

CRS Report for Congress

Commercial Fishery Disaster Assistance

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Commercial Fishery Disaster Assistance

Summary

Disaster relief may be provided by the federal government to assist the fishing industry when it is affected by a commercial fishery failure. A commercial fishery failure occurs when fishermen endure hardships resulting from fish population declines or other disruptions to the fishery. The Department of Commerce can provide disaster assistance under either Section 308 of the Interjurisdictional Fisheries Act (16 U.S.C. § 4107), as amended, or Section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1861(a)). The National Marine Fisheries Service plays a central role in determining whether a disaster has occurred and in allocating federal funding to states and affected fishing communities. Congress plays a pivotal role by appropriating funds and providing oversight of the process.

Fisheries are subject to environmental variability that may affect the fishery resource and/or commercial infrastructure such as boats, shoreside processing, and market channels. Since 1994, federal fishery failures have been declared on 25 occasions and nearly \$730 million in federal funding has been appropriated for fishery disaster relief. Funds have been allocated to fisheries of the North Pacific, Pacific Northwest, Gulf of Mexico, and the East Coast. Recent cases include Gulf of Mexico fisheries in the wake of hurricanes Gustav and Ike, the Chesapeake Bay blue crab fishery, and the West Coast salmon troll fishery, where strict harvest limits were imposed in response to declines of Sacramento River Chinook salmon.

Direct federal financial assistance has been provided to fishermen and fishing communities in the form of grants, job retraining, employment, and low interest loans. Assistance has also included fishery data collection, research, and fishing capacity reduction programs to prevent or lessen the effects of future disruptions to fisheries. However, critics contend that disaster assistance programs often fall short of expectations because sometimes funds are not disbursed in a timely manner, ambiguities complicate the definition of a fishery failure, relief may not be integrated with long-term fishery management objectives, and funds may not reach the people who are in the greatest need of assistance.

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Commercial Fishery Disaster Assistance

Introduction

Disaster relief may be provided by the federal government to assist the fishing industry when it is affected by a commercial fishery failure. A commercial fishery failure occurs when fishermen endure hardships resulting from fish population declines or other disruptions to the fishery. The Department of Commerce can provide disaster assistance under either Section 308 of the Interjurisdictional Fisheries Act (IFA; 16 U.S.C. § 4107), as amended, or Section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA; 16 U.S.C § 1861(a)). The National Marine Fisheries Service (NMFS) plays a central role in determining whether a disaster has occurred and in allocating federal funding to states and affected fishing communities. Congress plays a pivotal role by appropriating funds and providing oversight of the process.

Fisheries are subject to environmental variability that may affect the fishery resource and/or commercial infrastructure such as boats, shoreside processing, and market channels. Since 1994, federal fishery failures have been declared on 25 occasions and nearly \$730 million in federal funding has been appropriated for fishery disaster relief. Funds have been allocated to fisheries of the North Pacific, Pacific Northwest, Gulf of Mexico, and the East Coast. Direct financial assistance has been provided to fishermen and fishing communities in the form of grants, job retraining, employment, and low interest loans. Assistance has also included fishery data collection, research, and fishing capacity reduction programs to prevent or lessen the effects of future disruptions to fisheries. Recent cases include Gulf of Mexico fisheries in the wake of hurricanes Gustav and Ike, the Chesapeake Bay blue crab fishery, and the West Coast salmon troll fishery, where strict harvest limits were imposed in response to declines of Sacramento River Chinook salmon. Several issues related to fishery disaster relief include timing relief disbursements to meet critical needs, integrating relief with long-term management objectives, defining and declaring a fishery failure, and reaching people who may be in the greatest need of relief.

Program Requirements and Procedures

The Department of Commerce can provide disaster assistance under either the MSFCMA or the IFA.¹ Differences exist under each law with regard to the causes of a fishery failure, and the use of funds (see **Table 1**). Several recent fishery failures have been declared under both laws, providing program managers greater latitude in matching relief with the needs of recipients.

¹ See the National Oceanic and Atmospheric Administration, Fishery Disaster Assistance website at [http://www.nmfs.noaa.gov/mb/financial_services/disaster.htm].

Table 1. Fishery Failure Causes, Types of Assistance, and Use of Funds

Section	Fishery Failure Causes	Types of Assistance and Use
Section 312(a) of MSFCMA	Fishery resource disaster as a result of — (1) natural causes (2) man-made causes beyond the control of fishery managers to mitigate through conservation and management measures, including regulatory restrictions imposed to protect human health or the marine environment (3) undetermined causes	(1) assessment of the social and economic effects of the failure (2) assistance to the community (3) projects to restore the fishery or prevent reoccurrence of a similar failure (4) federal share of assistance cannot be greater than 75%
Section 308(b) of IFA	Fishery resource disaster arising from — (1) natural causes (2) undetermined causes	(1) restore a fishery affected by a fishery failure; (2) prevent a future fishery failure (3) federal share of funding is limited to 75% of costs
Section 308(d) of IFA	Fishery resource disaster arising from — (1) natural disasters such as a hurricane	(1) direct assistance to fishermen; (2) indirect assistance through state agencies, local government, and nonprofit organizations (3) no limit on the federal share of costs
Section 315 of MSFCMA	Regional fishery disaster — (1) results in economic losses to the coastal or fishing communities (2) affects more than one state or a major fishery managed by a Council or interstate fishery commission (3) is determined by the Secretary to be a commercial fishery failure under § 312(a) of MSFCMA or fishery resource disaster under § 308(d) of IFA	(1) activities authorized under either MSFCMA or IFA (2) the Secretary may waive matching requirements if no reasonable means are available for meeting the match and the probable benefit of federal financing outweighs the public interest in imposing the match

MSFCMA. In 1996, MSFCMA was amended to include a new section focusing on a transition to sustainable fisheries. This section includes Subsection 312(a) to provide fishery disaster relief when fishery failures occur, especially for those fisheries in need of stock rebuilding. Under Section 312(a), the process is started at the discretion of the Secretary of Commerce, at the request of the governor of an affected state, or at the request of a fishing community. The Secretary then

determines whether a commercial fishery failure has occurred due to a fishery resource disaster resulting from:

- natural causes;
- man-made causes beyond the control of fishery managers to mitigate through conservation and management measures, including regulatory restrictions imposed to protect human health or the marine environment; or
- undetermined causes.

Requests usually contain information describing the alleged fishery failure. Although guidelines for handling requests are not codified in rule, the Secretary typically directs the appropriate Regional Administrator for NMFS to collect and analyze required information such as the historical context, the biological and economic magnitude of the disaster, and the relationship between underlying causes and the alleged fishery failure.² Depending on the circumstances, states may provide most of these data and the related analysis. The Secretary uses the information to determine whether or not the situation constitutes a fishery failure. Once the Secretary declares that a fishery failure has occurred, Congress may use the authorization in the MSFCMA to appropriate funds for financial assistance to harvesters and other affected parties.

After funds are appropriated, the Secretary would make relief available to the affected state or fishing community, often through state agencies. Funding under the MSFCMA may be used to address a broad variety of needs including assessment of the social and economic effects of the failure, assistance to the community, and projects to restore the fishery or prevent reoccurrence of a similar failure. Before releasing funds, the Secretary must also determine that relief activities would not expand the size and scope of the failure in that fishery, other fisheries, or affect fisheries in other geographic regions. The federal share of assistance carried out under the MSFCMA cannot be greater than 75% of the cost of relief activities.

IFA. The IFA was enacted in 1986 to distribute federal funds to states for developing interstate fishery research programs. Under IFA, funds are authorized to provide assistance for a commercial fishery failure in Section 308(b) and Section 308(d). Under Section 308(b), the causes of a commercial fishery failure or serious disruption to future production due to a fishery resource disaster include natural and undetermined causes. In Section 308(d), fishery resource disasters are referred to as natural disasters. The definition of a fishery resource disaster appears to be broader under the MSFCMA because human-related causes are also included. Otherwise, the process of collecting information and determining whether a failure has occurred is similar under both laws.

IFA funding under Section 308(b) may be used by states alone or by the Secretary in cooperation with the states. Funding may be provided for any purpose

² NMFS Procedures and Guidance for Disaster Assistance Under Magnuson-Stevens Act Section 312(a) and Interjurisdictional Fisheries Act Sections 308(b) and 308(d) can be found at [<http://www.nmfs.noaa.gov/directives/>].

the Secretary determines as appropriate to restore a fishery affected by a fishery failure or to prevent a future fishery failure. Under Section 308(b), funds may not be used for grants to charter fishing vessels, and the federal share of activity funding is limited to 75% of costs. Funding under Section 308(d) of IFA may be used to provide direct assistance to fishermen or to provide assistance indirectly through state agencies, local government, and nonprofit organizations. In contrast to the MSFCMA and Section 308(b) of IFA, there is no limit on the federal share of costs under Section 308(d). Section 308(d) also outlines the conditions under which funding may be used for other activities such as fishing capacity reduction programs. These programs include fishing vessel buybacks, gear reduction, or fishing permit retirement. Funding under both MSFCMA and IFA is usually appropriated by Congress as needs arise, rather than in anticipation of future needs.

MSFCMA Regional Coastal Disaster Assistance. In 2006, MSFCMA was amended to add Section 315 the Regional Coastal Disaster Assistance, Transition, and Recovery Program. When a catastrophic regional fishery disaster occurs, the Secretary may establish a regional program to provide immediate disaster relief assistance to fishermen, charter fishing operators, U.S. fish processors, and owners of related fishery infrastructure. A catastrophic regional fishery disaster is defined as a natural disaster, such as a hurricane or tsunami, or a regulatory closure to protect human health or the marine environment. A catastrophic regional fishery disaster is an event that:

- results in economic losses to the coastal or fishing communities;
- affects more than one state or a major fishery managed by a Council³ or interstate fishery commission; and
- is determined by the Secretary to be a commercial fishery failure under Section 312(a) of MSFCMA or as a fishery resource disaster under Section 308(d) of IFA of 1986.

Within two months after a catastrophic regional fishery disaster, the Secretary is required to provide the governor of each participating state with a comprehensive economic and socioeconomic evaluation of the region's fisheries. The evaluation would assess the current and future economic viability of affected fisheries including the economic impact of foreign fish imports and direct, indirect, or environmental impacts of the disaster on the fishery and coastal communities. Subject to the availability of appropriations, the program would provide funds for infrastructure needs, job training assistance, fishing capacity reduction, and for other activities authorized under either MSFCMA or IFA. Under the Regional Coastal Disaster Assistance, Transition, and Recovery Program, the Secretary may waive the matching requirements if no reasonable means are available for meeting the match, and the

³ Eight regional Fishery Management Councils were created by the Fishery Conservation and Management Act, later renamed the Magnuson Fishery Conservation and Management Act and more recently the Magnuson-Stevens Fishery Conservation and Management Act. Council members are appointed by the Secretary of Commerce from lists of candidates knowledgeable of fishery resources, provided by state governors. The councils prepare fishery management plans (FMPs) for those fisheries that occur primarily within the federal waters of the Exclusive Economic Zone (3-200 nautical miles from shore). Links to individual Council websites are available at [<http://www.nmfs.noaa.gov/>].

probable benefit of 100% federal financing outweighs the public interest in imposing the match.

Small Business Administration. When businesses suffer economic injuries from a disaster, the Small Business Administration (SBA) may also determine whether a disaster declaration is warranted.⁴ For example, when red tide required closure of the Maine shellfish fishery in 2005, SBA evaluated the impact on small businesses and determined a disaster declaration was justified. The declaration makes affected businesses eligible for Economic Injury Disaster Loans.⁵ The purpose of the loan program is to provide working capital at low interest rates to assist in the recovery of businesses harmed by a disaster.

Fishery Disaster Declarations

Since 1994, the Secretary of Commerce has declared 25 fishery resource disasters. During this period Congress has appropriated nearly \$730 million for fishery disaster relief. **Table 2** provides a list of fishery disasters and funds appropriated by Congress for each.

Fishery resource disasters are diverse, both with respect to their causes and scope. Most declarations have resulted from natural events such as hurricanes, floods, changes in ocean conditions, or algal blooms such as red tide. In coastal areas hurricanes may damage fishing industry infrastructure such as vessels, docks, fish houses, and related businesses. Even if the resource remains abundant, harvesting, processing, and transport to markets may not be possible until repairs are undertaken and basic services are restored. In addition to the costs of repairs and the replacement of equipment and gear, lost fishing time can also be costly. The fishery resource may also be directly affected if, in addition to damaged infrastructure, hurricanes cause damage to oyster beds from silt and debris. Algal blooms such as red tide are another type of natural event that can render seafood toxic and result in fishery closures. Under these conditions, fishermen may be completely shut down for months until toxin levels in shellfish decline to acceptable levels.

Declines in fishery resource abundance may result from several factors, such as natural environmental variations, human effects on the environment, and overfishing. Salmon fisheries are sensitive to natural changes in oceanic conditions. Salmon abundance has also been affected where dams, irrigation, grazing, mining, and forestry practices have degraded salmon habitat, especially for salmon populations in the Pacific Northwest. Overfishing has also contributed to fish population declines in several resource disaster cases such as the New England multispecies fishery and the Pacific groundfish fishery. In these cases, fish abundance decreased significantly and stock rebuilding has required substantial decreases in harvest.

⁴ For SBA purposes, disasters may also be declared by the President, state governor, Secretary of Agriculture, or Secretary of Commerce.

⁵ For information concerning SBA Economic Injury Disaster Loans, see [<http://www.sba.gov/services/disasterassistance/index.html>]. Also see CRS Report RL33243, *Small Business Administration: A Primer on Programs*, by N. Eric Weiss.

Table 2. Fishery Failure Declarations Since 1994

Fishery or Region	Authority	Declared	Appropriation
New England Multispecies I	IFA 308(b)	3/18/94	\$86.8 million ^a
Northwest Salmon Fisheries I	IFA 308(d)	5/26/94	\$12 million
Gulf of Mexico Hurricanes	IFA 308(d)	8/2/95	\$15 million
New England Multispecies II	IFA 308(d)	8/12/95	\$26 million
Northwest Salmon Fisheries II	IFA 308(d)	8/2/95	\$13 million
Bristol Bay/Kuskokwim River (AK)	MSA 312(a)	11/5/97	\$7 million
Gulf of Mexico Flooding Events	MSA 312(a)	8/7/98	\$3.5 million
Northwest Salmon Fisheries III	MSA 312(a)	8/7/98	\$3.5 million
Bristol Bay/Kuskokwim River (AK)	MSA 312(a)	9/9/98	\$50 million
Florida Trap Fisheries	MSA 312(a)	9/20/99	\$4.8 million
North Carolina Fisheries	MSA 312(a)	9/22/99	\$6 million
Long Island Sound Lobster	MSA 312(a)	2/4/00	\$13.9 million
West Coast Groundfish Fisheries	MSA 312(a)	2/4/00	\$5 million
Bering Sea Alaska Snow Crab	MSA 312(a)	5/11/00	\$10 million
Alaska Salmon (Norton Sound)	IFA 308(b) MSA 312(a)	8/4/00	\$15 million \$7.5 million
Fraser River/Lummi Indian Salmon	MSA 312(a)	11/13/02	None to date
Georgia Blue Crab	MSA 312(a)	5/8/03	None to date
Red Tide (Massachusetts)	MSA 312(a)	6/16/05	\$2.5 million
Red Tide (Maine)	MSA 312(a)	6/23/05	\$2 million
Gulf of Mexico Fisheries (Katrina and Rita) ^b	MSA 312(a) IFA 308(d)	9/9/05 10/4/05	\$128 million \$110 million
Klamath river Basin (Salmon)	IFA 308(b) MSA 312(a)	8/10/06	\$60.4 million
Sacramento River (Troll salmon)	IFA 308(b) MSA 312(a)	5/1/08	\$170 million
Gulf of Mexico (Gustav and Ike)	IFA 308(d)	9/17/08	None to date
Chesapeake Bay Blue Crab	MSA 312(a)	9/23/08	None to date

Source: Adapted from the NOAA, Office of Management and Budget, Fishery Disaster Assistance Web page, [http://www.nmfs.noaa.gov/mb/financial_services/disaster.htm].

a. Funding was appropriated on several different occasions from 1994 to 1999.

b. Fishery failures for both hurricanes were declared under § 312(a) of the MSFCMA and § 308(d) of the IFA.

Funds for disaster assistance have been used for a wide variety of purposes, and may include direct assistance to fishermen such as:

- compensation;
- community grants;
- training;
- loans and debt refinancing; and
- employment on fishery related projects.

Other forms of indirect fishery-related assistance have included fishing capacity reduction (vessel, permit, and gear buybacks), formation of a fisheries research trust, economic planning grants, and research grants. **Table 3** summarizes funding and activities by fishery or disaster event for fishing disaster declarations.

Table 3. Assistance Provided for Commercial Fishery Resource Disasters by Fishery Disaster and Year of Appropriation

<p>New England Multispecies</p> <p>1994 — \$30 million. Assistance: fishing industry grants that included employment for fishermen (training, new business opportunities, aquaculture, marketing, and by-catch reduction), demonstration buyback program, loan program, and family assistance centers.</p> <p>1995 — \$25 million. Assistance: vessel buyback, administration, and fisherman health program.</p> <p>1999 — \$6.8 million. Continuation from 1994 failure with assistance that included compensation for lost fishing time and cooperative research.</p> <p>2000 — \$25 million. Continuation from 1994 failure with assistance that included permit buyback and cooperative research.</p> <p>2001 — \$1 million. Continuation from 1995 of the fisherman health program.</p> <p>2008 — \$13.4 million (disaster not declared). Assistance: funding for fishermen, fishing businesses, and a health insurance program.</p>
<p>Pacific Northwest Salmon</p> <p>1994 — \$12 million. Assistance: fishing permit buyback, habitat restoration jobs, and data collection jobs.</p> <p>1995 — \$13 million. Assistance: fishing permit buyback, habitat restoration jobs, and data collection jobs.</p> <p>1998 — \$3.5 million. Assistance: fishing buyback program.</p> <p>2007 — \$60.4 million (Klamath River-related). Assistance: direct payments to fishermen for business expenses.</p> <p>2008 — \$100 million (\$170 million total). Assistance: direct payments to commercial and recreational charter fishermen.</p>
<p>Gulf of Mexico Hurricanes</p> <p>1995 — \$15 million (hurricanes and tropical storms from 1992-1995). Assistance: compensation to fishermen, Gulf states for research and habitat restoration (inshore license buyback TX and cooperative research LA).</p> <p>2006 — \$128 million. Assistance: rehabilitating oyster beds and shrimp grounds, reseeding, rehabilitating, and storing oyster reefs, and cooperative research and monitoring.</p> <p>2007 — \$110 million. Assistance similar to 2006 funding.</p>

<p>Alaska Salmon</p> <p>1998 — \$7 million (Bristol Bay/Kuskokwim River). Assistance: community grants, loan program, economic planning grants, and fisheries research, education, and training grants.</p> <p>1999 — \$50 million (Bristol Bay/Kuskokwim River/Yukon River). Assistance: emergency assistance to affected families, direct loans, community development activities.</p> <p>2000 — \$15 million (Norton Sound/Kuskokwim/Yukon River). Assistance: economic development and loans.</p> <p>2001 — \$7.5 million (Norton Sound/Kuskokwim/Yukon River). Assistance: economic development and loans.</p>
<p>Gulf of Mexico Flooding</p> <p>1997 — \$3.5 million. Assistance: research and data collection.</p>
<p>Florida Trap Fishery</p> <p>2000 — \$ 4.8 million. Assistance: direct assistance to fishermen, buyback trap certificates, retrieve lost traps and debris, and research ongoing trap reduction program.</p>
<p>North Carolina Fisheries</p> <p>2000 — \$6 million. Assistance: direct economic relief to seafood dealers, charter and head boats and commercial fishing piers, research and resource assessment, and mitigation of oyster losses by enhancing habitat.</p>
<p>Long Island Sound Lobster Fishery</p> <p>2000 — \$13.9 million. Assistance: economic compensation, trap tag buyback, job training, small business development, interest subsidy loans, and research on causes of the disaster.</p>
<p>West Coast Groundfish Fisheries</p> <p>2000 — \$5 million. Assistance: compensation to individuals, provided direct sustaining aid to fishermen, and assistance to resource dependent communities.</p>
<p>Bering Sea Alaska Snow Crab</p> <p>2000 — \$10 million. Assistance: community and economic development, Bering Sea ecosystem research, and cooperative research.</p>
<p>Red Tide (Massachusetts and Maine)</p> <p>2006 — \$5 million. Assistance: pay compensation to individuals and management (research and monitoring).</p>
<p>Georgia Blue Crab</p> <p>Declaration made in 2003 but no funding has been provided.</p>
<p>Fraser River/Lummi Indian Fishery (Sockeye salmon)</p> <p>Declaration made in 2002 but no funding has been provided.</p>

Source: Adapted from the National Oceanic and Atmospheric Administration, Office of Management and Budget, Fishery Disaster Assistance Web page, [http://www.nmfs.noaa.gov/mb/financial_services/disaster.htm].

State Role. States are frequently an active partner throughout the process, from requesting the Secretary of Commerce to declare a fishery failure and providing related data to disbursing relief to fishermen and related businesses. Relief funding is often provided directly to states, or in cases of regional disasters through regional commissions such as the Pacific States Marine Fisheries Commission. For example, in 2007, distribution of Oregon salmon troll fishery relief was planned and coordinated by the state Department of Agriculture in cooperation with related agencies and nonprofit organizations such as the Oregon Salmon Commission. In addition to matching funds, state government may also provide funding when federal funds are not available, although historically such funding has been limited.

Fishing Capacity Reduction Programs

Many U.S. fisheries are overcapitalized — investments in fishing capacity are greater than that needed to harvest the fishery resource on a sustainable basis. When fishery resources decline precipitously, as in the case of a fishery failure, effects on the fishing industry are likely to be greater when there is excess fishing capacity operating in the fishery. First, when excess fishing capacity exists, overfishing often occurs and management goals are likely to involve rebuilding of fish populations. During rebuilding, the fishery is likely to be highly regulated with relatively low allowable harvests. Second, since many fisheries are already overcapitalized and fully exploited, there are few alternative fishing opportunities. Finally, the financial effects of any fishery failure are likely to be greater when there is overcapacity because of the larger number and/or size of vessels and associated crew participating in the fishery.

Fishing capacity reduction, often referred to as buyback programs, has been a prominent feature of several disaster relief programs. Capacity reduction is usually accomplished through the direct purchase of fishing vessels, gear, and/or fishing permits.⁶ The use and funding of capacity reduction are discussed in Section 312(b) of the MSFCMA and Section 308(d) of the IFA.

The general objectives of buyback programs are to provide immediate relief to fishermen, decrease the level of fishing effort to improve the profitability of the remaining fishing fleet, and conserve the resource. The effectiveness of buyback programs in reducing fishing capacity depends on whether the remaining fishermen have the incentive to continue investing in boats and gear. Often there is also “latent” fishing effort — boats and gear with permits to fish that are inactive or only marginally utilized in the fishery. The exit of some vessels may encourage this latent fishing effort (vessels) to re-enter the fishery, resulting in little or no net reduction in fishing capacity. Furthermore, the first to accept buybacks may be the least efficient vessels in the fleet. This results in fleet reductions that are relatively modest yet expensive because only the oldest and least efficient units are taken out of production.

⁶ See CRS Report 97-441 ENR, *Commercial Fishing: Economic Aid and Capacity Reduction*, by Andrew Read and Eugene H. Buck.

Although capacity reduction programs attempt to provide long-term benefits to those who decide to remain in the fishery, poorly crafted programs may result in little or no benefit at the expense of taxpayers. Although a means to ease financial hardship caused by a fishing disaster, lasting benefits may depend on better recognition of the motivations of vessel owners and fishermen.

Recent Actions by NOAA and Congress

The following summaries include fishery disaster declarations since 2005, the most recent of which address Gulf of Mexico fisheries affected by hurricanes Gustav and Ike and the Chesapeake Bay soft shell crab fishery. The most recent funding for fishery disaster assistance is \$75 million included in the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009 (P.L. 110-329). These funds are reserved for fishery resource disasters that have been declared by the Secretary of Commerce under the IFA and the MSFCMA. Unlike in most recent cases, specific fishery disasters were not identified for funding, although the fisheries identified by two most recent declarations (Gulf of Mexico fishing industry and the Chesapeake Bay blue crab fishery) are potential recipients.

Gulf of Mexico Fisheries (Hurricanes Katrina and Rita). In the wake of hurricanes Katrina and Rita, Gulf of Mexico harvesting and shoreside fishery infrastructure were damaged or in some cases completely destroyed. On September 9, 2005, Commerce Secretary Gutierrez announced a formal determination of a fishery failure in the Gulf of Mexico resulting from the effects of Hurricane Katrina. On October 4, 2005, Secretary Gutierrez announced a formal determination of an additional fishery failure in Louisiana and Texas due to the effects of Hurricane Rita.

The immediate effects of the fishery failure were difficult to discern because of the broad geographic area affected by the hurricanes and the substantial damage to infrastructure such as ports, processing, and general access to markets. In 2004, Gulf of Mexico annual landings of major fisheries including shrimp, finfish, and oysters totaled 1.476 billion pounds with a dockside value of \$669 million.⁷ In the areas initially affected by Katrina there were 15 major fishing ports, 177 seafood processing facilities, 1,816 federally permitted fishing vessels, and more than 13,000 state-permitted fishing vessels.⁸ Private recreational fishing boats, charter boats, and related infrastructure were also extensively damaged.

The Fisheries and Oceans Subcommittee of the House Committee on Resources held a hearing on December 15, 2005, to assess the impacts of hurricanes Katrina and Rita on Gulf of Mexico fishery resources, industry, and communities.⁹ In response

⁷ U.S. Dept. of Commerce, National Marine Fisheries Service, *Fisheries of the United States, 2005*, Current Fishery Statistics No. 2005 (Washington, DC: February 2007), p. 6.

⁸ For more background information on initial damages and recovery, see CRS Report RS22241, *Hurricanes Katrina and Rita: Fishing and Aquaculture Industries — Damage and Recovery*, by Eugene H. Buck.

⁹ The name of the House Committee on Resources was changed at the beginning of the 110th (continued...)

to questions concerning the magnitude of damages, the Assistant Administrator of NMFS stated that \$1.2 billion might be needed to assist the recovery of the fishing industry.¹⁰ Further refinement of estimates from Gulf states and the Administration were requested by several subcommittee members. Another general concern voiced at the hearing was the need for timely funding focused on the fishing industry.

Several federal reports regarding hurricane impacts on Gulf of Mexico fisheries have been released since the December 2005 hearing. NMFS released, "Report to Congress on the Impacts of Hurricanes Katrina, Rita, and Wilma on Alabama, Louisiana, Florida, Mississippi, and Texas Fisheries," in July 2007.¹¹ This report describes fishery conditions before and after the 2005 hurricane season and also describes other trends affecting the fishing industry such as rising costs and seafood imports. A second report, "Economic Damages to Infrastructure Incurred by Louisiana Fishing Industries Due to Hurricanes Katrina and Rita in 2005" was also released in July 2007. This report estimated fisheries losses of \$582 million in Louisiana and \$988 million for the entire Gulf of Mexico.¹² Both reports stressed that estimates should be conditioned on data and methods used in each state, factors influencing fisheries, and uncertainties related to the rate of recovery from storm damage.

On June 15, 2006, the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006, (P.L. 109-234) was enacted. It allocated \$128 million to the National Oceanic and Atmospheric Administration (NOAA) "Operations, Research, and Facilities" account for expenses related to Hurricane Katrina.¹³ General areas identified for funding included scanning, mapping, and coordinating marine debris removal, rehabilitating oyster beds and shrimp grounds, undertaking cooperative research to monitor the recovery of Gulf fisheries, and assisting fishermen to recover from economic impacts. On May 25, 2007, The U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007, (P.L. 110-28) was enacted. Funding allocated to the NOAA "Operations, Research, and Facilities" account totaled \$110 million for impacts of Hurricanes Katrina and Rita on the shrimp and fishing industries.

The Gulf States Marine Fisheries Commission, through a cooperative agreement with NOAA, administers and coordinates funding of recovery programs through

⁹ (...continued)

Congress to the House Committee on Natural Resources and the Subcommittee on Fisheries and Oceans was changed to the Subcommittee on Fisheries, Wildlife, and Oceans.

¹⁰ The Assistant Administrator also referred to potential buyouts and other needs to restructure the industry because of Gulf of Mexico fishing fleet overcapacity.

¹¹ The report is available at [http://www.nmfs.noaa.gov/msa2007/docs/Fisheries_Report_Final.pdf].

¹² R. H. Caffey et al., "Economic Damages to Infrastructure Incurred by Louisiana Fishing Industries Due to Hurricanes Katrina and Rita in 2005," Report to the U.S. Department of Commerce National Oceanic and Atmospheric Administration (July 2007), pp. 86-88.

¹³ The measure included \$90 million plus a \$38 million transfer from the United States Department of Agriculture that was to be used for improving oyster grounds.

grant agreements with each of the Gulf states. Funds appropriated in 2006 are being used to restore damaged oyster beds, to remove debris, to restore fishery habitat, and to support cooperative research. Funds appropriated in 2007 are being used to assist individual commercial fishermen, other fishing industry businesses, and resource management agencies to promote Gulf fishery products.

West Coast Salmon Ocean Troll Fishery (Klamath). On July 6, 2006, a fishery failure was declared for the West Coast ocean troll salmon fishery. Chinook salmon stocks that spawn in California and Oregon rivers intermingle in the ocean and are harvested together off the coasts of these states. Klamath River fall Chinook salmon is a key stock with respect to both landings and regulation of the fishery.¹⁴

The ocean troll salmon fishing season between Cape Falcon, Oregon, and Point Sur, California, was strictly limited during the 2006 season.¹⁵ From 2001 to 2005, drought conditions in the upper Klamath Basin resulted in very low flow conditions in the Klamath River and its tributaries. Low flows likely contributed to substantial mortality of juvenile and adult Chinook salmon by creating an environment in which Chinook salmon become more susceptible to endemic diseases. Returns of Klamath River fall Chinook fell below 35,000, the regulatory floor set for any one year, in 2004 and 2005, and the 2006 run size was projected to be approximately 25,000. As a result of the anticipated low spawning return, the Pacific Fishery Management Council (PFMC) recommended, and NOAA issued, a Temporary Rule for Emergency Action to strictly curtail the troll salmon fishery off Oregon and California from May 1, 2006, to August 31, 2006. Although a complete closure of the fishery was avoided, landings decreased in 2006 by 81% when compared to the average of the preceding five years.

The Governors of Oregon and California requested action based on the 2006 forecast of Klamath River fall Chinook salmon returns and the actions taken in the spring of 2006 by the PFMC and NMFS. Since the PFMC developed the 2006 season regulations in the spring of 2006, the likely effects of the curtailed fishery were anticipated before the actual losses were realized. Fishermen and others associated with the fishing industry were concerned that aid to fishing communities might be delayed. On July 6, 2006, the Secretary of Commerce declared a fishery resource disaster under Section 308(b) of the IFA, and on August 10, 2006, under Section 312(a) of the MSFCMA. Fishing industry concerns increased during the fall of 2006 and spring of 2007 when no federal funding was provided. In May 2007, the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability

¹⁴ The conservation objectives under the Pacific Fishery Management Council's (PFMC) Pacific Coast Salmon Fishery Management Plan require returns of 33-34% of potential adult natural spawners and no fewer than 35,000 naturally spawning adults to the Klamath River. When the stock is projected to fall below this level, PFMC is required to recommend a closure of the salmon fisheries within its jurisdiction that harvest Klamath River fall Chinook salmon.

¹⁵ From 2001 to 2005, the dressed weight of Oregon and California troll salmon landings averaged 8.025 million pounds, but in 2006 landings dropped to 1.529 million pounds. For West coast troll salmon fishery statistics, see [<http://www.pcouncil.org/salmon/salbluebook/salbluebook.html>].

Appropriations Act, 2007, (P.L. 110-28) allocated \$60.4 million to the NOAA “Operations, Research, and Facilities” account to be distributed among eligible recipients affected by the commercial fishery failure. Assistance is being distributed by the Pacific States Marine Fisheries Commission to Oregon and California fishermen and Indian tribes that rely on salmon. Oregon salmon troll fishery landings and revenue improved only slightly during the 2007 season.

New England Multispecies Fishery. In 2007, the governors of Maine, Massachusetts, and Rhode Island requested that the Secretary of Commerce declare a fishery failure for the Northeast Multispecies (groundfish) fishery. They cited economic hardships endured by New England fishermen because of restrictive fishery regulations for groundfish species such as cod. In October 2007, NMFS responded that revenue declines in Maine and Massachusetts were not sufficient to warrant a commercial fishery failure. NMFS cited increases in 14 of 18 groundfish stocks in the most recent stock assessment and total fishery revenue increases for some ports during the last year. Industry representatives responded that a disaster was declared 13 years ago when fish landings were more than twice as high as in 2007. The actual biological and economic impacts cited by NMFS and industry sources differ depending on the time period used, species considered, and fishing port.

On December 4, 2007, the Senate agreed to S.Res. 376, expressing the sense of the Senate that the Secretary of Commerce should declare a commercial fishery failure for the groundfish fishery for Massachusetts, Maine, New Hampshire, and Rhode Island and immediately propose regulations to implement Section 312(a) of the Magnuson-Stevens Fishery Conservation and Management Act. The Secretary did not change his decision. However, the omnibus spending bill passed on December 17, 2007, included \$13.4 million in the NOAA budget for the Massachusetts multispecies fishery. The funding was provided to lessen the economic impacts associated with New England Fishery Management Council’s Framework 42 of Amendment 13 to the Multispecies Fishery Management Plan.¹⁶ In August 2008, Massachusetts Governor Patrick announced the disbursement of \$11.3 million to Massachusetts fishermen and fishing businesses, \$750,000 for crew members, \$630,000 for a health insurance program for crew members, and \$700,000 to cover administrative fees. Concerns have been raised because fishermen in New Hampshire and Maine who face similar economic hardships are not eligible for Massachusetts funding.

West Coast Salmon Ocean Troll Fishery (Sacramento). On April 10, 2008, the Pacific Fishery Management Council adopted a complete closure of commercial and sport fisheries off California and most of Oregon in response to the collapse of the Sacramento River fall Chinook salmon run. The minimum conservation goal for Sacramento fall Chinook is 122,000 to 180,000 spawning

¹⁶ The primary purpose of Framework 42 of Amendment 13 to the Multispecies Fishery Management Plan is to establish a biennial adjustment process to review the fishery periodically and recommend changes to management measures necessary to end overfishing and rebuild stocks.

salmon,¹⁷ while as recently as 2002, 775,000 adults returned to spawn.¹⁸ Even with ocean fishery closures, the 2008 returns of Sacramento fall Chinook were projected to be 54,000 fish. The cause of the decline is uncertain, although the National Marine Fisheries Service has suggested that changes in ocean conditions such as unfavorable shifts in ocean temperature and related lack of food for juvenile salmon is a likely cause.

On May 1, 2008, in response to requests by the governors of California, Oregon, and Washington, the Secretary of Commerce declared a commercial fishery failure for the West Coast salmon fishery. Congress provided \$170 million in disaster funds in the Food, Conservation, and Energy Act of 2008 (P.L. 110-246) for commercial and recreational fishermen who were affected by the fishery failure. As of September 2008, \$100 million has been released to the Pacific States Marine Fishery Commission to be distributed as relief to commercial fishermen, processors, charter boat operators, recreational guides, and other businesses dependent on fishing.

Gulf of Mexico Fisheries (Hurricanes Gustav and Ike). On September 17, 2008, Commerce Secretary Gutierrez determined that Hurricanes Gustav and Ike had caused a fishery resource disaster in the Gulf of Mexico. The determination authorized assistance to fishermen under the Interjurisdictional Fisheries Act and made fishing businesses eligible for Small Business Administration loans. Commercial fishing in the affected areas of Louisiana and Texas consists mostly of shrimp, finfish, and oyster harvests. NOAA is working with the region to assess impacts on the commercial fishing industry, including damage to fishing ports and seafood processing facilities.

Chesapeake Bay Blue Crab. On September 23, 2008, Secretary Gutierrez determined that a commercial fishery failure for the soft shell blue crab fishery¹⁹ of the Chesapeake Bay had occurred under § 312(a) of the MSFCMA. The blue crab population has declined since the 1990s, with a 41% decline in the value of soft shell blue crabs landings in Maryland and Virginia. Although the cause is uncertain, factors contributing to the blue crab population decline are likely to include deteriorating water quality, loss of habitat, and overfishing.²⁰ Maryland and Virginia adopted new commercial and recreational regulations for 2008 to shorten the season in both states, limit the harvest of female crabs in Maryland, and close the winter dredge fishery in Virginia. The fishery failure determination was made in response to requests by the governors of Virginia and Maryland based on the decline of the resource and the importance of this fishery to Chesapeake Bay communities and the regional economy.

Recent Administrative Actions by NMFS. In 2007, NMFS began developing regulations related to definitions, procedures, and provisions of § 312(a)

¹⁷ The number of salmon needed to return to the river to sustain this salmon population.

¹⁸ For Pacific salmon fishery management information, see [<http://www.pcouncil.org/>].

¹⁹ Blue crab are harvested at three stages — as hard crab, as peeler crabs (just prior to molting), and as soft shell crabs (immediately after molting).

²⁰ See [<http://www.dnr.state.md.us/fisheries/regulations/bluecrabproposedregulations.html>]

and § 315 of the MSFCMA and § 308(b) and § 308(d) of the IFA.²¹ As an initial step NMFS solicited information regarding all aspects of fisheries disaster assistance from the general public, fishing industry, scientific community, coastal communities, and federal and state resource agencies. A partial list of topics identified by NMFS includes:

- defining terms such as commercial fisheries failure, fishery resource, and fishery resource disaster;
- determining the degree to which those engaged in a fishery suffer economic hardship;
- defining the characteristics or parameters of a fishery resource disaster, the end date of a disaster, and the information required to request a fishery failure or disaster determination; and
- delineating the scope of biological and economic data to be reviewed.

NMFS plans to use public input to determine which issues need to be addressed in developing a proposed rule and ultimately a final rule.

Issues for Congress

Commercial fisheries are strongly influenced by environmental conditions that may affect industry infrastructure or the abundance and distribution of the fishery resource. These changes often take place suddenly; in the case of hurricanes and harmful algal blooms within a fishing season with little or no warning. Disaster relief programs may help save businesses that have been devastated and can address severe economic fluctuations by providing assistance until conditions return to “normal.” Several concerns have emerged that relate to the nature of commercial fisheries and disaster relief programs, including (1) timing relief to meet crucial needs, (2) relating disaster relief to long-term fisheries management, (3) defining a fishery failure, and (4) determining the beneficiaries of relief.

Timing of Relief. The timeliness of disaster relief is a concern because relief funds are seldom appropriated in anticipation of disasters. First, information regarding the scope of the disaster usually needs to be compiled by the fishing industry, state and local governments, and NMFS. Difficulties in concluding this task can be compounded by the lack of data and readily available economic studies. In cases such as Hurricane Katrina, it was immediately clear that a disaster had occurred, and the Secretary made a determination within two weeks of the landfall of Hurricane Katrina. Although the full dimensions of the disaster and the level and scope of resource needs remained uncertain for months after the disaster, many have asserted that some basic aid should have been provided to members of the fishing industry immediately after the disaster.

²¹ NMFS Procedures and Guidance for Disaster Assistance Under Magnuson-Stevens Act 312(a) and Interjurisdictional Fisheries Act 308(b) and 308(d) can be found at [<http://www.nmfs.noaa.gov/directives/>].

For the West Coast troll salmon fishery in 2006, immediate questions revolved around whether a resource disaster would occur. Background information, fishery landings, and economic data were needed for the Secretary to make a determination. Managers and participants were aware of the impending fishery closure before regulations were adopted because the poor condition of the Klamath River Chinook salmon stock was well documented. Even after regulations were adopted, some questioned whether a fishery failure could be declared before the season started and the fishing industry had actually been harmed.

After a fishery failure is declared, funding is dependent on appropriations by Congress. Given the timing of appropriations bills and congressional schedules, it can be difficult to appropriate funding in a timely manner. Hurricane Katrina and Hurricane Rita fishery disaster funding was appropriated in June 2006, more than nine months after the Gulf fishery failure was declared in September 2005. Many in the industry asserted that the greatest need occurred immediately after the hurricanes, when infrastructure, vessels, gear, and markets were lost to fishermen and other industry participants. The West Coast troll salmon fishery was declared a fishery failure in the summer of 2006, but funding was not appropriated until May 2007.

In the short-term, many fishing industry participants believe that the most pressing concern should involve getting relief to those individuals and businesses most directly and immediately affected by the fishery failure. For these needs, some have advocated establishing a disaster fund with funding appropriated in advance that could provide assistance on short notice. In 2008, Congress moved in this direction by appropriating \$75 million for fishery disasters in the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009 (P.L. 110-329).

Long-Term Management Approaches. Often direct or indirect assistance to the fishing industry is part of a relief program. Some have criticized federal assistance because it delays the inevitable readjustment that may be needed for fisheries with excess harvesting capacity. Critics argue that climatic and/or environmental conditions are blamed for fish population declines caused by overfishing. Most fish populations vary over time, and frequently it is difficult to determine the relative importance of the factors that cause these variations.

Features of several programs such as buybacks, fisherman training, and cooperative data collection focus on concerns related to the need for readjustments in fishing fleet size. Yet, when relief is provided, even when it includes a buyback program, greater numbers of fishermen and effort usually remain in the fishery than would be sustainable in the long-run. Many fisheries managers agree that relief such as vessel buybacks needs to be more closely integrated with ongoing fisheries management objectives.

Defining Fishery Failures. The general causes of fishery resource disasters that result in commercial fishery failures are defined by the MSFCMA and IFA. However, specific characteristics of a fishery resource disaster such as scale, timing, and extent are not defined. Since there is no set definition of a fishery failure or fishery resource disaster, the Secretary of Commerce has a large degree of discretion when determining whether a fishery failure has occurred.

For example, in 2007 the governors of Maine, Massachusetts, and Rhode Island requested the Secretary of Commerce to declare a fishery failure for the Northeast Multispecies (groundfish) fishery. There appears to be general agreement that Northeast fishermen have faced continuing hardships during the last several years, but disagreement centers on whether this disruption rises to the level of a fishery failure. These ambiguities appear to be one of the reasons that NMFS solicited the public for information related to fishery resource disasters in early 2008.

Who Benefits? Who benefits from disaster funding is a reoccurring point of contention. Participants such as fishermen and fish processors may be widely dispersed and difficult to locate and track. Although it is often possible to contact vessel and processing plant owners, industry-related labor such as crew members and fish processing employees may be difficult to track. In some fisheries, crew members are temporary labor that follow fishing opportunities.²² Because of the transient nature of employment in the fishing industry and seasonal movement of fishing vessels among regions, labor statistics regarding the employment of fishermen are either difficult to obtain or may not exist. Similar problems may occur in related fishery processing and distribution sectors. Some have voiced the need for better labor statistics that can assist in forecasting and planning for the effects of different fisheries programs, including disaster relief.

Economic effects of fishery disasters on the local community and region are also difficult to quantify. Services directly related to fishing such as boat repairs, dock services, and fishing equipment suppliers, as well as other businesses indirectly related to fishing are likely to be harmed by losses in the fish harvesting and processing sectors. Although general regional impacts can be estimated using economic models, it is often difficult to identify the level of impacts on these businesses because of their dispersed nature and their indirect relationship to fishing. Many have claimed that a broader understanding of these community impacts is needed. Relatedly some also argue for more deliberate and long-term data collection and planning to link community concerns with marine fisheries management.

²² For more information, see CRS Report RS21312, *How Many Fishermen?*, by Eugene H. Buck.