

Fishery, Aquaculture, and Marine Mammal Issues in the 112th Congress

-name redacted-

Analyst in Natural Resources Policy

January 22, 2013

Congressional Research Service

7-.... www.crs.gov R41613

Summary

Fish and marine mammals are important resources in open ocean and nearshore coastal areas; many federal laws and regulations guide their management as well as the management of their habitat. Aquaculture or fish farming enterprises seek to supplement food traditionally provided by wild harvests.

Commercial and sport fishing are jointly managed by the federal government and individual states. States generally have jurisdiction within 3 miles of the coast. Beyond state jurisdiction and out to 200 miles in the federal exclusive economic zone (EEZ), the federal government (National Marine Fisheries Service, NMFS) manages fisheries under the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) through eight regional fishery management councils. Beyond 200 miles, the United States participates in numerous international agreements.

Some of the fishery measures enacted by the 112th Congress included bills with provisions to (1) authorize the Corps of Engineers to take emergency measures to exclude Asian carp from the Great Lakes (P.L. 112-74); (2) create a Gulf Coast Restoration Trust Fund to promote efforts to achieve long-term sustainability of the ecosystem, fish stocks, fish habitat, and the recreational, commercial, and charter fishing industry in the Gulf of Mexico (P.L. 112-141); (3) extend the authority to make expenditures from the Highway Trust Fund under the Sport Fish Restoration and Boating Trust Fund, through FY2014 (also P.L. 112-141); (4) extend the authorization to engage foreign citizens in the U.S. distant water tuna fleet and give distant water tuna vessels the option of using Guam as their required port of call (P.L. 112-213); and (5) amend the Marine Debris Research, Prevention, and Reduction Act, to define a severe marine debris event and direct that a determination for such an event be made for the Tohoku earthquake and tsunami and for Hurricane Sandy (also P.L. 112-213).

Aquaculture—the farming of fish, shellfish, and other aquatic animals and plants in a controlled environment—is expanding rapidly abroad, yet with little growth in the United States. In the United States, important species cultured include catfish, salmon, shellfish, and trout. Some of the aquaculture measures enacted by the 112th Congress included bills with provisions to (1) direct the National Aquatic Animal Health Task Force to establish an infectious salmon anemia research program (P.L. 112-55); (2) authorize the Corps of Engineers to transfer funds to the Fish and Wildlife Service for National Fish Hatcheries in FY2012 to mitigate for fisheries lost due to Corps of Engineers projects (P.L. 112-74); and (3) direct the Secretary of the Interior to convey the McKinney Lake National Fish Hatchery to the state of North Carolina (P.L. 112-237).

Marine mammals are protected under the Marine Mammal Protection Act (MMPA). With few exceptions, the MMPA prohibits harm or harassment ("take") of marine mammals, unless permits are obtained. It also addresses specific situations of concern, such as dolphin mortality associated with the eastern tropical Pacific tuna fishery. Other than annual appropriations, no marine mammal legislation was enacted by the 112th Congress.

The level of appropriations for fisheries, aquaculture/hatchery, and marine mammal programs administered by NMFS and the Fish and Wildlife Service was a recurring issue during the 112th Congress due to pressures to reduce federal spending.

Contents

Most Recent Developments	1
Introduction	1
Commercial and Sport Fisheries	2
Background	2
Current Performance Measures	
Magnuson-Stevens Act	5
Pacific Salmon	
Additional Fishery Issues in the 112 th Congress	10
Habitat Protection and Restoration	10
Sport Fisheries	
Invasive Species	
International Fisheries	
Tuna and Billfish	
Disasters and Recovery	
Marine Debris	
Colorado River	
Harmful Algal Blooms and Hypoxia	
Marketing and Trade	
Jobs	
Seafood Safety	
Tax Provisions	
Fishing and Research Vessels	
Health	
Striped Bass	
National Fish and Wildlife Foundation Miscellaneous Fisheries Reauthorizations	
Legal Fees	
Fishing Permits and Licenses	
Coral	
Insurance	
Saltonstall-Kennedy Act	
Government Reorganization	
Aquaculture	
*	
Background.	21
Aquaculture Issues in the 112 th Congress	22
Marine Mammals	
Background	
Marine Mammal Protection Act Reauthorization	27
Additional Marine Mammal Issues in the 112 th Congress	
Habitat	
Whaling	
Sea Otters	
Polar Bears	
Miscellaneous Marine Mammal Issues	30

Appropriations	
National Marine Fisheries Service	
Fish and Wildlife Service	
Marine Mammal Commission	

Figures

Figure 1. U.S. Commercial Fish and Shellfish Harvest, 1976-2010

Tables

Table 1. NMFS Appropriations, FY2011-FY2013	31
Table 2. FWS Appropriations, FY2010-FY2013	32

Contacts

Author Contact Information

Most Recent Developments

On January 14, 2013, President Obama signed P.L. 112-270 (H.R. 6060), amending P.L. 106-392 to maintain annual base funding for the Upper Colorado and San Juan River fish recovery programs. On January 2, 2013. President Obama signed (1) P.L. 112-240 (H.R. 8), including language amending the Internal Revenue Code of 1986 to include algae-based biofuel in the cellulosic biofuel producer credit, and (2) P.L. 112-239 (H.R. 4310), including language creating a maritime environmental and technical assistance program, with one focus being research, development, assessment, and deployment of emerging marine technologies and practices related to controlling aquatic invasive species. On January 1, 2013, the Senate passed H.R. 6060. On December 28, 2012, President Obama signed P.L. 112-237 (S. 3687), including language (1) directing the Secretary of the Interior to convey the McKinney Lake National Fish Hatchery to the state of North Carolina and (2) exempting from the Lacey Act certain water transfers by the North Texas Municipal Water District and the Greater Texoma Utility Authority for zebra mussel control. On December 28, 2012, the Senate passed H.R. 1 (amended), including \$150 million for fishery disasters declared during 2012. On December 18, the House passed S. 3687. On December 17, 2012, the Senate passed S. 3687. On December 20, 2012, President Obama signed P.L. 112-213 (H.R. 2838), including provisions (1) clarifying restrictions on American Fisheries Act vessels; (2) creating a maritime environmental and technical assistance program, with one focus being research, development, assessment, and deployment of emerging marine technologies and practices related to controlling aquatic invasive species: (3) amending the Marine Debris Research, Prevention, and Reduction Act, including adding language defining a severe marine debris event and directing that a determination for such an event be made for the Tohoku earthquake and tsunami and for Hurricane Sandy; and (4) extending the authorization to engage foreign citizens in the U.S. distant water tuna fleet and give distant water tuna vessels in the western Pacific Ocean the option of using Guam as their required port of call. On December 12, 2012, the Senate concurred with the House-amended H.R. 2838. On December 5, 2012, the House amended and passed H.R. 2838. On December 4, 2012, the Senate passed S. 3254, amended, and substituted this measure in H.R. 4310 as an amendment.

Introduction

Increasing use of marine resources is driving proposals for Congress and the Administration to alter current relationships between environmental protection and sustainable resource management. In response to reports by the U.S. Commission on Ocean Policy and the Pew Oceans Commission noting declines in marine resources and shortcomings in what are perceived as fragmented and limited approaches to resource protection and management in federal and state waters,¹ the Obama Administration released the final recommendations of its Ocean Policy Task Force on July 19, 2010.² A further concern is the increasing pressures and conflicts that arise from economic activity associated with continued human population growth. A common concern is

¹ See *An Ocean Blueprint for the 21st Century*, http://www.oceancommission.gov/documents/full_color_rpt/ 000_ocean_full_report.pdf, and *America's Living Oceans: Charting a Course for Sea Change*, http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Protecting_ocean_life/ env_pew_oceans_final_report.pdf.

² See http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf.

habitat loss or alteration, due both to natural processes, such as climate variation and ocean acidification, and to development, competition from invasive species, and other factors, primarily related to economic and social interests. Congress faces the issues of how to balance these diverse interests (which may fall on various sides of any given controversy), and whether to alter current laws that promote the sustainable management of fishery and other marine resources and protect the marine environment.

The primary laws governing fisheries, aquaculture, and marine mammals are MSFCMA (16 U.S.C. §§1801 et seq.), the National Aquaculture Act of 1980 (16 U.S.C. §§2801 et seq.), and the Marine Mammal Protection Act (MMPA; 16 U.S.C. §§1361 et seq.). Congress last reauthorized and extensively amended MSFCMA in the 109th Congress (P.L. 109-479); the current funding authorization expires on September 30, 2013. The Marine Mammal Protection Act was last reauthorized in 1994 by P.L. 103-238, and funding authorization expired on September 30, 1999.

Commercial and Sport Fisheries

Background

Historically, coastal states managed marine sport and commercial fisheries in nearshore waters, where almost all seafood was caught. However, as fishing techniques improved, fishermen ventured farther offshore. Before 1950, the federal government assumed limited responsibility for marine fisheries, responding primarily to international fishery concerns and treaties (e.g., by enacting laws implementing treaties, such as was done by the Northern Pacific Halibut Act in 1937) as well as to interstate fishery conflicts (e.g., by consenting to interstate fishery compacts, such as was accomplished by enactment of the Pacific Marine Fisheries Compact in 1947). In the late 1940s and early 1950s, several Latin American nations proclaimed marine jurisdictions extending 200 miles or further offshore. This action was denounced by those within the United States and other distant-water fishing nations who sought to preserve access to coastal waters for far-ranging fishing vessels.

Beginning in the 1950s (Atlantic) and 1960s (Pacific), increasing numbers of foreign fishing vessels steamed into U.S. offshore waters to catch the substantially unexploited seafood resources. Since the United States then claimed only a 3-mile jurisdiction,³ foreign vessels could fish many of the same stocks caught by U.S. fishermen. U.S. fishermen deplored this "foreign encroachment" and alleged that overfishing was causing stress on, or outright depletion of, fish stocks. Protracted Law of the Sea Treaty negotiations in the early and mid-1970s as well as actions by other coastal nations provided impetus for unilateral U.S. action.⁴

Such unilateral action occurred when the United States enacted the Fishery Conservation and Management Act (FCMA), later renamed the Magnuson Fishery Conservation and Management Act and more recently the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), ushering in a new era of federal marine fishery management. The FCMA was signed into law on April 13, 1976, after several years of debate. On March 1, 1977, marine fishery

³ Subsequently in 1964, P.L. 88-308 prohibited fishing by foreign-flag vessels within 3 miles of the coast; in 1966, P.L. 89-658 proclaimed an expanded 12-mile exclusive U.S. fishery jurisdiction.

⁴ The United Nations Convention on the Law of the Sea was reported favorably in the 110th Congress by the Senate Committee on Foreign Relations (S.Exec.Rept. 110-9) on December 19, 2007.

resources within 200 miles of all U.S. coasts, but outside state waters, came under federal jurisdiction. This 200-mile fishery conservation zone was superseded by a 200-mile exclusive economic zone (EEZ), proclaimed by President Reagan on March 10, 1983 (Presidential Proclamation 5030).

With the enactment of the FCMA, an entirely new, multifaceted regional management system began allocating fishing rights, with priority given to domestic enterprise. Primary federal management authority was vested in the National Marine Fisheries Service (NMFS, also popularly referred to as NOAA Fisheries) within the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce.⁵ In addition, the FCMA established eight Regional Fishery Management Councils,⁶ with members appointed by the Secretary of Commerce from lists provided by coastal state governors of candidates knowledgeable about fishery resources.⁷ Each regional council prepares fishery management plans (FMPs) for those fisheries that they determine require active federal management. After public hearings, revised FMPs are submitted to the Secretary of Commerce for approval. Approved plans are implemented through regulations published in the *Federal Register*. Together these councils and NMFS have developed and implemented more than 40 FMPs for various fish and shellfish resources, with additional FMPs in various stages of development. Some plans are created for an individual species or a few related ones (e.g., FMPs for red drum by the South Atlantic Council and for shrimp by the Gulf of Mexico Council). Others are developed for larger species assemblages inhabiting similar habitats (e.g., FMPs for Gulf of Alaska groundfish by the North Pacific Council and for reef fish by the Gulf of Mexico Council). Many of the implemented plans have been amended (one more than 30 times), and three have been developed and implemented jointly by two or more councils.

Under initial FCMA authority, a substantial portion of the fish caught from federal offshore waters was allocated to foreign fishing fleets. However, the 1980 American Fisheries Promotion Act (Title II of P.L. 96-561) and other FCMA amendments orchestrated a decrease in foreign catch allocations in response to domestic fishing and processing industries expansion. Foreign catch from the U.S. EEZ declined from about 3.8 billion pounds in 1977 to zero since 1992. Accompanying the decline of foreign catch, domestic offshore catch in federal EEZ waters increased dramatically, from about 1.6 billion pounds (1977) to more than 6.3 billion pounds in 1986-1988.⁸ After this peak, annual landings hovered around 6 billion pounds until about 2006, when Bering Sea pollock stocks began a decline and increased efforts to reduce overfishing in federal EEZ waters began to take effect. Beginning in 2010, recovery of overfished stocks began to support larger harvests (**Figure 1**).

⁵ NMFS programs are described in detail at http://www.nmfs.noaa.gov/.

⁶ Links to individual council websites are available at http://www.nmfs.noaa.gov/councils/.

⁷ For the 2010 report to Congress on council membership, see http://www.nmfs.noaa.gov/sfa/reg_svcs/ Council_Reportcoongress/2010ApportionmentReportToCongress.pdf.

⁸ This total includes both landings for human food and landings for industrial purposes (e.g., bait and animal food, reduction to meal and oil, etc.).



Figure 1. U.S. Commercial Fish and Shellfish Harvest, 1976-2010

Source: NMFS, *Fisheries of the United States* (various years), Current Fishery Statistics series. **Note:** Total includes both industrial and edible fish and shellfish harvest.

Current Performance Measures

The economic status of U.S. commercial fisheries is updated and reported annually.⁹ In 2011 (the most recent data available), U.S. commercial fishermen landed 7.9 billion pounds of edible, unprocessed fish and shellfish from combined state, federal, and international waters, worth more than \$5.1 billion at the dock. U.S. imports of mostly processed edible seafood products supplied 5.3 billion pounds, worth \$16.6 billion. U.S. consumers spent an estimated \$85.9 billion on edible seafood in 2011, with \$57.7 billion of that amount spent in restaurants and other food service establishments. In addition, marine recreational anglers caught an estimated 345 million fish in 2011, of which the retained catch was about 201 million pounds.¹⁰ In 2011 (the most recent data available), a nationwide survey, conducted every five years, estimated that recreational anglers spent more than \$41.8 billion pursuing their sport.¹¹

⁹ For additional information on domestic commercial fisheries, see http://www.st.nmfs.noaa.gov/st1/commercial/index.html. Additional data for 2011 are available at http://www.st.nmfs.noaa.gov/st1/fus/fus11/FUS_2011.pdf.

¹⁰ Recreational fishing programs at NMFS are discussed at http://www.st.nmfs.gov/st1/recreational/index.html.

¹¹ Preliminary results of the 2011 survey can be found at http://library.fws.gov/Pubs/nat_survey2011-national-overview-prelim-findings.pdf.

NMFS reports annually on the status of fish stocks managed under MSFCMA through two determinations.¹² For 2011, NMFS made determinations for 258 fish stocks and complexes,¹³ finding that 36 (14%) of them were subject to overfishing¹⁴ and 222 (86%) were not. In addition, NMFS made separate determinations for 219 stocks and complexes, finding that 45 (21%) were overfished¹⁵ and 174 (79%) were not. These numbers reflect an improvement in the overfishing percentage compared to 2010 (when 16% were subject to overfishing) as well as an improvement in the overfished percentage compared to that year (when 23% were overfished).¹⁶ In 2005, NMFS began using these same fish stock status data to portray nationwide progress in addressing overfishing through a numerical Fish Stock Sustainability Index (FSSI).¹⁷ Out of a possible maximum FSSI score of 920, this index of success in curbing overfishing has increased (i.e., improved) from 481.5 (third quarter of calendar year 2005) to 600 (second quarter of calendar year 2012).

Magnuson-Stevens Act

MSFCMA was reauthorized more recently in the 109th Congress by P.L. 109-479, the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006.¹⁸ Some of the major issues addressed by this comprehensive measure included

- modifying requirements for appointing and training members of regional councils as well as for conducting business by regional council committees and panels to enhance transparency of the regional council process;
- setting a firm deadline to end overfishing by 2011 and modifying how depleted fisheries are to be rebuilt;
- increasing the consideration of economic and social impacts in fishery management;
- modifying research programs and improving data collection and management;
- increasing protection for deep sea corals and bottom habitat;
- implementing a pilot program of ecosystem-based management;
- promoting new gear technologies to further reduce bycatch;

¹² See http://www.nmfs.noaa.gov/sfa/statusoffisheries/2011/RTC/2011_RTC_Report.pdf.

¹³ NMFS reviewed 537 individual stocks and stock complexes but had insufficient information to make determinations on all of them.

¹⁴ A stock that is subject to overfishing has a fishing mortality (harvest) rate greater than the level that provides for the maximum sustainable yield from this stock.

¹⁵ A stock that is overfished has a biomass level less than a biological threshold specified in that stock's FMP.

¹⁶ For more background on overfishing, see CRS Report R42563, *Ending Overfishing and Rebuilding Fish Stocks in U.S. Federal Waters*, by (name redacted) and (name redacted).

¹⁷ FSSI is a performance measure for the sustainability of 230 fish stocks selected for their importance to commercial and recreational fisheries. The FSSI will increase as overfishing ends and stocks rebuild to the level that provides maximum sustainable yield. FSSI is calculated by assigning a score for each fish stock based on rules available at http://www.nmfs.noaa.gov/sfa/statusoffisheries/2012/second/Q2%202012%20FSSI%20Summary%20Changes.pdf.

¹⁸ For additional summary information on this measure, see http://www.nmfs.noaa.gov/msa2005/ MSA%202006%20Implementation%20Overview.pdf.

- establishing national guidelines for individual fishing quota (limited access privilege) programs;
- modifying regional council fishery management plan procedures, including better coordination of environmental review under the National Environmental Policy Act (NEPA; 42 U.S.C. §§4321, et seq.);
- strengthening the role of science in fishery management decision-making; and
- authorizing appropriations for federal fishery management through FY2013.¹⁹

NMFS has summarized various tasks associated with implementing P.L. 109-479.²⁰ Examples of implementation activities include (1) a report by NMFS to Congress on implementing new provisions relating to better control of illegal, unreported, and unregulated (IUU) fishing activities;²¹ and (2) final guidance amending National Standard 1, designed to end overfishing through new requirements for annual catch limits and other accountability measures.²² In addition, NMFS released a new national policy encouraging the consideration and use of catch shares as an alternative to managing fisheries through open access harvesting.²³

The 112th Congress considered a number of measures relating to MSFCMA and held numerous hearings, P.L. 112-10 included language at Section 1349, Division B, prohibiting FY2011 expenditures to approve new limited-access privilege programs under MSFCMA for any fishery under the jurisdiction of the South Atlantic, Mid-Atlantic, New England, or Gulf of Mexico Fishery Management Council. In addition, Section 307 of P.L. 112-213 (H.R. 2838) clarified restrictions on American Fisheries Act vessels. On March 8, 2011, the Senate Committee on Commerce, Science, and Transportation held an oversight hearing on evaluating the success of MSFCMA in preventing overfishing and rebuilding depleted fish populations. On June 20, 2011. the Senate Committee on Homeland Security and Government Affairs, Subcommittee on Federal Financial Management, held a hearing on the NMFS's actions to improve its enforcement program and how NMFS is managing funds to support the domestic fishing industry. On July 26, 2011, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs held an oversight hearing on NOAA's fishery science and its effect on jobs. On October 3, 2011, the Senate Committee on Commerce, Science, and Transportation held a field oversight hearing in Boston, MA, to review fishery management plans affecting Massachusetts. On October 17, 2011, the House Committee on Natural Resources held an oversight field hearing in Seattle, WA, on the scientific basis for NMFS fisheries restrictions to protect Steller sea lions. On August 25, 2012, the House Committee on Natural Resources held an oversight field hearing in Panama City, FL, on how strengthening fisheries might strengthen the economy. In addition, bills introduced in the 112th Congress addressed a number of issues.

• H.R. 1013 would have amended MSFCMA to provide the New England Fishery Management Council additional resources from the Asset Forfeiture Fund to address research and monitoring priorities established by the council; on

¹⁹ For additional highlights and commentary on this enactment, see http://cbbulletin.com/Free/199763.aspx; a detailed summary of enacted provisions is available at http://www.olemiss.edu/orgs/SGLC/National/Magnuson.pdf.

²⁰ Available at http://www.nmfs.noaa.gov/msa2007/Reauthorization_tasks.pdf. Additional information on NMFS's implementation of P.L. 109-479 can be found at http://www.nmfs.noaa.gov/msa2007/.

²¹ Available at http://www.nmfs.noaa.gov/msa2007/docs/biennial report011309.pdf.

²² 74 Federal Register 3178-3213, January 16, 2009.

²³ See http://www.nmfs.noaa.gov/sfa/domes_fish/catchshare/docs/noaa_cs_policy.pdf.

December 1, 2011, the House Committee on Natural Resources held a hearing on this bill. S. 1304 would have made funds available to reimburse certain fishermen for legal fees and costs incurred in connection with improper fines. S. 1312 would have established a fisheries investment fund to assist fishermen with the costs of regulatory compliance and to reimburse the legal fees incurred by certain fishermen. H.R. 2610 would have amended MSFCMA to reform procedures for the payment of funds from the Asset Forfeiture Fund; on December 1, 2011, the House Committee on Natural Resources held a hearing on this bill.

- H.R. 1646 would have amended MSFCMA to (1) require peer review of certain scientific and statistical committee recommendations, (2) modify criteria for extending the rebuilding period for overfished fisheries, (3) set a deadline for secretarial decisions on disaster declarations, (4) modify criteria for limited-access privilege program approval, and (5) establish criteria to be met before a fishery can be closed; on December 1, 2011, the House Committee on Natural Resources held a hearing on this bill. H.R. 2772 and S. 1678 would have amended MSFCMA to permit eligible fishermen to approve certain limited access privilege programs (LAPPs) and provide for the termination of certain LAPPs; on December 1, 2011, the House Committee on Natural Resources held a hearing on H.R. 2772.
- S. 632 and H.R. 3061 would have amended MSFCMA to extend the authorized period for rebuilding of certain overfished fisheries; on December 1, 2011, the House Committee on Natural Resources held a hearing on H.R. 3061. H.R. 6350 would have amended MSFCMA to provide additional flexibility for fishery managers, additional transparency for fishermen, a referendum for catch shares, and additional funding for fishery surveys.
- Section 308 of H.R. 2838 would have required a report from the Secretary of Homeland Security assessing the need for additional Coast Guard capability in the high latitude regions, including for fisheries enforcement. On October 3, 2011, the House Committee on Transportation and Infrastructure reported this bill, amended (H.Rept. 112-229). On November 15, 2011, the House passed this bill, amended. On September 22, 2102, the Senate passed H.R. 2838 (amended), deleting the House provision.
- Section 4 of H.R. 594 would have amended MSFCMA to direct the Secretary, subject to the availability of appropriations, to enter into contracts with, or provide grants to, states for the purpose of establishing and implementing a registry program for recreational fishermen; on December 1, 2011, the House Committee on Natural Resources held a hearing on this bill.
- H.R. 2304 and S. 1916 would have amended MSFCMA to modify how scientific information is to be used in implementing annual catch limits; on December 1, 2011, the House Committee on Natural Resources held a hearing on H.R. 2304.
- H.R. 2753 would have amended MSFCMA to require Internet access to Regional Fishery Management Council meetings and meeting records; on December 1, 2011, the House Committee on Natural Resources held a hearing on this bill.

- H.R. 6362 would have directed the Secretary of Commerce to issue a fishing capacity reduction loan to refinance the existing loan funding the Pacific Coast Groundfish Fishery Fishing Capacity Reduction Program.
- S. 1371 and H.R. 4129 would have amended MSFCMA to add Rhode Island to the Mid-Atlantic Fishery Management Council. H.R. 5885 would have added New York to the New England Fishery Management Council.
- S. 238 would have amended MSFCMA to require that annual fishery impact statements evaluate the effects of management actions on fishing communities.

Pacific Salmon

Steelhead trout and five species of salmon spawn in U.S. Pacific coastal rivers and lakes, after which juveniles migrate to North Pacific ocean waters where they mature before returning to the same freshwater rivers and lakes to spawn. Management is complicated because these fish may cross several state and national boundaries during their life spans, and their different subpopulations or stocks intermingle on fishing grounds. In addition to natural environmental fluctuations, factors influencing the abundance of salmon include hydropower dams that block rivers and create reservoirs, sport and commercial harvests, habitat modification by competing resource industries and other human development, and hatcheries seeking to supplement natural production but sometimes unintentionally causing genetic or developmental concerns.

The Northwest Power and Conservation Council took the lead in the Columbia River Basin under the 1980 Pacific Northwest Electric Power Planning and Conservation Act, by attempting to protect salmon and their habitat while also providing inexpensive electric power to the region. Under this effort, federal agencies and public utilities have spent hundreds of millions of dollars on technical improvements for dams, habitat enhancement, and water purchases to improve salmon survival. Recent years have seen an increased interest by state governments and tribal councils in developing comprehensive salmon management efforts.

In response to declining salmon populations in Washington, Oregon, Idaho, and California, discrete population units were listed as endangered or threatened species under the Endangered Species Act.²⁴ In 2006, a San Joaquin River Restoration Settlement Agreement ended an 18-year legal dispute over the operation of Friant Dam in California that had eliminated salmon from much of this river. This agreement provides for river channel improvements and water flow to sustain Chinook salmon upstream (south) from the confluence of the Merced River tributary while reducing or avoiding water supply losses to Friant Division long-term water contractors that may result from restoration flows provided in the agreement. Congress authorized the implementation of this agreement through P.L. 111-11. In 2010, two agreements were concluded for the Klamath River Basin to address fishery and water supply issues.

The 112th Congress considered a number of measures related to Pacific salmon. On May 3, 2011, the House Committee on Agriculture and Committee on Natural Resources held a joint oversight hearing on pesticide registration consultations under Section 7 of the Endangered Species Act (ESA) related to ESA-listed salmon. On November 18, 2011, President Obama signed P.L. 112-

²⁴ For additional background on this issue, see CRS Report 98-666, *Pacific Salmon and Steelhead Trout: Managing Under the Endangered Species Act*, by (name redacted) and (name redacted).

55 (H.R. 2112) into law, including language directing the National Aquatic Animal Health Task Force to establish an infectious salmon anemia research program. Several bills introduced in the 112th Congress would have affected Pacific salmon.

- H.R. 1251, Section 108 of H.R. 1837, and Title V, Subtitle A, of S. 2365 would have provided congressional direction for Endangered Species Act (ESA) implementation as it relates to operation of the Central Valley Project and the California State Water Project; in addition, Section 203 of H.R. 1837 and Title V. Subtitle B. of S. 2365 would have repealed the San Joaquin Restoration Settlement. Furthermore, Section 207 of H.R. 1837 and Section 519 of S. 2365 would have ordered that no distinction be made under ESA between anadromous fish of wild and hatchery origin in the Sacramento and San Joaquin Rivers and their tributaries. On June 2 and 13, 2011, the House Natural Resources Subcommittee on Water and Power held hearings on H.R. 1837. H.R. 1837 was reported (amended) by the House Committee on Natural Resources on February 27, 2012 (H.Rept. 112-403), and passed by the House (amended) on February 29, 2012. Section 308 of H.R. 1287 and S. 706 would have prohibited the Bureau of Reclamation and California state agencies from restricting operations for the Central Valley Project pursuant to any ESA biological opinion under certain conditions.
- H.R. 1 (seeking to provide continuing appropriations for the remainder of FY2011) included language that would have limited funding for the Pacific Coastal Salmon Recovery Fund to \$50 million (Section 1307, Division B, Title III) and prohibited funds from being used by NMFS and FWS for implementing certain actions described in a biological opinion for the operations of the Central Valley Project and the California State Water Project (Section 1475, Division B, Title IV).
- S. 962 and H.R. 1858 would have reauthorized and amended the Northwest Straits Marine Conservation Initiative Act, including authorizing county Marine Resources Committees; one duty of these committee would have been to assist in identifying local implications, needs, and strategies associated with the recovery of Puget Sound salmon. On February 27, 2012, the Senate Committee on Commerce, Science, and Transportation reported S. 962 (S.Rept. 112-151).
- H.R. 946 and H.R. 3069 would have amended MMPA to permit activities aimed at reducing marine mammal predation on endangered Columbia River salmon; on June 14, 2011, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs held a hearing on H.R. 946. On December 8, 2011, the House Committee on Natural Resources reported H.R. 3069 (H.Rept. 112-322). On June 19, 2012, the House passed H.R. 2578 after amending this measure to include the language of H.R. 3069 as Title VII.
- On July 15, 2011, the House passed H.R. 2354 (amended), after adopting a floor amendment (appearing in Section 614) that would have prohibited Corps of Engineers funding for activities related to the removal of Condit Dam on the White Salmon River in Washington. This provision was not included when the Senate reported this bill on September 7, 2011 (S.Rept. 112-75).

- Section 5 of H.R. 6247 would have required power administrations to report the customer's share of the direct and indirect costs related to compliance with any federal environmental laws related to conservation of fish and wildlife; Section 8 of this bill would have prohibited bypassing water around turbines at federal dams when such action would be harmful to endangered fish. On August 15, 2012, the House Committee on Natural Resources held a hearing on this bill.
- S. 1401 would have established a Salmon Stronghold Partnership to promote international and interagency cooperation to improve salmon management; on January 30, 2012, the Senate Committee on Commerce, Science, and Transportation reported (amended) the bill (S.Rept. 112-140).
- H.R. 2111 would have (1) required a study by the National Academy of Sciences of federal salmon recovery actions on the Columbia and Snake Rivers and (2) declared that the Secretary of the Army may remove the four Lower Snake River dams.
- Section 305(b) of S. 52 would have reauthorized the Pacific Salmon Treaty Act through FY2013; On January 26, 2012, the Senate Committee on Commerce, Science, and Transportation reported this bill (S.Rept. 112-132).
- H.R. 4275 would have amended the Civil Rights Act of 1991 with respect to the application of this act to an employment discrimination lawsuit involving the Wards Cove, AK, salmon cannery.
- H.R. 3398/S. 1851 would have authorized restoration of the Klamath Basin and transfer the PacifiCorps Iron Gate Hatchery facilities to the state of California.

Additional Fishery Issues in the 112th Congress

On October 4, 2011, the House Committee on Natural Resources held an oversight hearing on the impact of the Administration's National Ocean Policy and Council on jobs, energy, and the economy; a second hearing on this issue was held on October 26, 2011. Legislation was introduced in the 112th Congress to address numerous issues related to fisheries.

Habitat Protection and Restoration

Division A, Title I, Subtitle F, of P.L. 112-141 created a Gulf Coast Restoration Trust Fund to promote efforts to achieve long-term sustainability of the ecosystem, fish stocks, fish habitat, and the recreational, commercial, and charter fishing industry in the Gulf of Mexico. Division A, Section 312 of P.L. 112-81 amended the Sikes Act to modify how this act applies to state-owned facilities used for national defense. P.L. 112-270 (H.R. 6060) amended P.L. 106-392 to maintain annual base funding for the Upper Colorado and San Juan River fish recovery programs.

S. 1266 (S.Rept. 112-183), H.R. 872, Section 108 of H.R. 3323, Section 3999E of S. 1720, Title VI of S. 2365, and S. 3605 would have amended the Federal Insecticide, Fungicide, and Rodenticide Act and the Federal Water Pollution Control Act regarding the regulation of the use of pesticides in or near navigable waters; on March 29, 2011, H.R. 872 was reported by the House Committee on Transportation and Infrastructure (H.Rept. 112-43, Part I) and the House Committee on Agriculture (H.Rept. 112-43, Part II). The House passed H.R. 872 on March 31, 2011. On June 21, 2011, the Senate Committee on Agriculture, Nutrition, and Forestry reported

H.R. 872. H.R. 4318 would have prohibited the use of any pesticide containing atrazine. Section 10016 of H.R. 6083 would have restricted the modification, cancellation, or suspension of the registration of a pesticide on the basis of the implementation of a biological opinion under the Endangered Species Act; on September 13, 2012, the House Committee on Agriculture reported, amended, H.R. 6083 (H.Rept. 112-669), with the pesticide provision now in Section 10017.

Section 11 of S. 203 would have amended the Oil Pollution Act of 1990 to provide specific funding for rescue, rehabilitation, and recovery of marine species, including marine birds and sea turtles. Section 505 of H.R. 501/H.R. 1870 would have established an Ocean Resources Conservation and Assistance Fund to provide specific support for rescue, rehabilitation, and recovery of marine species; conservation of marine ecosystems; improvement of marine ecosystem resiliency; and protection of marine biodiversity. H.Res. 80 would have expressed the sense of the House in support of the goals and ideals of National Marine Awareness Day, celebrating the diversity of marine fisheries and wildlife and the richness of marine ecosystems. Section 2(c)(2) of H.R. 1505 would have extended the authority of the Secretary of Homeland Security to waive certain responsibilities under the Fish and Wildlife Act of 1956 and the Fish and Wildlife Coordination Act to secure the border within 100 miles of any international land and maritime U.S. border. H.R. 1650 would have amended Section 307 of the National Oceanic and Atmospheric Administration Authorization Act of 1992 to establish a Chesapeake Bay coastal living resources management and habitat program. S. 1991 and Section 5 of S. 973 would have created a National Endowment for the Oceans, with funding (Section 6) for habitat restoration, protection, and maintenance, including analyses of ocean acidification and minimization of ecosystem harm. S. 1201, S.Amdt. 2232 to S. 3240, and Title II, Subtitle A of S. 3525 would have authorized a national program to conserve fish and aquatic communities through partnerships to foster habitat conservation; the Senate declined to consider S.Amdt. 2232 when action was taken on S. 3240; on July 17, 2012, the Senate Committee on Environment and Public Works reported S. 1201 (S.Rept. 112-187), S. 1266 and H.R. 2325 would have established a Delaware River Basin Restoration Program, including grants for restoration or protection of fish and their habitat; on July 16, 2012, the Senate Committee on Environment and Public Works reported (amended) H.R. 2993 would have directed the Corps of Engineers to revise the Missouri River Mainstem Reservoir System Master Water Control Manual and any related regulations to delete fish and wildlife as an authorized purpose of the Corps. S. 1389 and Section 128(6) of S. 1596 would have exempted from the Fish and Wildlife Coordination Act the reconstruction of any road, highway, or bridge damaged by a natural disaster; on September 21, 2011, the Senate Committee on Appropriations reported S. 1596 (S.Rept. 112-83). S.Res. 281 designated September 24, 2011, as "National Estuaries Day" and reaffirmed support for the scientific study, preservation, protection, and restoration of estuaries; the Senate agreed to this measure on September 23, 2011. Similarly, S.Res. 566 designated September 29, 2012, as "National Estuaries Day"; on September 19, 2012, the Senate agreed to S.Res. 566. Section 402 of S. 1971 would have amended the Clean Water Act to elaborate on standards and adverse impact determinations for cooling water intake structures. Section 4 of S. 2147 would have established an Arctic Ocean Research, Monitoring, and Observation Program to offer grants for research and monitoring of Arctic fisheries, including the distributions and ecology of Arctic cod and other forage fishes. Section 2 of H.R. 4314 would have authorized coastal adaptation project grants, with one priority addressing ocean acidification. H.R. 4408 would have amended the Sikes Act to promote the use of cooperative agreements for land management related to Department of Defense installations and to facilitate interagency cooperation in conservation programs. S. 1991 would have established a National Endowment for the Oceans. Section 4 of

H.R. 6303 would have authorized global science program grants, with one priority addressing ocean acidification. Section 5 of H.R. 6247 would have required power administrations to report the customer's share of the direct and indirect costs related to compliance with any federal environmental laws related to conservation of fish and wildlife; Section 8 of this bill would have prohibited bypassing turbines at federal dams when such action would be harmful to endangered fish. On August 15, 2012, the House Committee on Natural Resources held a hearing on H.R. 6247.

In addition, a number of bills in the 112th Congress proposed to address various water quality and aquatic/marine ecosystem restoration issues more generally; for more information on these issues, see CRS Report R41594, *Water Quality Issues in the 112th Congress: Oversight and Implementation*, by (name redacted), and CRS Report RL34329, *Crosscut Budgets in Ecosystem Restoration Initiatives: Examples and Issues for Congress*, by (name redacted) and (name redacted).

Sport Fisheries

P.L. 112-5 extended the authority to make expenditures from the Highway Trust Fund and other trust funds, including various programs under the Sport Fish Restoration and Boating Trust Fund, through the end of FY2011. P.L. 112-30 extended the authority to make expenditures from the Highway Trust Fund and other trust funds, including various programs under the Sport Fish Restoration and Boating Trust Fund, through March 31, 2012. P.L. 112-102 extended the authority to make expenditures from the Highway Trust Fund and other trust funds, including various programs under the Sport Fish Restoration and Boating Trust Fund, through March 31, 2012. P.L. 112-102 extended the authority to make expenditures from the Highway Trust Fund and other trust funds, including various programs under the Sport Fish Restoration and Boating Trust Fund, through June 30, 2012. P.L. 112-140 extended the authority to make expenditures from the Highway Trust Fund and other trust funds, including various programs under the Sport Fish Restoration and Boating Trust Fund, through July 6, 2012. Division C, Title IV, and Division D, Section 40101(b), of P.L. 112-141 extended the authority to make expenditures from the Highway Trust Fund and other trust funds, including various programs under the Sport Fish Restoration and Boating Trust Fund, through July 6, 2012. Division C, Title IV, and Division D, Section 40101(b), of P.L. 112-141 extended the authority to make expenditures from the Highway Trust Fund and other trust funds, including various programs under the Sport Fish Restoration and Boating Trust Fund, through July 6, 2012. Division C, Title IV, and Division D, Section 40101(b), of P.L. 112-141 extended the authority to make expenditures from the Highway Trust Fund and other trust funds, including various programs under the Sport Fish Restoration and Boating Trust Fund, through FY2014.

Section 9(b)(2)(D) of S. 351 and Section 13(2)(D) of S. 352 would have designated a portion of revenues from certain oil and gas leasing in Alaska for the Dingell-Johnson Sport Fish Restoration Fund. H.R. 4650 and S. 3195 would have suspended temporarily the duty on certain fishing reels.

Section 311 of H.R. 1287, S. 706, and Section 4140 of S. 1720 would have prohibited the Claims and Judgment Fund of the United States Treasury from paying legal fees of an environmental nongovernmental organization related to any action that prevents, terminates, or reduces access to or the production of a resource by commercial or recreational fishermen. H.R. 1444 would have required that fishing be a recognized use in management plans for federal lands under the jurisdiction of the Secretary of the Interior or the Secretary of Agriculture; on September 9, 2011, the House Natural Resources Subcommittee on National Parks, Forests, and Public Lands held a hearing on this bill. S. 901 and H.R. 1997 would have funded projects to secure recreational public access to federal public land that has significantly restricted access for fishing. Section 2(b)(2) of S. 1265, Section 3 of H.R. 6086, and Section 1701(e) of H.R. 14/S. 1813, as passed (amended) by the Senate on March 14, 2012, would have amended the Land and Water Conservation Fund Act to specify that at least 1.5% of the annual authorized funding

amount be made available for projects that secure recreational public access to existing federal public land for hunting, fishing, and other recreational purposes. On April 24, 2012, the Senate passed H.R. 4348 after amending this measure to substitute the language of S. 1813, as amended; in conference, this provision was deleted (H.Rept. 112-557). H.R. 2834, Title I of H.R. 4089, and S. 2066 would have directed federal public land management officials to facilitate use of and access to federal public lands and waters for fishing; on September 9, 2011, the House Natural Resources Subcommittee on National Parks, Forests, and Public Lands held a hearing on this bill. On July 19, 2012, the House Committee on Natural Resources reported (amended) H.R. 2834 (H.Rept. 112-609, Part I). On April 13, 2012, the House Committee on Natural Resources reported (amended) H.R. 4089 (H.Rept. 112-426, Part I); the House passed this measure on April 17, 2012. H.R. 6086 would have directed federal public land management agencies to report on public access to federal public lands for fishing and other recreational purposes.

S. 1555 and H.R. 3429 would have authorized the use of certain offshore oil and gas platforms in the Gulf of Mexico for artificial reefs. S.Amdt. 2232 to S. 3541 (Section 13303) and Section 123 of S. 3525 would have directed the Secretary of the Interior to develop a plan to assess how removal of decommissioned offshore oil and gas platforms might relate to creation of artificial habitats that enhance fishing; the Senate declined to consider S.Amdt. 2232 when action was taken on S. 3240. H.R. 6208 would have temporarily limited the authority of the Secretary of the Interior to require or authorize the removal or movement of offshore oil and gas facilities.

H.R. 1443 sought to prevent restrictions on traditional fishing implements (e.g., lead sinkers), including a provision to makes states and territories ineligible for federal Sport Fish Restoration funds if traditional fishing implements are restricted. H.R. 1445 would have prohibited the Environmental Protection Agency (EPA) from regulating, based on material composition, any type of fishing tackle, while H.R. 1558, Title IV of H.R. 4089, S. 838, S.Amdt. 2232 to S. 3240 (Section 13301), and Section 121 of S. 3525 would have amended the Toxic Substances Control Act to modify the jurisdiction of the EPA with respect to certain sport fishing articles (e.g., lead sinkers); the Senate declined to consider S.Amdt. 2232 when action was taken on S. 3240. On April 13, 2012, the House Committee on Natural Resources reported (amended) H.R. 4089 (H.Rept. 112-426, Part I); the House passed this measure on April 17, 2012.

H.R. 3074 would have amended the Migratory Bird Treaty Act to delegate to states the authorities of the Secretary of the Interior under that act with respect to cormorants. S. 3674 and H.R. 6665 would have amended the Migratory Bird Treaty Act to provide exemptions relating to the taking of migratory game birds to protect aquatic crops.

Several bills would have modified (Section 4(b) of S. 108 and Section 5(b) of S. 1069) or temporarily suspended (S. 2879 and S. 2880) the tariff on vulcanized rubber felt or lug boot bottoms for use in fishing waders. H.R. 2351 would have directed the Secretary of the Interior to continue stocking fish in certain lakes in the North Cascades National Park, Ross Lake National Recreation Area, and Lake Chelan National Recreation Area; on September 15, 2011, the House Natural Resources Subcommittee on National Parks, Forests, and Public Lands held a hearing on this bill. This bill was reported by the House Committee on Natural Resources on December 1, 2011 (H.Rept. 112-305), and passed by the House on December 7, 2011. Section 4 of H.R. 594 would have amended MSFCMA to direct the Secretary, subject to the availability of appropriations, to enter into contracts with, or provide grants to, states for the purpose of

establishing and implementing a registry program for recreational fishermen; on December 1, 2011, the House Committee on Natural Resources held a hearing on this bill. H.R. 5797 and S. 3251 would have exempted vessel owners and operators on Mille Lacs Lake, MN, from federal laws applicable to navigable waters; on July 31, 2012, the House Committee on Transportation and Infrastructure reported (amended) H.R. 5797 (H.Rept. 112-634), and the House passed this measure (amended) on August 1, 2012. H.Res. 801 would have recognized anglers and fishery management agencies for their role in restoring fish populations.

Invasive Species

Section 403 of P.L. 112-213 (H.R. 2838) and Section 3511 of P.L. 112-239 (H.R. 4310) created a maritime environmental and technical assistance program, with one focus being research, development, assessment, and deployment of emerging marine technologies and practices related to controlling aquatic invasive species. Section 5 of P.L. 112-237 (H.R. 3687) exempted from the Lacey Act certain water transfers by the North Texas Municipal Water District and the Greater Texoma Utility Authority for zebra mussel control. On July 13, 2011, the House Committee on Transportation and Infrastructure, Subcommittees on Coast Guard and Maritime Transportation and on Water Resources and Environment, held a joint hearing on ballast water discharge regulation.

Section 5 of S. 1430 would have authorized a "green ships" program, with one element focusing on identifying, evaluating, testing, demonstrating, and improving marine technologies for controlling aquatic invasive species; on December 7, 2011, the Senate Committee on Commerce, Science, and Transportation reported (amended) this bill (S.Rept. 112-99). H.R. 2840 would have amended the Clean Water Act to add a new Section 321 to implement ballast water management and standards related to discharges from commercial vessels; on November 3, 2011, the House Committee on Transportation and Infrastructure reported (amended) this bill (H.Rept. 112-266). On November 4, 2011, the House, by floor amendment, added the language of H.R. 2840 as Title VII of H.R. 2838; the House passed H.R. 2838 (amended) on November 15, 2011; on September 22, 2012, the Senate passed H.R. 2838 (amended), deleting the House title amending the Clean Water Act. Section 459 of H.R. 2584, as reported by the House Committee on Appropriations on July 19, 2011 (H.Rept. 112-151), would have prohibited the Environmental Protection Agency (EPA) from providing funds to any Great Lakes state that has a more stringent performance or ballast water exchange standard than either a revised Coast Guard standard or the International Maritime Organization standard; however, FY2012 appropriations for EPA, included in P.L. 112-74, contain no similar provision. S. 3332 and S. 3570 would have established nationally uniform standards governing ballast water discharges.

Section 105, Division B, of P.L. 112-74 authorized the Corps of Engineers to take emergency measures to exclude Asian carp from the Great Lakes. H.R. 892 and S. 471 would have directed the Corps of Engineers, U.S. Geological Survey, and FWS to take measures to control the spread of Asian carp, including studying the feasibility of the hydrological separation of the Great Lakes and Mississippi River Basins. H.R. 2432 would have required the Corps of Engineers to prepare an economic impact statement before carrying out any federal action relating to the Chicago Area Water System. H.R. 4146 and S. 2164 would have authorized the Army Corps of Engineers to take actions to manage Asian carp traveling up the Mississippi River in the state of Minnesota. H.R. 4406 and S. 2317 would have directed the Army Corps of Engineers to complete the Great Lakes Mississippi River Interbasin Study within 18 months, focusing on the permanent

prevention of the spread of aquatic nuisance species between the Great Lakes and the Mississippi River Basins. H.R. 6348 would have designated the Army Corps of Engineers as the lead federal agency for Asian carp control and expands authorization of Corps activities to control Asian carp. H.R. 6385 and S. 3645 would have directed a multiagency effort to slow the spread of Asian carp in the Upper Mississippi and Ohio River basins and tributaries.

H.Res. 132 would have expressed the need to raise awareness and promote capacity building to address the lionfish invasion in the Atlantic Ocean. Section 3 of S. 432 would have amended the Lake Tahoe Restoration Act to require FWS to deploy strategies to prevent the introduction of aquatic invasive species into the Lake Tahoe Basin; on February 7, 2012, the Senate Committee on Environment and Public Works reported (amended) S. 432 (S.Rept. 112-148), with the invasive species provisions in Section 7. Section 2 of H.R. 4314 would have authorized coastal adaptation project grants, with one priority addressing invasive species. On April 26, 2012, the Senate Committee on Appropriations reported S. 2465 (S.Rept. 112-164), adding language that sought to encourage the Bureau of Reclamation, in partnership with the Bonneville Power Administration, to continue its efforts to develop invasive zebra and quagga mussel vulnerability assessments for federally owned hydropower projects. S. 3606 and H.R. 5864 would have modified the regulatory process for injurious wildlife to prevent the introduction and establishment of nonnative species.

International Fisheries

Section 113 of P.L. 112-55 directs certain management measures for U.S. tuna fishing under the authority of the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. On May 23, June 14, and June 28, 2012, the Senate Committee on Foreign Relations held hearings on the United Nations Convention on Law of the Sea. On November 14, 2011, the Obama Administration transmitted the 2009 Agreement on Port State Measures to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing to the Senate for advice and consent on ratification; S. 1980 would have implemented this agreement, and was reported on November 14, 2012, by the Senate Committee on Commerce, Science, and Transportation (S.Rept. 112-255). S. 52 and H.R. 4100 would have amended various statutes implementing international fishery agreements to deter and combat illegal, unreported, and unregulated (IUU) fishing; additional provisions (Title IV in S. 52; Title II in H.R. 4100) would have amended the Tuna Conventions Act of 1950 to implement the Antigua Convention; on June 19, 2012, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs held a hearing on H.R. 4100; the Committee on Natural Resources ordered this bill reported on July 11, 2012. On January 26, 2012, the Senate Committee on Commerce, Science, and Transportation reported S. 52 (S.Rept. 112-132). H.Res. 47 would have expressed the sense of the House of Representatives urging that the parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) adopt stronger protections for sharks and bluefin tuna. S.Res. 227 would have called for the protection of the Mekong River Basin and increased U.S. support for delaying the construction of mainstream dams along the Mekong River. Section 801 of H.R. 2583 would have expressed the sense of Congress that timely reporting by fisheries commissions that sufficiently explains commission activities and the disposition of commission resources is necessary to maintain public support for their continued funding; Section 104(4) of H.R. 2583 as well as Section 703(e) of S. 1426 would have authorized \$31.3 million for International Fisheries Commissions in FY2012. On September 23, 2011, the House Committee on Foreign Affairs

reported H.R. 2583, amended, with the provision on fishery commission reporting at Section 1147 (H.Rept. 112-223). Section 107 of S. 1426 would have extended the period for reimbursement of seized commercial fishermen under the Fishermen's Protective Act from 2008 to 2013. S. 1601 and H.R. 6018 would have authorized \$36.3 million for International Fisheries Commissions in FY2013; on July 17, 2012, the House passed H.R. 6018 (amended). H.R. 6038 and S. 3356 would have required a GAO study of U.S. international conservation policies and programs, specifically including illegal fishing, and direct the President to develop and implement a comprehensive International Conservation Strategy. S. 3518 would have made it a principal negotiating objective of the United States in trade negotiations to eliminate government fisheries subsidies.

Tuna and Billfish

P.L. 112-183 (H.R. 2706) prohibited the sale of billfish. Section 701 of P.L. 112-213 (H.R. 2838) extended the authorization to engage foreign citizens in the U.S. distant water tuna fleet and gave distant water tuna vessels in the western Pacific Ocean the option of using Guam as their required port of call in order to meet U.S. maritime regulations. Section 113 of P.L. 112-55 directs certain management measures for U.S. tuna fishing under the authority of the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean.

H.R. 1806 would have amended the Endangered Species Act to provide that bluefin tuna not be treated as an endangered or threatened species. S. 52 and H.R. 4100 would have amended the Tuna Conventions Act of 1950 to implement the Antigua Convention; in addition, S. 52 would have amended the MMPA to authorize appropriations thorough FY2013 to study of the effect of intentional encirclement (including chase) on dolphins incidentally taken in purse seine fishing for yellowfin tuna in the eastern tropical Pacific Ocean. On January 26, 2012, the Senate Committee on Commerce, Science, and Transportation reported S. 52 (S.Rept. 112-132); on June 19, 2012, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs held a hearing on H.R. 4100; the Committee on Natural Resources ordered this bill reported on July 11, 2012. Section 2(e) of S. 2062 would have amended the Lacey Act to remove the exemption from Lacey Act enforcement for taking of highly migratory species in violation of foreign law where the United States does not recognize foreign jurisdiction over highly migratory species.

Disasters and Recovery

Division A, Title I, Subtitle F, of P.L. 112-141 (H.R. 4348) created a Gulf Coast Restoration Trust Fund to promote consumption of Gulf of Mexico seafood as well as efforts to achieve longterm sustainability of the ecosystem, fish stocks, fish habitat, and the recreational, commercial, and charter fishing industry in the Gulf of Mexico.

S. 653 and H.R. 1336 would have required the Administrator of the Small Business Administration to establish a Southeast Hurricanes Small Business Disaster Relief Program for losses caused by Hurricane Katrina of 2005, Hurricane Rita of 2005, Hurricane Gustav of 2008, or Hurricane Ike of 2008. H.R. 1228 and S. 662 would have required EPA to enter into an arrangement with the National Academies to preliminarily evaluate the natural resource damages from the Deepwater Horizon Oil Spill; on June 28, 2011, the Senate Environment and Public Works Subcommittee on Water and Wildlife held a hearing on S. 662. Section 204 of H.R. 3757 would have amended the Clean Water Act to elaborate on how closing and reopening of fishing grounds following an oil spill is to be managed. S.Amdt. 2187 to S. 3240 would have extended emergency disaster loans under the Farm Service Agency (FSA) to commercial fishermen; S.Amdt. 2188 to S. 3240 would have extended the non-insured crop assistance program under FSA to commercial fishermen; and S.Amdt. 2206 to S. 3240 would have extended FSA operating loans to commercial fishermen. On June 21, 2012, the Senate passed S. 3240 with the provision relating to emergency disaster loans included (Section 5001).²⁵ On December 28, 2012, the Senate passed H.R. 1 (amended), including \$150 million for fishery disasters declared during 2012.

Marine Debris

Title VI of P.L. 112-213 (H.R. 2838) amended the Marine Debris Research, Prevention, and Reduction Act, and included language in Section 608 defining a severe marine debris event, with a determination for such an event directed in Section 609 for the Tohoku earthquake and tsunami and for Hurricane Sandy.

Colorado River

P.L. 112-270 (H.R. 6060) amended P.L. 106-392 to maintain annual base funding for the Upper Colorado and San Juan River fish recovery programs.

Harmful Algal Blooms and Hypoxia

On June 1, 2011, the House Science, Space, and Technology Subcommittee on Energy and Environment held a legislative hearing on harmful algal bloom and hypoxia research. H.R. 2484 and S. 1701 would have amended and reauthorized the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 (through FY2015) to include a comprehensive strategy to address harmful algal blooms and hypoxia and to provide for the development and implementation of a comprehensive research plan and action strategy to reduce harmful algal blooms and hypoxia; on December 16, 2011, the House Committee on Science, Space, and Technology reported (amended) H.R. 2484 (H.Rept. 112-333, Part I). On November 13, 2011, the Senate Committee on Commerce, Science, and Transportation reported (amended) S. 1701 (S.Rept. 112-237). Section 7 of S. 1582 and Section 13 of H.R. 3690 would have directed EPA to complete a study and report to Congress on available scientific information relating to the impacts of nutrient excesses and algal blooms on coastal recreation waters. H.R. 3570 would have amended the Oceans and Human Health Act to require coordination with programs under the Harmful Algal Bloom and Hypoxia Research and Control Act.

²⁵ The Senate Committee on Agriculture, Nutrition, and Forestry filed a written report on S. 3240 on August 28, 2012 (S.Rept. 112-203).

Marketing and Trade

Section 7 of H.R. 480 would have established a Gulf of Mexico seafood marketing program. Several bills would have modified (Section 4(b) of S. 108 and Section 5(b) of S. 1069) or temporarily suspended (S. 2879 and S. 2880) the tariff on vulcanized rubber felt or lug boot bottoms for use in fishing waders. Section 7004 of S. 1773/H.R. 3286 would have amended the Farmer-to-Consumer Direct Marketing Act of 1976 to establish a local marketing promotion program for fishing cooperatives or other business entities or a producer or fisher network or association, including community-supported fishery networks or associations. H.R. 4650 and S. 3195 would have suspended temporarily the duty on certain fishing reels. H.R. 5071 and S. 2556 would have extended the temporary suspension of duty on ovsters (other than smoked). prepared or preserved. H.R. 6200 would have sought to address seafood fraud by requiring labels to identify species, origin, and fishing gear used for both domestic and imported fish and would require a plan to coordinate FDA and NMFS seafood inspection. S. 3518 would have made it a principal negotiating objective of the United States in trade negotiations to eliminate government fisheries subsidies. S. 3615 would have promoted national seafood marketing efforts through the creation of a National Seafood Marketing and Development Fund and Regional Seafood Marketing Boards.

Jobs

Section 7(b)(2)(H) of H.R. 192/S. 179 would have promoted cooperative research and education efforts with commercial fishermen operating within the Gulf of the Farallones National Marine Sanctuary and the Cordell Bank National Marine Sanctuary; on February 27, 2012, the Senate Committee on Commerce, Science, and Transportation reported S. 179 (S.Rept. 112-149). H.R. 594 would have established a jobs creation grant program to support cooperative research and monitoring, recreational fishing registry programs, marine debris removal, and restoration of coastal resources; on December 1, 2011, the House Committee on Natural Resources held a hearing on this bill. H.R. 3109 would have amended the Coastal Zone Management Act of 1972 to require establishment of a Working Waterfront Grant Program to preserve, protect, and expand coastal access for persons engaged in water-dependent commercial activities. Section 39 of H.R. 1026 would have directed the Federal Emergency Management Agency to study the impacts of the National Flood Insurance Program on harbor areas that are working waterfronts.

Seafood Safety

S. 50 would have directed the Departments of Commerce and of Health and Human Services, the Federal Trade Commission, and other federal agencies to combat seafood fraud²⁶ and coordinate and strengthen programs to better ensure that seafood in interstate and foreign commerce is fit for human consumption; on January 26, 2012, the Senate Committee on Commerce, Science, and Transportation reported this bill (S.Rept. 112-131). H.R. 832 would have required research on the safety of Gulf of Mexico seafood, including levels of elevated hazardous substances. S. 1183 and H.R. 3391 would have established a program to monitor long-term changes in mercury and methyl mercury in fish and other aquatic organisms. Section 4 of S. 1582 would have directed

²⁶ See CRS Report RL34124, *Seafood Marketing: Combating Fraud and Deception*, by (name redacted).

EPA to develop updated recommendations on testing for mercury affecting the waters of the Great Lakes, including fish tissue.

Tax Provisions

Section 202(a)(74) of S. 13 would have repealed Section 7873 of the Internal Revenue Code relating to federal tax treatment of income derived by Indians from exercise of fishing rights secured by treaty. H.R. 278 would have amended the Internal Revenue Code to provide for tax-exempt qualified small issue bonds to finance fish processing property. Section 5 of H.R. 390 would have amended the Internal Revenue Code to provide for an exclusion from the gross estate for certain farmlands and lands subject to qualified conservation easements managed to provide habitat in support of fish and wildlife-dependent recreation. H.R. 6276 would have amended the Internal Revenue Code to provide for Commercial Fishing, Farm, and Ranch Risk Management Accounts.

Fishing and Research Vessels

H.R. 2241 and S. 1208 would have provided an election to terminate certain capital construction funds without penalties. H.R. 3472 and S. 1890 would have established standards and procedures for disposal of forfeited fishing vessels; on June 19, 2012, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs held a hearing on H.R. 3472. Section 610 of S. 1665, as reported (amended) by the Committee on Commerce, Science, and Transportation on January 26, 2012 (S.Rept. 112-135), would have directed the NOAA Administrator to give special consideration to stated factors related to designating a homeport for the FSV *Henry E. Bigelow.* Section 302 of H.R. 5887 would have delayed certain safety requirements for fishing vessels.

Health

Section 232(a) of H.R. 105/H.R. 3000, Section 501(a) of H.R. 299, Section 201(a) of H.R. 397/H.R. 6299, Section 2(a) of H.R. 1050, and Section 621(a) of H.R. 3682 would have amended the Employee Retirement Income Security Act of 1974 (ERISA; P.L. 93-406; 29 U.S.C. §§1001, et seq.) to authorize fishing industry associations to provide health care plans for association members. H.R. 3570 would have amended and reauthorized the Oceans and Human Health Act through FY2015.

Striped Bass

H.R. 3906 would have amended the Atlantic Striped Bass Conservation Act to allow recreational fishing for Atlantic striped bass in the Block Island Sound transit zone. Section 3 of H.R. 6096 would have reauthorized the Atlantic Striped Bass Conservation Act through FY2017. On July 19, 2012, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs held a hearing on both these bills.

National Fish and Wildlife Foundation

S. 1494, Section 243 of S. 3525, and H.R. 6441 would have reauthorized and amended the National Fish and Wildlife Foundation Establishment Act. On April 24, 2012, the Senate Environment and Public Works Subcommittee on Water and Wildlife held a hearing on S. 1494, and on September 19, 2012, the Senate Committee on Environment and Public Works reported (amended) S. 1494 (S.Rept. 112-215).

Miscellaneous Fisheries Reauthorizations

H.R. 6096 would have reauthorized the Anadromous Fish Conservation Act, Atlantic Striped Bass Conservation Act, Interjurisdictional Fisheries Act, and Northwest Atlantic Fisheries Convention Act through FY2017. On July 19, 2012, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs held a hearing on this bill.

Legal Fees

Section 311 of H.R. 1287, S. 706, and Section 4140 of S. 1720 would have prohibited the Claims and Judgment Fund of the U.S. Treasury from paying legal fees of an environmental non-governmental organization related to any action that prevents, terminates, or reduces access to or production of a resource by commercial or recreational fishermen.

Fishing Permits and Licenses

H.R. 1210, S. 608, and Section 406 of H.R. 2838 would have limited maritime liens on fishing permits and licenses. On October 3, 2011, the House Committee on Transportation and Infrastructure reported H.R. 2838 (amended), with this provision in Section 405 (H.Rept. 112-229). On November 15, 2011, the House passed H.R. 2838 (amended); on September 22, 2012, the Senate passed H.R. 2838 (amended), deleting the House provision limiting maritime liens.

Accidents and Injury

Section 2(2) of S. 475 would have prohibited funding of National Institute for Occupational Safety and Health's Agriculture, Forestry, and Fishing Program, which seeks to eliminate occupational diseases and injuries among workers in these industries through research and prevention.

Coral

S. 46 and H.R. 738 would have amended and reauthorized the Coral Reef Conservation Act of 2000 through FY2015 (H.R. 738) or FY2016 (S. 46). On September 12, 2012, the Senate Committee on Commerce, Science, and Transportation reported S. 46 (S.Rept. 112-210). Section 3(a)(2)(A)(iii)(I) of S. 692 would have promoted research on the mitigation of hurricane impacts on coral reefs; on November 14, 2012, the Senate Committee on Commerce, Science, and Transportation for 6101(b) of H.R. 6644 would have stated U.S. policy as cooperating with partner countries and nongovernmental organizations to protect and sustainably manage coral reefs, including through debt-for-nature exchanges.

Insurance

Section 39 of H.R. 1026 would have required the Federal Emergency Management Agency to study the impacts of the National Flood Insurance Program on harbor areas including commercial and recreational fishing.

Saltonstall-Kennedy Act

S. 2184 and H.R. 4208 would have amended the Saltonstall-Kennedy Act to establish a Regional Fisheries Investment Grant Program.

Government Reorganization

Section 202(b) of S. 1116 would have transferred all NMFS functions to the Fish and Wildlife Service in the Department of the Interior.

Aquaculture

Background

Aquaculture is broadly defined as the farming or husbandry of fish, shellfish, and other aquatic animals and plants, usually in a controlled or selected environment.²⁷ The diversity of aquaculture is typified by such activities as freshwater fish farming (e.g., catfish and trout farms);²⁸ shellfish and seaweed culture; net-pen culture, used by the salmon industry, wherein fish remain captive throughout their lives in marine pens; and ocean ranching, used by the Pacific Coast salmon industry, whereby juvenile salmon are cultured, released to mature in the open ocean, and caught when they return as adults to spawn. Fish hatcheries can be either publicly or privately operated to raise fish for recreational and commercial stocking as well as to mitigate aquatic resource and habitat damage.

The U.N. Food and Agriculture Organization (FAO) has characterized aquaculture as one of the world's fastest-growing food production activities. World aquaculture production grew from approximately 1 million metric tons in the early 1950s to 78.9 million metric tons in 2010 (the most recent FAO data available).²⁹ Meanwhile, the harvest from wild populations has been static for the last two decades, and further growth of fish production for human consumption is expected to rely on aquaculture. In 2006, FAO estimated that 47% of all fish consumed by humans came from aquaculture. FAO predicts that world aquaculture production could exceed 130 million metric tons by 2030, more than double the current wild fish harvest for human consumption.³⁰

²⁷ For more background information, see CRS Report RL32694, *Open Ocean Aquaculture*, by (name redacted) and (name redacted), and out-of-print CRS Report 97-436, *Aquaculture and the Federal Role*, by (name redacted) and (name redacted), available from Eugene Buck at #redacted#@crs.loc.gov.

²⁸ For statistics on freshwater production, see http://www.agcensus.usda.gov/Publications/2002/Aquaculture/index.asp.

²⁹ For more details, see http://www.fao.org/docrep/013/i1820e/i1820e00.htm.

³⁰ For a discussion of FAO projections for 2030, see http://www.fao.org/docrep/007/y5648e/y5648e07.htm#bm07.1.

U.S. aquaculture, until recently and with a few exceptions, has been considered a minor industry.³¹ The U.S. Department of Commerce's *Fisheries of the United States—2011* reported that in 2011 U.S. aquaculture production reached 753 million pounds with sales of \$1,282 million.³² Catfish accounted for 478 million pounds and sales of \$375 million while crawfish contributed 116 million pounds and sales of \$177 million.³³ The domestic aquaculture industry faces strong competition from imports of foreign aquacultural products, from the domestic poultry and livestock industries, and from wild harvests. In addition, aquaculture operations face increasing scrutiny for habitat destruction, pollution, and other concerns. The major federal statute affecting U.S. aquaculture is the National Aquaculture Act of 1980, as amended (16 U.S.C. §§2801 et seq.). The purpose of this act is to ensure coordination of various federal programs and policies affecting the aquaculture industry, and to promote and support aquaculture research and development.

In October 2007, NOAA released a 10-year plan for its marine aquaculture program.³⁴ On June 9, 2011, the Department of Commerce and NOAA released complementary national aquaculture policies to address concerns related to aquaculture development in the EEZ.³⁵ Legislation to modify the regulatory environment and promote the development of U.S. offshore, open-ocean aquaculture was introduced in the 110th Congress, but was not considered by either chamber, and was not reintroduced in the 111th or 112th Congress.

In 2009, the Gulf of Mexico Fishery Management Council voted to approve a plan to issue aquaculture permits and regulate aquaculture in federal waters of the Gulf of Mexico. Environmentalists and some fishing industry representatives have opposed the plan because of concerns related to environmental protection and potential harm to wild fish populations. Many who oppose the plan support a precautionary approach and development of national aquaculture standards.

Aquaculture Issues in the 112th Congress

The 112th Congress considered a number of measures related to aquaculture. On March 30, 2012, the House Committee on Agriculture held a field hearing in State University, Arkansas, including concerns about constraints on transport of aquaculture products under the Lacey Act.

P.L. 112-55 included a provision directing the *National Aquatic Animal Health Task Force to establish an infectious salmon anemia research program.* P.L. 112-74 included a provision authorizing the Corps of Engineers to transfer to the Fish and Wildlife Service as much as \$3,800,000 for National Fish Hatcheries in FY2012 to mitigate for fisheries lost due to Corps of

³¹ NMFS has produced a short video on U.S. aquaculture, available at http://www.nmfs.noaa.gov/aquaculture/ homepage_stories/aquaculture_video.html.

³² National Marine Fisheries Service Office of Science and Technology, *Fisheries of the United States 2011*, Current Fishery Statistics No. 2011, Silver Spring, MD, August 2012, p. 20, http://www.st.nmfs.noaa.gov/Assets/commercial/fus/fus/11/01_front2011.pdf.

³³ Sales for the miscellaneous category including baitfish, ornamental/tropical fish, alligators, algae, aquatic plants and others totaled approximately \$282 million. Sales were defined as the final sales of products to processors and dealers.

³⁴ Department of Commerce, National Oceanic and Atmospheric Administration, *NOAA 10-Year Plan for Marine Aquaculture*, NOAA Aquaculture Program Office, Silver Spring, MD, October 2007.

³⁵ The NOAA and Department of Commerce aquaculture policies are available at http://www.nmfs.noaa.gov/ aquaculture/policy/2011_policies_homepage.html.

Engineers projects. Section 6 of P.L. 112-237 (S. 3687) directed the Secretary of the Interior to convey the McKinney Lake National Fish Hatchery to the State of North Carolina. Section 404(b) of P.L. 112-240 (H.R. 8) amended the Internal Revenue Code of 1986 to include algae-based biofuel in the cellulosic biofuel producer credit. In the 112th Congress, several additional measures were introduced that could have affected aquaculture:

- S. 229, H.R. 520, and H.R. 3553 would have amended the Federal Food, Drug, • and Cosmetic Act to require labeling of genetically engineered fish. S. 230 and H.R. 521 would have amended the Federal Food, Drug, and Cosmetic Act to prevent the approval of genetically engineered fish for human consumption. Section 744 of H.R. 2112, as passed by the House on June 16, 2011, would have prohibited the Food and Drug Administration from spending FY2012 funds to approve any application for genetically engineered salmon. On September 7, 2011, the Senate Committee on Appropriations reported H.R. 2112, without the prohibition on FDA related to genetically engineered salmon (S.Rept. 112-73), and this provision was not in the enacted P.L. 112-55. S. 1717 would have prohibited the sale of genetically altered salmon. On December 15, 2011, the Senate Commerce, Science, and Transportation Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard held an oversight hearing on the environmental risks of genetically engineered fish. On May 24, 2012, S.Amdt. 2108 to S. 3187 was defeated, proposing to prohibit approval by FDA of genetically engineered fish unless NOAA concurred with such approval.
- H.R. 1149, H.R. 2009, S. 1085, and S. 1564 would have amended the Clean Air Act to include algae-based biofuel in the renewable fuel program. Section 5 of S. 937/H.R. 2036 and Section 222 of H.R. 2133 would have provided additional incentives for algae-based fuel production. Section 9010 of S. 3240 would have excluded algae from eligibility for a biomass assistance program; the Senate passed S. 3240 on June 21, 2012.³⁶ Section 10 of H.R. 5955 would have declared algae eligible for the agriculture biomass assistance program. H.R. 5967 would have amended the Public Utility Regulatory Policies Act of 1978 to include algae as renewable biomass.
- H.R. 4296, S. 496, and S.Amdt. 2199 to S. 3240 would have amended the Food, Conservation, and Energy Act to repeal a program relating to inspection and grading of catfish. Section 11018 of S. 3240 would have required research and development regarding a policy to insure producers against reduction in the margin between the market value of catfish and selected costs incurred in the production of catfish. On June 21, 2012, the Senate passed S. 3240, amended to repeal the catfish inspection program (Section 12208) and require a policy on margin coverage for catfish (Section 11019).³⁷ Section 11021 of H.R. 6083 also addressed margin coverage for catfish; on September 13, 2012, the House Committee on Agriculture reported (amended) H.R. 6083 (H.Rept. 112-669).

³⁶ The Senate Committee on Agriculture, Nutrition, and Forestry filed a written report on S. 3240 on August 28, 2012 (S.Rept. 112-203).

³⁷ Ibid.

- Section 7117 of S. 3240 and Section 7123 of H.R. 6083 would have authorized appropriations for Department of Agriculture aquaculture assistance programs through FY2017; in addition, Section 7407 of S. 3240/H.R. 6083 would have reauthorized the National Aquaculture Act through FY2017. Title I, Subtitle E of S. 3240/H.R. 6083 and Section 2 of H.R. 6192/H.R. 6228/H.R. 6233 would have expanded and extended disaster assistance programs for farm-raised fish. On June 21, 2012, the Senate passed S. 3240 with these provisions,³⁸ and on August 2, 2012, the House passed H.R. 6233. On September 13, 2012, the House Committee on Agriculture reported (amended) H.R. 6083 (H.Rept. 112-669). H.R. 4948 and Section 9(e) of S. 2261 would have amended the Federal Crop Insurance Act to modify and extend emergency assistance for farm-raised fish.
- Section 207 of H.R. 1837 and Section 519 of S. 2365 would have ordered that no distinction be made under the Endangered Species Act between anadromous fish of wild and hatchery origin in the Sacramento and San Joaquin Rivers and their tributaries. On June 2 and 13, 2011, the House Natural Resources Subcommittee on Water and Power held hearings on H.R. 1837. H.R. 1837 was reported (amended) by the House Committee on Natural Resources on February 27, 2012 (H.Rept. 112-403), and passed by the House (amended) on February 29, 2012.
- Section 105 of S. 2465 and Section 106 of H.R. 5325 would have authorized the Army Corps of Engineers to transfer to the Fish and Wildlife Service as much as \$4,300,000 for National Fish Hatcheries in FY2013 to mitigate for fisheries lost due to Army Corps of Engineers projects. On June 6, 2012, the House passed H.R. 5325 (amended). H.R. 5931 would have authorized and required the Fish and Wildlife Service to charge federal agencies for mitigation services provided by National Fish Hatcheries and other related facilities.
- S. 50 would have directed the Departments of Commerce and of Health and Human Services, the Federal Trade Commission, and other federal agencies to coordinate and strengthen programs to combat seafood fraud³⁹ and better ensure that seafood in interstate and foreign commerce is fit for human consumption; on January 26, 2012, the Senate Committee on Commerce, Science, and Transportation reported this bill (S.Rept. 112-131).
- H.R. 2905 would have temporarily waived the risk management purchase requirement for agricultural producers adversely impacted by Hurricane Irene or Tropical Storm Lee so that such producers would be eligible to receive assistance under the Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish Program.
- H.R. 574 would have prohibited the Secretary of the Interior and the Secretary of Commerce from authorizing commercial finfish aquaculture operations in the EEZ unless specifically authorized by Congress. H.R. 2373 would have

³⁸ Ibid.

³⁹ See CRS Report RL34124, Seafood Marketing: Combating Fraud and Deception, by (name redacted).

established a regulatory system and research program for offshore aquaculture in the U.S. EEZ.

- H.R. 1176 would have amended the Specialty Crops Competitiveness Act of 2004 to include farmed shellfish as specialty crops. S. 1607 would have added shellfish to the list of crops eligible for the noninsured crop disaster assistance program and the emergency assistance for livestock program of the Department of Agriculture.
- H.R. 3074 would have amended the Migratory Bird Treaty Act to delegate to states the authorities of the Secretary of the Interior under that act with respect to cormorants. On March 29, 2012, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs held a hearing on this bill.
- H.R. 1650 would have amended Section 307 of the National Oceanic and Atmospheric Administration Authorization Act of 1992 to establish a Chesapeake Bay coastal living resources management and habitat program, supporting fish and shellfish aquaculture including native oyster restoration.
- H.R. 3109 would have amended the Coastal Zone Management Act of 1972 to require establishment of a Working Waterfront Grant Program to preserve, protect, and expand coastal access for persons engaged in water-dependent commercial activities, including aquaculture.
- H.R. 6200 would have sought to address seafood fraud by requiring labels to identify species and origin for both domestic and imported fish and would require a plan to coordinate FDA and NMFS seafood inspection.
- Section 39 of H.R. 1026 would have required the Federal Emergency Management Agency to study the impacts of the National Flood Insurance Program on harbor areas including aquaculture.
- Section 2(C)(1) of H.R. 1251 would have directed the Secretary of Commerce and Secretary of the Interior to establish a fish hatchery program or refuge to preserve and restore the delta smelt.
- Section 3 of H.R. 2110 would have authorized a nutrient bio-extraction pilot project for Long Island Sound, defined so as to include the aquaculture of suspension-feeding shellfish or algae.
- S. 256 and Section 112 of S. 1960 would have amended the Internal Revenue Code of 1986 to allow a credit against income tax for equity investments in aquaculture small businesses.
- H.R. 5864 would have modified the regulatory process for injurious wildlife to prevent the introduction of harmful nonnative wildlife and wild animal pathogens and parasites.
- As part of the Klamath Settlement, Section 206(f) of H.R. 3398/S. 1851 would have transferred the PacifiCorps Iron Gate Hatchery facilities to the state of California.
- H.R. 278 would have amended the Internal Revenue Code of 1986 to provide for tax-exempt qualified small issue bonds to finance fish processing property.

• Section 306 of H.R. 4351 would have authorized a grant program for promoting urban aquaculture.

Marine Mammals

Background

In 1972, Congress enacted the Marine Mammal Protection Act (MMPA; 16 U.S.C. §§1361 et seq.), due in part to high dolphin mortality (estimated at more than 400,000 animals per year) in the eastern tropical Pacific tuna purse-seine fishery. While some critics assert that the MMPA is scientifically irrational because it identifies one group of organisms for special protection unrelated to their abundance or ecological role, supporters note that the MMPA has accomplished much by way of promoting research and increased understanding of marine life as well as encouraging attention to incidental bycatch mortalities of marine life by commercial fishing and other maritime industries.

The MMPA established a moratorium on the "taking" of marine mammals in U.S. waters and by U.S. nationals on the high seas. It also established a moratorium on importing marine mammals and marine mammal products into the United States. The MMPA protected marine mammals from "clubbing, mutilation, poisoning, capture in nets, and other human actions that lead to extinction." It also expressly authorized the Secretary of Commerce and the Secretary of the Interior to issue permits for the "taking" of marine mammals for certain purposes, such as scientific research and public display.

Under the MMPA, the Secretary of Commerce, acting through NMFS, is responsible for the conservation and management of whales, dolphins, and porpoises (cetaceans), and seals and sea lions (pinnipeds). The Secretary of the Interior, acting through the Fish and Wildlife Service (FWS), is responsible for walruses, sea and marine otters, polar bears, manatees, and dugongs. This division of authority derives from agency responsibilities as they existed when the MMPA was enacted. Title II of the MMPA established an independent Marine Mammal Commission (MMC) and its Committee of Scientific Advisors on Marine Mammals to oversee and recommend actions necessary to meet the requirements of the MMPA.

Prior to passage of the MMPA, states were responsible for marine mammal management on lands and in waters under their jurisdiction. The MMPA shifted marine mammal management authority to the federal government. It provides, however, that management authority, on a species-byspecies basis, could be returned to states that adopt conservation and management programs consistent with the purposes and policies of the MMPA. It also provides that the moratorium on taking can be waived for specific purposes, if the taking will not disadvantage the affected species or population. Permits may be issued to take or import any marine mammal species, including depleted species, for scientific research or to enhance the survival or recovery of the species or stock. The MMPA allows U.S. citizens to apply for and obtain authorization for taking small numbers of mammals incidental to activities other than commercial fishing (e.g., offshore oil and gas exploration and development) if the taking would have a negligible impact on any marine mammal species or stock, provided that monitoring requirements and other conditions are met.

The MMPA moratorium on taking does not apply to any Native American (Indian, Aleut, or Eskimo) who resides in Alaska near the coast of the North Pacific (including the Bering Sea) or Arctic Ocean (including the Chukchi and Beaufort Seas), if such taking is for subsistence or for

creating and selling authentic Native articles of handicrafts and clothing, and is not done wastefully.

The MMPA also authorizes the taking of marine mammals incidental to commercial fishing operations. The eastern tropical Pacific tuna fishery initially was excluded from the incidental take regimes. Instead, the taking of marine mammals incidental to that fishery is governed by separate provisions of the MMPA, and was substantially amended in 1997 by the International Dolphin Conservation Program Act.

Section 319 of P.L. 108-136 amended the MMPA in 2003 to provide a broad exemption for "national defense" activities. This section also amended the definition of "harassment" of marine mammals, as it applies to military readiness activities, to require greater scientific evidence of harm, and the consideration of impacts on military readiness in the issuance of permits for incidental takings.⁴⁰ The Navy's use of mid-frequency sonar and its possible effects on marine mammals has been the focus of much controversy and litigation.⁴¹

Marine Mammal Protection Act Reauthorization

The MMPA was reauthorized by P.L. 103-238, the Marine Mammal Protection Act Amendments of 1994; the authorization for appropriations expired on September 30, 1999. The 1994 amendments indefinitely authorized the taking of marine mammals incidental to commercial fishing operations and provided for assessing marine mammal stocks in U.S. waters. This reauthorization also included amendments providing for developing and implementing take-reduction plans for stocks that have been reduced or are being maintained below their optimum sustainable population levels due to interactions with commercial fisheries, and for studying pinniped-fishery interactions.⁴²

A December 2008 study by the Government Accountability Office (GAO) found that limitations in information available make it difficult for NMFS to accurately determine which marine mammal stocks meet the statutory requirements for establishing take reduction teams.⁴³ GAO found that NMFS did not have a human-caused mortality estimate or a maximum removal level for 39 of 113 (35%) marine mammal stocks, making it impossible to determine their strategic status in accordance with MMPA requirements. For the remaining 74 stocks, NMFS data have significant limitations that call their accuracy into question. NMFS contends that funding constraints limit their ability to gather sufficient data. In addition, NMFS has not established take reduction teams for 14 marine mammal stocks for which NMFS data show them to be strategic and interacting significantly with commercial fisheries.

⁴⁰ For more background, see CRS Report RS22149, *Exemptions from Environmental Law for the Department of Defense (DOD)*, by (name redacted).

⁴¹ For more background, see CRS Report RL34403, *Whales and Sonar: Environmental Exemptions for the Navy's Mid-Frequency Active Sonar Training*, by (name redacted), and CRS Report RL33133, *Active Military Sonar and Marine Mammals: Events and References*, by (name redacted) and Kori Calvert.

⁴² For more background and information on the 1994 amendments, see out-of-print CRS Report 94-751 ENR, *Marine Mammal Protection Act Amendments of 1994*, by (name redacted), available from the author at #redacted#@crs.loc.gov.

⁴³ U.S. Government Accountability Office, *Improvements Are Needed in the Federal Process Used to Protect Marine Mammals from Commercial Fishing*, GAO-09-78 (December 8, 2008). Available at http://www.gao.gov/new.items/ d0978.pdf.

Legislation introduced in the 112th Congress addressed several issues related to the MMPA. On October 17, 2011, the House Committee on Natural Resources held an oversight field hearing in Seattle, WA, on the scientific basis for NMFS fisheries restrictions to protect Steller sea lions.

- H.R. 990 would have amended MMPA to allow the importation of polar bear trophies taken in sport hunts in Canada. H.R. 991, Title III of H.R. 4089, S. 1066, and Section 102 of S. 3525 would have amended MMPA to allow imports of polar bear trophies taken in sport hunts in Canada before the date the polar bear was determined to be a threatened species under the Endangered Species Act. On May 12, 2011, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs held a hearing on H.R. 991. On December 1, 2011, the House Committee on Natural Resources reported (amended) H.R. 991 (H.Rept. 112-308). On April 13, 2012, the House Committee on Natural Resources reported (amended) H.R. 4089 (H.Rept. 112-426, Part I); the House passed this measure on April 17, 2012. Section 2(d)(2)(B) of S. 2062 would have amended the MMPA to delete enforcement authority under the Lacey Act for polar bear management.
- H.R. 946 and H.R. 3069 would have amended MMPA to authorize NOAA to issue one-year permits to Washington and Oregon and four Columbia River treaty tribes for the "lethal taking" of sea lions, seeking to reduce marine mammal predation on endangered Columbia River salmon; on June 14, 2011, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs held a hearing on H.R. 946. On December 8, 2011, the House Committee on Natural Resources reported H.R. 3069 (H.Rept. 112-322). On June 19, 2012, the House passed H.R. 2578 after amending this measure to include the language of H.R. 3069 as Title VII.
- Section 3(a) of H.R. 840 and Section 195(a)(2) of H.R. 4301 would have allowed certain offshore drilling operations to proceed without further review under the MMPA. Section 101 of H.R. 909/H.R. 3302 would have declared the Draft Proposed Outer Continental Shelf (OCS) Oil and Gas Leasing Program 2010-2015 to be fully compliant with MMPA; on May 31 and June 3, 2011, the House Energy and Commerce Subcommittee on Energy and Power held hearings on H.R. 909.
- Section 305(a) of S. 52 would have amended the MMPA to authorize appropriations thorough FY2013 to study of the effect of intentional encirclement (including chase) on dolphins incidentally taken in purse seine fishing for yellowfin tuna in the eastern tropical Pacific Ocean. On January 26, 2012, the Senate Committee on Commerce, Science, and Transportation reported this bill (S.Rept. 112-132).
- S. 1453 and H.R. 2714 would have amended MMPA to allow the transport, purchase, and sale of pelts of—and handicrafts, garments, and art produced from—South Central and Southeast Alaska northern sea otters that are taken for subsistence purposes. On October 25, 2011, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs held a hearing on H.R. 2714.

- Section 142(6) of H.R. 4301 would have directed NOAA and FWS to assign employees to regional offices to coordinate review of federal permits for oil and gas projects on federal lands onshore and on the OCS, with expertise in MMPA authorizations.
- H.R. 594 would have established a jobs creation grant program to support cooperative research to collect data to improve marine mammal stock assessments; on December 1, 2011, the House Committee on Natural Resources held a hearing on this bill.
- Section 3 of H.R. 332 would have required compliance by all federal defense agencies with certain environmental laws, including MMPA.
- S. 1402 would have amended MMPA to increase the maximum penalty for violating that act.

Additional Marine Mammal Issues in the 112th Congress

Legislation was introduced in the 112th Congress to address several other issues related to marine mammals generally.

Habitat

S. 203 and Section 106 of H.R. 3757 would have directed NOAA to research oil spill prevention and response in the Arctic waters, including assessment of impacts on Arctic marine mammals, and amend the Oil Pollution Act of 1990 to provide specific funding for rescue, rehabilitation, and recovery of marine species, including marine mammals. Section 224 of H.R. 501/H.R. 1870 would have amended Section 20 of the Outer Continental Shelf Lands Act relating to determining the cumulative impacts on marine mammal species and stocks and their subsistence use. Section 4 of S. 2147/S. 2154 would have established an Arctic Ocean Research, Monitoring, and Observation Program to offer grants for research and monitoring of Arctic marine mammals, including their responses to loss of sea ice habitats and reactions to disturbance. S. 1991 would have established a National Endowment for the Oceans.

Whaling

S. 3262 and H.R. 5898 would have amended the Whaling Convention Act to require the Secretary of Commerce to authorize aboriginal subsistence whaling as permitted by the regulations of the International Whaling Commission and to set aboriginal subsistence catch limits for bowhead whales in the event the Commission fails to adopt such limits. H.Res. 714 would have stressed the importance of continued U.S. leadership in whale conservation and restate U.S. opposition to commercial whaling. H.R. 6145 would have authorized the Secretary of the Interior to provide preservation and interpretation assistance for the New Bedford Whaling National Historical Park in Massachusetts.

Sea Otters

H.R. 4043 would have established special management areas for southern sea otters to accommodate military readiness activities, and declare that incidental take restrictions under

MMPA and ESA are not applicable in these areas during military readiness activities; on April 19, 2012, the House Natural Resources Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs held a hearing on this bill; on July 17, 2012, the House Committee on Natural Resources reported (amended) this bill (H.Rept. 112-606, Part I). On May 18, 2012, the House passed H.R. 4310 after amending this measure to include the language of H.R. 4043 in Section 316. On December 4, 2012, the Senate passed (amended) H.R. 4310, without the House language on sea otters, and this language was not included in the conference report (H.Rept. 112-705), filed December 18, 2012.

Polar Bears

H.R. 39 would have delisted the polar bear as a threatened species under the Endangered Species Act of 1973.

Miscellaneous Marine Mammal Issues

Section 34 of H.R. 235, Section 506(b)(21) of H.R. 408/S. 178, Section 3 of S. 475, and Section 2(a)(31) of H.R. 1891 would have repealed exchange programs for Alaska Natives, Native Hawaiians, and their historical whaling and trading partners in Massachusetts in Subpart 12 of Part D of Title V of the Elementary and Secondary Education Act of 1965; on June 14, 2011, the House Committee on Education and the Workforce reported H.R. 1891, amended (H.Rept. 112-106). H.Res. 80 would have expressed the sense of the House in support of the goals and ideals of National Marine Awareness Day, celebrating the diversity of marine wildlife and the richness of marine ecosystems.

Appropriations

Appropriations also play an important role in federal fisheries management, providing funds for various programs and initiatives. In addition, appropriations bills have served as vehicles for some changes in MSFCMA provisions.

National Marine Fisheries Service

For NMFS, funding for fisheries and marine mammal programs including management under MSFCMA is provided within NOAA's Operations, Research, and Facilities (OR&F) Account. (See **Table 1**.) NMFS employs more than 2,800 scientists, policy analysts, engineers, boat captains, computer modelers, statisticians, enforcement officers, secretaries, fisheries managers, economists, and various other skilled workers to implement its programs. Appropriations issues in the 112th Congress included not only what level of funding might be adequate to implement the programs required by law, but also what levels of funding might be provided for alleviating the effects of disasters on fisheries and how much funding should be provided to restore salmon habitat and promote the recovery of endangered and threatened salmon stocks.

(in thousands of dollars)							
	FY2011 Enacted	FY2012 Request	FY2012 Enacted	FY2013 Request	FY2013 Sen Rpt	FY2013 Hse Psd	
Fisheries	506,684	550,295	490,673	491,491	495,764	481,516	
Protected Species	199,447	216,581	176,451	170,041	184,347	154,234	
Habitat Conservation	49,812	53,600	43,187	35,987	43,678	29,388	
Enforcement Surveillance	105,619	106,207	107,899	110,289	110,289	110,289	
Admin. Efficiency Initiative		(16,271)					
Undistributed Reduction			(24,000)				
CongDirected Projects	33,418						
SUBTOTAL (OR&F)	894,980	910,412	794,210	807,808	834,078	775,427	
Procurement, Acquisition, Construction	0	0	0	0	0	0	
Pacific Coastal Salmon Recovery	80,000	65,000	65,000	50,000	65,000	65,000	
Other Accounts	42,420	25,142	16,025	17,284	350	350	
TOTAL	1,017,400	1,001,104	875,235	875,092	899,428	840,777	

Table 1. NMFS Appropriations, FY2011-FY2013

Sources: Budget Justifications, House and Senate Committee Reports, and floor debate.

The Administration's FY2013 budget request was released on February 13, 2012.⁴⁴ The Administration is proposing that FY2013 funding for NMFS in NOAA's OR&F account increase about \$13.6 million (+1.7%) above the FY2012 enacted funding. This is offset by a proposed reduction of \$15 million for the Pacific Coastal Salmon Recovery Fund. On April 19, 2012, the Senate Committee on Appropriations reported S. 2323, proposing to increase NMFS funding in NOAA's OR&F account by \$26.3 million (3.3%) more than the Administration request and \$39.9 million (5.0%) more than was enacted for FY2012 (S.Rept. 112-158). On May 2, 2012, the House Committee on Appropriations reported H.R. 5326, proposing to decrease NMFS funding in NOAA's OR&F account by \$32.4 million (-4.0%) below the Administration request and \$18.8 million (-2.4%) below the amount enacted for FY2012 (H.Rept. 112-463). On May 10, 2012, the House passed H.R. 5326 (amended); it proposes NMFS funding for FY2013, but would prohibit FY2013 funding for (1) a new limited access privilege program for any fishery under the jurisdiction of Atlantic and Gulf of Mexico fishery management councils; (2) a National Ocean Policy; (3) implementation of a proposed rule for turtle excluder devices; (4) the salary of any officer or employee who uses the Fisheries Enforcement Asset Forfeiture Fund for any purpose other than specifically authorized; and (5) reintroduction of California Central Valley Spring Run

⁴⁴ The Department of Commerce "Budget in Brief" is available at http://www.osec.doc.gov/bmi/budget/FY13BIB/ fy2013bib_final.pdf.

Chinook salmon. In the absence of final action on either bill, a continuing resolution, P.L. 112-175, provided FY2013 funding through March 27, 2013, for projects and activities at the FY2012 level.

Fish and Wildlife Service

Within the FWS budget, an account for "fisheries and aquatic resource conservation" includes funding for the National Fish Hatchery operations, aquatic invasive species programs, and marine mammal programs. (See **Table 2**.) These programs employ about 800 individuals, located at 70 National Fish Hatcheries, 65 Fish and Wildlife Conservation Offices, 1 historic National Fish Hatchery, 9 Fish Health Centers, and 7 Fish Technology Centers.

The Administration's FY2013 budget request was released on February 13, 2012.⁴⁵ The Administration is proposing that FY2013 funding for FWS's Fisheries and Aquatic Resource Conservation line item decrease by about \$3.7 million (-2.7%) below the FY2012 enacted funding. Most of this reduction would occur for National Fish Hatchery operations. On July 10, 2012, the House Committee on Appropriations reported H.R. 6091, proposing to decrease FWS funding in their "Fisheries and Aquatic Resources Conservation" account for FY2013 by \$4.4 million (-3.4%) below the Administration request and \$8.1 million (-6.0%) below the amount enacted for FY2012 (H.Rept. 112-589). In the absence of final action on either bill, a continuing resolution, P.L. 112-175, provided FY2013 funding through March 27, 2013, for projects and activities at the FY2012 level.

Table 2. FWS Appropriations, FY2010-FY2013

(in thousands of dollars)						
	FY2011 Request	FY2011 Enacted	FY2012 Request	FY2012 Enacted	FY2013 Request	FY2013 Hse Rpt
Fisheries and Aquatic Resource Conservation	142,477	138,939	136,012	135,317	131,607	127,170

Sources: Budget justifications, House and Senate Committee Reports, and floor debate.

Marine Mammal Commission

The Marine Mammal Commission (MMC) is an independent agency of the executive branch, established under Title II of the Marine Mammal Protection Act (MMPA; P.L. 92-522). The MMC and its Committee of Scientific Advisors on Marine Mammals provide oversight and recommend actions on domestic and international topics to advance policies and provisions of the Marine Mammal Protection Act. As funding permits, the Marine Mammal Commission supports research to further the purposes of the MMPA.

The Administration's FY2013 request for the MMC is \$3.1 million, which would represent a 1.9% increase compared to FY2012-enacted funding of \$3.0 million. In S. 2323, the Senate Committee on Appropriations recommends \$3.1 million, a 1.9% increase over FY2012-enacted

⁴⁵ The Department of Commerce "Budget in Brief" is available at http://www.osec.doc.gov/bmi/budget/FY13BIB/ fy2013bib_final.pdf.

funding and the same as the Administration's FY2013 request. On May 2, 2012, the House Committee on Appropriations reported H.R. 5326, recommending \$3.0 million, the same as the FY2012-enacted funding and 1.8% less than the Administration's FY2013 request (H.Rept. 112-463). On May 10, 2012, the House passed H.R. 5326 (amended). In the absence of final action on either bill, a continuing resolution, P.L. 112-175, provided FY2013 funding through March 27, 2013, for projects and activities at the FY2012 level.

Author Contact Information

(name redacted) Analyst in Natural Resources Policy #redacted#@crs.loc.gov, 7-....

Acknowledgments

Retired CRS specialist (name redacted) made important contributions to this report.

EveryCRSReport.com

The Congressional Research Service (CRS) is a federal legislative branch agency, housed inside the Library of Congress, charged with providing the United States Congress non-partisan advice on issues that may come before Congress.

EveryCRSReport.com republishes CRS reports that are available to all Congressional staff. The reports are not classified, and Members of Congress routinely make individual reports available to the public.

Prior to our republication, we redacted names, phone numbers and email addresses of analysts who produced the reports. We also added this page to the report. We have not intentionally made any other changes to any report published on EveryCRSReport.com.

CRS reports, as a work of the United States government, are not subject to copyright protection in the United States. Any CRS report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS report may include copyrighted images or material from a third party, you may need to obtain permission of the copyright holder if you wish to copy or otherwise use copyrighted material.

Information in a CRS report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to members of Congress in connection with CRS' institutional role.

EveryCRSReport.com is not a government website and is not affiliated with CRS. We do not claim copyright on any CRS report we have republished.