

CRS Report for Congress

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Natural Resources: Selected Issues for the 109th Congress

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Summary

The 109th Congress is likely to consider a number of natural resource management issues involving how the federal government should balance multiple uses and invest in resource development and protection. Decisions on these issues affect local communities, industries, ecosystems, and the nation. This report introduces 30 key policy issues in five broad categories that may be addressed by the 109th Congress by authorizations, appropriations, or oversight. While this report will be updated occasionally, many of the cited CRS products are updated more frequently.

Although there is no central natural resource issue, certain themes often are prevalent during consideration of resource questions. Many natural resource conflicts center on balancing resource use and protection. The desirability of current versus alternative uses and protection programs, and whether natural resources should be managed to produce national or local benefits, are also common themes. Other resource questions involve the effect of federal resource management on privately owned lands and the role of scientific data in decision making.

For federal lands, questions before the 109th Congress may include how much and which land the federal government should own, how to prioritize multiple uses (e.g., grazing, timber, habitat, recreation), who should manage the lands, and whether to designate additional lands. There are financial questions as well, such as whether and how to collect or change fees for land uses and the disposition of collected funds.

The 109th Congress may consider recommendations from two ocean commissions for a more coordinated national ocean policy and a reorganization of the National Oceanic and Atmospheric Administration. Congress also may debate reauthorization of fishing, marine mammal, and coastal zone management legislation and the Senate may address the U.N. Convention on the Law of the Sea.

Federal species management and ecosystem protection are likely to be a focus during the 109th Congress. Topics include whether to: amend the Endangered Species Act, develop legislation to prevent or respond to invasive species, alter the approach to protection for international species, support efforts to protect and restore wetlands, and expand or curtail specific large-scale ecosystem restoration efforts.

Increased competition for water has fostered interest in evaluating the federal policy and role in water resources, particularly for water supply and river management. The 109th Congress is likely to consider transboundary water resource management and assistance for rural and municipal water supply and for aging dams.

An array of other natural resource policy issues may be debated in the 109th Congress. They include whether to expand access to federal lands for development of energy and mineral resources and whether to alter the federal role in natural disaster mitigation. Questions on federal involvement in managing natural resources on private and Indian lands and tribal uses of non-Indian resources also are likely.

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Natural Resources: Selected Issues for the 109th Congress

Introduction

Decisions on how to develop, manage, and protect the nation's natural resources have economic, social, and environmental implications. Some impacts are local, others are national or international. This report briefly discusses selected natural resource issues that the 109th Congress may consider through oversight, authorizations, or appropriations. Although for the most part these are not new topics for Congress, different policy options may be considered during the 109th Congress than during earlier Congresses. This report will be updated only occasionally; however, it lists some of the related CRS products that provide more detailed information and that are updated more frequently. For a complete listing of current CRS products on natural resource issues covered in this report, as well as products on other natural resource issues, see the CRS web page at [<http://www.crs.gov/products/browse/is-environment.shtml>].

This report introduces 30 natural resource issues, many of which are complex and interrelated. Some discussions are site- or agency-specific, such as the entry on the Army Corps of Engineers, while others are national or international in scope, such as the section on "Assessing Ocean Policy." Others deal with specific resources, for instance, the Forests and Fire Management paragraph. The 30 issues have been grouped into five categories, including a miscellaneous "Other" category, as follows:

- Federal Lands and Resources
- Ocean Affairs and Earth Sciences
- Species Management and Ecosystem Protection
- Water Resources
- Other

Although there is no single or central natural resource issue, certain themes have been prevalent during consideration of resource questions. These themes include the extent to which natural resources should be used or protected, and the desirability of current versus alternative uses and protection programs. Conflicting views reflect different values, needs, and perceptions of the condition of resources and the sustainability of uses. A related debate is over whether natural resources should be managed primarily to produce national benefits or benefits for the localities and states in which they are located.

Who decides how natural resources should be managed, and how the decisions are made, also have been topics of discussion. Some stakeholders seek to maintain or enhance the federal role in resource management. Others support more local influence or international decision making in some cases. Conflicts over natural

resources in the United States perhaps have intensified as a result of pressures from overall population growth and economic development nationally and worldwide. Another theme in resource discussions is the role of science in multiple areas, such as determining the health and availability of resources and the extent and impact of changing resource conditions. Congress has also debated whether federal funds for natural resources issues are adequate and focused on the appropriate resource priorities.

Congress deals with natural resource issues on a number of fronts. Key laws, programs, and issues are handled by multiple authorizing committees in the House and Senate. Also, many issues involve several committees, such as those involving wetlands protection and restoration. In addition, natural resource issues often are addressed during consideration of bills providing annual appropriations for natural resource agencies, programs, and activities.¹ In many cases, natural resource issues do not divide along clear party lines. Instead, they often are split along rural-urban, eastern-western, coastal-interior, or upstream-downstream interests.

A number of the natural resources issues in this report are intertwined with issues in other policy areas. For example, the relationship between natural resources management and environmental protection are evident in many issues, such as groundwater contamination's effect on rural water supply. (For information on environmental quality and protection issues, see CRS Issue Brief IB10115, *Environmental Protection Issues in the 108th Congress*, coordinated by Susan Fletcher and Margaret Isler.) Cross-cutting issues are included in this report if the congressional concern revolves principally around resource conditions and supply.

Similarly, debates on energy policy, a major issue in past Congresses, encompass questions of access to energy resources and the impact of energy production on lands and resources. While a few energy resource issues are covered in this report, information on energy policy broadly is contained in CRS Issue Brief IB10116, *Energy Policy: The Continuing Debate and Omnibus Energy Legislation*, by Robert L. Bamberger. Many natural resource issues, especially ones dealing with resource conditions and uses on private lands, overlap with agricultural topics. For information on federal conservation programs for agricultural lands, see CRS Issue Brief IB96030, *Soil and Water Conservation Issues*, by Jeffrey A. Zinn. Finally, climate change may have implications for natural resources, including agriculture, forestry, fisheries, water availability, and ecosystem health, and may contribute to changes in the intensity, location, and timing of some natural disasters, such as flooding, drought, and hurricanes. For information on climate change, see CRS Issue Brief IB89005, *Global Climate Change*, by John R. Justus and Susan R. Fletcher.

¹ For information on appropriations bills and issues, and links to CRS reports on the same, see the CRS appropriations page at [<http://www.crs.gov/products/appropriations/apppage.shtml>].

Natural Resource Issues

Federal Lands and Resources

Federal Estate: Ownership and Issues. The federal government owns about 672 million acres — nearly 30% — of the 2.27 billion acres of land in the United States. The percentage of federal ownership in some western states is significantly higher. Four agencies administer 94% of federal lands: the Forest Service (FS) in the Department of Agriculture (USDA), and the Bureau of Land Management (BLM), Fish and Wildlife Service (FWS), and National Park Service (NPS), all in the Department of the Interior (DOI).

The ownership of lands by the federal government has long generated controversy and is likely to continue to do so. A key area of debate is how much land the federal government should own — and hence whether some federal lands should be moved to state or private ownership, or some land should be acquired for conservation, open space, and wildlife habitat purposes. For lands retained in federal ownership, debates may involve whether to curtail certain land designations, such as national monuments created by the President, or if current management procedures should be changed — for instance, to allow a greater role for state and local governments, or to establish special management entities. Also, the extent to which federal lands should be preserved, made available for development or resource extraction, or opened to recreational uses raises a variety of related resources policy matters, especially with respect to preserving wildlife habitat, designating wilderness areas, developing energy resources, grazing livestock, and harvesting timber. Further, the various types of federal lands typically are administered under separate statutes, which may be considered for amendment.

CRS Products

CRS Report RL32393, *Federal Land Management Agencies: Background on Land and Resources Management*, coordinated by Carol Hardy Vincent.

CRS Report RL30126, *Federal Land Ownership: Constitutional Authority; the History of Acquisition, Disposal, and Retention; and Current Acquisition and Disposal Authorities*, by Ross W. Gorte and Pamela Baldwin.

Federal Land Funding. Funding for federal lands continues to be contentious. Federal lands and natural resource programs must compete against other federal priorities (defense, education, etc.) as well as internally among the several land and resource management agencies. Some policy questions relate to setting fees (e.g., recreation and grazing fees, discussed in “Recreation” and “Rangelands” below). One perennial question relates to funding from the Land and Water Conservation Fund (LWCF). This account is credited with deposits of \$900 million annually, but the funds can only be spent when Congress enacts appropriations. Current congressional attention centers on (1) deciding the amount to appropriate annually to each of the four eligible federal land management agencies, and to the state grant program; (2) determining which lands should be acquired; and (3)

appropriating LWCF funds for purposes other than land acquisition. The primary context for debating these issues is the annual Interior appropriations legislation.

Another contentious area is compensating counties for the tax-exempt status of federal lands. Appropriations for the primary program, Payments in Lieu of Taxes (PILT), have not kept pace with the increasing authorized level. The 109th Congress will likely address PILT funding as part of annual Interior appropriations legislation. In addition, the Secure Rural Schools and Community Self-Determination Act (P.L. 106-393) was enacted to offset FS and BLM payments that had declined due to lower timber sales. This act expires at the end of FY2006, and the 109th Congress is likely to consider whether to retain the law and, if so, in what form.

CRS Products

CRS Report RL32306, *Appropriations for FY2005: Interior and Related Agencies*, coordinated by Carol Hardy Vincent and Susan Boren.

CRS Report RS21503, *Land and Water Conservation Fund: Current Status and Issues*, by Jeffrey A. Zinn.

CRS Report RL31392, *PILT (Payments in Lieu of Taxes): Somewhat Simplified*, by M. Lynne Corn.

Forests and Fire Management. In recent years, wildfires have killed firefighters, burned homes, threatened communities, and destroyed trees. Reducing fuels in the federal forests has been proposed to reduce the threats from fire, although the threats are not limited to federal forests. In December 2003, Congress enacted the Healthy Forests Restoration Act (P.L. 108-148) to facilitate fuel reduction activities and for other purposes indirectly related to wildfire protection. Oversight and funding of fire programs are likely topics in the 109th Congress.

The Bush Administration has made numerous regulatory changes related to forest management, public involvement in FS planning and decision making, environmental impacts of FS activities, and fuel reduction. Changes include:

- categorical exclusions from analysis and documentation under the National Environmental Policy Act (NEPA), involving activities including fuel reduction, post-fire rehabilitation, and “small” timber sales;
- modified review procedures, for example, for administrative review and internal Endangered Species Act consultations; and
- new rules governing national forest uses, such as for issuing special use permits and for protecting roadless areas. These changes necessarily alter forest management, set forth in forest plans prepared under the National Forest Management Act of 1976 (NFMA; 16 U.S.C. §§1600-1616, et al.).

The Bush Administration also has proposed new regulations governing NFMA planning, and there is substantial uncertainty over management of the national

forests. The 109th Congress may conduct oversight or consider legislation related to some or all of the proposed changes.

CRS Products

CRS Issue Brief IB10076, *Bureau of Land Management (BLM) Lands and National Forests*, coordinated by Ross W. Gorte and Carol Hardy Vincent.

CRS Report RL30755, *Forest Fire/Wildfire Protection*, by Ross W. Gorte.

National Park Management. The NPS mission to provide for the public enjoyment of parklands while protecting the park resources has fostered continuing management challenges. The 109th Congress is likely to address a variety of park management issues. For instance, although the NPS is working to define and quantify its maintenance needs, the extent of progress toward eliminating the agency's multibillion dollar backlog of deferred maintenance remains unclear. Questions for Congress include the adequacy of efforts to reduce the backlog, sufficiency of funds for backlogged maintenance, and the balance of eliminating the backlog with other NPS priorities. Congress funds and oversees NPS efforts to enhance security, particularly along U.S. borders and at national icons, such as the Washington Monument and Statue of Liberty. Congress may continue to examine the role of "partnership" groups that raise funds for the NPS. In addition, many park and recreation bills to designate or study sites for particular purposes or to adjust the boundaries of park units are likely to be debated.

National Heritage Areas (NHAs), which are designated by Congress, receive technical and financial assistance from the NPS but are not federally owned. Due to the large number of existing NHAs, and recent bills to study and designate additional areas, Congress has considered legislation to provide consistent criteria for NHA designation, management, and funding. The Urban Park and Recreation Recovery program provides federal grants to urban areas for rehabilitation of recreational facilities; it has not received funding for grants in recent appropriations laws.

CRS Products

CRS Issue Brief IB10126, *Heritage Areas: Background, Proposals, and Current Issues*, by Carol Hardy Vincent and David Whiteman.

CRS Issue Brief IB10093, *National Park Management and Recreation*, coordinated by Carol Hardy Vincent.

Rangelands. Management of federal rangelands presents an array of matters for Congress. They include efforts by BLM to change grazing regulations and policies to improve grazing administration overall; these efforts have been supported by some but criticized by others either as unnecessary or as removing important environmental protections. Another focus involves the automatic renewal of expiring grazing permits and leases, with one recent law authorizing temporary renewal, without requirements for environmental studies, for those expiring through FY2008. Further, the federal grazing fee for private livestock grazing on federal lands has been controversial since its inception. Instances of grazing on federal land without a

permit or payment of fees, and agency actions to fine and jail owners and impound and sell trespassing cattle, also have been contentious.

Federal rangeland condition is of recurring interest to Congress, with oversight of agency efforts to inventory, monitor, and improve range conditions as well as enhance their productivity. Restricting or eliminating grazing on some federal land because of environmental and recreational concerns has been considered. Also, many view invasive and noxious weeds as an expanding threat to the health and productivity of rangelands. (See “Invasive Species,” below.) Other range matters include the consistency of BLM and FS grazing programs, access across private lands, and management of riparian areas. In addition, there has been concern about BLM’s wild horse and burro program and related provisions of law, particularly the removal, adoption, and treatment of animals and agency efforts to achieve its identified optimal herd size on the range.

CRS Products

CRS Report RL32244, *Grazing Regulations and Policies: Changes by the Bureau of Land Management*, by Carol Hardy Vincent.

CRS Report RS21423, *Wild Horse and Burro Issues*, by Carol Hardy Vincent.

Recreation. The federal land management agencies administer most U.S. government land for multiple purposes, including preservation, recreation, and development of natural resources. This preservation/use dichotomy is a focal point for debate over recreation on federal lands. Key topics include access for recreation generally, motorized off-highway vehicle use and policies for BLM and FS areas, and the use of personal watercraft, snowmobiles, and aircraft for NPS units. Specific conflicts for NPS units center on snowmobiles in three Yellowstone area parks, air tour overflights and “natural quiet” at Grand Canyon National Park (GCNP), and the proposed Colorado River Management Plan for GCNP allocating permits for motorized and non-motorized boats. Other matters include the effect of recreation, especially motorized, on natural resources, visitor experience, and local economies.

Debate also may continue over trails; while trail designation is often popular, questions remain regarding their quantity, quality, and funding. Possible legislative proposals in the 109th Congress include adding routes to the National Trails System, authorizing studies of routes for addition to the system, creating new categories of trails, and authorizing acquisition of land from willing sellers for certain trails. Recreation debates also arise in areas managed by other federal agencies, such as reservoirs and rivers managed by the Army Corps of Engineers and Bureau of Reclamation. Subjects of congressional oversight might include balancing recreational water needs and other purposes, financing maintenance of recreational facilities, and developing policies for recreational development and land use. Congress also may oversee agency efforts to establish, collect, and distribute fees for recreation at federal lands and waters.

CRS Products

CRS Issue Brief IB10093, *National Park Management and Recreation*, coordinated by Carol Hardy Vincent.

CRS Report RS21861, *Recreational Fee Demonstration Program: Retaining the Program?*, by Carol Hardy Vincent.

Wilderness and Roadless Areas. Federal agencies manage some federal lands to preserve natural conditions, for biological, recreational, or scenic purposes. In 1964, the Wilderness Act created the National Wilderness Preservation System, with statutory protections that emphasize preserving areas in their natural state. Although a few exceptions were provided in the act, wilderness areas included in the System cannot have permanent roads and structures, and use of machines and mechanized travel is limited. Units of the System can only be designated by Congress, and many bills to designate wilderness areas are introduced in each Congress. Designation of new wilderness areas can be controversial. Many areas currently being considered are managed by BLM under the Federal Land Policy and Management Act (FLPMA). Whether FLPMA allows the BLM to conduct additional wilderness inventories or to create new “Wilderness Study Areas” are current policy questions, as is the development of language to “release” undesignated study areas to multiple use management. In addition, some BLM lands do not include the headwaters of water sources flowing through the land, which may raise water rights and other issues as part of congressional consideration of designating BLM wilderness areas.

Management for the remaining forest roadless areas remains a controversial issue. The Clinton Administration promulgated nationwide rules to administratively protect the remaining “roadless areas” in the National Forest System by precluding most roads and timber cutting. These roadless rules have been called de facto wilderness management even though roads and timbering were allowed in more instances than is true for areas in the National Wilderness Preservation System. The validity of the rules has been litigated, and enforcement of the rules has been enjoined. The Bush Administration has proposed alternative rules that would eliminate a nationwide approach, return management of roadless areas to each forest unit, and give governors of the various states a role in making recommendations on the management of roadless areas. These proposed rules may be finalized soon. Congress may conduct oversight of agency rulemaking on roadless areas or consider related legislation.

CRS Products

CRS Report RS21917, *Bureau of Land Management (BLM) Wilderness Review Issues*, by Ross W. Gorte and Pamela Baldwin.

CRS Report RL32393, *Federal Land Management Agencies: Background on Land and Resources Management*, coordinated by Carol Hardy Vincent.

CRS Report RL30647, *The National Forest System Roadless Areas Initiative*, by Pamela Baldwin.

Ocean Affairs and Earth Sciences

Assessing Ocean Policy. Two reports present ocean policy issues that the 109th Congress may consider. In June 2003, the Pew Oceans Commission presented to Congress and the nation 26 recommendations in its final report, *America's Living Oceans: Charting a Course for Sea Change*. The report outlines a national agenda for protecting and restoring our oceans. The final report of the U.S. Commission on Ocean Policy, *An Ocean Blueprint for the 21st Century*, containing extensive recommendations on a coordinated and comprehensive national ocean policy, was delivered to Congress and the President on September 20, 2004.

These reports cover an array of issues, such as law of the sea; national and regional governance; federal organization, regulation, and enforcement; offshore management regimes; funding for sound science and research and for implementing commission recommendations; oceanic education; coastal and watershed management; and ecosystem based management. The 109th Congress may consider legislative responses to the findings and recommendations of both commissions. If action is deemed appropriate, there would be related questions on the timing and level of that response and the fiscal implications and out-year budgetary impacts on current and future ocean programs. While some argue that congressional action is more pressing for expiring and expired major coastal and marine laws, the U.S. Commission's report counsels delay until Congress can examine the report and possibly draw from it as the reauthorization process proceeds. Early consideration in the 109th Congress appears likely for an organic act for the National Oceanic and Atmospheric Administration (NOAA), a prominent recommendation in both commission reports. (See "Atmospheric and Oceanic Research, Operations, and Services," below.) The same law that created the U.S. Commission also requires the President to submit to Congress a statement of proposals implementing or responding to the commission's recommendations for a national policy on ocean and coastal resources. That statement was scheduled for delivery to Capitol Hill on December 20, 2004. Committees may hold hearings to assess the Administration's statement.

CRS Products

CRS Issue Brief IB10132, *Ocean Commissions: Ocean Policy Review and Outlook*, by John Justus, Eugene H. Buck, Jeffery Zinn, and Wayne Morrissey.

Atmospheric and Oceanic Research, Operations, and Services.

Atmospheric and oceanic research is conducted for a variety of reasons, including improving weather forecasts and warnings by the National Weather Service, monitoring air quality, assessing water availability, and detecting climate change. Much of civilian oceanic and atmospheric research is done by the National Oceanic and Atmospheric Administration, but other federal agencies also contribute. NOAA also performs a variety of other activities ranging from climate outlooks to marine fisheries management. Funding for NOAA is currently authorized under several laws, because programs from different federal agencies were merged into the agency when it was created in 1970 and placed in the Department of Commerce.

A NOAA organic act has been proposed for many years to give the agency more budgetary and decision making autonomy from the Department of Commerce.

Recent interest in a NOAA organic act is driven by U.S. Ocean Policy Commission recommendations, which focus on federal agency-wide coordination of ocean and coastal programs by NOAA. Bills introduced in the 108th Congress addressed NOAA reorganization, budget authorization, and other Ocean Policy Commission-related topics. Some or all of these, or other measures, will likely be introduced in the 109th Congress. Congress may confront related organizational issues, such as establishing NOAA as an independent agency, or transferring NOAA to another department, or maintaining the status quo with enhanced budget authority.

CRS Products

CRS Report RL32309, *Appropriations for FY2005: Commerce, Justice, State, the Judiciary, and Related Agencies* (section entitled “A NOAA Organic Act”), coordinated by Ian F. Fergusson and Susan B. Epstein.

CRS Issue Brief IB10132, *Ocean Commissions: Ocean Policy Review and Outlook*, by John Justus, Eugene H. Buck, Jeffrey Zinn, and Wayne Morrissey.

Coastal Resources. Coastal resource issues almost always involve conflicts between human activities in coastal areas and protection of natural resources. While the country’s coastal counties are only 17% of the nation’s area, they are home to more than 50% of the country’s population and jobs. Conflicts may increase in number and intensity as population and development continue to concentrate in coastal areas. Currently, development is concentrated along the shoreline of most coastal counties, where it can displace or disrupt wetlands, beaches and dunes, estuaries, and other highly productive natural systems. At the same time, the shoreline is exposed to hazardous natural forces including ocean storms, high winds, and flooding. Where the shoreline is developed, property owners try to stabilize it in its current location which can increase the loss from hazards, and subsequent federal outlays.

The coastal zone management program is the central federal effort for managing coastal development and resource protection. The authorization of appropriations expired at the end of FY1999, and the 109th Congress may consider reauthorization. The program provides federal grants to assist states and territories in creating and administering federally approved plans for development and protection. Statutory and regulatory guidance for these plans give participants considerable latitude as to which topics they emphasize. The program also gives participants leverage over federal actions in or affecting coastal zones by requiring those actions to be consistent with approved plans. In addition to the reauthorization, Congress may consider programs that deal with specific coastal resource topics, such as estuaries, wetlands, beach erosion, or coastal barriers. Many other federal programs apply more broadly but have large coastal components, such as resource protection programs for certain federal lands (e.g., seashore units of the National Park System and units of the National Wildlife Refuge System), and the National Flood Insurance Program. (See “Natural Disaster Mitigation” below.)

CRS Products

CRS Report RS20498, *Coastal Zone Management Reauthorization: An Overview*, by Jeffrey A. Zinn.

Fishery and Marine Mammal Policy. Two recent ocean policy reports, discussed in “Assessing Ocean Policy,” expressed concern over U.S. management and use of fish and marine mammals. These reports recommend measures to address declining fish stocks and marine mammal populations and to improve the stability and competitiveness of the U.S. commercial fishing industry. Authorizations of appropriations for both the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) and the Marine Mammal Protection Act (MMPA) have expired. The MSFCMA authorized federal management of fishing in waters of the U.S. Exclusive Economic Zone beyond state jurisdiction to 200 miles offshore. The MMPA prohibited taking of marine mammals unless permitted under several programs. Proposals to reauthorize and amend both the MSFCMA and the MMPA were considered but not enacted in the 108th Congress. The 109th Congress may consider similar proposals.

Among the topics likely to arise in amending the MSFCMA are modifying management of bycatch, the management of larger marine ecosystems, and increasing protecting for unique habitats, with possible policy questions concerning the legislative designation of marine protected areas. Proposed reforms also include creating user fees and other revenue sources to fund conservation, management, and enforcement. Other proposed changes seek to promote the collection of necessary data and ensure that regional fishery management council decisions are fair and balanced. Other proposals aim to enhance the stability of the fishing industry by implementing programs to reduce fishing capacity and by establishing national standards for individual fishing quota programs.

Likely topics of debate for amending the MMPA include modifying management of commercial fishing interactions, robust wild stocks, and marine mammals in captivity; actions fostering international cooperation on managing marine mammal populations may also be considered. Discussions of regulatory changes may encompass subsistence use of marine mammals by Native Americans, effects of underwater noise of human origin, and incidental takes of marine mammals.

CRS Products

CRS Issue Brief IB10109, *Fishery, Aquaculture, and Marine Mammal Legislation in the 108th Congress*, by Eugene H. Buck.

CRS Report RL30215, *The Magnuson-Stevens Fishery Conservation and Management Act: Reauthorization Issues*, by Eugene H. Buck and Daniel A. Waldeck.

CRS Report RL30120, *The Marine Mammal Protection Act: Reauthorization Issues*, by Eugene H. Buck.

Natural Hazards and Mapping Data Management. In 2004, there was a rash of natural disasters — hurricanes, floods, earthquakes, and volcanic activity. The federal government funds natural hazards research, which contributes to understanding the scientific reasons for disasters; defines potential disaster locations, surmises possible impacts, and identifies extent of post-disaster damage and loss. Resulting data and research findings can be disseminated as electronic data via the internet. Disaster decision support is possible through federally developed technologies such as electronic geographic information systems (GIS), remote sensing, and accurate locator devices. The federal government also funds other approaches to disaster management, including mitigation and disaster assistance. Current debate about federal disaster management centers on what is the appropriate role for the federal government, whether current approaches work, and whether federal policy is cost effective and beneficial at a national level.

One disaster mitigation effort is spearheaded by the Federal Emergency Management Agency (FEMA) in the Department of Homeland Security. FEMA is engaged in a Flood Map Modernization Initiative (FMMI) to convert all flood plain maps to digital electronic format, and produce new ones in that format which the agency contends are more accurate. Congress has been concerned about the progress of FMMI, its cost, and related issues such as benefits for homeland security, public access to data and information, and right-to-privacy. A related issue is the interplay of this initiative with the Coastal Barrier Resources Act (CBRA) and its coastal mapping requirements. Some in Congress have sought to remove certain parcels of land from designated barriers, which have been mapped under CBRA. CBRA maps can overlap FEMA-designated flood hazard areas, and consequently can be used in determinations to deny property owners access to federal flood insurance. Also, some communities have been exempted by law from the National Flood Insurance Program so they can develop FEMA-designated flood plains and regulated floodways. Controversies over federal disaster management approaches, flood map modernization, access to mapping data, and exemptions to CBRA and NFIP could lead to legislative debates in the 109th Congress.

CRS Products

CRS Report RL32242, *Emergency Management Funding for the Department of Homeland Security: Information and Issues for FY2005*, by Keith Bea, Shawn Reese, Wayne Morrissey, Frank Gottron, and C. Stephen Redhead.

CRS Report RL31691, *FEMA's Flood Hazard Map Modernization Initiative*, by Wayne A. Morrissey.

U.N. Convention on the Law of the Sea. The 1982 United Nations Convention on the Law of the Sea and the 1994 Agreement Relating to Implementation of Part XI of the United Nations Convention on the Law of the Sea remain pending before the Senate Committee on Foreign Relations. The Convention established a legal regime governing activities on, over, and under the world's oceans. If, as it did in 2004, the Committee again favorably recommends Senate advice and consent to U.S. adherence, this convention may be an issue for the full Senate in the 109th Congress. The following have been among recent arguments presented in support of U.S. adherence: participation would protect U.S. interests

during ongoing deliberations by the Commission on the Limits of the Continental Shelf, which was created by the Convention, and enable the United States to submit its own limits; and participation would enhance U.S. efforts to amend the Convention. November 16, 2004, marked the first opportunity for the proposal of amendments to the Convention. Some opponents to U.S. adherence assert that participation in the Convention would be contrary to U.S. national security interests, especially as the United States carries out its counter-terrorism programs. Opponents also maintain that fundamental concerns raised in 1982 by the Reagan Administration were not corrected by the 1994 Agreement, and are concerned about the extent to which adherence would infringe on U.S. sovereignty.

CRS Products

CRS Issue Brief IB95010, *The Law of the Sea Convention and U.S. Policy*, by Marjorie Ann Browne.

CRS Report RL32185, *U.N. Convention on the Law of the Sea: Living Resources Provisions*, by Eugene H. Buck.

CRS Report RS21890, *The U.N. Law of the Sea Convention and the United States: Developments Since October 2003*, by Marjorie Ann Browne.

Species Management and Ecosystem Protection

Endangered Species. The Endangered Species Act of 1973 (ESA) has been one of the more contentious environmental laws. This may stem from its strict substantive provisions, which can affect the use of both federal and nonfederal lands and resources. Under the ESA, species of plants and animals (both vertebrate and invertebrate) can be listed as “endangered” or “threatened” according to assessments of their risk of extinction. Once species are listed, legal tools are available to aid their recovery and protect their habitat. The ESA also may be controversial because dwindling species usually are harbingers of resource scarcity: the most common cause of listing species is habitat loss. The authorization for spending under the ESA expired on October 1, 1992. The prohibitions and requirements of the ESA remain in force, even in the absence of an authorization, and funds have been appropriated to implement the administrative provisions of the ESA in each subsequent fiscal year. The 109th Congress is likely to focus on various proposals to amend the ESA. Likely policy questions include changes to the role of science in decision-making; changes to the definition and process for designating critical habitat; further protections for private property owners’ interests; and encouragement of increased landowner protection of listed species.

CRS Products

CRS Issue Brief IB10072, *Endangered Species: Difficult Choices*, by Eugene H. Buck, M. Lynne Corn, and Pamela Baldwin.

International Species Protection and Conservation. The United States is involved in the conservation of foreign species and natural areas through various laws and international treaties, such as the ESA and the Convention on International

Trade in Endangered Species (CITES). CITES is an international agreement among national governments that aims to ensure that the international trade in plants and animals does not threaten their survival. The ESA protects foreign endangered species by limiting or banning their import into the United States, and implements CITES. Overall, the ESA has a more comprehensive approach to foreign species protection than CITES. For example, the ESA protects species based on several criteria that may threaten their survival, whereas CITES protects species based solely on the threat of trade to survival. The United States also assists in the conservation of some *high-visibility* foreign species (e.g., tigers and elephants) by providing funds for conserving their populations and habitat through the Multinational Species Conservation Fund. The United States also promotes the conservation of tropical forests in developing countries, most notably through debt-for-nature transactions under the Tropical Forest Conservation Act.

The 109th Congress may address whether protection for foreign species under the ESA should be modified to more closely follow CITES. For example, Congress may oversee a proposed FWS policy to allow limited imports of endangered foreign species if the import enhances the species' population. The proposed policy would move ESA protections closer to CITES. The 109th Congress also may conduct oversight on the implementation of the Tropical Forest Conservation Act, restoration of Iraqi marshlands, and the conservation of international fisheries.

CRS Products

CRS Report RL31286, *Debt-for-Nature Initiatives and the Tropical Forest Conservation Act: Status and Implementation*, by Pervaze A. Sheikh.

CRS Report RL32433, *The Iraq Marshes: Restoration Activities*, by Kyna Powers.

CRS Report RS21157, *Multinational Species Conservation Fund*, by M. Lynne Corn and Pervaze A. Sheikh.

Invasive Species. The 109th Congress may consider whether new legislative authorities and funding are needed to address issues of non-native species and their increasing economic and ecological impacts. A major unanswered question regarding non-native species is who should be responsible for ensuring economic integrity and ecological stability in response to the actual or potential impacts of non-native species. To date the congressional response to problems posed by harmful non-native species generally has been to addressing the specific non-native species, such as brown tree snakes on Guam and impure seed stocks. A few notable efforts have begun to address specific pathways (e.g., ship ballast water), but no current law addresses the general concern over non-native species and the wide variety of paths by which they enter this country. In addition to the benefits that legislation may have on the variety of natural resources suffering biological damage as a result of non-native species, many interests could be helped or harmed by legislation, including domestic and international trade and tourism, industries dependent on bringing in non-native species, and those dependent on keeping them out. Additional policy considerations include the balance between response and prevention, overlapping

jurisdiction of congressional committees, and coordination of the many agencies and levels of government now dealing with this invasive species.

CRS Products

CRS Report RL30123, *Invasive Non-Native Species: Background and Issues for Congress*, by M. Lynne Corn, Eugene H. Buck, Jean Rawson, Alex Segarra, and Eric Fischer.

Large-Scale Ecosystem Restoration and Management. In the last 25 years, the United States has devoted substantial efforts and spent billions of dollars on restoring some large ecosystems such as the Florida Everglades, the Chesapeake Bay, and the San Francisco Bay and Sacramento and San Joaquin Rivers Delta (California Bay-Delta). Many of these efforts have multi-purpose objectives and benefits, such as improving water supply and conveyance, and managing natural resources and watersheds. Policy matters at these and other location such as the allocation of natural resources (e.g., agricultural and municipal water), governance of restoration initiatives, funding of restoration activities, and the science behind restoration projects were debated in the 108th Congress and are expected to be considered in the 109th Congress.

The 109th Congress may consider authorization of additional ecosystem restoration efforts, such as proposals for restoration of the Upper Mississippi River System, Great Lakes (also discussed in “Transboundary Water Resources”), and coastal Louisiana (also discussed in “Wetlands Protection and Restoration”). Currently authorized initiatives may receive direction through oversight, project authorizations, and appropriations. For instance, Congress authorized an initial set of Everglades projects and approved a general restoration framework in 2000; attempts to authorize additional Everglades restoration projects are expected in the 109th Congress. Requests for additional restoration measures in ongoing initiatives such as in the Chesapeake Bay also are expected. Oversight of ecosystem restoration is likely, in particular for water supply and environmental restoration in the California Bay-Delta, and coordination of Great Lakes restoration through the recently formed Great Lakes Interagency Task Force.

CRS Products

CRS Report RL31975, *CALFED Bay-Delta Program: Overview of Institutional and Water Use Issues*, by Pervaze A. Sheikh and Betsy A. Cody.

CRS Report RL31621, *Florida Everglades Restoration: Background on Implementation and Early Lessons*, by Pervaze Sheikh.

CRS Report RL32630, *Upper Mississippi River System: Proposals to Restore an Inland Waterway’s Ecosystem*, by Kyna Powers and Nicole T. Carter.

Wetlands Protection and Restoration. Today there are about 105 million acres of wetlands, of an estimated 220 million acres present when Europeans arrived in the area that became the 48 coterminus states. Until the early 1980s, federal policies emphasized converting wetlands to other uses, primarily agricultural

production. Since then, these policies have been revised, and now seek to retain wetlands for their resource values. Presidents, starting with George H. W. Bush, have articulated a goal of either no-net-loss or net-gain. The current Bush Administration has announced that wetland protection will be a second term priority, with a goal of restoring or improving 3 million acres.

Congress has supported recent wetland protection efforts by altering or eliminating programs that contributed to wetland destruction and by creating new protection programs. Recent Congresses have focused on conflicts between the rights of landowners and protection efforts because almost 75% of all wetlands are on private lands. The 109th Congress is likely to continue reviewing federal protection efforts, such as the permit program of the U.S. Army Corps of Engineers under §404 of the Clean Water Act and federal acquisition and easement programs. Congress also may conduct oversight regarding changes in wetland acreage, including where wetlands are being lost or gained; how different types of wetlands are affected by protection efforts; and the effectiveness of various protection approaches and programs. Large scale ecosystem restoration programs, such as coastal Louisiana and the Everglades, designed both to restore existing wetlands and create additional wetlands may attract interest. (See “Large-Scale Ecosystem Restoration and Management,” above.)

CRS Products

CRS Issue Brief IB97014, *Wetland Issues*, by Jeffrey A. Zinn and Claudia Copeland.

Water Resources

Assessing Federal Water Resources Policy and Research.

Responsibilities for federal water resources planning, management, and development are spread among many congressional committees, and among many federal departments, agencies, and bureaus. Recurrent pressures on existing water supplies (from population growth, drought, species needs, and changing public interests, etc.) have fostered interest in evaluating the federal role in water resources planning, management, and infrastructure development. This interest manifested itself in several ways during the 108th Congress. Examples range from national-level legislation to establish a new national water policy commission, provide periodic water resource assessments, and change water resources project planning, to site-specific authorization of multi-faceted water supply and ecosystem restoration projects. Similar water resource legislation is expected in the 109th Congress. Increased federal support for water technology research and integrated water and energy research was the focus of proposed legislation in the 108th Congress and also may be the subject of legislation in the 109th.

CRS Products

CRS Report RS20569, *Water Resource Issues in the 108th Congress*, by Betsy A. Cody and H. Steven Hughes.

Army Corps of Engineers. Congress regularly authorizes and reviews water resources programs and projects of the U.S. Army Corps of Engineers in a Water Resources Development Act (WRDA) and/or the annual Energy and Water Development Appropriations acts. Consideration of a WRDA, which typically has been biennial, is likely in 2005; the last WRDA was enacted in 2000. Debate of a WRDA in the 109th Congress is likely to include discussions of whether or not to require controversial changes to project development and evaluation practices at the Corps. WRDA debates also are likely on changes to state and local roles in projects and authorization of high-profile projects, such as coastal Louisiana restoration and lock expansion and ecosystem restoration for the Upper Mississippi River.

Congressional concern has been raised by a shift, beginning with the FY2005 budget request, to performance-based budgeting for the Corps. The shift contributed to the Administration reducing support for operation and maintenance of some waterways and a policy of not funding sand renourishment of beach protection projects after an initial nourishment. Congress may provide the Corps direction in appropriations bills on these issues, as well as on security of Corps facilities, implementation of Florida Everglades ecosystem restoration, and flow management of the Missouri River. Congress may provide direction on agency management issues, such as internal reorganization, strategic planning, and competitive sourcing efforts, in either a WRDA or an appropriation bill.

CRS Products

CRS Report RL32064, *Army Corps of Engineers Water Resources Activities: Authorization and Appropriations*, by Nicole T. Carter.

CRS Issue Brief IB10133, *Water Resources Development Act (WRDA) and Other Army Corps of Engineers Legislation*, coordinated by Nicole T. Carter.

Bureau of Reclamation. The Bureau of Reclamation operates hundreds of federal dams, reservoirs, and distribution facilities throughout the western United States. As the largest wholesale water supplier (primarily to irrigation) and the second largest hydro-electric power producer in the country, the Bureau's facilities are intricately involved in myriad western water resource issues. Perennial matters for Congress involve appropriations for authorized construction and levels of funding for newly authorized water re-use (Title 16) and rural water supply projects.

Other topics of congressional debate involve project management and operations — particularly how project operations and water contract renewals affect federally listed threatened and endangered species, and how requirements to alter project operations to protect such species affect long-term water users. Areas where project operations are particularly controversial include the Klamath River basin (OR and CA); the Trinity River basin (CA); the Sacramento and San Joaquin rivers (CA), including the Bay-Delta area where they converge; and the Middle Rio Grande area (NM). Overarching legislation to address water issues in California (CALFED) was enacted at the end of the 108th Congress; however, activities such as progress on storage projects and federal spending, as well as efforts to increase pumping and renew long-term contracts, may receive congressional oversight and judicial attention during the 109th Congress. Other areas of congressional interest are more

programmatic, such as whether the Bureau should continue to invest in water re-use projects and whether a rural water supply program ought to be established. (See “Rural and Municipal Water Supply,” below.)

CRS Products

CRS Report RL31975, *CALFED Bay-Delta Program: Overview of Institutional and Water Use Issues*, by Pervaze A. Sheikh and Betsy A. Cody.

CRS Report RL31098, *Klamath River Basin Issues: An Overview of Water Use Conflicts*, by Betsy A. Cody, Pamela Baldwin, and Eugene H. Buck.

CRS Issue Brief IB10019, *Western Water Resource Issues*, by Betsy A. Cody and Pervaze A. Sheikh.

Dams. While the nation’s more than 77,000 federal and nonfederal dams provide multiple benefits, they also pose risks. Although dam failures have been rare, dam safety and security is a concern because approximately 30% of U.S. dams are situated such that their failure or mis-operation would threaten lives or infrastructure. Age, construction deficiencies, inadequate maintenance, and seismic or weather events may contribute to structural integrity. As state and municipal budgets tighten, and more dams reach the end of their projected useful lives, pressures are likely to grow for federal funding to rehabilitate or remove nonfederal dams. Other potential questions for the 109th Congress may include reauthorizing appropriations for specific dam safety programs. Security of most federal dams was assessed after September 11, 2001; for the most part, security now competes for agency appropriations with longer-standing safety and other operation and maintenance activities involving federal facilities.

The 109th Congress also may address hydropower licensing reform. Operating licenses for many hydropower facilities are due to expire. Relicensing will define how these facilities are managed for the next 30-50 years. Within the current licensing process, certain state and federal agencies have authority to establish conditions as part of Federal Energy Regulatory Commission (FERC) licenses. The 108th Congress considered bills that would alter agencies’ conditioning authority. Changes also have been proposed to the Department of the Interior regulations on its conditioning authority. Given these proposed regulations and FERC’s new Integrated Licensing Process, it remains to be seen if, and how, the 109th Congress will consider hydropower licensing reform.

CRS Products

CRS Issue Brief IB10122, *Hydropower Licenses and Relicensing Conditions: Current Issues and Legislative Activity*, by Kyna Powers.

Rural and Municipal Water Supply. Increased quantity and quality pressures on existing water supplies — due to growing population, environmental regulation, in-stream species and ecosystem needs, water source contamination, agricultural water demand, and changing public interests — have resulted in heightened water use conflicts throughout the country, particularly in the West.

These factors, coupled with the severity of recent drought in much of the West, have fostered interest in new water supply development, supply augmentation, and security of water supplies. Historically, local, regional, or state agencies generally have been responsible for water supply, and have been wary of federal involvement in allocating water. Small and rural communities, however, increasingly have come to Congress for assistance with rural water supply projects, while urban communities have pressed for assistance with new technologies to augment water supply, primarily through desalination and water re-use or reclamation technologies.

One congressional response over the last two decades has been authorization for the Bureau of Reclamation to construct individual rural water supply projects and water reclamation and re-use facilities (Title 16 projects). Central questions for the 109th Congress are how these activities mesh with other federal programs to assist communities with federal drinking water requirements, and whether a new rural water supply program is needed for western states. The 108th Congress considered, but did not enact, western rural water supply legislation.

CRS Products

CRS Report RL30478, *Federally Supported Water Supply and Wastewater Treatment Programs*, by Resources, Science, and Industry Division.

CRS Issue Brief IB10118, *Safe Drinking Water Act: Implementation and Issues*, by Mary Tiemann.

CRS Issue Brief IB10019, *Western Water Resource Issues*, by Betsy A. Cody and Pervaze A. Sheikh.

Transboundary Water Resources. U.S. boundary waters — water basins and aquifers shared by the United States and neighboring nations — often present contentious resource issues, including water pollution, water withdrawals, and ecosystem restoration. International cooperation sometimes is hindered by competing economic interests, differences in governance, and varying levels of environmental and human health protection. In the Southwest, agricultural interests and municipalities depend on the Rio Grande River to satisfy growing needs, but persistent drought and Mexico's reported failures to deliver water obligated under a 1944 treaty appear to have caused significant economic losses to the region. Past Congresses have provided significant monetary support to the region and congressional interest is likely to continue during the 109th Congress.

Much attention also might be focused on the nation's largest shared freshwater resource — the Great Lakes. A major area of concern for the 109th Congress might be the threat of water withdrawals and their potential effects on the environment and surrounding population. The Council of Great Lakes Governors recently released a draft agreement among the U.S. and Canada and a compact between the eight Great Lakes states to create uniform water withdrawal standards; final versions are anticipated in 2005. Some, however, have alleged that the draft agreement and compact seriously challenge Canadian sovereignty and facilitate, rather than contain, water diversions. Upon completion of the final draft, the compact would need to be approved by each of the eight state legislatures, as well as Congress.

Water Use Challenges and River Management. The nation's surface water and groundwater are used for multiple, sometimes competing, purposes. Existing arrangements for water use may be challenged during the 109th Congress by Indian water rights claims, drought conservation and preparedness measures, and judicial decisions affecting water allocation (e.g., decisions requiring management changes to support federally-listed threatened and endangered species). As these demands are placed on available water supplies, a central question in management is increasingly how to balance or prioritize uses, while satisfying existing water rights and contractual obligations, especially during drought.

River and reservoir management, in particular, are receiving congressional and public scrutiny. Rivers provide not only economic benefits — water supply for agriculture and municipalities, navigation, and flood protection — but also recreational opportunities and natural habitat. In many cases, Bureau of Reclamation or Army Corps of Engineers facilities and their operation are central to debates over multi-purpose rivers. Water resources management by federal agencies remains controversial and is frequently challenged in the courts, on the Middle Rio Grande, Colorado, Klamath, Columbia, Snake, Mississippi, and Missouri Rivers. In contrast, groundwater management has been left primarily to states. The federal role in groundwater monitoring and studies through agencies such as the USGS, nonetheless, can be controversial. The 109th Congress may choose to become involved in surface water and groundwater management through oversight, legislative direction, authorizing legislation, or appropriations.

CRS Products

CRS Issue Brief IB10120, *Army Corps of Engineers Civil Works Program: Issues for Congress*, by Nicole T. Carter and Pervaze A. Sheikh.

CRS Report RS20569, *Water Resource Issues in the 108th Congress*, by Betsy A. Cody and H. Steven Hughes.

Other

Arctic Oil, Arctic Refuge (ANWR). The future of the rich biological resources, wilderness values, and energy potential of northeastern Alaska has been debated in Congress for over 40 years. The question for Congress is whether to open a portion of what is now the Arctic National Wildlife Refuge (ANWR) to allow the development of potentially the richest on-shore source of oil remaining in the United States, and if so under what restrictions. Alternatively, Congress might choose to provide further protection for the refuge's biological and wilderness resources through statutory wilderness designation, or to maintain the current status of the area. Under current law, unless Congress chooses to act, the entire refuge will remain closed to development under provisions of the 1980 Alaska National Interest Lands Conservation Act. Prospects for ANWR development legislation have improved from the 108th Congress with the re-election of President Bush and enhanced support in the 109th Congress' House and Senate majority. Currently, the most commonly discussed scenario for the 109th Congress is incorporation of an ANWR development title in a budget reconciliation package, which could help avoid a filibuster by opponents in the Senate.

CRS Products

CRS Report RL31278, *Arctic National Wildlife Refuge: Background and Issues*, coordinated by M. Lynne Corn.

CRS Issue Brief IB10111, *Arctic National Wildlife Refuge (ANWR): Controversies for the 108th Congress*, by M. Lynne Corn, Bernard A. Gelb, and Pamela Baldwin.

Energy and Mineral Resources on Federal Lands. A controversial question is whether to increase access to federal lands for energy and mineral development. Comprehensive energy legislation, which could affect energy development on federal lands and the Outer Continental Shelf (OCS), was considered in the 108th Congress and is being planned for the 109th Congress. An issue that may arise in energy legislation is access to energy and mineral resources on federal lands. The U.S. Geological Survey estimates that significant oil and gas resources exist below some federal lands now off-limits to energy development, particularly in the Rocky Mountain region. The industry contends that entry into these areas is necessary to ensure future domestic oil and gas supplies. Opponents to opening these areas maintain that there are environmental risks, and the United States could meet its energy needs through increased exploration elsewhere and energy conservation. BLM recently implemented new management strategies intended to remove impediments and streamline the permitting process for developing resources on federal lands in general.

The OCS contains significant energy resources. The U.S. Gulf of Mexico is identified by the Energy Information Administration as the most promising region for new additions to U.S. oil reserves. The Minerals Management Service projects Gulf oil production could be as high as 2.25 million barrels per day by 2011, 50% higher than current production. Natural gas production is projected to reach 13 billion cubic feet per day by 2011, more than twice its current level. These forecasts reflect retaining the current leasing moratoria for certain areas, although there is industry interest in accessing areas under moratoria. The moratoria were imposed in response to economic and environmental concerns over drilling near coastal communities. Another debate is whether, and how, to create a federal authority to administer future use of the OCS for renewable energy production.

There generally is bipartisan interest in reforming the General Mining Law of 1872, which likely would include some form of royalty paid to the U.S. Treasury. The mining industry also is interested in removing alleged permitting delays, while some environment groups press for stricter environmental regulations.

CRS Products

CRS Issue Brief IB89130, *Mining on Federal Lands*, by Marc Humphries.

CRS Report RL32315, *Oil and Gas Exploration and Development on Public Lands*, by Marc Humphries.

CRS Report RL31521, *Outer Continental Shelf Oil and Gas: Energy Security and Other Major Issues*, by Marc Humphries.

Indian Lands and Resources. American Indian reservations (trust and non-trust lands), off-reservation trust lands, and Alaska Native corporation lands (non-trust) cover more than 116 million acres (5%) of the United States — about 71 million acres in the lower 48 states and about 45 million acres in Alaska. Indian tribes and individuals also are interested in non-Indian lands, waters, and other natural resources, as subjects of legal rights, objects of legal claims, culturally important areas, or economic resources.

On Indian trust lands (55 million acres), tribes have sought to increase their autonomy to develop energy resources by reducing the trust oversight role of the Department of the Interior. The omnibus energy bill considered in the 108th Congress included provisions that would have allowed energy-related agreements based on tribal rather than federal regulations; the provisions led to fears that tribes would not only avoid federal environmental reviews but also lose federal trust protections against losses. The energy bill will likely be reintroduced in the 109th Congress. Indian tribes also have sought through legislation to improve planning for fish and wildlife management on Indian lands.

Among significant topics for non-Indian areas, other than land claims, are rights to water and to wildlife resources. Indian tribes have asserted water rights claims in a number of western states, and many tribes are participating in negotiations or adjudications with states, local governments, and other water users. The 108th Congress approved negotiated water-rights settlements for the Nez Perce Tribe regarding the Snake River in Idaho and for some central Arizona tribes, but the 109th Congress may be asked to consider related Arizona and New Mexico tribal settlements. Management of fish and wildlife on non-Indian lands and waters — for instance, salmon and other fish in the Klamath and Trinity river basins (CA and OR), marine mammals in the north Pacific, or caribou in ANWR — also has given rise to water rights, fishing, and development controversies that Congress has been asked to address. Another tribal issue on non-Indian lands concerns Indian sacred sites on federal lands. Tribes have long promoted legislation to protect sacred sites and give tribes a role in their management, but federal land managers and private companies have voiced fears that such a management role might enable tribes to restrict statutory uses, such as development or recreation.

CRS Products

CRS Report RL31098, *Klamath River Basin Issues: An Overview of Water Use Conflicts*, coordinated by Betsy A. Cody.

CRS Report RS21670, *Major Indian Issues in the 108th Congress*, by Roger Walke.

Natural Disaster Mitigation. Efforts have accelerated in recent years to save lives and prevent property loss caused by natural disasters. Local land use plans, particularly in districts struck by multiple floods (referred to as “repetitive loss” areas), have been and continue to be revised. Development and construction patterns

of the past have been altered, resulting in the relocation or elevation of homes and businesses to prevent flood damages. Many buildings susceptible to earthquake damage have been reinforced (“retrofitted”) to reduce the likelihood of damage or loss of life or injury. Homeowners in rural areas at risk from wildfires have been encouraged or required to make landscaping or construction changes to minimize such risks. Hurricane damages have been reduced in some coastal areas through the adoption and enforcement of strict building code provisions.

These and other hazard mitigation actions may help achieve desired goals. At the same time, pressures remain to develop areas and use private property notwithstanding their disaster risk. As a result, considerable debate has developed on specific policies and the federal role in such actions. Areas of congressional debate and related questions include the following.

- The federal government historically has provided disaster assistance after state and local governments are overwhelmed by natural disasters. To what extent does federal disaster relief reduce community and individual incentives to undertake mitigation?
- The National Flood Insurance Program (NFIP) mandates that participating property owners and communities undertake specified mitigative actions. Some analysts contend that NFIP premiums do not fully reflect actual costs, and that the program reduces disaster resilience and prevention efforts by encouraging property owners to rebuild in flood zones. Should Congress further modify the National Flood Insurance Act to balance the need for insurance and rebuilding with the goal of preventing disasters or reducing their impacts?
- The federal government provides funds for hazard mitigation activities, including updating and modernizing flood zone maps. (See “Natural Hazards and Mapping Data Management,” above.) Are current tools sufficient to help Congress establish priorities and determine the cost effectiveness of federal spending for these activities?

CRS Products

CRS Report RL32242, *Emergency Management Funding for the Department of Homeland Security: Information and Issues for FY2005*, by Keith Bea, Shawn Reese, Wayne Morrissey, Frank Gottron, and C. Stephen Redhead.

Private Land Conservation. Natural resource questions related to private lands that attract congressional attention are many and varied. Some center on the effects of private land uses on natural resources, especially in rural areas. Agricultural production — including crop and livestock production — occupies about 41% of land in the lower 48 states, according to the National Agricultural Statistics Service of the Department of Agriculture (USDA). It can contribute to pesticide and nutrient runoff, soil erosion, air pollution, and loss of wildlife habitat. USDA administers many voluntary programs which provide technical assistance, funding, education, and research to help farmers address these problems. Some

programs pay producers to retire lands that have high resource values, such as wetlands, while other programs help producers grow crops in ways that protect resources and environmental conditions. About 40 million acres of land (10% of all cropland) is retired through federal conservation programs, using multi-year rental agreements or easements. USDA states that its programs have reduced soil erosion and increased wetland area. However, the effect of its programs on nutrient and pesticide runoff and other problems has not been well measured. Many of these conservation programs expire in FY2007, and the 109th Congress is likely to discuss them as part of the farm bill debate.

Another set of resource questions is associated with development as it spreads from established urban centers into less developed areas, including farm land. This development can contribute to declines in habitat and environmental quality. Growth is largely managed by local and state governments, but Congress could limit, guide, or foster growth through federal programs to build roads, sewer and water lines, and public facilities. Growth also could be addressed in omnibus transportation legislation or other measures that designate sites or provide guidance for federal projects or facilities.

A third set of resource questions can occur where private and public ownership abut. At these locations, land use and resource protection goals may be incompatible, leading to conflict over such topics as predator and weed control, and habitat for important species. At the same time, private landowners often contend that public land management is inconsistent and unresponsive to their concerns. Congress has discussed some of these topics, largely on a case-by-case basis, but may look for more systematic responses. Currently, few federal programs apply in the same way to both public and private lands.

CRS Products

CRS Report RS20011, *Managing Regional Growth: Is There a Role for Congress?*, by Jeffrey A. Zinn.

CRS Issue Brief IB96030, *Soil and Water Conservation Issues*, by Jeffrey A. Zinn.