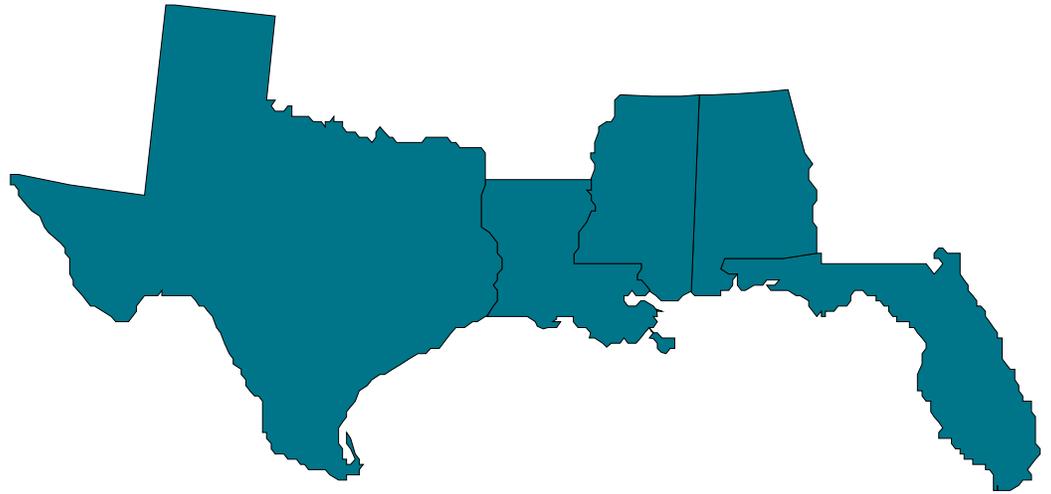


# Gulf of Mexico

- Alabama
- West Florida
- Louisiana
- Mississippi
- Texas



# Gulf of Mexico Summary

## Management Context

The Gulf region includes the states of Alabama, Louisiana, Mississippi, Texas, and western Florida. Federal fisheries in this region are managed by the Gulf of Mexico Fishery Management Council (GMFMC) and the National Marine Fisheries Service. The spiny lobster and coastal pelagics fisheries, and the harvest of corals, are jointly managed with the South Atlantic Fishery Management Council (SAFMC).

### Gulf of Mexico Fishery Management Plans

1. Atlantic Red Drum
2. Shrimp
3. Stone Crab
4. Reef Fish Resources
5. Coastal Migratory Pelagic Resources (with SAFMC)
6. Spiny Lobster (with SAFMC)
7. Coral, Coral Reef, and Live/Hard Bottom Habitats (with SAFMC)

Of the species covered in these fishery management plans, red snapper, greater amberjack, and gray triggerfish are currently considered overfished. Stocks currently subject to overfishing include red snapper, greater amberjack, gag, and gray triggerfish.

There is one limited access privilege program (LAPP) in the Gulf Region. The Gulf of Mexico red snapper fishery has been managed as an individual fishing quota (IFQ) fishery since 2007 and had an ex-vessel value of \$9.0 million. A Gulf of Mexico grouper IFQ is anticipated for 2010.

## Commercial Fisheries

In 2006, landings by Gulf of Mexico commercial fishermen were 1.3 billion pounds and had an ex-vessel value of \$674 million. Landings revenue from shellfish was \$542 million (371 million pounds), while landings revenue from finfish and other fishery products was \$132 million (975 million pounds). Shrimp accounted for nearly 60% of landings revenue, though comprising 20% of total landings. The commercial fishing industry generated the highest economic impacts in Florida (\$5.2 billion in sales, \$2.9 billion in income, and 103,000 jobs).

### Key Gulf of Mexico Commercial Species

Commercially-important species and species groups in the Gulf of Mexico include: blue crab, stone crab, crawfish, groupers, menhaden, mullets, oyster, shrimp, red snapper, and tunas.



Three shrimp boats at the Municipal Pier in Key West, Florida

## Economic Impacts

Florida led the region in commercial fisheries-related sales and income, and generated more full- and part-time jobs than the other states. The commercial fishing industries in Louisiana and Texas generated comparable economic activity. In Louisiana, commercial fishing generated \$2.1 billion in sales, \$1.1 billion in income, and supported 46,000 jobs. In Texas, the commercial fishing industry generated \$2.2 billion in sales, \$1.1 billion in income, and supported 47,000 jobs. Commercial fishing generated \$492,000 and \$205,000 in sales in Alabama and Mississippi, respectively.

## Landings Revenue

Ex-vessel revenue decreased 13% from 1997 to 2006 (26% after adjusting for inflation). Decreases in ex-vessel revenues for both shellfish and finfish and other fishery products were also seen: shellfish revenues declined 10% (24% in real terms) and finfish and other fishery products dropped 21% (33% in real terms).

Overall, Louisiana had the highest average landings revenue (\$307 million nominally, \$327 million in real terms), followed by Texas (\$204 million nominally, \$217 million in real terms), west Florida (\$151 million nominally, \$161 million in real terms), Alabama (\$45 million nominally, \$48 million in real terms), and Mississippi (\$44 million nominally, \$47 million in real terms). Mississippi and Louisiana experienced the largest decrease in ex-vessel revenues between 1997 and 2006, decreasing 55% and 20%, respectively.

The Gulf region's key species or groups generated an average of \$684 million in revenue from 1997-2006. This comprised an average of 91% of the ex-vessel value in the Gulf. Shrimp (65% of key species revenue; 59% of

total revenue) had the highest average ex-vessel revenues, followed by menhaden (8% of key species revenue; 8% of total revenue) and blue crab (6% of key species revenue; 6% of total revenue). Texas generated the majority of shrimp revenues, comprising 40% of shrimp revenue on average per year. On average, Louisiana accounting for 36% of shrimp revenue. Overall, shrimp revenues in the region fell 16% between 1997 and 2006, with the largest drop occurring in Mississippi, a 61% decrease in shrimp revenues. Only Alabama experienced a growth in shrimp revenues, increasing \$37 million (1997) to \$39 million in 2006.

#### Commercial Fish Facts

- Blue crab, oysters, shrimp, and red snapper are key species or species groups for all five states in the Gulf Region.

#### Landings revenue

- On average, the key individual species and species groups accounted for 91% of total revenue.
- Shrimp landings revenue averaged \$444 million from 1997-2006, consistently accounting for ~55-65% of Gulf landings revenue. Overall, shrimp landings revenue decreased 16% (29% in real terms) during this time period.
- The largest annual increase and decrease in annual revenue was for crawfish: 1144% (2000-2001) and -93% (1999-2000).
- In contrast, blue crab, grouper, and oyster revenues remained relatively stable (1997-2006). That is, revenues generally did not fluctuate more than 10% from year to year.

#### Landings

- The Gulf Region's key species or species groups averaged 96% of total landings from 1997-2006.
- Menhaden landings averaged 1.2 billion pounds from 1997-2006, consistently accounting for ~65-75% of Gulf landings. Overall, menhaden landings declined 34% during this time period.
- Of the key species or groups, crawfish landings were the most variable, having both the largest annual increase (2549% from 2000-2001) and decrease (-97% from 1999-2000).

#### Prices

- Groupers and red snapper prices were relatively stable during the time period, generally varying less than 10% per year
- Stone crab at \$3.81, tunas at \$2.66, and oysters at \$2.33 had the highest average annual prices per pound.
- Menhaden at \$0.05, mullets at \$0.67, and blue crab at \$0.69 had the lowest average annual prices per pound.
- The largest annual increase in price was for stone crab, 189% from 1997-1998. The largest annual decrease was for crawfish, a 53% drop in price from 2000-2001.

#### Landings

Over the 10 year period, total landings averaged 1.6 billion pounds, ranging from 1.2 billion pounds (2005) to 2.0 billion pounds (1999). Finfish and other fishery products averaged 1.3 billion pounds, decreasing 34% between 1997 and 2006. Shellfish landings remained relatively stable over the time period, averaging 362 million pounds.

The Gulf's regionally important species or groups averaged 1.6 billion pounds. Landings ranged from 1.2 billion pounds (2005) to 1.9 billion pounds (1999). Menhaden comprises an average of 72% of total landings for the region (1.2 billion pounds). Louisiana's contribution to menhaden landings is highest in the region, averaging 83% of annual menhaden landings, despite a 43% drop in Louisiana's menhaden landings between 1997 and 2006.

#### Prices

From 1997-2006, ex-vessel prices for high-valued species such as stone crab (\$3.81 average annual price per pound; \$4.00 per pound in real terms), tunas (\$2.66 average annual price; \$2.82 per pound in real terms) and oyster (\$2.33 average annual price; \$2.47 per pound in real terms) increased 340%, 26%, and 50%, respectively. Adjusting for inflation, the prices of stone crab, tunas and oysters increased 272%, 7% and 27%, respectively. Landings for stone crab show a declining trend overall with 4.8 million pounds landed in 2006, the lowest landings in the past 10 years. The ex-vessel price of shrimp, which consistently accounts for 55-65% of landings revenue, averaged \$1.78 per pound (\$1.90 in real terms), but showed an overall declining trend in price, dropping 34% between 1997 and 2006.

With the exception of blue crab and shrimp, 2006 ex-vessel prices for key species or groups were higher relative to their corresponding average prices for the time period. Red snapper, crawfish, and oyster ex-vessel prices in 2006 were all above 20% or more above their average annual prices. Shrimp and blue crab 2006 ex-vessel prices were lower than their corresponding average prices, 21% and 7%, respectively.

#### Recreational Fishing

In the Gulf region, there were 6.2 million recreational anglers in 2006 who took a total of 23.9 million fishing trips. Anglers spent \$2.2 billion on recreational fishing trips in the region and \$14 billion on durable fishing-related equipment. The economic impacts from recreational fishing were highest in western Florida. In 2006, expenditures by anglers in western Florida contributed

# Gulf of Mexico Summary

\$7.8 billion in total sales to the regional economy, added over 75,000 jobs, and generated \$4.2 billion in value-added impacts.

## Key Gulf Recreational Fishing Species

The Gulf of Mexico's recreationally-important species are: Atlantic croaker, Gulf/southern kingfish, red drum, red snapper, sand/silver seatrout, sheepshead, southern flounder, Spanish mackerel, spotted seatrout, and striped mullet.

## Participation Rates<sup>1</sup>

There were 3.3 million anglers from coastal counties in the Gulf region in 2006 (54% of the total). There were 2.5 million out-of-state residents (41% of total anglers) and 315,000 non-coastal county residents (5% of total anglers).

## Recreational Fishing Facts

### Participation

- The total number of anglers between 1997 and 2006 increased 63% in the Gulf region. Participation increased in all three angler groups: coastal county residents (72%), non-coastal county residents (114%), and out-of-state anglers (49%).
- The number of anglers in Louisiana doubled from 1997 (616,000 anglers) to 2006 (1.2 million anglers).
- Western Florida had the highest number of recreational anglers in 2006 with 4.0 billion anglers. Out-of-state anglers averaged almost 55% of total anglers between 1997-2006.
- The number of out-of-state anglers taking fishing trips in Mississippi fell 70% between 1997-2006.

### Recreational trips

- In 2006, the number of fishing trips taken on a private or rented boat comprised 58% of the 23.9 million trips taken.

### Economic impacts

- In western Florida, anglers spent a total of \$9.0 billion on fishing trips and durable equipment. Anglers in Texas followed, spending a total of \$3.2 billion on fishing trips and durable equipment.

### Catch data for key species

- The total number of Spanish mackerel caught in the Gulf region in 2006 was almost 3 million higher than the number caught in 1997, a 134% increase. The majority of Spanish mackerel are caught in western Florida.
- The 2006 catch of red snapper (3.5 million fish) is an 18% increase over 1997 levels. Recreational harvest of red snapper declined 14% (969,000 fish) while the number of released red snapper increased 38% to 2.6 million fish.

The proportions of coastal county resident anglers and out-of-state anglers varied over the time period. From 1998 to 2001, out-of-state anglers comprised 49-50% of total anglers, while coastal county resident anglers comprised 46-47%. From 2002 to 2006, coastal county residents averaged 52% of total anglers.

Between 1997 and 2006, participation increased from 3.8 million anglers to 6.2 million anglers, a 63% increase. Total participation was highest in 2004 with 6.4 million anglers.

## Recreational Fishing Trips<sup>1</sup>

The number of total fishing trips taken in the Gulf region ranged between 15.9 million (1999) to 24.4 million (2004). There was an 28% increase in fishing trips taken between 1997 and 2006. In 2006, there were 13.8 million private/rental boat trips taken by Gulf region anglers, 58% of all fishing trips. There were 9.2 million fishing trips taken from shore (39% of total trips) and 820,000 fishing trips taken from a party/charter boat (3% of total trips). Private/rental trips outnumbered the other two fishing trip modes combined in each year from 1997-2006.

The majority of fishing trips in the region were taken in western Florida. In 2006, 16.2 million trips were taken, an increase of 21% over the 13.4 million trips taken in 1997. Private/rental boat trips were the most popular (8.9 million or 55% of trips), followed by fishing trips from shore (6.7 million trips or 42%) and party/charter boat trips (560,000 or 3% of trips).

## Expenditures and Economic Impacts

Total trip and durable equipment expenditures in the Gulf region totaled over \$16 billion in 2006. Boat expenses by all anglers totaled \$8.2 billion, vehicle expenses were \$2 billion, and fishing tackle expenses were \$1.7 billion. Expenditures by residents were \$1.5 billion (68% of total trip expenditures). Private boat trips accounted for 58% of total trip expenditures by residents at \$878 million. Non-residents spent the most on fishing trips from shore: \$346 million or 50% of trip expenditures by non-residents.

Economic impacts to the economy of each state are reported in terms of those due to trip expenditures (by mode) and purchases of durable goods. When looking at which fishing mode generated the highest sales impacts in each state, shore trips in western Florida (\$467 million) and private boat trips in Texas (\$673 million) and Louisiana (\$260 million) ranked highest. In Mississippi, private boat trips accounted for the highest sales impacts (\$17.8 million). Fishing trips from shore generated the highest total sales impacts (\$95.6 million) in Alabama.

<sup>1</sup>Note that Texas does not collect data on participation (number of anglers) and effort (number of fishing trips).

Western Florida sustained the highest number of jobs related to recreational fishing: over 75,000 jobs. Texas (34,000 jobs) and Louisiana (27,000 jobs) followed.

***Recreational Harvest and Released Catch***

The recreational catch of spotted seatrout is the most caught key species or group in the Gulf Region with 36 million fish caught in 2006. Anglers released 20.9 million and harvested 15.6 million. Louisiana accounted for 66% of the region’s catch of spotted seatrout with 24 million fish. The species with the second highest catch levels in the region was red drum. Over 9.8 million fish were caught in 2006.

From 1997-2006, angler harvest increased for eight of the 10 key species: spotted seatrout (89%), Gulf and southern kingfish (64%), Spanish mackerel (53%), and Atlantic croaker (37%) harvests increased the most during this period. Only one species had a decrease in number of released fish (Atlantic croaker). From 1997-2006, Spanish mackerel (252%), Gulf and southern kingfish (157%), southern flounder (84%), sand and silver seatrout (66%) and striped mullet (65%) had the largest increases in number of released fish. Only one species had a decline in overall catch (porgies) during this period.

**Marine Coastal Economy**

Of the five states in the Gulf Region, Texas and Florida contributed the most to the national economy in terms of gross domestic product by state. In 2005, Florida and Texas had the greatest number of establishments in the region, with Texas employing the greatest number of people. Annual payroll and employee compensation in Texas were also highest for the region.

Louisiana, Mississippi, and Florida all have Commercial Fishing Location Quotients (CFLQ) above the national baseline (1.0). Louisiana showed an increase in employment in commercial fishing industries from 2001 to 2005, 24% and 16% respectively. However, Florida’s CFLQ dropped 26% between 2001 and 2006. Decreases were also observed for Texas (43%) and Alabama (20%).

***Seafood Sales and Processing***

In 2005, the 647 non-employer firms in the seafood retail industry had receipts of \$64 million, an increase in receipts of 27% from 1998 levels (\$50 million). Employer establishments in this industry increased 22% between 1998 and 2005, with all states but Texas showing double-digit gains. In 2005, the annual payroll (\$33 million) and number of employees (2,000) of these establishments represented, respectively, a 53% and 41% increase over 1998 levels.

With the exception of Mississippi, for which information was not available, all Gulf states experienced a 40% or larger increase in the number of non-employer seafood product preparation and packaging firms from 1998 to 2005. Overall, 2005 receipts (\$24 million) were up 51% from 1998 levels. Alabama (217%), Louisiana (85%), and Florida (75%) experienced significant gains in receipts while in Texas, receipts by these firms declined 57%. In contrast, the number of employer establishments engaged in this industry declined 17% from 183 firms in 1998 to 152 firms in 2005. Annual payroll was \$217 million in 2005, a 16% increase over 1998 levels, while the number of employees declined 4% to 10,000 workers.

In 2005, there were 539 employer establishments engaged in seafood wholesale activities in the Gulf region, a decrease of 24% from 1998. Almost half of these establishments (258) are in Florida, while 24% (128 establishments) and 18% (97 establishments) were located in Louisiana and Texas, respectively. Overall, annual payroll in the region and employees working in this industry in 2005 were \$118 million and 4,700, respectively. The number of establishments, annual payroll, and number of employees engaged in this industry declined 24%, 8%, and 22%, respectively, from 1998 levels. All states experienced declines in each of these categories.

***Transport, Support, and Marine Operations***

Establishment numbers for industries in this sector were generally available for all states. The availability of employee numbers and annual payroll data was limited for Alabama and Mississippi and, to a lesser degree, Texas.

In Louisiana, there were 509 establishments with an annual payroll of \$946 million and 24,000 workers employed in this sector in 2005. This represents a 19% increase in establishments, a 27% decrease in employees, and a 9% increase in payroll since 1998. Coastal freight transportation, navigational services to shipping, and ship and boat building each accounted for roughly 20-25% of the Louisiana establishments in this sector. Ship and boat building and coastal freight transportation accounted for 40% and 31%, respectively, of the payroll in this sector; ship and boat building accounted for almost half the jobs in this sector in 2005.

In Florida, there were 1,233 establishments with an annual payroll of \$1.1 billion and 30,000 workers employed in this sector in 2005. (See the discussion in the South Atlantic region for additional detail on Florida industries in this sector).

Ship and boat building represented the largest industry in this sector in the Gulf of Mexico region. In 2005, 584 establishments with an annual payroll of \$1.5 billion

## Gulf of Mexico Summary

employed 42,000 workers. This is a critical industry in this sector for Mississippi.

Based on available data (excludes Mississippi), marine cargo handling represented the second largest industry in this sector. In 2005, 186 establishments with an annual payroll of \$468 million employed 16,000 workers. In addition, coastal freight transportation and navigational services were significant industries in Texas, Louisiana, and Florida. Marinas and deep sea freight transportation were significant industries in Florida.