey | 152,560 | 1,927,389 | 1,038,127 | 36,618 |
| New York | 58,940 | 1,830,881 | 972,022 | 39,585 |
| Virginia | 130,562 | 1,448,353 | 807,255 | 33,439 |

Total Landings Revenue and Landings Revenue of Key Species/Species Groups (thousands of dollars)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Total Revenue | 356,016 | 350,661 | 347,357 | 348,231 | 342,397 | 357,210 | 407,793 | 440,398 | 362,198 | 402,040 |
| Finfish & Other | 119,851 | 106,459 | 98,479 | 90,643 | 84,091 | 87,702 | 88,003 | 101,874 | 95,516 | 103,636 |
| Shellfish | 236,165 | 244,202 | 248,878 | 257,589 | 258,306 | 269,508 | 319,790 | 338,524 | 266,683 | 298,404 |
| Bass, Striped | 7,775 | 8,469 | 9,238 | 8,616 | 8,215 | 9,751 | 7,671 | 11,332 | 10,045 | 11,086 |
| Clam, Atlantic Surf | 25,558 | 27,574 | 34,973 | 34,211 | 34,692 | 35,366 | 26,760 | 27,084 | 29,580 | 32,479 |
| Clam, Quahog | 31,370 | 29,278 | 27,655 | 22,744 | 16,935 | 20,160 | 19,918 | 20,773 | 20,229 | 19,131 |
| Crab, Blue | 71,650 | 75,568 | 66,278 | 70,871 | 61,660 | 60,799 | 69,364 | 71,073 | 55,638 | 56,923 |
| Flounder, Summer | 8,041 | 7,952 | 7,769 | 7,078 | 8,700 | 10,678 | 13,094 | 13,810 | 12,365 | 10,316 |
| Lobster, American | 30,286 | 28,629 | 15,250 | 9,828 | 6,273 | 5,569 | 5,615 | 6,696 | 9,116 | 8,340 |
| Menhaden | 44,160 | 33,125 | 30,041 | 27,783 | 24,123 | 24,352 | 25,570 | 28,188 | 24,466 | 30,922 |
| Oyster, Eastern | 12,335 | 10,042 | 9,949 | 8,587 | 9,814 | 8,903 | 5,663 | 6,703 | 6,485 | 9,475 |
| Scallop, Sea | 30,492 | 42,104 | 66,135 | 75,275 | 91,237 | 111,969 | 160,847 | 181,299 | 120,140 | 146,832 |
| Squid | 19,577 | 14,918 | 13,189 | 9,904 | 9,287 | 6,497 | 14,302 | 9,169 | 7,727 | 7,445 |

Total Landings and Landings of Key Species / Species Groups (thousands of pounds)

| | | | | | | | acarrae or pearrae) | | | | |
|---------------------|---------|---------|---------|---------|---------|---------|---------------------|---------|---------|---------|--|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | |
| Total Landings | 916,095 | 753,212 | 715,376 | 835,425 | 702,234 | 710,738 | 757,468 | 709,023 | 667,314 | 728,338 | |
| Finfish & Other | 692,883 | 545,711 | 511,997 | 631,288 | 496,430 | 514,804 | 529,762 | 518,166 | 488,018 | 553,228 | |
| Shellfish | 223,211 | 207,501 | 203,379 | 204,137 | 205,804 | 195,934 | 227,707 | 190,857 | 179,297 | 175,110 | |
| Bass, Striped | 5,386 | 4,956 | 5,602 | 4,930 | 4,591 | 5,273 | 3,945 | 5,708 | 4,788 | 5,507 | |
| Clam, Atlantic Surf | 48,610 | 54,178 | 63,614 | 60,421 | 62,134 | 64,601 | 50,984 | 50,921 | 50,556 | 53,952 | |
| Clam, Quahog | 5,314 | 5,263 | 4,560 | 3,857 | 2,318 | 3,311 | 3,537 | 3,735 | 3,728 | 4,056 | |
| Crab, Blue | 76,844 | 78,715 | 62,360 | 61,045 | 63,076 | 56,047 | 68,979 | 70,983 | 61,873 | 48,859 | |
| Flounder, Summer | 5,311 | 4,922 | 4,879 | 5,164 | 6,433 | 7,315 | 8,337 | 8,564 | 6,609 | 4,501 | |
| Lobster, American | 8,620 | 7,390 | 3,775 | 2,633 | 1,705 | 1,181 | 1,386 | 1,585 | 1,772 | 1,397 | |
| Menhaden | 546,567 | 415,006 | 403,599 | 518,487 | 394,606 | 398,744 | 421,309 | 412,672 | 400,784 | 469,277 | |
| Oyster, Eastern | 3,623 | 3,266 | 2,883 | 2,217 | 1,713 | 1,493 | 859 | 1,202 | 984 | 1,114 | |
| Scallop, Sea | 5,141 | 8,341 | 14,258 | 21,160 | 24,887 | 28,213 | 33,411 | 24,520 | 18,282 | 22,885 | |
| Squid | 50,294 | 24,333 | 28,238 | 15,465 | 15,187 | 10,462 | 41,622 | 12,279 | 9,744 | 8,607 | |

Average Annual Price for Key Species / Species Groups (price per pound)

| Average Annual Fil | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------------|------|------|------|------|------|------|------|------|------|------|
| Bass, Striped | 1.44 | 1.71 | 1.65 | 1.75 | 1.79 | 1.85 | 1.94 | 1.99 | 2.10 | 2.01 |
| Clam, Atlantic Surf | 0.53 | 0.51 | 0.55 | 0.57 | 0.56 | 0.55 | 0.52 | 0.53 | 0.59 | 0.60 |
| Clam, Quahog | 5.90 | 5.56 | 6.06 | 5.90 | 7.31 | 6.09 | 5.63 | 5.56 | 5.43 | 4.72 |
| Crab, Blue | 0.93 | 0.96 | 1.06 | 1.16 | 0.98 | 1.08 | 1.01 | 1.00 | 0.90 | 1.17 |
| Flounder, Summer | 1.51 | 1.62 | 1.59 | 1.37 | 1.35 | 1.46 | 1.57 | 1.61 | 1.87 | 2.29 |
| Lobster, American | 3.51 | 3.87 | 4.04 | 3.73 | 3.68 | 4.71 | 4.05 | 4.22 | 5.15 | 5.97 |
| Menhaden | 0.08 | 0.08 | 0.07 | 0.05 | 0.06 | 0.06 | 0.06 | 0.07 | 0.06 | 0.07 |
| Oyster, Eastern | 3.40 | 3.08 | 3.45 | 3.87 | 5.73 | 5.96 | 6.59 | 5.58 | 6.59 | 8.50 |
| Scallop, Sea | 5.93 | 5.05 | 4.64 | 3.56 | 3.67 | 3.97 | 4.81 | 7.39 | 6.57 | 6.42 |
| Squid | 0.39 | 0.61 | 0.47 | 0.64 | 0.61 | 0.62 | 0.34 | 0.75 | 0.79 | 0.86 |

2007 Economic Impacts of Recreational Fishing Expenditures (thousands of dollars)

| | Trips | Jobs | Total Sales | Value Added |
|------------|-----------|--------|-------------|-------------|
| Delaware | 1,295,658 | 1,784 | 273,433 | 125,328 |
| Maryland | 4,045,324 | 9,228 | 1,299,104 | 650,364 |
| New Jersey | 7,435,594 | 10,893 | 1,806,606 | 930,794 |
| New York | 6,218,085 | 6,493 | 979,186 | 511,312 |
| Virginia | 3,723,442 | 7,267 | 822,986 | 432,573 |

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

| Fishing Mode | Trip Expen | ditures | Durable Equipment Expenditures | Expenditures |
|-------------------------|-----------------|-------------|--------------------------------------|--------------|
| | Non-Residents | Residents | Fishing Tackle | 990,169 |
| Private Boat | 179,281 | 380,835 | Other Equipment | 274,792 |
| Shore | 137,808 | 178,093 | Boat Expenses | 907,688 |
| For-Hire | 62,995 | 82,581 | Vehicle Expenses | 1,359,885 |
| Total Trip Expenditures | 380,084 | 641,509 | Second Home Expenses | 303,043 |
| | | | Total Durable Equipment Expenditures | 3,835,577 |
| Total State Trip and Di | urable Equipmen | t Expenditu | res | 4,857,170 |

Recreational Anglers by Residential Area (thousands of anglers)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Coastal | 1,655 | 1,591 | 1,944 | 2,290 | 1,643 | 2,229 | 2,363 | 3,002 | 2,876 | 3,234 |
| Non-Coastal | 102 | 148 | 148 | 190 | 139 | 144 | 157 | 252 | 224 | 212 |
| Out-of-State | NA^1 |
| Total Anglers | 1,757 | 1,739 | 2,091 | 2,480 | 1,783 | 2,372 | 2,520 | 3,254 | 3,100 | 3,446 |

Recreational Fishing Effort by Mode (thousands of trips)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| For-Hire | 975 | 910 | 1,134 | 1,323 | 1,024 | 1,182 | 1,323 | 1,152 | 1,339 | 1,399 |
| Private or Rental | 8,630 | 7,935 | 11,324 | 11,982 | 9,551 | 11,286 | 11,084 | 11,730 | 12,123 | 12,551 |
| Shore | 4,848 | 5,259 | 6,993 | 7,901 | 6,071 | 7,383 | 6,327 | 7,935 | 7,895 | 8,768 |
| Total Trips | 14,453 | 14,105 | 19,451 | 21,206 | 16,646 | 19,852 | 18,734 | 20,817 | 21,357 | 22,718 |

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)

| Species/Groups | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|------------------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Bass, Striped | Н | 960 | 1,008 | 1,554 | 1,475 | 1,252 | 1,662 | 1,574 | 1,503 | 1,994 | 1,512 |
| bass, Striped | R | 4,996 | 5,815 | 6,677 | 5,464 | 5,053 | 7,802 | 8,474 | 8,009 | 9,511 | 7,114 |
| Bluefish | Н | 2,243 | 1,904 | 2,580 | 3,227 | 2,518 | 3,193 | 4,274 | 5,176 | 4,037 | 4,556 |
| Diueiisii | R | 2,462 | 4,135 | 6,311 | 6,519 | 4,579 | 4,196 | 5,793 | 7,121 | 5,513 | 7,736 |
| Drum (Atlantic | Н | 8,391 | 8,111 | 9,702 | 12,145 | 10,868 | 9,349 | 9,830 | 10,790 | 9,464 | 9,602 |
| Croaker) | R | 9,074 | 10,031 | 14,162 | 9,811 | 10,361 | 9,425 | 7,928 | 11,136 | 8,059 | 12,331 |
| Drum (Spot) | Н | 3,447 | 1,244 | 2,763 | 2,196 | 2,314 | 4,772 | 3,725 | 5,245 | 6,347 | 10,694 |
| Druin (Spot) | R | 1,623 | 975 | 1,788 | 1,562 | 1,016 | 1,657 | 1,591 | 4,163 | 2,587 | 3,933 |
| Drum (Weakfish) ² | Н | 2,151 | 1,396 | 1,876 | 1,315 | 918 | 308 | 331 | 1,125 | 497 | 276 |
| Diulii (Weakiisii) | R | 3,128 | 2,531 | 4,284 | 2,732 | 1,689 | 1,363 | 1,387 | 1,906 | 1,877 | 1,079 |
| Flounder, Summer | Н | 5,548 | 3,048 | 5,869 | 4,393 | 2,633 | 3,922 | 3,598 | 3,303 | 3,393 | 2,792 |
| Hourider, Summer | R | 14,345 | 16,109 | 15,773 | 21,881 | 11,852 | 14,902 | 15,235 | 21,311 | 15,419 | 18,489 |
| Flounder, Winter | Н | 247 | 511 | 1,317 | 795 | 362 | 541 | 331 | 196 | 248 | 209 |
| riounder, winter | R | 298 | 346 | 678 | 475 | 266 | 183 | 85 | 264 | 288 | 57 |
| Porgies (Scup) | Н | 460 | 1,129 | 3,309 | 2,058 | 1,187 | 5,271 | 1,713 | 821 | 1,528 | 1,715 |
| Porgles (Scup) | R | 585 | 312 | 1,491 | 1,983 | 1,551 | 2,379 | 2,857 | 1,839 | 3,145 | 2,296 |
| Con Page Black | Н | 1,090 | 1,275 | 3,330 | 2,636 | 3,057 | 3,033 | 1,590 | 1,060 | 1,317 | 1,515 |
| Sea Bass, Black | R | 3,684 | 5,401 | 12,381 | 10,519 | 10,328 | 8,381 | 5,668 | 5,405 | 5,966 | 7,534 |
| Wraccos (Tautos) | Н | 201 | 520 | 710 | 617 | 1,231 | 384 | 832 | 376 | 721 | 808 |
| Wrasses (Tautog) | R | 1,018 | 1,908 | 1,493 | 1,694 | 2,534 | 1,010 | 1,648 | 1,221 | 2,239 | 2,472 |

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¹Out-of-state resident information is collected for individual states but whether an angler is a resident of a region is not specified; NA = data is not available.

²This species may not be equivalent to species with similar names listed in the commercial tables.

2007 Economic Impacts of the Delaware Seafood Industry (thousands of dollars)

| | Sales Impacts | Income Impacts | Job Impacts |
|------------------------------------|---------------|----------------|-------------|
| Total Impacts | 73,890 | 39,266 | 1,582 |
| Commercial Harvesters | 15,402 | 5,349 | 294 |
| Seafood Processors & Dealers | 6,915 | 3,696 | 82 |
| Seafood Wholesalers & Distributors | 10,111 | 5,153 | 96 |
| Retail Sector | 41,461 | 25,068 | 1,110 |

Total Landings Revenue and Landings Revenue of Key Species/Species Groups (thousands of dollars)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-----------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|--------|
| Total Revenue | 5,837 | 6,800 | 6,833 | 7,660 | 6,067 | 5,204 | 5,234 | 6,113 | 5,692 | 7,578 |
| Finfish & Other | 1,464 | 1,617 | 1,379 | 1,080 | 986 | 1,465 | 1,121 | 1,273 | 1,330 | 1,294 |
| Shellfish | 4,374 | 5,183 | 5,454 | 6,580 | 5,081 | 3,739 | 4,113 | 4,840 | 4,361 | 6,284 |
| Bass, Striped | 245 | 271 | 245 | 365 | 336 | 479 | 497 | 494 | 507 | 429 |
| Clam, Quahog | 218 | 215 | 243 | 233 | 392 | 435 | 175 | 220 | 193 | ND^1 |
| Crab, Blue | 4,018 | 4,599 | 5,086 | 5,140 | 3,511 | 1,899 | 2,839 | 3,429 | 2,961 | 5,007 |
| Eel, American | 296 | 182 | 192 | 126 | 118 | 230 | 167 | 100 | 275 | 313 |
| Oyster, Eastern | ND^1 | ND^1 | ND^1 | 172 | 478 | 305 | 361 | 485 | 459 | 466 |
| Scallop, Sea | ND^1 | ND^1 | ND^1 | ND^1 | ND^1 | ND^1 | 7 | 102 | 121 | ND^1 |
| Sea Bass, Black | ND^1 | ND^1 | 142 | 42 | 21 | 181 | 48 | 157 | 190 | 201 |
| Spot | 60 | 24 | 17 | 51 | 8 | 46 | 38 | 98 | 58 | 99 |
| Weakfish | 337 | 352 | 318 | 133 | 176 | 83 | 61 | 82 | 56 | 36 |
| Whelks | 121 | 330 | 113 | 1,015 | 694 | 1,079 | 690 | 562 | 601 | ND^1 |

Total Landings and Landings of Key Species / Species Groups (thousands of pounds)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-----------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|--------|
| Total Landings | 7,866 | 8,372 | 6,741 | 7,140 | 5,857 | 5,018 | 4,208 | 4,851 | 4,380 | 5,089 |
| Finfish & Other | 3,344 | 3,129 | 2,497 | 2,078 | 1,933 | 2,264 | 1,279 | 1,470 | 1,156 | 1,068 |
| Shellfish | 4,523 | 5,243 | 4,244 | 5,062 | 3,925 | 2,754 | 2,929 | 3,381 | 3,224 | 4,020 |
| Bass, Striped | 163 | 176 | 145 | 199 | 146 | 191 | 176 | 174 | 184 | 188 |
| Clam, Quahog | 74 | 70 | 76 | 64 | 134 | 141 | 54 | 69 | 60 | ND^1 |
| Crab, Blue | 4,360 | 4,993 | 4,092 | 4,085 | 3,062 | 1,792 | 2,276 | 2,924 | 2,856 | 3,580 |
| Eel, American | 131 | 129 | 119 | 121 | 90 | 156 | 137 | 110 | 120 | 136 |
| Oyster, Eastern | ND^1 | ND^1 | ND^1 | 78 | 133 | 76 | 79 | 84 | 75 | 76 |
| Scallop, Sea | ND^1 | ND^1 | ND^1 | ND^1 | ND^1 | ND^1 | 1 | 13 | 20 | ND^1 |
| Sea Bass, Black | ND^1 | ND^1 | 94 | 25 | 12 | 98 | 20 | 73 | 87 | 73 |
| Spot | 140 | 52 | 32 | 78 | 14 | 77 | 59 | 155 | 63 | 128 |
| Weakfish | 553 | 440 | 329 | 188 | 173 | 91 | 51 | 71 | 34 | 25 |
| Whelks | 75 | 162 | 65 | 828 | 590 | 729 | 491 | 276 | 203 | ND^1 |

Average Annual Price for Key Species / Species Groups (price per pound)

| | | .00 / Opo | | | o por po | | | | |
|--------|--|---|--|--|--|--|---|--|---|
| 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| 1.50 | 1.53 | 1.69 | 1.84 | 2.30 | 2.50 | 2.82 | 2.84 | 2.75 | 2.28 |
| 2.97 | 3.07 | 3.21 | 3.67 | 2.92 | 3.09 | 3.26 | 3.18 | 3.22 | ND^1 |
| 0.92 | 0.92 | 1.24 | 1.26 | 1.15 | 1.06 | 1.25 | 1.17 | 1.04 | 1.40 |
| 2.25 | 1.41 | 1.61 | 1.04 | 1.31 | 1.48 | 1.22 | 0.91 | 2.28 | 2.30 |
| ND^1 | ND^1 | ND^1 | 2.21 | 3.60 | 4.00 | 4.57 | 5.76 | 6.10 | 6.14 |
| ND^1 | ND^1 | ND^1 | ND^1 | ND^1 | ND^1 | 5.05 | 8.08 | 6.19 | ND^1 |
| ND^1 | ND^1 | 1.52 | 1.66 | 1.69 | 1.86 | 2.35 | 2.15 | 2.18 | 2.76 |
| 0.43 | 0.47 | 0.52 | 0.66 | 0.59 | 0.60 | 0.65 | 0.63 | 0.92 | 0.78 |
| 0.61 | 0.80 | 0.97 | 0.71 | 1.02 | 0.91 | 1.18 | 1.16 | 1.63 | 1.46 |
| 1.61 | 2.04 | 1.73 | 1.23 | 1.18 | 1.48 | 1.41 | 2.04 | 2.96 | ND^1 |
| | 1.50 2.97 0.92 2.25 ND ¹ ND ¹ 0.43 0.61 | 1.50 1.53 2.97 3.07 0.92 0.92 2.25 1.41 ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ 0.43 0.47 0.61 0.80 | 1.50 1.53 1.69 2.97 3.07 3.21 0.92 0.92 1.24 2.25 1.41 1.61 ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ 1.52 0.43 0.47 0.52 0.61 0.80 0.97 | 1.50 1.53 1.69 1.84 2.97 3.07 3.21 3.67 0.92 0.92 1.24 1.26 2.25 1.41 1.61 1.04 ND¹ ND¹ ND¹ 2.21 ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ 1.52 1.66 0.43 0.47 0.52 0.66 0.61 0.80 0.97 0.71 | 1.50 1.53 1.69 1.84 2.30 2.97 3.07 3.21 3.67 2.92 0.92 0.92 1.24 1.26 1.15 2.25 1.41 1.61 1.04 1.31 ND¹ ND¹ ND¹ 2.21 3.60 ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ 1.52 1.66 1.69 0.43 0.47 0.52 0.66 0.59 0.61 0.80 0.97 0.71 1.02 | 1.50 1.53 1.69 1.84 2.30 2.50 2.97 3.07 3.21 3.67 2.92 3.09 0.92 0.92 1.24 1.26 1.15 1.06 2.25 1.41 1.61 1.04 1.31 1.48 ND¹ ND¹ ND¹ 2.21 3.60 4.00 ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ 1.52 1.66 1.69 1.86 0.43 0.47 0.52 0.66 0.59 0.60 0.61 0.80 0.97 0.71 1.02 0.91 | 1.50 1.53 1.69 1.84 2.30 2.50 2.82 2.97 3.07 3.21 3.67 2.92 3.09 3.26 0.92 0.92 1.24 1.26 1.15 1.06 1.25 2.25 1.41 1.61 1.04 1.31 1.48 1.22 ND¹ ND¹ ND¹ 2.21 3.60 4.00 4.57 ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ 5.05 ND¹ ND¹ 1.52 1.66 1.69 1.86 2.35 0.43 0.47 0.52 0.66 0.59 0.60 0.65 0.61 0.80 0.97 0.71 1.02 0.91 1.18 | 1.50 1.53 1.69 1.84 2.30 2.50 2.82 2.84 2.97 3.07 3.21 3.67 2.92 3.09 3.26 3.18 0.92 0.92 1.24 1.26 1.15 1.06 1.25 1.17 2.25 1.41 1.61 1.04 1.31 1.48 1.22 0.91 ND¹ ND¹ ND¹ 2.21 3.60 4.00 4.57 5.76 ND¹ ND¹ ND¹ ND¹ ND¹ ND¹ 5.05 8.08 ND¹ ND¹ 1.52 1.66 1.69 1.86 2.35 2.15 0.43 0.47 0.52 0.66 0.59 0.60 0.65 0.63 0.61 0.80 0.97 0.71 1.02 0.91 1.18 1.16 | 1.50 1.53 1.69 1.84 2.30 2.50 2.82 2.84 2.75 2.97 3.07 3.21 3.67 2.92 3.09 3.26 3.18 3.22 0.92 0.92 1.24 1.26 1.15 1.06 1.25 1.17 1.04 2.25 1.41 1.61 1.04 1.31 1.48 1.22 0.91 2.28 ND¹ ND¹ ND¹ 2.21 3.60 4.00 4.57 5.76 6.10 ND¹ ND¹ ND¹ ND¹ ND¹ 5.05 8.08 6.19 ND¹ ND¹ ND¹ ND¹ ND¹ 5.05 8.08 6.19 ND¹ ND¹ 1.52 1.66 1.69 1.86 2.35 2.15 2.18 0.43 0.47 0.52 0.66 0.59 0.60 0.65 0.63 0.92 0.61 0.80 0.97 0.71 1.02 0.91 < |

¹ND = data is confidential thus not disclosable.

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| Impact Category | Jobs | Total Sales | Value Added |
|---|-------|-------------|-------------|
| Trip Impacts by Fishing Mode: | | | |
| Private Boat | 374 | 44,115 | 21,992 |
| Shore Mode | 416 | 39,967 | 21,226 |
| For-Hire | 82 | 7,776 | 4,446 |
| Total Durable Equipment Impacts | 912 | 181,574 | 77,663 |
| Total State Trip and Durable Equipment Economic Impacts | 1,784 | 273,433 | 125,328 |

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

| <u> </u> | | | , | |
|-------------------------|-----------------|-----------|--------------------------------------|--------------|
| Fishing Mode | Trip Expend | ditures | Durable Equipment Expenditures | Expenditures |
| | Non-Residents | Residents | Fishing Tackle | 43,650 |
| Private Boat | 24,515 | 14,573 | Other Equipment | 13,644 |
| Shore | 27,400 | 7,962 | Boat Expenses | 14,108 |
| For-Hire | 3,938 | 1,693 | Vehicle Expenses | 136,522 |
| Total Trip Expenditures | 55,853 | 24,228 | Second Home Expenses | 12,317 |
| | | | Total Durable Equipment Expenditures | 220,241 |
| Total State Trip and Du | rable Equipment | Expenditu | es | 300,322 |

Recreational Anglers by Residential Area (thousands of anglers)¹

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Coastal | 103 | 69 | 82 | 107 | 89 | 127 | 116 | 120 | 137 | 150 |
| Non-Coastal | NA^2 |
| Out-of-State | 188 | 168 | 201 | 226 | 177 | 199 | 243 | 191 | 205 | 224 |
| Total Anglers | 291 | 237 | 283 | 333 | 266 | 326 | 359 | 311 | 342 | 374 |

Recreational Fishing Effort by Mode (thousands of trips)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| For-Hire | 31 | 43 | 42 | 71 | 63 | 38 | 65 | 48 | 42 | 53 |
| Private or Rental | 419 | 383 | 606 | 672 | 535 | 552 | 679 | 568 | 671 | 731 |
| Shore | 469 | 375 | 448 | 436 | 429 | 514 | 434 | 459 | 465 | 512 |
| Total Trips | 920 | 800 | 1,096 | 1,180 | 1,028 | 1,104 | 1,177 | 1,074 | 1,179 | 1,296 |

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)3

| haivest (h) and kelease (k) of key species 7 species groups (humber of hish in thousands) | | | | | | | | | | | |
|---|---|------|-------|------|-------|-------|------|------|------|-------|-------|
| Species/Groups | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| Bass, Striped | Н | 19 | 9 | 40 | 41 | 29 | 30 | 25 | 20 | 19 | 10 |
| bass, Surpeu | R | 185 | 106 | 152 | 163 | 115 | 169 | 151 | 225 | 246 | 251 |
| Bluefish | Н | 150 | 84 | 132 | 102 | 117 | 89 | 136 | 152 | 96 | 172 |
| Didensii | R | 275 | 323 | 303 | 221 | 435 | 120 | 322 | 217 | 322 | 479 |
| Drum (Atlantic | Н | 391 | 663 | 518 | 312 | 262 | 341 | 494 | 934 | 863 | 401 |
| Croaker) | R | 840 | 1,017 | 695 | 285 | 361 | 655 | 483 | 761 | 1,034 | 618 |
| Drum (Weakfish) ⁴ | Н | 456 | 224 | 312 | 72 | 122 | 20 | 7 | 19 | 11 | 4 |
| Diulii (Weakiisii) | R | 614 | 372 | 465 | 227 | 101 | 39 | 79 | 111 | 121 | 19 |
| Flounder, Summer | Н | 219 | 181 | 336 | 146 | 107 | 106 | 124 | 91 | 110 | 118 |
| Flourider, Summer | R | 736 | 433 | 797 | 1,051 | 498 | 415 | 850 | 841 | 534 | 1,096 |
| Mackerel, Atlantic | Н | 5 | (1) | 1 | 23 | 6 | (1) | 7 | (1) | (1) | (1) |
| Mackerer, Adamic | R | (1) | (1) | (1) | 1 | 1 | (1) | (1) | (1) | (1) | (1) |
| Perch, White | Н | 63 | 107 | 48 | 44 | 40 | 30 | 63 | 43 | 65 | 27 |
| reich, white | R | 175 | 312 | 140 | 117 | 72 | 134 | 187 | 116 | 147 | 143 |
| Sea Bass, Black | Н | 52 | 41 | 151 | 203 | 607 | 307 | 106 | 62 | 128 | 76 |
| Sea Dass, Diack | R | 284 | 213 | 820 | 1,003 | 1,233 | 832 | 448 | 250 | 460 | 544 |
| Tuna, Yellowfin | Н | 1 | (1) | 6 | 16 | 10 | 2 | 1 | 3 | 2 | (1) |
| Tulia, Tellowilli | R | (1) | (1) | (1) | 1 | (1) | (1) | (1) | (1) | (1) | (1) |
| Wrasses (Tautog) | Н | 63 | 95 | 114 | 51 | 186 | 63 | 143 | 72 | 117 | 89 |
| wrasses (rautog) | R | 169 | 202 | 324 | 209 | 412 | 167 | 263 | 251 | 216 | 267 |

²All Delaware residents are considered coastal county residents thus this category is not applicable (NA). ³In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.

 $^{^{1}}$ In this table, "(1)" = 0-999 anglers.

⁴This species may not be equivalent to species with similar names listed in the commercial tables.

Delaware's State Economy (% of national total)

| | Establishments | Employees | | Employee Compensation (\$ millions) | Gross State Product (\$ millions) | Commercial Location Quotient ¹ |
|----------|----------------|----------------|---------------|---|---|---|
| 1998 | 22,871 (0.3%) | 354,643 (0.3%) | 11,831 (0.4%) | 19,738 (0.3%) ² | 36,831 (0.4%) | ND^3 |
| 2006 | 25,613 (0.3%) | 388,250 (0.3%) | 17,449 (0.4%) | 25,263 (0.3%) | 59,589 (0.5%) | ND |
| % change | 12.0% | 9.5% | 47.5% | 28.0% | 61.8% | |

Seafood Sales & Processing - Nonemployer Firms (thousands of dollars)

| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|-------------------------|----------|-----------------|------|------|------|------|------|------|-------|------|
| Seafood product | Firms | NA ⁴ | NA | NA | NA | NA | NA | NA | 3 | 3 |
| preparation & packaging | Receipts | NA | NA | NA | ND | ND | ND | ND | 64 | 214 |
| Seafood sales, | Firms | 6 | 4 | NA | 5 | 5 | 7 | 9 | 12 | 9 |
| retail | Receipts | 676 | 562 | ND | 214 | 435 | 959 | 803 | 1,523 | 835 |

Seafood Sales & Processing – Employer Establishments (thousands of dollars)

| ocaroca carco a | | | | (,,,, | | | | | | |
|-----------------------------|----------------|------|-------|-------|-------|-------|------|-------|-------|-------|
| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| Seafood product | Establishments | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| preparation & | Employees | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| packaging | Payroll | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Confood calos | Establishments | 7 | 5 | 4 | 5 | 7 | 5 | 2 | 3 | 3 |
| Seafood sales, wholesale | Employees | ND | ND | ND | ND | 65 | ND | ND | ND | 9 |
| Wilolesale | Payroll | ND | ND | ND | ND | 2,279 | ND | ND | ND | 337 |
| Confood calos | Establishments | 11 | 11 | 13 | 12 | 15 | 18 | 16 | 14 | 17 |
| Seafood sales, retail | Employees | ND | 64 | ND | 65 | 94 | ND | 144 | 138 | 135 |
| retair | Payroll | ND | 1,123 | ND | 1,243 | 1,779 | ND | 3,363 | 3,264 | 3,133 |

Transport, Support, & Marine Operations - Employer Establishments (thousands of dollars)

| Trainsport, capp | ort, & Marine O | oci ations | Linpidy | or Establis | Autonica (| triousaria | or admar | | | |
|--------------------------|-----------------|------------|---------|-------------|------------|------------|----------|------|------|--------|
| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| Coastal & Great | Establishments | 1 | 1 | 1 | 4 | 8 | 5 | 3 | 3 | 3 |
| Lakes freight | Employees | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| transportation | Payroll | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Deep sea | Establishments | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 1 | NA |
| freight | Employees | ND | ND | ND | ND | ND | ND | ND | ND | NA |
| transportation | Payroll | ND | ND | ND | ND | ND | ND | ND | ND | NA |
| Deep sea | Establishments | 1 | 1 | 1 | 1 | 1 | NA | NA | 1 | NA |
| passenger | Employees | ND | ND | ND | ND | ND | NA | NA | ND | NA |
| transportation | Payroll | ND | ND | ND | ND | ND | NA | NA | ND | NA |
| | Establishments | 15 | 12 | 14 | 12 | 13 | 17 | 17 | 16 | 18 |
| Marinas | Employees | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | Payroll | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | Establishments | 5 | 6 | 6 | 5 | 6 | 5 | 5 | 4 | 4 |
| Marine cargo handling | Employees | ND | ND | 272 | 257 | 199 | 513 | ND | ND | 597 |
| nananng | Payroll | ND | ND | 4,570 | 4,482 | 14,718 | 14,879 | ND | ND | 18,812 |
| Navigational | Establishments | 9 | 9 | 8 | 10 | 10 | 10 | 9 | 9 | 8 |
| services to | Employees | 69 | ND | ND | ND | ND | ND | ND | ND | 75 |
| shipping | Payroll | 3,057 | ND | ND | ND | ND | ND | ND | ND | 4,783 |
| D 101 1 | Establishments | NA | NA | NA | NA | NA | 1 | 2 | 2 | 3 |
| Port & harbor operations | Employees | NA | NA | NA | NA | NA | ND | ND | ND | ND |
| operations | Payroll | NA | NA | NA | NA | NA | ND | ND | ND | ND |
| Chin O hant | Establishments | 4 | 4 | 4 | 3 | 1 | 1 | 1 | 1 | 1 |
| Ship & boat building | Employees | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | Payroll | ND | ND | ND | ND | ND | ND | ND | ND | ND |

 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

 $^{^{3}}ND$ = Data are suppressed due to confidentiality restrictions.

⁴NA = Data are not available.

2007 Economic Impacts of the Maryland Seafood Industry (thousands of dollars)

| | Sales Impacts | Income Impacts | Employment Impacts |
|------------------------------------|---------------|----------------|-----------------------|
| Total Impacts | 594,294 | 298,185 | 11,041 |
| Commercial Harvesters | 117,757 | 40,545 | 2,502 |
| Seafood Processors & Dealers | 88,672 | 38,219 | 983 |
| Seafood Wholesalers & Distributors | 140,584 | 70,530 | 1,295 |
| Retail Sector | 247,282 | 148,890 | 6,262 |

Total Landings Revenue and Landings Revenue of Key Species/Species Groups (thousands of dollars)

| | an Earlainigs Revenue and Earlainigs Revenue of Rey openies, openies of cups (mousanus er dem | | | | | | | | | |
|-------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| Total Revenue | 57,962 | 62,927 | 53,874 | 55,591 | 49,013 | 49,038 | 49,294 | 63,670 | 53,581 | 52,273 |
| Finfish & Other | 10,958 | 11,278 | 10,010 | 8,574 | 8,135 | 8,095 | 4,763 | 10,718 | 9,897 | 11,010 |
| Shellfish | 47,003 | 51,649 | 43,864 | 47,017 | 40,878 | 40,943 | 44,531 | 52,952 | 43,685 | 41,263 |
| Bass, Striped | 3,717 | 3,886 | 4,216 | 3,418 | 3,759 | 3,916 | 1,576 | 4,234 | 4,591 | 5,307 |
| Clams or Bivalves | 4,817 | 5,221 | 5,094 | 8,073 | 8,002 | 5,170 | 2,579 | 4,784 | 4,889 | 5,074 |
| Crab, Blue | 34,269 | 38,859 | 30,843 | 34,681 | 30,338 | 34,532 | 39,104 | 39,962 | 31,141 | 30,444 |
| Croaker, Atlantic | 453 | 482 | 569 | 676 | 512 | 576 | 751 | 543 | 440 | 269 |
| Flounder, Summer | ND^1 | ND^1 | ND^1 | ND^1 | ND^1 | 527 | ND^1 | 673 | 549 | ND^1 |
| Menhaden | 426 | 463 | 523 | 382 | 423 | 337 | 232 | 1,514 | 609 | 1,203 |
| Oyster, Eastern | 7,635 | 7,111 | 7,192 | 3,789 | 2,172 | 706 | 181 | 3,435 | 1,238 | 2,524 |
| Perch, White | 884 | 763 | 941 | 801 | 559 | 556 | 347 | 848 | 569 | 420 |
| Scallop, Sea | 14 | 24 | 108 | 108 | 96 | ND^1 | 418 | 4,513 | 6,200 | 2,809 |
| Sea Bass, Black | 451 | 681 | 475 | 244 | 436 | 555 | ND^1 | 706 | 811 | ND^1 |

Total Landings and Landings of Key Species / Species Groups (thousands of pounds)

| | | , | | | | | | | | |
|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| Total Landings | 61,479 | 66,419 | 48,913 | 55,539 | 53,185 | 49,350 | 49,557 | 67,460 | 51,227 | 48,575 |
| Finfish & Other | 21,405 | 21,666 | 16,164 | 16,089 | 15,275 | 13,468 | 8,103 | 24,977 | 12,720 | 18,054 |
| Shellfish | 40,074 | 44,754 | 32,749 | 39,450 | 37,909 | 35,882 | 41,454 | 42,483 | 38,507 | 30,521 |
| Bass, Striped | 2,883 | 2,430 | 2,705 | 2,049 | 2,085 | 2,193 | 897 | 2,339 | 2,485 | 2,627 |
| Clams or Bivalves | 6,454 | 6,644 | 7,111 | 11,911 | 10,663 | 7,527 | 3,676 | 6,112 | 7,756 | 7,948 |
| Crab, Blue | 30,870 | 35,371 | 22,847 | 25,933 | 26,481 | 27,816 | 33,826 | 34,914 | 29,446 | 21,386 |
| Croaker, Atlantic | 1,376 | 1,584 | 1,502 | 2,233 | 1,513 | 1,532 | 1,801 | 1,389 | 877 | 467 |
| Flounder, Summer | ND^1 | ND^1 | ND^1 | ND^1 | ND^1 | 329 | ND^1 | 333 | 248 | ND^1 |
| Menhaden | 4,464 | 5,721 | 4,871 | 4,619 | 4,850 | 4,232 | 3,336 | 15,806 | 5,263 | 11,431 |
| Oyster, Eastern | 2,461 | 2,440 | 2,368 | 1,274 | 567 | 159 | 43 | 738 | 274 | 259 |
| Perch, White | 1,457 | 1,516 | 1,921 | 1,947 | 1,583 | 1,477 | 453 | 1,524 | 688 | 712 |
| Scallop, Sea | 2 | 4 | 21 | 28 | 27 | ND^1 | 93 | 584 | 931 | 450 |
| Sea Bass, Black | 315 | 439 | 305 | 150 | 280 | 313 | ND^1 | 330 | 350 | ND^1 |

Average Annual Price for Key Species / Species Groups (price per pound)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------|--------|--------|--------|--------|--------|--------|--------|------|------|--------|
| Bass, Striped | 1.29 | 1.60 | 1.56 | 1.67 | 1.80 | 1.79 | 1.76 | 1.81 | 1.85 | 2.02 |
| Clams or Bivalves | 0.75 | 0.79 | 0.72 | 0.68 | 0.75 | 0.69 | 0.70 | 0.78 | 0.63 | 0.64 |
| Crab, Blue | 1.11 | 1.10 | 1.35 | 1.34 | 1.15 | 1.24 | 1.16 | 1.14 | 1.06 | 1.42 |
| Croaker, Atlantic | 0.33 | 0.30 | 0.38 | 0.30 | 0.34 | 0.38 | 0.42 | 0.39 | 0.50 | 0.58 |
| Flounder, Summer | ND^1 | ND^1 | ND^1 | ND^1 | ND^1 | 1.60 | ND^1 | 2.02 | 2.22 | ND^1 |
| Menhaden | 0.10 | 0.08 | 0.11 | 0.08 | 0.09 | 0.08 | 0.07 | 0.10 | 0.12 | 0.11 |
| Oyster, Eastern | 3.10 | 2.91 | 3.04 | 2.97 | 3.83 | 4.45 | 4.23 | 4.66 | 4.52 | 9.73 |
| Perch, White | 0.61 | 0.50 | 0.49 | 0.41 | 0.35 | 0.38 | 0.77 | 0.56 | 0.83 | 0.59 |
| Scallop, Sea | 6.64 | 6.61 | 5.10 | 3.81 | 3.52 | ND^1 | 4.48 | 7.72 | 6.66 | 6.25 |
| Sea Bass, Black | 1.43 | 1.55 | 1.56 | 1.62 | 1.56 | 1.77 | ND^1 | 2.14 | 2.31 | ND^1 |

 1 ND = data is confidential thus not disclosable.

| Impact Category | Jobs | Total Sales | Value Added |
|---|-------|-------------|-------------|
| Trip Impacts by Fishing Mode: | | | |
| Private Boat | 839 | 90,426 | 55,135 |
| Shore | 1,140 | 105,619 | 62,298 |
| For-Hire | 442 | 38,387 | 22,566 |
| Total Durable Equipment Impacts | 6,806 | 1,064,672 | 510,366 |
| Total State Trip and Durable Equipment Economic Impacts | 9,228 | 1,299,104 | 650,364 |

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

| Fishing Mode | Trip Expend | ditures | Durable Equipment Expenditures | Expenditures | | | | |
|---|---------------|-----------|--------------------------------------|--------------|--|--|--|--|
| | Non-Residents | Residents | Fishing Tackle | 251,487 | | | | |
| Private Boat | 26,290 | 60,706 | Other Equipment | 60,207 | | | | |
| Shore | 54,190 | 33,799 | Boat Expenses | 165,596 | | | | |
| For-Hire | 10,578 | 15,317 | Vehicle Expenses | 548,320 | | | | |
| Total Trip Expenditures | 91,058 | 109,822 | Second Home Expenses | 136,653 | | | | |
| | | | Total Durable Equipment Expenditures | 1,162,263 | | | | |
| Total State Trip and Durable Equipment Expenditures | | | | | | | | |

Recreational Anglers by Residential Area (thousands of anglers)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------|------|------|------|-------|------|------|------|-------|-------|-------|
| Coastal | 423 | 383 | 461 | 565 | 430 | 526 | 442 | 620 | 733 | 850 |
| Non-Coastal | 29 | 41 | 51 | 50 | 41 | 53 | 39 | 49 | 84 | 78 |
| Out-of-State | 307 | 349 | 481 | 426 | 330 | 418 | 333 | 425 | 447 | 528 |
| Total Anglers | 759 | 773 | 994 | 1,041 | 801 | 997 | 815 | 1,095 | 1,264 | 1,456 |

Recreational Fishing Effort by Mode (thousands of trips)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| For-Hire | 160 | 126 | 204 | 174 | 182 | 187 | 264 | 181 | 235 | 219 |
| Private or Rental | 1,554 | 1,413 | 2,204 | 2,340 | 1,596 | 2,033 | 1,499 | 1,933 | 1,980 | 2,440 |
| Shore | 1,124 | 1,343 | 1,442 | 1,275 | 1,059 | 1,110 | 881 | 1,066 | 1,374 | 1,387 |
| Total Trips | 2,839 | 2,883 | 3,851 | 3,790 | 2,837 | 3,330 | 2,645 | 3,180 | 3,589 | 4,045 |

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)1

| () | - | (, | ا رد | | | | • | - | | 490 649 3,753 3,896 2, | | |
|------------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|---------------------------|-------|--|
| Species/Groups | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | |
| Bass, Striped | Н | 392 | 263 | 506 | 383 | 282 | 525 | 380 | 490 | 649 | 679 | |
| bass, Surpeu | R | 2,642 | 2,388 | 3,245 | 2,890 | 2,929 | 4,653 | 3,739 | 3,753 | 3,896 | 2,998 | |
| Bluefish | Н | 284 | 167 | 344 | 429 | 199 | 214 | 373 | 240 | 509 | 705 | |
| Didensii | R | 492 | 605 | 1,150 | 1,074 | 577 | 518 | 683 | 344 | 850 | 1,381 | |
| Drum (Atlantic | Н | 1,126 | 1,210 | 2,675 | 1,320 | 1,223 | 1,620 | 871 | 810 | 833 | 1,093 | |
| Croaker) | R | 3,022 | 2,484 | 4,968 | 1,586 | 2,523 | 1,393 | 819 | 951 | 1,792 | 1,631 | |
| Drum (Spot) | Н | 1,327 | 655 | 1,390 | 1,089 | 691 | 3,301 | 1,375 | 2,007 | 2,645 | 3,843 | |
| Druin (Spot) | R | 634 | 619 | 1,080 | 577 | 501 | 670 | 577 | 2,186 | 1,467 | 1,422 | |
| Drum (Weakfish) ² | Н | 290 | 340 | 475 | 303 | 100 | 41 | 30 | 22 | (1) | 10 | |
| Diulii (Weakiisii) | R | 462 | 753 | 1,209 | 737 | 286 | 181 | 132 | 55 | 57 | 106 | |
| Flounder, Summer | Н | 206 | 227 | 258 | 139 | 69 | 41 | 66 | 85 | 58 | 157 | |
| Hounder, Summer | R | 1,716 | 1,012 | 1,513 | 1,245 | 383 | 373 | 952 | 433 | 511 | 1,626 | |
| Perch, White | Н | 1,692 | 838 | 1,611 | 565 | 1,156 | 2,020 | 1,441 | 2,436 | 2,558 | 2,990 | |
| reicii, willite | R | 2,886 | 2,098 | 3,721 | 1,583 | 1,754 | 3,698 | 3,035 | 5,394 | 4,331 | 5,101 | |
| Sea Bass, Black | Н | 354 | 160 | 434 | 119 | 337 | 241 | 158 | 81 | 104 | 53 | |
| Sea Dass, Diack | R | 754 | 1,487 | 3,224 | 2,324 | 925 | 773 | 618 | 784 | 799 | 1,331 | |
| Tuna, Yellowfin | Н | 20 | 8 | 9 | 26 | 18 | 26 | 4 | 11 | 21 | 7 | |
| Tulia, Tellowilli | R | 3 | 1 | (1) | 2 | (1) | (1) | (1) | 2 | (1) | 1 | |
| Wraccoc (Tauton) | Н | 7 | 20 | 20 | 24 | 42 | 14 | 14 | 40 | 14 | 107 | |
| l Wrasses (Tauton) 🕒 | R | 29 | 183 | 128 | 138 | 295 | 96 | 36 | 255 | 211 | 390 | |

 $^{^{1}}$ In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.

²This species may not be equivalent to species with similar names listed in the commercial tables.

Maryland's State Economy (% of national total)

| | Establishments | Employees | Annual Payroll (\$ millions) | Employee Compensation (\$ millions) | Gross State Product (\$ millions) | Commercial Location Quotient ¹ |
|----------|----------------|------------------|------------------------------|---|---|---|
| 1998 | 126,577 (1.8%) | 1,938,727 (1.8%) | 59,818 (1.8%) | 119,732 (2.0%) ² | 161,954 (1.9%) | 0.74 |
| 2006 | 140,292 (1.9%) | 2,232,215 (1.9%) | 93,719 (2.0%) | 156,004 (2.1%) | 257,577 (2.0%) | 0.71 |
| % change | 10.8% | 15.1% | 56.7% | 30.3% | 59.0% | -4.1% |

Seafood Sales & Processing - Nonemployer Firms (thousands of dollars)

| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|----------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
| Seafood product preparation & packaging | Firms | 28 | 25 | 28 | 25 | 50 | 47 | 51 | 57 | 55 |
| | Receipts | 1,563 | 2,027 | 1,325 | 1,997 | 3,199 | 2,487 | 2,301 | 2,727 | 2,751 |
| Seafood sales, | Firms | 65 | 71 | 71 | 62 | 79 | 78 | 70 | 78 | 73 |
| retail | Receipts | 5,433 | 6,856 | 7,012 | 5,904 | 8,629 | 6,771 | 10,100 | 6,976 | 7,755 |

Seafood Sales & Processing - Employer Establishments (thousands of dollars)

| beared a tree at tree coninginprejercalculation to (include a tree at a contract) | | | | | | | | | | |
|---|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| Seafood product | Establishments | 28 | 27 | 27 | 26 | 24 | 23 | 23 | 23 | 19 |
| preparation & | Employees | 1,006 | 967 | 894 | 889 | 807 | 762 | 895 | 1,141 | 1,053 |
| packaging | Payroll | 21,651 | 22,947 | 22,309 | 23,686 | 20,618 | 20,399 | 23,039 | 24,986 | 28,852 |
| Coofeed color | Establishments | 94 | 93 | 92 | 94 | 77 | 63 | 58 | 59 | 59 |
| Seafood sales, wholesale | Employees | 1,001 | 950 | 903 | 913 | 870 | 686 | 733 | 709 | 694 |
| Wilolesale | Payroll | 23,498 | 24,214 | 26,940 | 28,847 | 33,072 | 27,934 | 29,813 | 30,148 | 32,943 |
| Carfa al anta | Establishments | 65 | 65 | 71 | 78 | 88 | 97 | 96 | 95 | 97 |
| Seafood sales, retail | Employees | 375 | 399 | 474 | 475 | 488 | 459 | 579 | 576 | 617 |
| | Payroll | 6,801 | 7,786 | 8,309 | 8,853 | 10,033 | 10,634 | 12,328 | 13,019 | 14,190 |

Transport, Support, & Marine Operations - Employer Establishments (thousands of dollars)

| Transport/ Cupp | ort, a marme c | po. a | | 0. =0.00 | orninornio (| (thousands of dollars) | | | | |
|---------------------------------|----------------|-----------------|--------|----------|--------------|------------------------|--------|--------|--------|--------|
| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| Coastal & Great | Establishments | 7 | 9 | 9 | 10 | 8 | 9 | 11 | 10 | 10 |
| Lakes freight | Employees | ND^3 | ND | 155 | 178 | ND | ND | ND | ND | ND |
| transportation | Payroll | ND | ND | 7,372 | 7,969 | ND | ND | ND | ND | ND |
| 5 () 1 (| Establishments | 11 | 12 | 12 | 12 | 14 | 16 | 15 | 16 | 14 |
| Deep sea freight transportation | Employees | 104 | ND | ND | ND | 123 | ND | 281 | 316 | ND |
| transportation | Payroll | 5,501 | ND | ND | ND | 9,216 | ND | 18,983 | 14,131 | ND |
| Deep sea | Establishments | NA ⁴ | NA | 1 | 1 | 4 | 3 | 2 | 1 | 1 |
| passenger | Employees | NA | NA | ND | ND | ND | ND | ND | ND | ND |
| transportation | Payroll | NA | NA | ND | ND | ND | ND | ND | ND | ND |
| | Establishments | 193 | 196 | 187 | 185 | 188 | 180 | 183 | 185 | 179 |
| Marinas | Employees | 1,142 | 1,103 | 1,172 | 1,240 | 1,232 | 1,296 | 1,321 | 1,228 | 1,260 |
| | Payroll | 26,924 | 28,289 | 30,207 | 32,088 | 33,621 | 34,024 | 36,598 | 36,590 | 40,866 |
| | Establishments | 17 | 14 | 13 | 15 | 16 | 14 | 11 | 12 | 13 |
| Marine cargo handling | Employees | 1,824 | 1,794 | 1,751 | 1,505 | 1,487 | 1,862 | 1,725 | 1,639 | 1,659 |
| Handing | Payroll | 68,008 | 60,105 | 60,915 | 63,172 | 66,525 | 69,084 | 75,911 | 81,219 | 73,367 |
| Navigational | Establishments | 13 | 13 | 12 | 13 | 13 | 11 | 8 | 9 | 9 |
| services to | Employees | ND | 311 | ND | 275 | ND | 195 | ND | ND | ND |
| shipping | Payroll | ND | 13,125 | ND | 18,710 | ND | 38,619 | ND | ND | ND |
| | Establishments | 4 | 4 | 4 | 4 | 7 | 8 | 10 | 11 | 11 |
| Port & harbor operations | Employees | 217 | 236 | ND | 319 | 259 | 376 | 479 | ND | ND |
| operations | Payroll | 6,109 | 8,708 | ND | 9,545 | 11,655 | 16,099 | 19,218 | ND | ND |
| | Establishments | 41 | 36 | 38 | 40 | 44 | 55 | 58 | 57 | 55 |
| Ship & boat | Employees | 1,697 | 1,902 | ND | 1,421 | 1,223 | 1,426 | 1,022 | ND | 1,119 |
| building | Payroll | 51,552 | 56,547 | ND | 48,561 | 40,743 | 36,444 | 35,364 | ND | 33,463 |

 $^{^{1}}$ The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared. 2 Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

 $^{^{3}}ND$ = Data are suppressed due to confidentiality restrictions.

⁴NA = Data are not available.

2007 Economic Impacts of the New Jersey Seafood Industry (thousands of dollars)

| | Sales Impacts | Income Impacts | Job Impacts |
|------------------------------------|---------------|----------------|-------------|
| Total Impacts | 1,927,389 | 1,038,127 | 36,618 |
| Commercial Harvesters | 164,081 | 65,287 | 1,909 |
| Seafood Processors & Dealers | 112,984 | 55,491 | 1,267 |
| Seafood Wholesalers & Distributors | 446,142 | 214,554 | 3,809 |
| Retail Sector | 1,204,183 | 702,794 | 29,634 |

Total Landings Revenue and Landings Revenue of Key Species/Species Groups (thousands of dollars)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------------------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| Total Revenue | 97,235 | 97,857 | 107,163 | 110,246 | 112,708 | 120,670 | 145,832 | 159,113 | 136,053 | 152,560 |
| Finfish & Other | 25,539 | 26,403 | 23,308 | 19,858 | 20,062 | 22,017 | 21,772 | 22,938 | 24,483 | 25,323 |
| Shellfish | 71,696 | 71,453 | 83,855 | 90,389 | 92,646 | 98,653 | 124,061 | 136,175 | 111,570 | 127,237 |
| Clam, Quahog | 8,712 | 7,363 | 6,757 | 5,636 | ND^1 | 5,228 | 7,409 | 7,556 | 7,615 | 968 |
| Clams, Ocean Quahog & Surf | 29,755 | 32,536 | 37,766 | 41,193 | 39,804 | 38,054 | 31,379 | 25,567 | 31,038 | 32,362 |
| Crab, Blue | 5,279 | 4,911 | 5,490 | 4,802 | 6,725 | 4,736 | 5,330 | 6,773 | 6,359 | 6,004 |
| Flounder, Summer | 2,732 | 3,038 | 2,604 | 2,313 | 3,504 | 3,683 | 4,429 | 4,649 | 4,926 | 3,989 |
| Goosefish | 5,809 | 7,782 | 6,505 | 6,135 | 5,896 | 6,200 | 3,496 | 4,492 | 4,416 | 4,485 |
| Herring, Atlantic | 274 | 8 | ND^1 | 32 | 60 | 145 | 6 | 371 | 389 | 563 |
| Lobster, American | 2,633 | 3,632 | 3,694 | 2,471 | 1,139 | 1,028 | 1,802 | 2,002 | 2,533 | 4,056 |
| Mackerel, Atlantic | 2,203 | 2,207 | 1,205 | 1,695 | 1,780 | 2,855 | 3,398 | 3,958 | 3,717 | 668 |
| Oyster, Eastern | 2,686 | 1,572 | 967 | 1,918 | 1,853 | 3,366 | 1,558 | 823 | 2,288 | 2,231 |
| Scallop, Sea | 9,816 | 14,528 | 24,108 | 29,983 | 33,336 | 43,507 | 67,498 | 88,494 | 57,471 | 77,320 |

Total Landings and Landings of Key Species / Species Groups (thousands of pounds)

| Total Earlaings and Earlaings of Rey Species 7 Species Groups (tribusarius of pourlus) | | | | | | | | | | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| Total Landings | 197,143 | 168,644 | 171,803 | 168,541 | 162,139 | 170,133 | 187,772 | 156,976 | 152,783 | 153,964 |
| Finfish & Other | 84,899 | 77,525 | 71,574 | 71,867 | 65,737 | 75,471 | 71,782 | 74,454 | 66,317 | 65,288 |
| Shellfish | 112,243 | 91,119 | 100,229 | 96,674 | 96,401 | 94,662 | 115,990 | 82,522 | 86,466 | 88,677 |
| Clam, Quahog | 2,193 | 1,880 | 1,622 | 1,357 | ND^1 | 1,260 | 1,796 | 1,852 | 1,844 | 240 |
| Clams, Ocean Quahog & Surf | 60,498 | 66,114 | 72,858 | 73,900 | 73,949 | 71,683 | 61,155 | 49,849 | 55,286 | 55,746 |
| Crab, Blue | 5,829 | 5,579 | 5,093 | 4,724 | 6,229 | 4,012 | 4,350 | 6,333 | 5,981 | 4,821 |
| Flounder, Summer | 1,863 | 1,917 | 1,848 | 1,745 | 2,407 | 2,385 | 2,829 | 2,529 | 2,380 | 1,698 |
| Goosefish | 8,141 | 6,358 | 4,414 | 5,855 | 5,697 | 7,185 | 4,230 | 3,922 | 3,841 | 4,234 |
| Herring, Atlantic | 2,545 | 47 | ND^1 | 708 | 1,138 | 1,805 | 114 | 2,263 | 2,451 | 6,039 |
| Lobster, American | 722 | 931 | 891 | 580 | 264 | 210 | 371 | 369 | 471 | 681 |
| Mackerel, Atlantic | 18,233 | 20,035 | 9,645 | 25,224 | 20,486 | 33,056 | 36,091 | 32,415 | 24,977 | 5,384 |
| Oyster, Eastern | 703 | 411 | 202 | 412 | 379 | 714 | 323 | 162 | 350 | 444 |
| Scallop, Sea | 1,588 | 2,748 | 4,949 | 8,219 | 8,644 | 10,638 | 13,737 | 11,832 | 8,440 | 11,801 |

Average Annual Price for Key Species / Species Groups (price per pound)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------------------|------|------|--------|------|--------|------|------|------|------|------|
| Clam, Quahog | 3.97 | 3.92 | 4.17 | 4.15 | ND^1 | 4.15 | 4.13 | 4.08 | 4.13 | 4.04 |
| Clams, Ocean Quahog & Surf | 0.49 | 0.49 | 0.52 | 0.56 | 0.54 | 0.53 | 0.51 | 0.51 | 0.56 | 0.58 |
| Crab, Blue | 0.91 | 0.88 | 1.08 | 1.02 | 1.08 | 1.18 | 1.23 | 1.07 | 1.06 | 1.25 |
| Flounder, Summer | 1.47 | 1.58 | 1.41 | 1.32 | 1.46 | 1.54 | 1.57 | 1.84 | 2.07 | 2.35 |
| Goosefish | 0.71 | 1.22 | 1.47 | 1.05 | 1.03 | 0.86 | 0.83 | 1.15 | 1.15 | 1.06 |
| Herring, Atlantic | 0.11 | 0.16 | ND^1 | 0.05 | 0.05 | 0.08 | 0.05 | 0.16 | 0.16 | 0.09 |
| Lobster, American | 3.65 | 3.90 | 4.14 | 4.26 | 4.31 | 4.90 | 4.86 | 5.42 | 5.38 | 5.96 |
| Mackerel, Atlantic | 0.12 | 0.11 | 0.12 | 0.07 | 0.09 | 0.09 | 0.09 | 0.12 | 0.15 | 0.12 |
| Oyster, Eastern | 3.82 | 3.82 | 4.77 | 4.65 | 4.88 | 4.72 | 4.82 | 5.09 | 6.53 | 5.02 |
| Scallop, Sea | 6.18 | 5.29 | 4.87 | 3.65 | 3.86 | 4.09 | 4.91 | 7.48 | 6.81 | 6.55 |

¹ND = data is confidential thus not disclosable.

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| Impact Category | Jobs | Total Sales | Value Added |
|---|--------|-------------|-------------|
| Trip Impacts by Fishing Mode: | | | |
| Private Boat | 1,709 | 242,167 | 125,283 |
| Shore | 1,127 | 135,067 | 73,433 |
| For-Hire | 848 | 91,446 | 53,163 |
| Total Durable Equipment Impacts | 7,209 | 1,337,926 | 678,915 |
| Total State Trip and Durable Equipment Economic Impacts | 10,893 | 1,806,606 | 930,794 |

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

| | | | , | | | | | | | |
|---|---------------|-----------|--------------------------------------|--------------|--|--|--|--|--|--|
| Fishing Mode | Trip Expend | ditures | Durable Equipment Expenditures | Expenditures | | | | | | |
| | Non-Residents | Residents | Fishing Tackle | 378,814 | | | | | | |
| Private Boat | 53,729 | 137,673 | Other Equipment | 78,186 | | | | | | |
| Shore | 39,409 | 70,950 | Boat Expenses | 296,190 | | | | | | |
| For-Hire | 34,235 | 25,182 | Vehicle Expenses | 405,725 | | | | | | |
| Total Trip Expenditures | 127,373 | 233,805 | Second Home Expenses | 52,466 | | | | | | |
| · | | | Total Durable Equipment Expenditures | 1,211,381 | | | | | | |
| Total State Trip and Durable Equipment Expenditures | | | | | | | | | | |

Recreational Anglers by Residential Area (thousands of anglers)

| | <u> </u> | | | | | | | | | |
|---------------|----------|------|------|-------|------|-------|-------|-------|-------|-------|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| Coastal | 400 | 493 | 544 | 721 | 400 | 592 | 708 | 818 | 693 | 890 |
| Non-Coastal | 29 | 30 | 17 | 42 | 17 | 20 | 31 | 39 | 25 | 19 |
| Out-of-State | 357 | 303 | 430 | 543 | 239 | 462 | 379 | 471 | 481 | 518 |
| Total Anglers | 786 | 827 | 990 | 1,306 | 656 | 1,074 | 1,117 | 1,328 | 1,199 | 1,427 |

Recreational Fishing Effort by Mode (thousands of trips)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| For-Hire | 459 | 419 | 518 | 643 | 368 | 466 | 501 | 408 | 630 | 545 |
| Private or Rental | 2,669 | 2,487 | 3,727 | 4,025 | 2,992 | 3,602 | 3,892 | 3,765 | 3,859 | 3,634 |
| Shore | 1,180 | 1,919 | 2,224 | 2,817 | 2,049 | 2,711 | 2,152 | 2,476 | 2,803 | 3,256 |
| Total Trips | 4,308 | 4,825 | 6,469 | 7,484 | 5,409 | 6,779 | 6,544 | 6,649 | 7,292 | 7,436 |

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)1

| | | , | · · · · · · · | | | | | | | , | |
|------------------------------|---|-------|---------------|-------|--------|-------|-------|-------|-------|-------|-------|
| Species/Groups | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| Bass, Striped | Н | 89 | 237 | 402 | 560 | 416 | 392 | 449 | 327 | 489 | 206 |
| bass, Surpeu | R | 488 | 1,153 | 885 | 966 | 715 | 926 | 1,324 | 1,197 | 2,102 | 1,495 |
| Bluefish | Н | 817 | 809 | 1,236 | 1,431 | 1,321 | 1,571 | 2,012 | 2,035 | 1,457 | 1,645 |
| Didensii | R | 702 | 1,824 | 1,907 | 2,056 | 2,168 | 1,913 | 2,403 | 2,644 | 1,930 | 3,146 |
| Drum (Weakfish) ² | Н | 921 | 584 | 760 | 736 | 493 | 151 | 184 | 1,053 | 418 | 209 |
| Druin (Weakiisii) | R | 778 | 551 | 1,605 | 1,065 | 351 | 631 | 607 | 1,280 | 1,231 | 581 |
| Flounder, Summer | Н | 2,728 | 1,503 | 3,023 | 2,070 | 989 | 1,784 | 1,887 | 1,396 | 1,561 | 1,328 |
| riounder, Summer | R | 6,520 | 9,220 | 7,261 | 10,343 | 4,205 | 5,807 | 7,212 | 9,931 | 6,823 | 7,125 |
| Flounder, Winter | Н | 169 | 376 | 1,080 | 562 | 208 | 307 | 95 | 46 | 43 | 194 |
| riounder, winter | R | 193 | 191 | 441 | 188 | 124 | 110 | 29 | 42 | 192 | 42 |
| Hake, Red | Н | 79 | 116 | 96 | 51 | 12 | 16 | 12 | 6 | 111 | 1 |
| Hake, Neu | R | 2 | 4 | 5 | 5 | (1) | 15 | 6 | 6 | 15 | (1) |
| Sea Bass, Black | Н | 273 | 449 | 1,962 | 1,919 | 1,760 | 1,903 | 1,173 | 667 | 692 | 1,006 |
| Sea Dass, Diack | R | 1,235 | 1,728 | 5,545 | 4,371 | 4,318 | 4,295 | 2,833 | 2,463 | 2,090 | 2,882 |
| Tuna, Bluefin | Н | (1) | 3 | 8 | 11 | 7 | 9 | 9 | 8 | 4 | 5 |
| Tulia, Diuelili | R | (1) | (1) | (1) | 4 | (1) | (1) | 31 | 26 | 35 | 1 |
| Tuna, Yellowfin | Н | 4 | 19 | 55 | 9 | 14 | 22 | 25 | 22 | 41 | 25 |
| Tulia, Tellowilli | R | (1) | (1) | (1) | (1) | 4 | (1) | 1 | (1) | 1 | (1) |
| Wraccoc (Tautoc) | Н | 12 | 166 | 462 | 468 | 348 | 103 | 131 | 37 | 195 | 342 |
| Wrasses (Tautog) | R | 225 | 671 | 627 | 1,006 | 836 | 394 | 426 | 335 | 563 | 1,353 |

 $^{^{1}}$ In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.

²This species may not be equivalent to species with similar names listed in the commercial tables.

New Jersey's State Economy (% of national total)

| | Establishments | Employees | Annijai Pavroli | | Gross State Product (\$ millions) | Commercial Location Quotient ¹ |
|----------|----------------|------------------|-----------------|-----------------------------|---|---|
| 1998 | 230,860 (3.3%) | 3,368,365 (3.1%) | 125,787 (3.8%) | 211,925 (3.6%) ² | 314,117 (3.6%) | 1.17 |
| 2006 | 243,055 (3.2%) | 3,645,381 (3.0%) | 175,502 (3.7%) | 257,419 (3.5%) | 448,426 (3.4%) | 0.89 |
| % change | 5.3% | 8.2% | 39.5% | 21.5% | 42.8% | -23.9% |

Seafood Sales & Processing - Nonemployer Firms (thousands of dollars)

| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Seafood product preparation & packaging | Firms | 15 | 16 | 17 | 14 | 21 | 23 | 23 | 26 | 27 |
| | Receipts | 1,098 | 1,913 | 2,545 | 2,878 | 2,673 | 2,279 | 2,694 | 3,086 | 3,027 |
| Seafood sales, | Firms | 93 | 98 | 94 | 87 | 92 | 100 | 89 | 93 | 72 |
| retail | Receipts | 8,707 | 8,457 | 8,289 | 8,368 | 8,348 | 8,822 | 9,219 | 9,194 | 8,916 |

Seafood Sales & Processing – Employer Establishments (thousands of dollars)

| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|-----------------------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Seafood product | Establishments | 14 | 18 | 16 | 18 | 17 | 16 | 15 | 17 | 16 |
| preparation & | Employees | 803 | 863 | 816 | 1,100 | 928 | 846 | 749 | 969 | 667 |
| packaging | Payroll | 17,990 | 18,491 | 20,655 | 27,302 | 23,045 | 20,794 | 21,029 | 28,235 | 22,097 |
| Carfeed and | Establishments | 101 | 110 | 107 | 112 | 102 | 84 | 85 | 85 | 89 |
| Seafood sales, wholesale | Employees | 936 | 1,027 | 1,028 | 1,023 | 969 | 920 | 948 | 914 | 941 |
| Wholesale | Payroll | 32,296 | 35,333 | 37,609 | 39,677 | 37,394 | 35,991 | 38,066 | 37,828 | 41,506 |
| C f | Establishments | 118 | 123 | 125 | 125 | 149 | 133 | 134 | 128 | 127 |
| Seafood sales, retail | Employees | 428 | 429 | 571 | 549 | 559 | 454 | 547 | 524 | 493 |
| retair | Payroll | 7,655 | 8,188 | 9,621 | 10,183 | 10,225 | 10,513 | 11,952 | 11,787 | 11,373 |

Transport, Support, & Marine Operations – Employer Establishments (thousands of dollars)

| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---------------------------------|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Coastal & Great | Establishments | 20 | 19 | 18 | 21 | 13 | 15 | 17 | 18 | 18 |
| Lakes freight | Employees | ND^3 | ND | ND | 532 | ND | 768 | ND | 914 | 1,040 |
| transportation | Payroll | ND | ND | ND | 36,912 | ND | 45,024 | ND | 54,097 | 68,096 |
| Daniel Calaba | Establishments | 35 | 38 | 37 | 33 | 35 | 37 | 33 | 38 | 39 |
| Deep sea freight transportation | Employees | 3,807 | 1,484 | 1,373 | 1,451 | 1,397 | 1,287 | 1,028 | 948 | 648 |
| cransportation | Payroll | 146,969 | 79,060 | 74,915 | 86,618 | 78,258 | 70,996 | 65,691 | 68,633 | 45,940 |
| Deep sea | Establishments | 3 | 2 | 3 | 4 | 4 | 5 | 4 | 5 | 4 |
| passenger | Employees | ND |
| transportation | Payroll | ND |
| | Establishments | 224 | 220 | 209 | 211 | 199 | 203 | 201 | 206 | 204 |
| Marinas | Employees | ND | ND | ND | ND | 927 | 951 | 945 | 978 | 940 |
| | Payroll | ND | ND | ND | ND | 32,480 | 34,777 | 36,862 | 38,323 | 39,154 |
| Marina cargo | Establishments | 24 | 24 | 26 | 26 | 29 | 27 | 26 | 26 | 25 |
| Marine cargo handling | Employees | 3,526 | 2,907 | 3,887 | 3,418 | 3,408 | 4,108 | 4,685 | 4,972 | 4,599 |
| Harlaning | Payroll | 158,301 | 166,705 | 227,064 | 187,150 | 247,217 | 318,325 | 340,085 | 363,714 | 345,784 |
| Navigational | Establishments | 15 | 17 | 22 | 21 | 22 | 16 | 17 | 16 | 19 |
| services to | Employees | ND | ND | 408 | 183 | ND | 210 | ND | 169 | ND |
| shipping | Payroll | ND | ND | 22,315 | 10,359 | ND | 8,028 | ND | 9,673 | ND |
| Davit O hawban | Establishments | 7 | 6 | 6 | 5 | 5 | 5 | 6 | 7 | 6 |
| Port & harbor operations | Employees | ND | ND | 375 | 376 | ND | 240 | ND | 194 | ND |
| operations | Payroll | ND | ND | 18,804 | 21,855 | ND | 10,644 | ND | 11,599 | ND |
| Chin O hook | Establishments | 44 | 43 | 43 | 45 | 41 | 37 | 35 | 37 | 34 |
| Ship & boat building | Employees | 1,796 | 1,992 | 2,178 | 2,185 | 2,223 | 2,005 | 2,040 | 2,320 | 2,307 |
| - aamig | Payroll | 61,814 | 66,141 | 71,918 | 70,980 | 76,607 | 75,149 | 80,301 | 89,421 | 88,367 |

¹The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.

compared. ²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

 $^{^{3}}ND$ = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the New York Seafood Industry (thousands of dollars)

| | Sales Impacts | Income Impacts | Job Impacts |
|------------------------------------|---------------|----------------|-------------|
| Total Impacts | 1,830,881 | 972,022 | 39,585 |
| Commercial Harvesters | 116,428 | 39,860 | 2,435 |
| Seafood Processors & Dealers | 94,356 | 39,847 | 696 |
| Seafood Wholesalers & Distributors | 424,823 | 208,571 | 3,658 |
| Retail Sector | 1,195,273 | 683,744 | 32,796 |

Total Landings Revenue and Landings Revenue of Key Species/Species Groups (thousands of dollars)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total Revenue | 81,828 | 74,787 | 61,121 | 55,072 | 51,264 | 51,601 | 46,874 | 56,368 | 57,706 | 58,940 |
| Finfish & Other | 22,319 | 19,363 | 16,495 | 18,864 | 15,924 | 16,426 | 16,762 | 18,317 | 19,123 | 20,099 |
| Shellfish | 59,509 | 55,424 | 44,626 | 36,208 | 35,341 | 35,175 | 30,112 | 38,051 | 38,583 | 38,841 |
| Clam, Atlantic Surf | 2,497 | 2,203 | 3,602 | 4,885 | 5,520 | 7,934 | 4,475 | 7,055 | 4,473 | 5,932 |
| Clam, Quahog | 19,185 | 17,777 | 17,547 | 13,502 | 12,245 | 12,399 | 10,673 | 12,696 | 12,237 | 14,224 |
| Clam, Softshell | 712 | 975 | 848 | 561 | 679 | 888 | 1,227 | 1,468 | 2,055 | 1,628 |
| Flounder, Summer | 1,967 | 1,832 | 2,007 | 1,778 | 2,042 | 2,240 | 3,275 | 3,797 | 3,418 | 3,129 |
| Lobster | 27,649 | 24,970 | 11,555 | 7,357 | 5,131 | 4,426 | 3,722 | 4,396 | 6,288 | 4,283 |
| Oyster, Eastern | 1,356 | 392 | 1,311 | 2,137 | 4,995 | 4,263 | 3,367 | 1,961 | 2,390 | 2,627 |
| Scallop, Sea | 5 | 68 | 239 | 718 | 90 | 164 | 720 | 3,617 | 3,518 | 3,812 |
| Scups or Porgies | 1,099 | 713 | 909 | 703 | 1,185 | 1,330 | 1,637 | 2,027 | 2,448 | 2,348 |
| Squid, Loligo | 6,720 | 8,052 | 8,423 | 6,035 | 6,247 | 4,353 | 5,425 | 6,054 | 5,844 | 5,158 |
| Tilefishes | 3,329 | 1,885 | 2,053 | 3,191 | 3,195 | 2,736 | 2,082 | 2,765 | 3,323 | 3,845 |

Total Landings and Landings of Key Species / Species Groups (thousands of pounds)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total Landings | 56,501 | 49,490 | 44,702 | 42,388 | 38,548 | 39,388 | 34,513 | 38,150 | 32,651 | 36,275 |
| Finfish & Other | 31,490 | 23,568 | 18,585 | 21,018 | 16,540 | 17,223 | 16,530 | 14,631 | 14,029 | 16,458 |
| Shellfish | 25,011 | 25,922 | 26,116 | 21,370 | 22,008 | 22,165 | 17,983 | 23,519 | 18,622 | 19,817 |
| Clam, Atlantic Surf | 3,859 | 4,878 | 5,567 | 7,549 | 8,544 | 13,264 | 7,462 | 11,953 | 6,913 | 9,161 |
| Clam, Quahog | 2,504 | 2,647 | 2,349 | 1,828 | 1,502 | 1,553 | 1,346 | 1,617 | 1,650 | 1,592 |
| Clam, Softshell | 208 | 229 | 181 | 106 | 132 | 163 | 234 | 270 | 393 | 198 |
| Flounder, Summer | 822 | 801 | 812 | 752 | 1,053 | 1,073 | 1,594 | 1,799 | 1,220 | 941 |
| Lobster | 7,897 | 6,452 | 2,883 | 2,053 | 1,440 | 946 | 996 | 1,154 | 1,243 | 716 |
| Oyster, Eastern | 237 | 68 | 150 | 244 | 537 | 466 | 370 | 219 | 269 | 124 |
| Scallop, Sea | 3 | 18 | 111 | 259 | 26 | 39 | 170 | 647 | 577 | 610 |
| Scups or Porgies | 621 | 455 | 634 | 655 | 1,558 | 1,850 | 1,907 | 2,186 | 2,416 | 2,325 |
| Squid, Loligo | 8,300 | 10,197 | 13,208 | 7,625 | 9,613 | 4,603 | 6,363 | 6,693 | 6,460 | 5,437 |
| Tilefishes | 1,962 | 798 | 916 | 1,835 | 1,593 | 1,755 | 1,335 | 1,142 | 1,297 | 1,394 |

Average Annual Price for Key Species / Species Groups (price per pound)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------------|------|------|------|------|------|------|------|------|------|-------|
| Clam, Atlantic Surf | 0.65 | 0.45 | 0.65 | 0.65 | 0.65 | 0.60 | 0.60 | 0.59 | 0.65 | 0.65 |
| Clam, Quahog | 7.66 | 6.72 | 7.47 | 7.39 | 8.15 | 7.98 | 7.93 | 7.85 | 7.42 | 8.94 |
| Clam, Softshell | 3.42 | 4.25 | 4.70 | 5.30 | 5.15 | 5.45 | 5.24 | 5.43 | 5.23 | 8.23 |
| Flounder, Summer | 2.39 | 2.29 | 2.47 | 2.36 | 1.94 | 2.09 | 2.05 | 2.11 | 2.80 | 3.33 |
| Lobster | 3.50 | 3.87 | 4.01 | 3.58 | 3.56 | 4.68 | 3.74 | 3.81 | 5.06 | 5.98 |
| Oyster, Eastern | 5.73 | 5.76 | 8.77 | 8.77 | 9.30 | 9.15 | 9.10 | 8.97 | 8.87 | 21.21 |
| Scallop, Sea | 1.81 | 3.90 | 2.15 | 2.77 | 3.43 | 4.19 | 4.24 | 5.59 | 6.10 | 6.25 |
| Scups or Porgies | 1.77 | 1.57 | 1.43 | 1.07 | 0.76 | 0.72 | 0.86 | 0.93 | 1.01 | 1.01 |
| Squid, Loligo | 0.81 | 0.79 | 0.64 | 0.79 | 0.65 | 0.95 | 0.85 | 0.90 | 0.90 | 0.95 |
| Tilefishes | 1.70 | 2.36 | 2.24 | 1.74 | 2.01 | 1.56 | 1.56 | 2.42 | 2.56 | 2.76 |

| Impact Category | Jobs | Total Sales | Value Added |
|---|-------|-------------|-------------|
| Trip Impacts by Fishing Mode: | | | |
| Private Boat | 710 | 85,949 | 53,810 |
| Shore | 421 | 45,391 | 27,710 |
| For-Hire | 746 | 73,572 | 44,550 |
| Total Durable Equipment Impacts | 4,617 | 774,274 | 385,242 |
| Total State Trip and Durable Equipment Economic Impacts | 6,493 | 979,186 | 511,312 |

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

| <u> </u> | | | , | |
|-------------------------|---------------|-----------|--------------------------------------|--------------|
| Fishing Mode | Trip Expend | ditures | Durable Equipment Expenditures | Expenditures |
| | Non-Residents | Residents | Fishing Tackle | 215,057 |
| Private Boat | 4,297 | 83,481 | Other Equipment | 86,322 |
| Shore | 3,672 | 41,513 | Boat Expenses | 251,835 |
| For-Hire | 8,978 | 38,432 | Vehicle Expenses | 126,049 |
| Total Trip Expenditures | 16,947 | 163,426 | Second Home Expenses | 66,428 |
| | | | Total Durable Equipment Expenditures | 745,690 |
| Total State Trip and Du | res | 926,063 | | |

Recreational Anglers by Residential Area (thousands of anglers)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---------------|------|------|------|------|------|------|------|-------|------|-------|
| Coastal | 427 | 337 | 469 | 474 | 387 | 599 | 587 | 885 | 735 | 881 |
| Non-Coastal | 6 | 11 | 12 | 11 | 8 | 19 | 18 | 27 | 25 | 39 |
| Out-of-State | 42 | 28 | 20 | 29 | 41 | 82 | 76 | 110 | 114 | 147 |
| Total Anglers | 476 | 376 | 500 | 513 | 436 | 700 | 681 | 1,022 | 874 | 1,067 |

Recreational Fishing Effort by Mode (thousands of trips)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| For-Hire | 244 | 281 | 306 | 344 | 339 | 406 | 397 | 475 | 398 | 522 |
| Private or Rental | 2,012 | 1,749 | 2,496 | 2,365 | 2,172 | 3,030 | 2,600 | 3,032 | 3,058 | 3,237 |
| Shore | 1,175 | 873 | 1,844 | 1,915 | 1,607 | 2,090 | 1,777 | 2,566 | 1,943 | 2,459 |
| Total Trips | 3,431 | 2,903 | 4,645 | 4,624 | 4,118 | 5,525 | 4,774 | 6,073 | 5,399 | 6,218 |

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)1

| That vest (11) and kelease (k) of key species 7 species of ours (number of fish in thousands) | | | | | | | | | | | |
|---|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Species/Groups | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| Bass, Striped | Н | 167 | 195 | 271 | 190 | 202 | 314 | 243 | 298 | 313 | 371 |
| bass, Striped | R | 885 | 1,229 | 1,373 | 824 | 588 | 1,084 | 1,493 | 1,348 | 1,578 | 1,456 |
| Bluefish | Н | 768 | 710 | 718 | 1,005 | 751 | 1,147 | 1,499 | 2,376 | 1,534 | 1,660 |
| Diuciisii | R | 589 | 1,156 | 2,629 | 2,543 | 1,017 | 1,305 | 1,883 | 3,314 | 1,839 | 1,919 |
| Drum (Weakfish) ² | Н | 21 | 18 | 42 | 28 | 25 | 9 | 8 | (1) | 9 | 7 |
| Diulii (Weakiisii) | R | 30 | 35 | 69 | 69 | 63 | 7 | 40 | 194 | 12 | 201 |
| Flounder, Summer | Н | 1,230 | 760 | 1,671 | 700 | 696 | 1,539 | 937 | 1,147 | 802 | 711 |
| Flourider, Summer | R | 1,522 | 3,260 | 3,574 | 5,228 | 4,100 | 5,722 | 2,682 | 7,767 | 5,277 | 5,255 |
| Flounder, Winter | Н | 78 | 136 | 237 | 233 | 154 | 234 | 236 | 150 | 204 | 15 |
| rioulider, willter | R | 104 | 152 | 237 | 286 | 141 | 73 | 56 | 222 | 95 | 14 |
| Herring, Atlantic ² | Н | 111 | 142 | 67 | 39 | 26 | 30 | 73 | 140 | 39 | 315 |
| Herring, Atlantic | R | 5 | 118 | 83 | 48 | 14 | (1) | 4 | 2 | 3 | 176 |
| Porgies (Scup) | Н | 444 | 875 | 3,126 | 1,734 | 1,091 | 5,112 | 1,581 | 686 | 1,277 | 1,601 |
| Polyles (Scup) | R | 483 | 197 | 1,301 | 1,666 | 1,246 | 1,805 | 2,508 | 1,263 | 2,498 | 1,590 |
| Sea Bass, Black | Н | 12 | 89 | 335 | 164 | 221 | 318 | 105 | 176 | 277 | 312 |
| Sea Dass, Dlack | R | 79 | 731 | 1,222 | 641 | 1,411 | 739 | 490 | 963 | 1,634 | 1,513 |
| Shortfin Mako | Н | 2 | 1 | 5 | (1) | 1 | 3 | (1) | (1) | 1 | 1 |
| SHOLUHI MAKU | R | 3 | 9 | 13 | 2 | 4 | 3 | 2 | 5 | 2 | (1) |
| Wraccoc (Tauton) | Н | 69 | 197 | 79 | 46 | 630 | 129 | 381 | 119 | 253 | 202 |
| Wrasses (Tautog) | R | 517 | 787 | 401 | 314 | 953 | 297 | 783 | 272 | 1,020 | 368 |

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 $^{^{1}}$ In this table, "1" = 1000-1499 fish were harvested or released and "(1)" = 0-999 fish were harvested or released.

²This species may not be equivalent to species with similar names listed in the commercial tables.

New York's State Economy (% of national total)

| | Establishments | Employees | Annual Payroll (\$ millions) | Compensation | Gross State Product (\$ millions) | Commercial Location Quotient ¹ |
|----------|----------------|------------------|------------------------------|-----------------------------|-----------------------------------|---|
| 1998 | 481,962 (7.0%) | 6,993,814 (6.5%) | 274,635 (8.3%) | 482,888 (8.1%) ² | 686,906 (7.9%) | 0.22 |
| 2006 | 515,950 (6.8%) | 7,532,764 (6.3%) | 398,192 (8.3%) | 594,223 (8.0%) | 1,028,320 (7.8%) | 0.12 |
| % change | 7.1% | 7.7% | 45.0% | 23.1% | 49.7% | -45.5% |

Seafood Sales & Processing - Nonemployer Firms (thousands of dollars)

| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Seafood product preparation & packaging | Firms | 17 | 43 | 39 | 45 | 40 | 62 | 49 | 57 | 61 |
| | Receipts | 1,093 | 3,621 | 3,538 | 2,607 | 1,730 | 2,580 | 3,517 | 2,652 | 3,044 |
| Seafood sales, | Firms | 279 | 274 | 268 | 262 | 244 | 272 | 241 | 219 | 206 |
| retail | Receipts | 24,314 | 28,922 | 30,580 | 31,218 | 29,832 | 29,321 | 28,640 | 24,987 | 24,790 |

Seafood Sales & Processing – Employer Establishments (thousands of dollars)

| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|--------------------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Seafood product | Establishments | 18 | 19 | 18 | 21 | 16 | 18 | 17 | 18 | 15 |
| preparation & | Employees | 339 | 452 | ND^3 | 370 | 352 | 271 | 323 | 324 | 298 |
| packaging | Payroll | 13,404 | 15,350 | ND | 18,258 | 20,430 | 15,676 | 14,782 | 14,810 | 16,491 |
| C f | Establishments | 323 | 313 | 305 | 296 | 315 | 291 | 274 | 269 | 254 |
| Seafood sales, wholesale | Employees | 2,195 | 2,189 | 2,265 | 2,158 | 2,269 | 2,183 | 2,091 | 2,003 | 2,066 |
| Wilolesale | Payroll | 67,377 | 71,437 | 75,538 | 76,881 | 84,367 | 75,063 | 75,411 | 76,177 | 78,198 |
| C f | Establishments | 302 | 297 | 307 | 323 | 381 | 376 | 386 | 392 | 388 |
| Seafood sales, retail | Employees | 1,004 | 1,026 | 1,113 | 1,154 | 1,421 | 1,518 | 1,602 | 1,513 | 1,495 |
| retail | Payroll | 15,037 | 16,110 | 17,304 | 18,609 | 22,867 | 25,422 | 26,489 | 25,665 | 26,701 |

Transport, Support, & Marine Operations - Employer Establishments (thousands of dollars)

| aeps. t/ supp | 5. t/ aae 5 | | | | | | | , | | |
|---------------------------------|----------------|--------|--------|--------|---------|---------|---------|--------|--------|---------|
| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| Coastal & Great | Establishments | 72 | 71 | 69 | 67 | 69 | 60 | 60 | 57 | 55 |
| Lakes freight | Employees | ND | 1,687 | 1,653 | 2,182 | 2,284 | 1,751 | 1,452 | 1,448 | 1,464 |
| transportation | Payroll | ND | 91,895 | 91,296 | 129,403 | 141,213 | 115,452 | 94,074 | 91,347 | 109,315 |
| D | Establishments | 48 | 42 | 43 | 40 | 38 | 35 | 36 | 39 | 38 |
| Deep sea freight transportation | Employees | 1,123 | 769 | ND | 621 | 1,084 | 927 | 600 | 602 | ND |
| transportation | Payroll | 91,731 | 49,402 | ND | 42,874 | 52,516 | 58,350 | 38,246 | 39,309 | ND |
| Deep sea | Establishments | 2 | 2 | 4 | 5 | 4 | 8 | 7 | 6 | 4 |
| passenger | Employees | ND | ND | ND | 160 | ND | 212 | ND | ND | ND |
| transportation | Payroll | ND | ND | ND | 5,646 | ND | 6,673 | ND | ND | ND |
| | Establishments | 405 | 389 | 392 | 386 | 386 | 417 | 413 | 416 | 404 |
| Marinas | Employees | 1,811 | 1,682 | 1,778 | 1,805 | 1,680 | 2,167 | 2,185 | 2,093 | 2,112 |
| | Payroll | 53,425 | 55,844 | 64,661 | 66,508 | 69,242 | 77,398 | 81,737 | 84,832 | 83,807 |
| Mania | Establishments | 19 | 20 | 22 | 19 | 11 | 14 | 14 | 12 | 12 |
| Marine cargo handling | Employees | 1,126 | 1,290 | 1,677 | ND | ND | 951 | 1,099 | ND | ND |
| nanuing | Payroll | 40,018 | 43,649 | 56,242 | ND | ND | 50,015 | 48,529 | ND | ND |
| Navigational | Establishments | 41 | 36 | 41 | 41 | 32 | 34 | 34 | 35 | 36 |
| services to | Employees | ND | ND | 487 | 554 | ND | ND | ND | ND | ND |
| shipping | Payroll | ND | ND | 27,872 | 29,646 | ND | ND | ND | ND | ND |
| D . O | Establishments | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 |
| Port & harbor | Employees | ND | ND | ND | ND | ND | ND | ND | ND | 6 |
| operations | Payroll | ND | ND | ND | ND | ND | ND | ND | ND | 119 |
| CI: CI: | Establishments | 50 | 52 | 48 | 44 | 41 | 44 | 45 | 47 | 48 |
| Ship & boat building | Employees | 976 | 841 | 880 | 759 | ND | ND | ND | 590 | ND |
| Dullullig | Payroll | 28,550 | 28,262 | 28,320 | 26,072 | ND | ND | ND | 21,514 | ND |

¹The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared.

compared. ²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

 $^{{}^{3}}ND$ = Data are suppressed due to confidentiality restrictions.

2007 Economic Impacts of the Virginia Seafood Industry (thousands of dollars)

| | Sales Impacts | Income Impacts | Job Impacts |
|------------------------------------|---------------|----------------|-------------|
| Total Impacts | 1,448,353 | 807,255 | 33,439 |
| Commercial Harvesters | 107,917 | 46,959 | 2,203 |
| Seafood Processors & Dealers | 179,333 | 94,186 | 2,544 |
| Seafood Wholesalers & Distributors | 223,917 | 112,069 | 2,118 |
| Retail Sector | 937,185 | 554,041 | 26,574 |

Total Landings Revenue and Landings Revenue of Key Species/Species Groups (thousands of dollars)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Total Revenue | 113,049 | 108,247 | 118,336 | 119,618 | 123,308 | 130,657 | 160,491 | 155,096 | 109,071 | 130,562 |
| Finfish & Other | 59,520 | 47,754 | 47,258 | 42,222 | 38,947 | 39,661 | 43,522 | 48,589 | 40,597 | 45,783 |
| Shellfish | 53,530 | 60,492 | 71,078 | 77,395 | 84,361 | 90,996 | 116,970 | 106,507 | 68,474 | 84,779 |
| Bass, Striped | 2,559 | 3,088 | 3,266 | 3,250 | 2,823 | 3,389 | 3,659 | 4,478 | 2,907 | 3,835 |
| Catfishes & Bullhead | 355 | 330 | 389 | 987 | 1,005 | 372 | 649 | 900 | 1,570 | 977 |
| Crab, Blue | 27,195 | 26,525 | 24,115 | 25,600 | 21,083 | 19,130 | 21,822 | 20,578 | 14,067 | 14,800 |
| Croaker, Atlantic | 4,162 | 3,499 | 5,598 | 3,126 | 3,815 | 2,822 | 3,013 | 3,691 | 4,344 | 4,616 |
| Flounder, Summer | 3,316 | 3,067 | 3,131 | 2,973 | 3,150 | 4,220 | 5,376 | 4,680 | 3,460 | 3,186 |
| Goosefish | 1,076 | 940 | 843 | 700 | 704 | 879 | 599 | 1,143 | 688 | 750 |
| Menhaden | 40,744 | 30,222 | 27,566 | 25,860 | 22,113 | 22,511 | 24,144 | 25,259 | 22,269 | 25,351 |
| Scallop, Sea | 20,658 | 27,483 | 41,680 | 44,466 | 57,715 | 68,298 | 92,203 | 84,574 | 52,819 | 62,892 |
| Sea Bass, Black | 1,307 | 1,195 | 1,335 | 1,317 | 1,589 | 1,306 | 1,167 | 1,243 | 1,072 | 663 |
| Spot | 1,536 | 1,040 | 2,256 | 1,326 | 1,256 | 1,688 | 2,236 | 2,227 | 1,762 | 3,175 |

Total Landings and Landings of Key Species / Species Groups (thousands of pounds)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Total Landings | 592,732 | 460,254 | 443,197 | 561,792 | 442,490 | 446,828 | 481,373 | 441,568 | 426,235 | 484,388 |
| Finfish & Other | 551,710 | 419,790 | 403,157 | 520,211 | 396,929 | 406,359 | 432,023 | 402,616 | 393,760 | 452,313 |
| Shellfish | 41,022 | 40,464 | 40,041 | 41,581 | 45,560 | 40,469 | 49,350 | 38,952 | 32,475 | 32,075 |
| Bass, Striped | 1,855 | 1,859 | 2,209 | 2,050 | 1,841 | 2,104 | 2,126 | 2,484 | 1,431 | 1,967 |
| Catfishes & Bullhead | 1,577 | 1,455 | 1,680 | 1,964 | 1,886 | 1,799 | 1,922 | 1,622 | 1,360 | 1,596 |
| Crab, Blue | 34,599 | 31,437 | 28,846 | 25,057 | 27,301 | 21,464 | 27,642 | 26,064 | 22,719 | 18,481 |
| Croaker, Atlantic | 12,007 | 12,850 | 12,889 | 12,929 | 12,448 | 10,936 | 9,488 | 9,272 | 7,829 | 10,899 |
| Flounder, Summer | 2,616 | 2,196 | 2,207 | 2,660 | 2,970 | 3,522 | 3,906 | 3,897 | 2,757 | 1,857 |
| Goosefish | 2,995 | 2,629 | 942 | 887 | 970 | 1,270 | 1,002 | 1,159 | 677 | 825 |
| Menhaden | 508,728 | 378,158 | 367,131 | 487,144 | 364,941 | 373,868 | 399,798 | 372,578 | 370,989 | 419,997 |
| Scallop, Sea | 3,548 | 5,572 | 9,176 | 12,654 | 16,189 | 17,536 | 19,409 | 11,444 | 8,312 | 10,024 |
| Sea Bass, Black | 816 | 740 | 648 | 661 | 771 | 507 | 498 | 476 | 328 | 190 |
| Spot | 4,277 | 2,962 | 3,765 | 3,248 | 3,062 | 3,471 | 4,338 | 3,103 | 1,696 | 4,249 |

Average Annual Price for Key Species / Species Groups (price per pound)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|----------------------|------|------|------|------|------|------|------|------|------|------|
| Bass, Striped | 1.38 | 1.66 | 1.48 | 1.59 | 1.53 | 1.61 | 1.72 | 1.80 | 2.03 | 1.95 |
| Catfishes & Bullhead | 0.23 | 0.23 | 0.23 | 0.50 | 0.53 | 0.21 | 0.34 | 0.55 | 1.15 | 0.61 |
| Crab, Blue | 0.79 | 0.84 | 0.84 | 1.02 | 0.77 | 0.89 | 0.79 | 0.79 | 0.62 | 0.80 |
| Croaker, Atlantic | 0.35 | 0.27 | 0.43 | 0.24 | 0.31 | 0.26 | 0.32 | 0.40 | 0.55 | 0.42 |
| Flounder, Summer | 1.27 | 1.40 | 1.42 | 1.12 | 1.06 | 1.20 | 1.38 | 1.20 | 1.26 | 1.72 |
| Goosefish | 0.36 | 0.36 | 0.90 | 0.79 | 0.73 | 0.69 | 0.60 | 0.99 | 1.02 | 0.91 |
| Menhaden | 0.08 | 0.08 | 0.08 | 0.05 | 0.06 | 0.06 | 0.06 | 0.07 | 0.06 | 0.06 |
| Scallop, Sea | 5.82 | 4.93 | 4.54 | 3.51 | 3.56 | 3.89 | 4.75 | 7.39 | 6.35 | 6.27 |
| Sea Bass, Black | 1.60 | 1.61 | 2.06 | 1.99 | 2.06 | 2.58 | 2.34 | 2.61 | 3.27 | 3.49 |
| Spot | 0.36 | 0.35 | 0.60 | 0.41 | 0.41 | 0.49 | 0.52 | 0.72 | 1.04 | 0.75 |

| Impact Category | Jobs | Total Sales | Value Added |
|---|-------|-------------|-------------|
| Trip Impacts by Fishing Mode: | | | |
| Private Boat | 1,786 | 175,564 | 101,912 |
| Shore | 463 | 42,646 | 24,452 |
| For-Hire | 136 | 10,771 | 6,145 |
| Total Durable Equipment Impacts | 4,883 | 594,005 | 300,064 |
| Total State Trip and Durable Equipment Economic Impacts | 7,267 | 822,986 | 432,573 |

2007 Angler Trip & Durable Equipment Expenditures (thousands of dollars)

| <u> </u> | | | , | |
|-------------------------|---------------|-----------|--------------------------------------|--------------|
| Fishing Mode | Trip Expend | ditures | Durable Equipment Expenditures | Expenditures |
| | Non-Residents | Residents | Fishing Tackle | 101,161 |
| Private Boat | 70,450 | 84,402 | Other Equipment | 36,433 |
| Shore | 13,137 | 23,869 | Boat Expenses | 179,959 |
| For-Hire | 5,266 | 1,957 | Vehicle Expenses | 143,269 |
| Total Trip Expenditures | 88,853 | 110,228 | Second Home Expenses | 35,179 |
| | | | Total Durable Equipment Expenditures | 496,001 |
| Total State Trip and Du | res | 695,082 | | |

Recreational Anglers by Residential Area (thousands of anglers)

| | <u> </u> | | | | | | | | | |
|---------------|----------|------|------|-------|------|------|-------|-------|-------|------|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| Coastal | 302 | 309 | 388 | 423 | 337 | 384 | 510 | 559 | 578 | 463 |
| Non-Coastal | 38 | 66 | 68 | 88 | 73 | 52 | 69 | 137 | 90 | 76 |
| Out-of-State | 291 | 187 | 262 | 520 | 407 | 288 | 428 | 511 | 364 | 297 |
| Total Anglers | 631 | 562 | 717 | 1,031 | 817 | 724 | 1,007 | 1,206 | 1,033 | 836 |

Recreational Fishing Effort by Mode (thousands of trips)

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| For-Hire | 80 | 41 | 64 | 91 | 72 | 86 | 96 | 41 | 34 | 59 |
| Private or Rental | 1,976 | 1,904 | 2,291 | 2,579 | 2,255 | 2,068 | 2,415 | 2,432 | 2,555 | 2,510 |
| Shore | 900 | 749 | 1,036 | 1,458 | 927 | 958 | 1,083 | 1,368 | 1,310 | 1,154 |
| Total Trips | 2,956 | 2,694 | 3,391 | 4,128 | 3,254 | 3,113 | 3,594 | 3,841 | 3,900 | 3,723 |

Harvest (H) and Release (R) of Key Species / Species Groups (number of fish in thousands)

| Species/Groups | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|------------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Bass, Striped | Н | 294 | 304 | 335 | 301 | 321 | 402 | 477 | 368 | 523 | 246 |
| bass, Surpeu | R | 796 | 941 | 1,022 | 621 | 707 | 971 | 1,768 | 1,485 | 1,690 | 914 |
| Cobia | Н | 4 | 5 | 10 | 9 | 3 | 2 | 3 | 14 | 8 | 10 |
| Cobia | R | 9 | 16 | 8 | 10 | 10 | 15 | 7 | 23 | 29 | 8 |
| Drum (Atlantic | Н | 6,730 | 5,882 | 5,486 | 9,335 | 9,129 | 6,695 | 7,293 | 7,791 | 7,069 | 7,753 |
| Croaker) | R | 4,991 | 5,669 | 7,811 | 7,087 | 7,108 | 6,544 | 5,791 | 8,144 | 4,599 | 9,511 |
| Drum, Red | Н | 13 | 12 | 23 | 7 | 50 | 14 | 5 | 3 | 15 | 71 |
| Druill, Reu | R | 94 | 233 | 197 | 30 | 801 | 43 | 34 | 31 | 159 | 166 |
| Drum (Spot) | Н | 2,024 | 569 | 527 | 1,056 | 1,602 | 1,441 | 2,323 | 2,994 | 3,510 | 6,609 |
| Druin (Spot) | R | 900 | 340 | 503 | 969 | 482 | 934 | 975 | 1,799 | 921 | 2,311 |
| Drum (Spotted | Н | 35 | 138 | 90 | 13 | 16 | 102 | 75 | 31 | 56 | 146 |
| Seatrout) | R | 75 | 152 | 265 | 110 | 136 | 207 | 296 | 277 | 125 | 415 |
| Drum (Weakfish) ¹ | Н | 464 | 229 | 287 | 176 | 178 | 86 | 103 | 30 | 59 | 45 |
| Diulii (Weakiisii) | R | 1,245 | 819 | 936 | 633 | 888 | 504 | 528 | 267 | 456 | 172 |
| Flounder, Summer | Н | 1,165 | 378 | 581 | 1,338 | 772 | 451 | 584 | 584 | 862 | 479 |
| Hourider, Summer | R | 3,852 | 2,183 | 2,629 | 4,014 | 2,666 | 2,585 | 3,539 | 2,340 | 2,274 | 3,388 |
| Sea Bass, Black | Н | 398 | 536 | 448 | 231 | 132 | 265 | 48 | 75 | 115 | 67 |
| Sed Dass, Diack | R | 1,332 | 1,242 | 1,570 | 2,180 | 2,441 | 1,742 | 1,280 | 945 | 983 | 1,265 |
| Wraccoc (Tautog) | Н | 51 | 43 | 35 | 29 | 26 | 76 | 163 | 108 | 142 | 67 |
| Wrasses (Tautog) | R | 77 | 66 | 13 | 27 | 38 | 55 | 141 | 107 | 229 | 94 |

¹This species may not be equivalent to species with similar names listed in the commercial tables.

Virginia's State Economy (% of national total)

| | Establishments | Employees | Annual Payroll (\$ millions) | Employee Compensation (\$ millions) | Product | Commercial Location Quotient ¹ |
|----------|----------------|------------------|------------------------------|---|----------------|---|
| 1998 | 172,182 (2.5%) | 2,700,589 (2.5%) | 81,261 (2.5%) | 167,476 (2.8%) ² | 226,569 (2.6%) | 0.38 |
| 2005 | 197,263 (2.6%) | 3,174,363 (2.7%) | 128,999 (2.7%) | 220,087 (3.0%) | 368,604 (2.8%) | 0.48 |
| % change | 14.6% | 17.5% | 58.7% | 31.4% | 62.7% | 26.3% |

Seafood Sales and Processing – Nonemployer Firms (thousands of dollars)

| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|-------------------------|----------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| Seafood product | Firms | 12 | 14 | 16 | 20 | 35 | 53 | 68 | 65 | 74 |
| preparation & packaging | Receipts | 283 | 854 | 613 | 1,185 | 1,406 | 2,370 | 3,456 | 3,665 | 4,916 |
| Seafood Sales, | Firms | 76 | 73 | 68 | 89 | 94 | 88 | 89 | 80 | 86 |
| retail | Receipts | 3,788 | 4,707 | 5,505 | 10,148 | 8,266 | 7,193 | 8,346 | 8,762 | 8,027 |

Seafood Sales and Processing - Employer Establishments (thousands of dollars)

| | | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Seafood product preparation & packaging | Establishments | 46 | 42 | 41 | 42 | 39 | 38 | 42 | 39 | 33 |
| | Employees | 1,515 | 1,515 | 1,230 | 1,259 | 1,035 | 1,256 | 1,231 | 1,336 | 871 |
| | Payroll | 29,441 | 30,554 | 34,642 | 35,228 | 35,828 | 37,386 | 38,731 | 39,980 | 28,530 |
| Seafood sales, wholesale | Establishments | 108 | 108 | 105 | 100 | 89 | 84 | 86 | 86 | 80 |
| | Employees | 1,087 | 1,056 | 1,072 | 875 | 790 | 742 | 756 | 675 | 605 |
| | Payroll | 20,721 | 22,086 | 21,054 | 21,138 | 21,591 | 20,133 | 22,235 | 21,864 | 21,388 |
| Seafood sales, retail | Establishments | 53 | 52 | 57 | 59 | 74 | 61 | 68 | 69 | 75 |
| | Employees | ND | ND | 243 | 203 | 259 | 165 | 297 | 286 | 334 |
| | Payroll | ND | ND | 3,262 | 3,104 | 3,662 | 3,146 | 4,479 | 4,865 | 5,348 |

Transport, Support, and Marine Operations – Employer Establishments (thousands of dollars)

| | ort, and warme | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|--|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Coastal & Great Lakes freight transportation | Establishments | 16 | 15 | 15 | 14 | 13 | 16 | 13 | 15 | 13 |
| | Employees | 501 | ND^3 | ND | ND | ND | 591 | ND | ND | ND |
| | Payroll | 18,281 | ND | ND | ND | ND | 26,881 | ND | ND | ND |
| Deep sea freight transportation | Establishments | 20 | 26 | 24 | 22 | 23 | 22 | 21 | 24 | 22 |
| | Employees | 895 | 953 | 1,172 | ND | 1,254 | 1,087 | 1,124 | 1,090 | 1,564 |
| | Payroll | 49,207 | 71,298 | 72,961 | ND | 92,591 | 87,099 | 91,978 | 95,871 | 141,085 |
| Deep sea passenger transportation | Establishments | NA^4 | NA | NA | NA | 2 | 2 | 2 | 1 | 1 |
| | Employees | NA | NA | NA | NA | ND | ND | ND | ND | ND |
| | Payroll | NA | NA | NA | NA | ND | ND | ND | ND | ND |
| Marinas | Establishments | 121 | 119 | 121 | 129 | 122 | 136 | 137 | 141 | 131 |
| | Employees | ND |
| | Payroll | ND |
| Marine cargo handling | Establishments | 16 | 17 | 16 | 16 | 18 | 19 | 19 | 18 | 17 |
| | Employees | 1,387 | ND | 1,820 | 1,284 | ND | ND | ND | 1,516 | 1,110 |
| | Payroll | 52,862 | ND | 53,584 | 50,553 | ND | ND | ND | 52,254 | 51,654 |
| Navigational services to shipping | Establishments | 13 | 13 | 14 | 13 | 17 | 15 | 20 | 21 | 17 |
| | Employees | 374 | ND |
| | Payroll | 9,359 | ND |
| Port & harbor operations | Establishments | 8 | 9 | 9 | 9 | 8 | 8 | 9 | 9 | 10 |
| | Employees | ND |
| | Payroll | ND |
| Ship & boat building | Establishments | 53 | 54 | 52 | 63 | 62 | 50 | 52 | 50 | 51 |
| | Employees | 21,711 | 21,176 | 21,429 | 20,198 | 21,240 | 20,720 | 21,022 | 21,230 | 21,741 |
| | Payroll | 853,817 | 765,462 | 856,081 | 989,524 | 963,644 | 901,156 | 920,372 | 938,375 | 993,066 |

¹The U.S. Commercial Fishing Location Quotient (CFLQ) of 1.0 represents the national baseline from which state CFLQs can be compared

²Employee Compensation data for 1998 were not available. Data from 2001 are reported here.

 $^{^{3}}ND$ = Data are suppressed due to confidentiality restrictions.

⁴NA = Data are not available.