

Funding for Hunting and Fishing and the Management of Fish and Wildlife

History

In 1885, Congress authorized funds for the federal government to conduct scientific studies of insects, birds, and mammals, an action that led to the establishment of the Division of Economic Ornithology and Mammalogy within the U.S. Department of Agriculture. The Division gradually expanded its responsibilities as the nascent conservation movement took hold in the United States and became the U.S. Bureau of Biological Survey in 1905 (which, in turn, was later combined with the Bureau of Fisheries to become the U.S. Fish and Wildlife Service).

The conservation movement had an early proponent in Theodore Roosevelt. President Roosevelt, an avid outdoorsman, made conservation an important issue during his administration (1901–1909). Roosevelt was influential in establishing the National Forest Service (1905), the National Park System (1916), and the first National Wildlife Refuge at Pelican Island, Florida (1903). Throughout his presidency, Roosevelt argued for the intelligent and scientific use of natural resources and, through his own lifestyle, advocated hunting and fishing as among those uses.

The states, too, began to take an active role in conservation through wildlife management. By 1910, most states had an administrative office of some type for the protection and management of wildlife. However, fish and wildlife management offices typically lacked trained staff and, more importantly, consistent funding (Jahn, 2000).

At that time, many state fish and wildlife agencies secured some funding through a fishing and hunting license system based on the premise that anglers and hunters should pay for the privilege of using publicly owned resources (Jahn, 2000). However, sportsmen were not merely passive users of natural resources whose role in funding management was limited to the license fees they paid: they recognized the need to protect and scientifically manage wildlife.

Sportsmen initiated and led the crusade for many advances in conservation and wildlife management, including the passage of the Federal Aid in Wildlife Restoration Act of 1937, a landmark legislative action in the funding of wildlife management.

The Federal Aid in Wildlife Restoration Act, commonly referred to as the Pittman-Robertson Act, linked wildlife policy to the sale of hunting licenses and taxes on firearms, ammunition, and other sporting goods and established a permanent wildlife management funding source for state agencies. The Act required states to enact a law to prohibit the use of hunting license revenues for any purpose other than for wildlife management before they could qualify for matching funds from the aforementioned excise taxes. Although most states had some form of wildlife management program by 1910, some states took advantage of Federal Aid in Wildlife Restoration funds to establish state fish and wildlife agencies.

In 1950, Congress passed the fisheries management companion to the Federal Aid in Wildlife Restoration Act. The Federal Aid in Sport Fish Restoration Act, commonly referred to as the Dingell-Johnson Act, provided funding for recreational fisheries management through taxes on fishing equipment (to which motorboat fuel was added by the Wallop-Breaux Amendment in 1984) and operates on the same matching funds principle as the Federal Aid in Wildlife Restoration Act.

The Wildlife and Sport Fish Restoration (WSFR) Acts were critical in establishing and protecting permanent funding for fish and wildlife management in the United States. Today, hunting and fishing license sales and matching funds provided by excise taxes on sporting goods and motorboat fuel continue to be one of the primary funding sources for most state fish and wildlife agencies. Funding remains an important issue today because, although most of the nation's wildlife is *not* hunted or fished, most agency funding continues to originate from sportsmen (Responsive Management, 2006a).

Current Fish and Wildlife Management Funding

State fish and wildlife agencies are primarily funded through the following five major sources:

1. hunting and fishing licenses, stamps, and permits;
2. programs administered by the U.S. Fish and Wildlife Service's Wildlife and Sport Fish Restoration (WSFR) Program (Federal Aid/WSFR programs), primarily the WSFR grant programs;
3. state tax general funds;
4. interest income on invested funds; and
5. miscellaneous revenues, such as State Wildlife Grants and other federal grants and programs, portions of state sales tax, tax checkoff programs, and special automobile license plates (Scott, Hansen, & Mosher, 1999).

Although state agencies are funded to varying degrees through these many resources, sales of hunting and fishing license and excise taxes on hunting and fishing equipment through the Federal Aid/WSFR program remain the primary sources of funding, making state agencies largely user-funded (by hunters and anglers). License sales and excise taxes often fund almost the entire agency in some states, accounting for at least 75% of the agency's total funding (Scott, Hansen, & Mosher, 1999).

The following discussion focuses on the primary sources of funding for agencies and on funding specifically for hunting and fishing. However, it is important to note that, as license sales decline and agencies are expected to manage more than just hunting and fishing, such as managing non-game wildlife or providing nuisance animal technical assistance, for example, license revenues are no longer enough to fund all agency activities. As a result, many agencies seek additional funding sources. Some of the more common additional funding sources are briefly addressed in the discussion that follows, such as the miscellaneous revenues mentioned above that include federal grants and programs, special tax initiatives, and license plate sales.

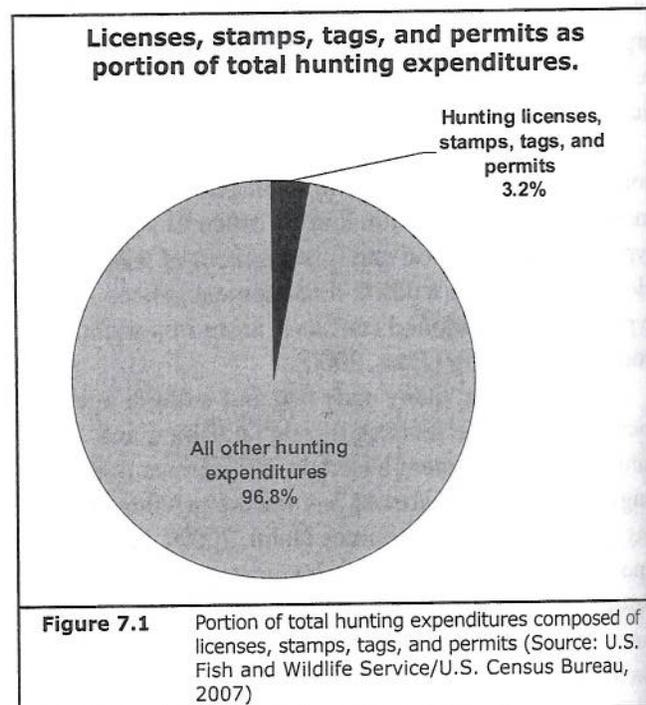
Hunting and Fishing Licenses

Hunting and fishing licenses, coupled with the WSFR grant programs, are the most important funding mechanisms for state fish and wildlife agencies. Together, license sales and equipment excise taxes (provided through the WSFR grant programs) constitute the majority of state agency funding. Moreover, funds through the Federal Aid/WSFR programs are dependent on license sales, making hunting and fishing license sales imperative to state fish and wildlife agencies.

Overall, hunters' and anglers' expenses for participating in hunting and fishing in the United States total approximately \$77 billion annually. However, only a very small percentage of sportsmen's annual costs are spent on licenses: 3.2% of hunters' annual costs on hunting are spent on hunting licenses, stamps, tags, and permits; and 1.2% of anglers' annual costs on fishing are spent on fishing licenses, stamps, tags, and permits (Figures 7.1 and 7.2) (U.S. Fish and Wildlife Service/U.S. Census Bureau, 2007).

The average hunter spends \$59 per year on licenses, stamps, tags, and permits, out of a total of \$1,830 spent annually on hunting to pursue their sport. The average angler spends \$17 per year on licenses, stamps, tags, and permits, out of a total of \$1,403 spent annually on fishing (U.S. Fish and Wildlife Service/U.S. Census Bureau, 2007).

Hunters and anglers often purchase multiple licenses for their activities. Each state offers different types of licenses. Some of the different types of licenses



include, but are not limited to, freshwater fishing, saltwater fishing, big game hunting, small game hunting, muzzleloader hunting, crossbow hunting, archery hunting, and hunting and fishing combination licenses. Additionally, these licenses may be available as a short-term (e.g., five-day), annual, or lifetime license. Special licenses are often available for youth and senior citizens as well. Typically, each license type is available to state residents, whereas specific nonresident hunting and fishing licenses are available for a higher fee to those who do not live in the state.

Sportsmen who purchase multiple licenses may increase state agency license sale revenues but do not have an impact on Federal Aid/WSFR or grant funds that are based on the number of licensed hunters or anglers, such as funds from the WSFR grant programs. In fact, states are required by the U.S. Fish and Wildlife Service (FWS) to “de-duplicate” license sales records, a process that involves identifying sportsmen who have purchased more than one license so that they are only accounted for once when reporting the total number of hunters and anglers in the state. Although there is no standard de-duplication method applied, each state is required to provide the FWS with the accounting methodology used to de-duplicate. The methodology must be approved by the FWS for the state to receive license certification approval for program funds (J. F. Organ, personal communication, January 2010).

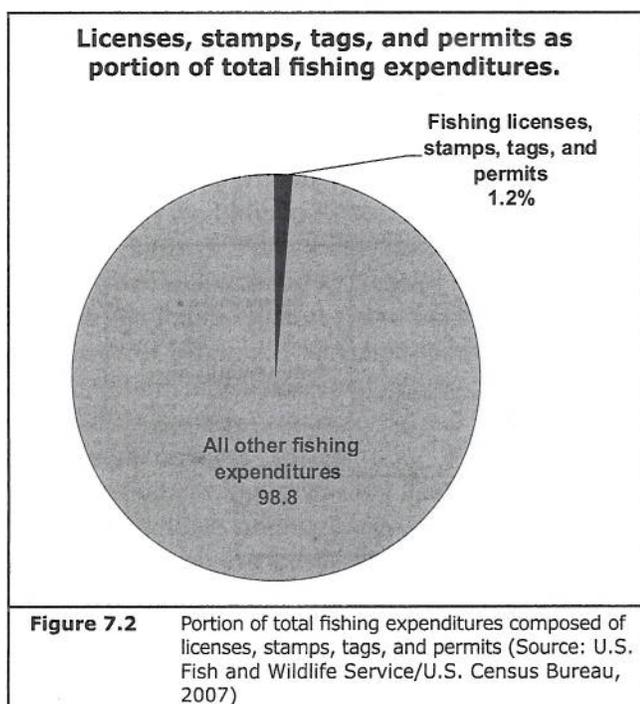
The availability of, and in some cases the requirements for, multiple types of licenses for hunting

and fishing, particularly for hunting, have increased the number of licenses sold, thus increasing license revenues. Data reported by the states to the U.S. Department of the Interior, FWS, Wildlife and Sport Fish Restoration Program (WSFR; formerly the Division of Federal Aid), show that the total number of hunting license holders in the 50 states dropped slightly from 14.95 million in 1968 to 14.62 million in 2008, but the number of hunting licenses, tags, and stamps sold increased from 20.86 million in 1968 to 35.18 million in 2008 (U.S. Fish and Wildlife Service, 2007d, 2008) (Figure 7.3, p. 148). The disparity between number of license holders and licenses sold is not as dramatic for anglers as it is for hunters; nonetheless, the difference between the number of fishing licenses sold and the number of fishing license holders has increased from 5.73 million in 1968 to 7.45 million in 2008, with 28.13 million fishing license holders buying 35.58 million fishing licenses, tags, and stamps in 2008 (U.S. Fish and Wildlife Service, 2008) (Figure 7.4, p. 148).

Approximately one out of six hunters—approximately 1.8 million—in the United States hunt out of state, and 70% of those hunt big game, such as deer, elk, moose, antelope, and bighorn sheep (U.S. Fish and Wildlife Service/U.S. Census Bureau, 2007). License fee revenues include licenses sold to out-of-state sportsmen, commonly referred to as nonresident sportsmen. Nonresident licenses, particularly hunting licenses, are typically sold for a higher fee than are resident licenses and can be an important source of revenue, especially for western state fish and wildlife agencies.

Nonresident hunting is important to some of the less populated western states, such as Alaska, Nevada, Wyoming, and New Mexico, because the revenue from the higher-priced nonresident license fees help to make some wildlife management and conservation programs possible. The wildlife management budget needs often exceed what Federal Aid/WSFR apportionments and revenues from the lower-priced resident licenses can cover in the more sparsely populated western states that have more land and wildlife to manage. In fact, in some western states, nonresident license fees account for more than half of the wildlife management and conservation funds derived from license revenues (J. Jackson, personal communication, November 2006).

Some argue that nonresident license fees are too extravagant, especially in comparison to resident fees. In some cases, nonresident license fees can be as much as 20 times the fee charged for a resident license for the same species. The higher fees can



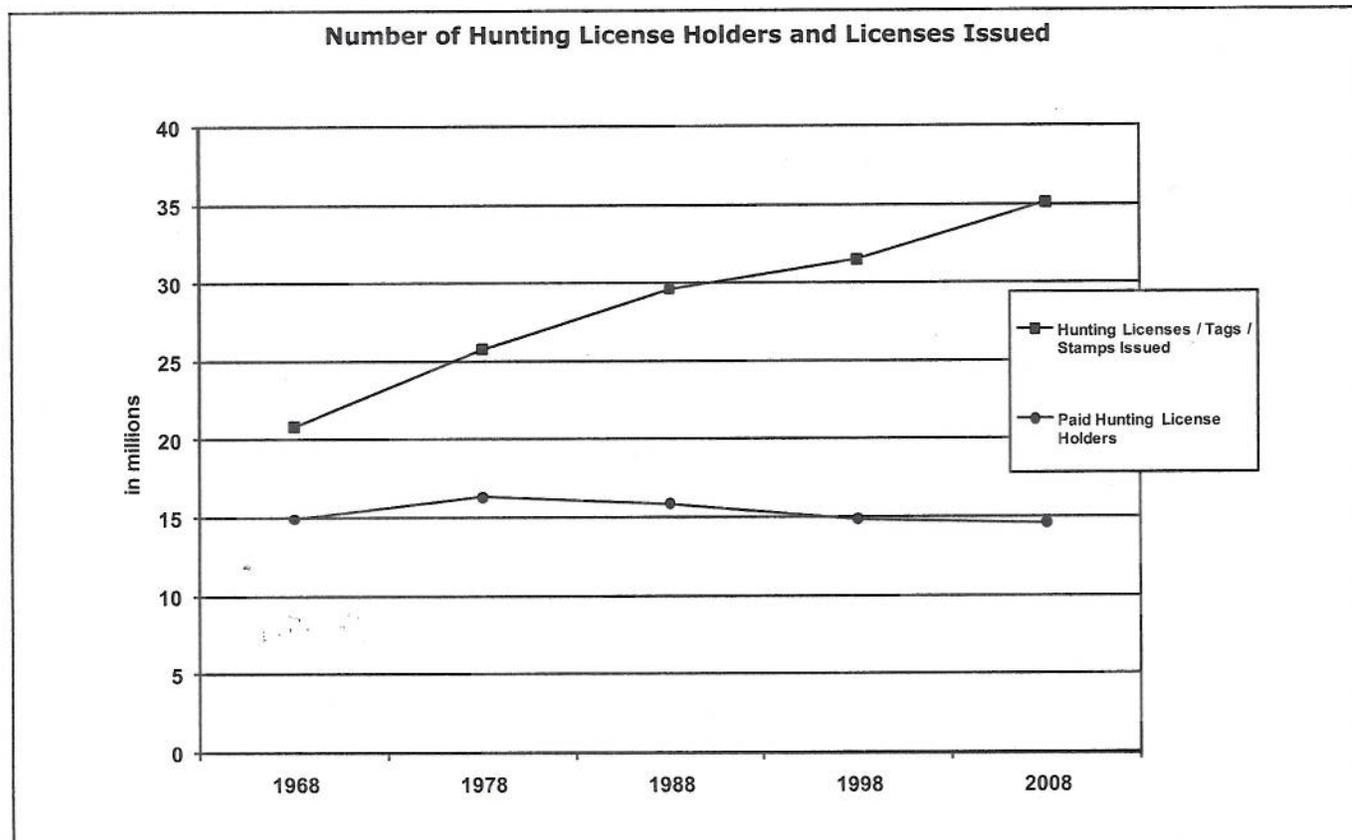


Figure 7.3 Total hunting license sales in the United States (Source: U.S. Fish and Wildlife Service, 2007d, 2008)

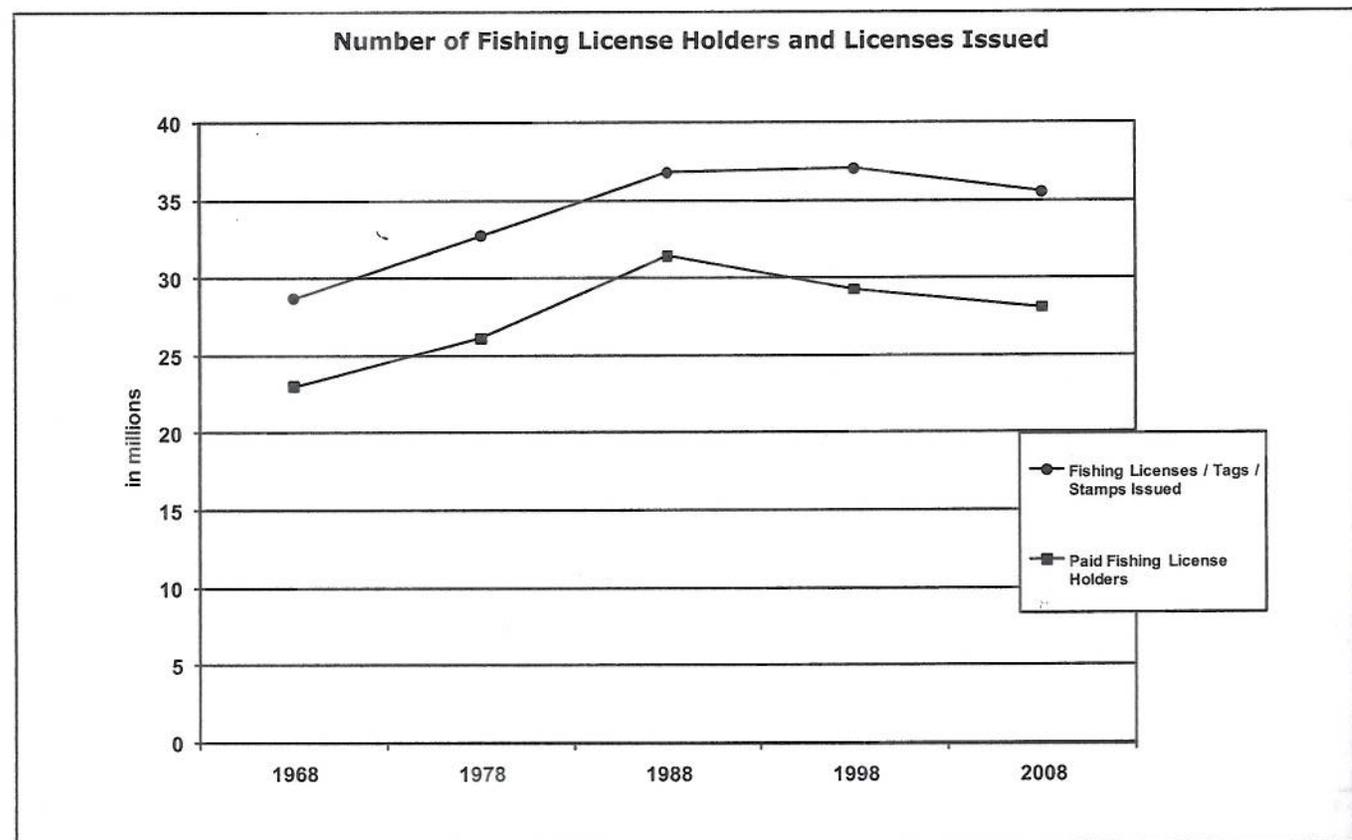


Figure 7.4 Total fishing license sales in the United States (Source: U.S. Fish and Wildlife Service, 2007d, 2008)

withstand the market for several reasons. First, the state and its residents often support the higher nonresident license fees so that it protects the hunting opportunities available for residents by limiting the number of licenses available and charging higher fees to maximize revenue and lower demand. Second, nonresidents are not represented in the state legislature, so their interests are not a primary concern, while maximizing license fee revenue is. Third, the most expensive nonresident hunting licenses are typically for game species that are not available in other states. For example, there are no elk to be hunted in Florida; therefore, some Florida residents may be willing to pay the higher fees to hunt elk in another state.

The number of nonresident licenses issued is often limited in order to protect resident hunting opportunities and for purposes of game management. The limited number of nonresident licenses also makes it possible for agencies to charge higher fees. Some states even raffle or auction off a limited number of nonresident hunting licenses to increase revenue. Such restrictions as a limited number of nonresident hunting licenses and opportunities have been legally contested in recent years as a violation of U.S. citizens' rights under the U.S. Constitution. Although courts have issued decisions on both sides of the conflict, a 2005 congressional appropriations bill provision established policy for states to regulate fish and wildlife in the public interest, including differentiation between residents and nonresidents (Musgrave, 2009).

Federal Aid

The Federal Aid in Wildlife Restoration Act (The Pittman-Robertson Act)

The Federal Aid in Wildlife Restoration Act, commonly referred to as the Pittman-Robertson Act, was passed by Congress in 1937 and went into effect in 1938. The legislation was sponsored by Senator Key Pittman of Nevada and Representative (later Senator) A. Willis Robertson of Virginia. The Act provides funding to select, restore, rehabilitate, and improve wildlife habitat, wildlife management research, and for distributing information on these projects.

The Federal Aid in Wildlife Restoration Act is largely considered landmark legislation for wildlife management because it established permanent federal funding for the purpose of wildlife management. The funds, popularly referred to as PR (Pittman-Robertson) funds, are obtained through an excise tax on sporting

goods, including guns and ammunition—a 10% tax rate on pistols and revolvers, and an 11% tax rate on firearms other than pistols and revolvers. The excise taxes on these items are paid by the manufacturers of these products and are included in the cost to sportsmen when they purchase the equipment. It is important to note for historical purposes, however, that the federal excise tax on guns and ammunition already existed; the Act simply ensured that the money from the excise tax would be dedicated to funding wildlife management.

Another important aspect of the Act was Representative Robertson's addition that required states to enact a law that all revenue from hunting license sales be used for wildlife management before the state could qualify for PR funds. This addition to the Act ensured that state legislatures would not divert license sales revenue for other purposes while funding wildlife management only through federal funds.

After successfully passing the legislation in 1937, Congress passed amendments in 1970 and 1972 that extended the tax to pistols, revolvers, and most archery equipment. The taxes on firearms and ammunition are collected by the firearms and ammunition section of the Alcohol and Tobacco Tax and Trade Bureau. The taxes on archery equipment are collected by the Internal Revenue Service and U.S. Customs and Border Protection. The taxes are deposited into the Wildlife Restoration Fund prior to being apportioned to the states by the FWS (J. Baughman, personal communication, April 2009; M. King, personal communication, April 2009; J. McAninch, personal communication, November 2008; G. Taylor, personal communication, April 2009).

The disbursement of PR funds to each state is determined by a formula, using variables that include the total land area of the state and the number of licensed hunters in the state. PR funds are administered on a cost-share basis, wherein each state pays for at least 25% of an approved project, with federal funds covering the remaining cost of the project up to 75%. The state's share must come from a non-federal source.

Approximately \$233 million from the sporting goods excise taxes were apportioned among the states and U.S. territories for fiscal year 2006 (U.S. Fish and Wildlife Service, 2007i). Since passage of the Act, PR funds have totaled more than \$4 billion.

The percentage of each state fish and wildlife agency's budget that comes from PR funds varies among states, as does the state's apportionment based on the formula discussed earlier.

The Federal Aid in Sport Fish Restoration Act (The Dingell-Johnson/Wallop-Breaux Act)

The Federal Aid in Sport Fish Restoration Act, commonly referred to as the Dingell-Johnson or Wallop-Breaux Act, was passed by Congress in 1950. The Act was modeled after the Federal Aid in Wildlife Restoration Act to create a similar Federal Aid program for the management, conservation, and restoration of fishery resources.

The Federal Aid in Sport Fish Restoration Act funds are obtained through an excise tax on fishing equipment, including fishing rods, reels, creels, lures, flies, and artificial baits. The excise taxes on these items are paid by the manufacturers of these products and are included in the cost to sportsmen when they purchase the equipment.

Similar to the Federal Aid in Wildlife Restoration Act, the Federal Aid in Sport Fish Restoration Act required states to enact a law that all revenue from fishing license sales be used for fisheries management before the state could qualify for funds, popularly referred to as DJ (Dingell-Johnson) funds. Several amendments have been made to the Act, but perhaps the most important is the Wallop-Breaux Amendment in 1984, which extended the excise tax to previously untaxed sport fishing equipment (e.g., fishing tackle) and motorboat fuel. The Amendment also extended the use of the funds to include boating access and aquatic resources education. The Amendment increased DJ funds significantly, which went from \$35 million in 1985 to \$110 million in 1986 when the Amendment was enacted (U.S. Fish and Wildlife Service, 2007j).

The disbursement of DJ funds to each state is also determined by a formula: 60% of each state's apportionment is based on the number of licensed anglers, and 40% is based on the state's total land and water area. DJ funds are also administered as a matching funds program, wherein each state pays for at least 25% of an approved project, with federal funds covering the remaining cost of the project up to 75%. The state's share must come from a non-federal source.

Approximately \$291 million from fishing equipment and motorboat fuel excise taxes were apportioned among the states and U.S. territories for fiscal year 2006 (U.S. Fish and Wildlife Service, 2007j).

The percentage of each state fish and wildlife agency's budget made up of DJ funds varies among states, as does the state's apportionment based on the formula discussed earlier. Each state cannot receive more than 5% or less than 1% of each year's total apportionment.

State Wildlife Grants

The State Wildlife Grants Program is funded by general appropriations by the U.S. Congress to the FWS, which has been accomplished through the Land and Water Conservation Fund (LWCF) throughout the past decade or more. The LWCF is obtained via income from federal offshore oil and natural gas leases. The FWS apportions part of the funds received from Congress for State Wildlife Grants to each state and U.S. territory (J. Baughman, personal communication, April 2009; M. King, personal communication, April 2009; G. Taylor, personal communication, April 2009; U.S. Fish and Wildlife Service, 2009). These funds must be used to support both the development and implementation of programs designed to benefit wildlife, including wildlife that is not hunted or fished. The intent is to help protect declining species and prevent species from becoming endangered or extinct. To qualify to receive funds through the State Wildlife Grants Program, each state and U.S. territory was required to submit a comprehensive wildlife conservation strategy to the FWS for approval.

The disbursement of State Wildlife Grant funds to each state and territory is determined by a formula: one third of the apportionment is based on the state or territory's land area, and two thirds of the apportionment is based on the state or territory's population. To receive the matching grant funds, the state or territory must provide at least 25% of the expenses for planning-related grant activities and at least 50% of the expenses for all other types of eligible programs from a non-federal funding source.

Other Sources of Funding

Cooperative Endangered Species Conservation Fund Grants

Section 6 of the Endangered Species Act provides U.S. states and territories with Cooperative Endangered Species Conservation Fund Grants to help states, territories, and partnered landowners implement projects to help protect and conserve endangered and threatened species on non-federal lands. States must provide at least 25% of the project expenses from a non-federal funding source to have the remaining 75% of expenses matched with grant funds. When two or more states or territories implement a joint project, the states and/or territories are only required to provide at least 10% of project expenses. The four primary grants are Conservation Grants, Habitat Conservation Planning Assistance Grants, Habitat Conservation Plan Land Acquisition Grants, and Recovery Land

Acquisition Grants. For fiscal year 2006, approximately \$67 million was awarded through the four grant programs (U.S. Fish and Wildlife Service, 2006).

The North American Wetlands Conservation Act

The North American Wetlands Conservation Act (NAWCA) was passed in 1989 to provide a source of matching grants to organizations and individuals to support wetlands conservation projects in the United States, Canada, and Mexico that benefit the wetland habitats of migratory birds and other wildlife. The grants are competitive, and requested funds must be matched at no less than a 1-to-1 ratio by non-federal sources of funding or donations. The grants are not limited to state fish and wildlife management agencies. Available NAWCA funds are based on congressional appropriation, but additional funding for the grants are also acquired through fines, penalties, and forfeitures under the Migratory Bird Treaty Act of 1918; interest accrued on Wildlife Restoration Grant Program funds; and amendments to the Federal Aid in Sport Fish Restoration Act.

Since 1991, more than \$462 million has been awarded through NAWCA grants, which have been matched by \$1.3 billion in contributions from others (U.S. Executive Branch, The White House, 2002). For fiscal year 2007, the congressional appropriation for NAWCA was \$39.4 million, and additional funds brought the total to \$74 million (U.S. Fish and Wildlife Service, 2007k).

The Landowner Incentive Program

The Landowner Incentive Program was established by Congress in 2002 but was not funded in 2008, and, at the time of publication, future funding was uncertain (J. Baughman, personal communication, April 2009; M. King, personal communication, April 2009; G. Taylor, personal communication, April 2009). The program was a partnership grant program to assist private landowners with conserving and restoring the habitat of endangered species and other at-risk plants and animals. State fish and wildlife agencies, as well as landowners and nonprofit groups that partner with the state agencies, were eligible for matching funds through the program. State agencies and partners were required to provide at least 25%

of the cost of the project from a non-federal funding source to qualify for program funds. Each state was limited to 5% of the total funds available through the program.

Additional Funding Sources

Fish and wildlife agencies continue to search for additional funding sources, commonly referred to as “alternative funding.” As hunting and fishing participation and license revenues decrease, fish and wildlife management costs continue to increase. With the stable funding initially provided by license revenues and Federal Aid/WSFR funds, wildlife management efforts have successfully rescued some species from the threat of extinction, but with that success has come more wildlife management responsibilities for both game and non-game species (Teaming With Wildlife, 2009). The responsibilities of the fish and wildlife agencies have also expanded as the public seeks agency assistance in dealing with nuisance wildlife and management of growing nonconsumptive recreational activities, including such activities as wildlife viewing. With this increase in costs and responsibilities, agencies are seeking additional funding.

Although one option available for agencies is to increase license fees, such increases may still not be enough to cover growing costs. For example, Figure 7.5 demonstrates how much license fees might need to increase in an effort for the Minnesota Department of Natural Resources to maintain its current level of services and programs. Furthermore, the Midwest Association of Fish and Wildlife Agencies (MAFWA) also reports that some state agencies find that continued

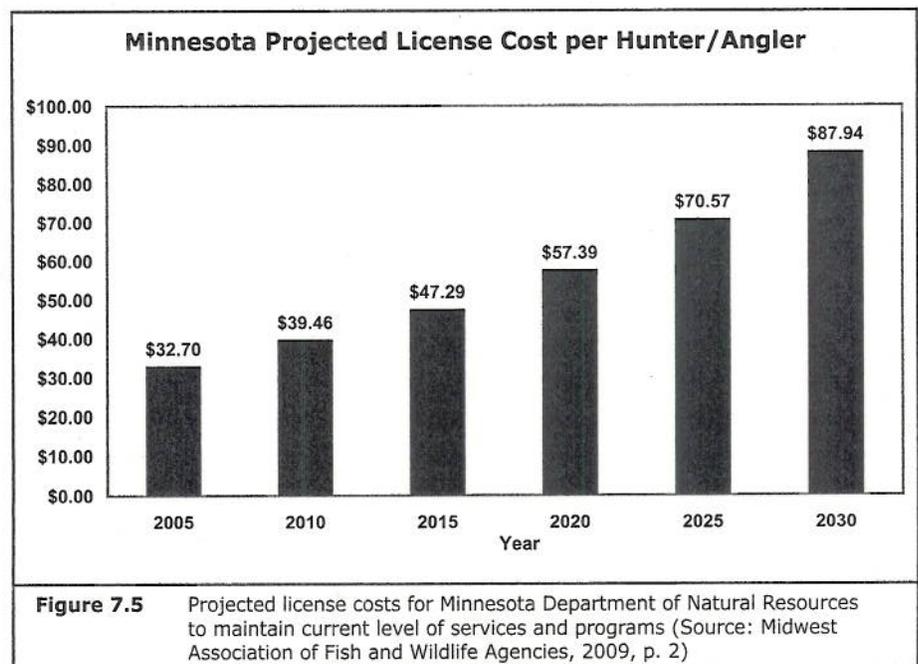


Table 7.1 Common additional funding sources for state fish and wildlife agencies (Source: Midwest Association of Fish and Wildlife Agencies, 2009)

Common Additional Funding Sources
Non-federal assistance (e.g., grants and agreements)
Public use fees
Non-consumption user fees
Habitat stamps
Registration fees (e.g., watercraft, ATVs, recreational vehicles)
Donations
Conservation or agency license plates
Trust funds
General sales tax (new tax)
General sales tax (redirect existing tax monies)
Income tax check-offs
Outdoor recreation equipment sales tax
Gas tax
Hotel rooms tax
Meals tax
Fuels tax
Real estate transfer tax
Severance tax (e.g., minerals, forest products, biofuels)
Containers tax
Fines and restitution for natural resources damage
Other fines
Landfill tipping fee
Lottery revenues
Revolving funds
General obligation bonds

increases in license fees are associated with declines in hunting and fishing participation and license sales, which have an adverse effect on funding for the agencies (Midwest Association of Fish and Wildlife Agencies, 2009) (see the related discussion, "Effects of Increasing Hunting and Fishing License Fees on Fish and Wildlife Agency Funding," later in this chapter).

Table 7.1 provides a list of commonly used or considered funding options compiled by MAFWA's Committee on Alternative Funding. Table 7.2 provides examples of states that currently use some of the additional funding sources listed in Table 7.1. Note that this is not a comprehensive list but only some examples of successful additional state funding initiatives.

Public Awareness of and Attitudes Toward Fish and Wildlife Agency Funding

Awareness and Knowledge of How Fish and Wildlife Agencies Are Funded

As discussed previously, state fish and wildlife agencies are primarily funded through hunting and fishing license sales and excise taxes on hunting and fishing equipment and on motorboat fuel (through the WSFR grant programs). However, among the general population, there is a lack of awareness regarding the primary funding sources for state fish and wildlife agencies and a misperception that state agencies are primarily funded by general tax funds.

In studies of residents in the northeastern and southeastern United States, the most common sources of funding identified in open-ended, "top-of-the-mind" questions were nonspecific and tax-related, such as taxes, general state taxes, and general federal taxes. Only 23% of northeastern U.S. residents named hunting and fishing licenses as a funding source for their state fish and wildlife agency (Figure 7.6, p. 154) (Responsive Management, 2004j). Similarly, in the southeastern United States, 19% of residents named hunting licenses and 19% named fishing licenses as sources of funding (Figure 7.7, p. 154) (Responsive Management, 2005aa).

When asked if fish and wildlife management in their state is funded almost entirely by hunting and fishing license dollars or by both license dollars and public taxes, the majority of residents in most western states indicated that they think fish and wildlife management in their state is substantially funded by both hunting and fishing license dollars *and* public taxes (Teel, Dayer, Manfredo, & Bright, 2005).

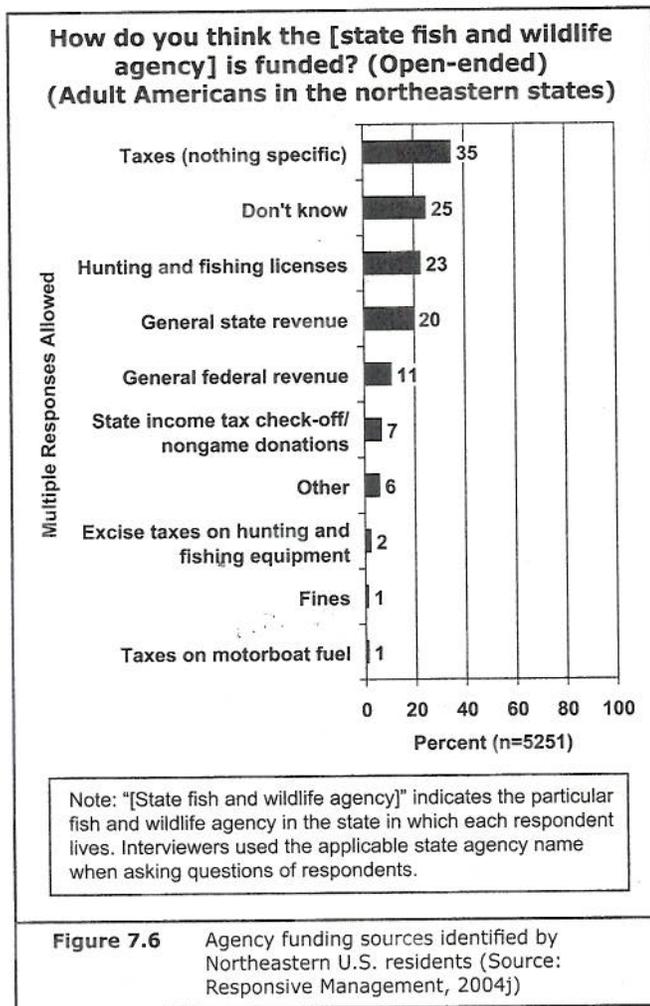
Awareness of agency funding obtained from excise taxes on hunting and fishing equipment through the WSFR grant programs is extremely low: Only 3% of northeastern U.S. residents and 3% of southeastern U.S. residents named any of the Federal Aid/WSFR sources that include excise taxes on hunting or fishing equipment and motorboat fuel (see Figures 7.6 and 7.7) (Responsive Management, 2004j, 2005aa).

Opinions on License Costs

Most commonly, the general population thinks that the current fees for hunting and fishing licenses are about the right amount, although, in surveys of residents in the northeastern and southeastern United States, approximately half do not know. In those same surveys,

Table 7.2 Examples of additional funding sources (Sources: Midwest Association of Fish and Wildlife Agencies, 2009; Minnesota Department of Natural Resources, 2009; Teaming With Wildlife, 2005)

State	Additional Funding Source Used	Description
Arizona	Lottery revenues	State lottery revenues go to the Arizona Heritage Fund for the acquisition, development, and protection of recreational, natural, wildlife, and cultural resources; \$20 million is split equally between the Arizona Game and Fish Department (\$10 million) and the Arizona Parks Department (\$10 million).
Arkansas	Dedicated general sales tax	A dedicated 1/8 of 1 percent sales tax; the Arkansas Game and Fish Commission receives 45% of funds collected through the tax.
Colorado	Lottery revenues	A portion of state lottery revenues goes to the Great Outdoors Colorado Trust Fund to fund projects that preserve, protect, and enhance Colorado's wildlife, parks, rivers, trails, and open spaces; funding allocations for wildlife projects are made through the Colorado Division of Wildlife.
Georgia	Wildlife license plates	All wildlife license plate revenues are used to support wildlife diversity programs administered by the Georgia Wildlife Resources Division (within the Georgia Department of Natural Resources).
Iowa	Gaming receipts and natural resource license plate sales	The Resource Enhancement and Protection (REAP) program is funded from Iowa's gaming receipts (Iowa's Environment First Fund), the sale of natural resource license plates, and some private contributions. REAP funding is distributed among Conservation Education, Iowa Department of Natural Resources (IDNR) administration, and various other IDNR activities, such as Open Space, City and Parks Open Space, Land Management, Historical Resources, etc.
Maine	Instant lottery ticket revenues	Revenues from the sale of instant lottery tickets go directly to the Maine Outdoor Heritage Fund (MOHF); the revenues do not support natural resource agency programs, but are used to fund special projects sponsored by any state natural resource agency in one of four program areas: fisheries and wildlife enhancement, public land acquisition, endangered species protection, and natural resources law enforcement.
Minnesota	State income tax check-off Conservation license plates	Raises approximately \$1 million annually. Raises approximately \$3.5 million annually for the Critical Habitat Matching Program, which provides matching funds for donations of land or cash to the Minnesota Department of Natural Resources (MNDNR).
Minnesota (continued)	Dedicated general sales tax	A dedicated 3/8 of 1 percent sales and use tax. Funds can only be used for projects that restore, protect, and enhance wetlands, prairies, forests, and habitat for game, fish, and wildlife; protect, enhance, and restore water quality in lakes, rivers, streams, and groundwater; and support parks and trails of regional or statewide significance. The Minnesota Legislature makes final funding decisions; projects for funding can be proposed by the MNDNR as well as other agencies and organizations that meet the criteria.
Missouri	Dedicated general sales tax	A dedicated 1/8 of 1 percent sales tax; generates approximately \$82 million that is split equally between the Missouri Department of Natural Resources' State Parks and Historic Preservation (50%) and Soil and Water Conservation (50%) programs.
Nevada	Mining permit fees	Proceeds from mining permit fees go directly to the Nevada Division of Wildlife for wildlife-related programs, primarily to address wildlife mortalities associated with mining operations, but surplus funds from the proceeds have recently been used for other areas of wildlife conservation.
Pennsylvania	Conservation license plates	Revenues from the sale of conservation license plates are directed to the Wild Resources Conservation Program; funding is awarded only to wildlife diversity projects.
Texas	Sporting goods sales tax	Dedicates up to \$32 million in existing tax from the sale of sporting goods to the Texas Parks and Wildlife Division programs.
Virginia	Dedicated general sales tax	A direct transfer of sales tax revenue; the Virginia Department of Game and Inland Fisheries receives up to \$13 million per year based on the estimated economic impact of fishing, hunting, and wildlife-associated recreation (determined by the <i>National Survey of Fishing, Hunting, and Wildlife-Associated Recreation</i>).
Washington	Personalized license plates	Revenues from the sale of personalized or "vanity" plates, which do not feature wildlife images, go directly to the Washington Department of Fish and Wildlife's Wildlife Diversity Division exclusively for the management of wildlife that are not hunted, fished, or trapped.
Wisconsin	Program funded by general obligation bonds	The Stewardship Program is funded with general obligation bonds; funds are dispersed for acquiring land and local recreation grants.



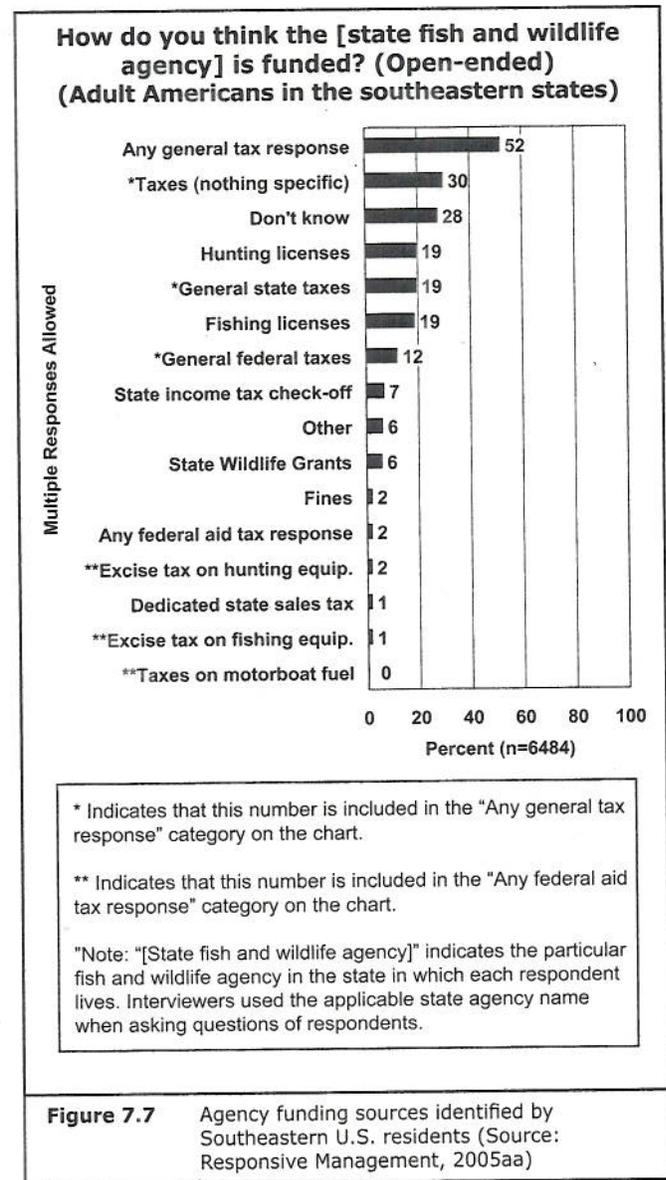
very few (less than 10%) think license fees are too high or too low. Furthermore, a majority of northeastern and southeastern U.S. residents support increases in user fees, such as hunting and fishing licenses, to cover the cost of managing fish and wildlife. A majority also support increases in user fees if it means more opportunities for hunting and fishing (Responsive Management, 2004j, 2005aa).

The majority of northeastern and southeastern U.S. residents agree that costs for managing fish and wildlife should be paid for with specific user fees, such as hunting and fishing licenses (Responsive Management, 2004j, 2005aa).

Sportsmen's Awareness of and Attitudes Toward Fish and Wildlife Agency Funding

Awareness and Knowledge of How Fish and Wildlife Agencies Are Funded

Although sportsmen are more likely than the general population (non-hunters and non-anglers) to identify



hunting and fishing licenses as a funding source of state fish and wildlife agencies, awareness of how state fish and wildlife agencies are funded and how those funds are used is low.

In a nationwide study of sportsmen, survey results indicated that there are very low levels of awareness, overall, especially "top-of-the-mind" awareness, of the WSFR grant programs. Nationwide, around 90% or more of hunters, anglers, and boaters did not name excise taxes through these programs as a funding source for fish and wildlife management or for hunting, fishing, and boating opportunities. The same study showed that more than a third of hunters, anglers, and boaters did not name hunting and fishing licenses as a source of revenue for fish and wildlife management programs and the enhancement of hunting and fishing opportunities. Substantial percentages

(12% of hunters and 20% of anglers) think funds for fish and wildlife management come from general state revenue; additionally, 11% of hunters and 22% of anglers think funds for enhancement of hunting and fishing opportunities come from general state revenue (Figures 7.8; 7.9; 7.10, and 7.11, p. 156) (Responsive Management, 1999b).

Regional U.S. studies also indicate that, although sportsmen are somewhat more likely than the general population to identify hunting and fishing licenses as a funding source of state fish and wildlife agencies, a large majority of sportsmen across the nation remain unaware of the Federal Aid/WSFR sources (excise taxes). In regional studies, less than 8% of hunters and less than 6% of anglers in the northeastern and southeastern United States named excise taxes on hunting and/or fishing equipment and motorboat fuel as agency funding sources, while only 2% of the general population in these regions named excise taxes on hunting and fishing equipment and 1% named the tax on motorboat fuel (Responsive Management, 2004j, 2005aa).

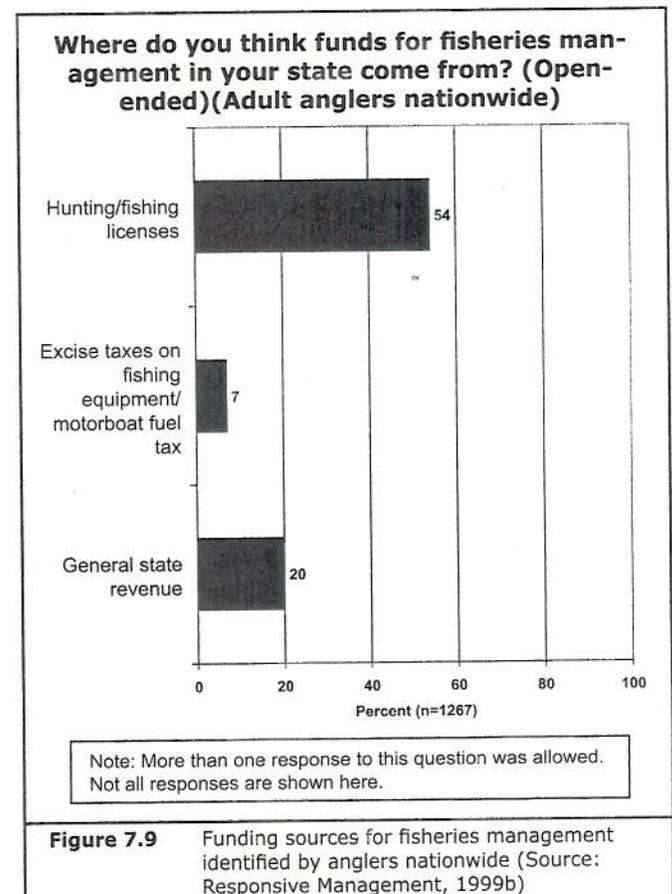
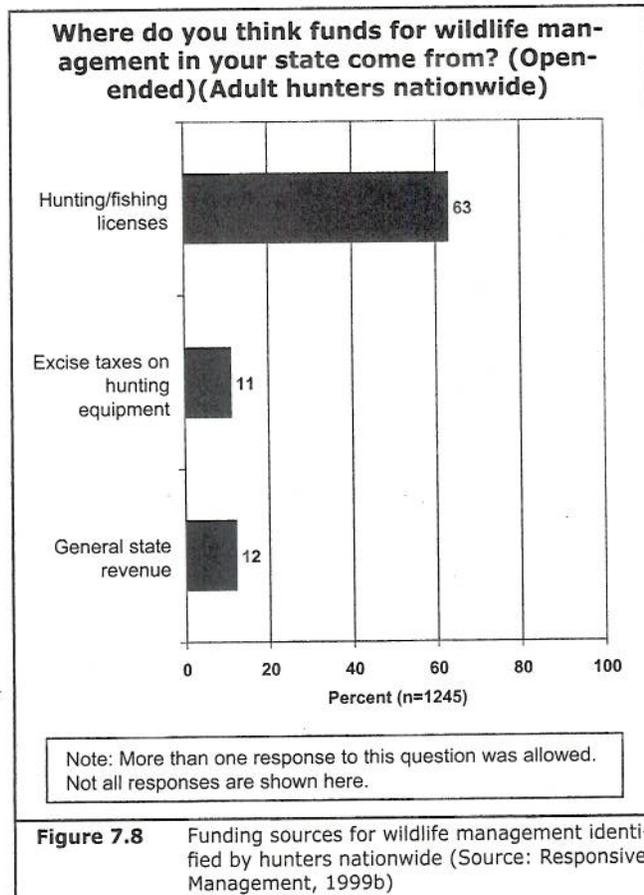
In a nationwide study, sportsmen were read the multiple names by which the Federal Aid/WSFR programs have been referred, including the Federal Aid in Wildlife Restoration Program (since renamed

the Wildlife Restoration Grant Program), Pittman-Robertson, the Federal Aid in Sport Fish Restoration Program (since renamed the Sport Fish Restoration Grant Program), Dingell-Johnson, and Wallop-Breaux. Respondents were asked if they had ever heard of each program. The Federal Aid in Wildlife Restoration Program was the most recognized; however, the percentages of hunters (28%), anglers (31%), and boaters (30%) with awareness were low (Responsive Management, 1999b).

Sportsmen are also about as likely as the general population to name general taxes as a funding source of state fish and wildlife agencies (Responsive Management, 2004j, 2005aa).

Opinions on License Costs

The majority of hunters and anglers think the current fees for hunting and fishing licenses are about the right amount. Similar to the general population, very few sportsmen in the northeastern and southeastern United States think license fees are too high or too low, although they are slightly more likely than the general population to say that the fees are too high. Furthermore, a majority of northeastern U.S. sportsmen (55% of hunters and 63% of anglers) and southeastern U.S. sportsmen (63% of hunters and 65% of



anglers) support increases in user fees, such as hunting and fishing licenses, to cover the cost of managing fish and wildlife. A majority (67% of northeastern hunters, 70% of southeastern hunters, 67% of northeastern anglers, and 71% of southeastern anglers) also support increases in user fees if it means more opportunities for hunting and fishing (Responsive Management, 2004j, 2005aa).

Although sportsmen support increases in license fees if the revenue is used for fish and wildlife management and hunting and fishing opportunities, support for increases are dependent on the size and frequency of those increases. Sportsmen prefer smaller, more frequent increases to large, infrequent increases. A study of Wyoming hunters' and anglers' attitudes toward proposed mechanisms for increasing license fees in response to general inflation found the most support for small inflationary license fee adjustments requested from the legislature every three to five years: a majority of hunters and anglers (55% of each) supported this option. Support for and opposition to two other proposed options—automatic adjustment of license fees for inflation and allowing the department to adjust fees for inflation—were about evenly divided. Large majorities of hunters and anglers (74%

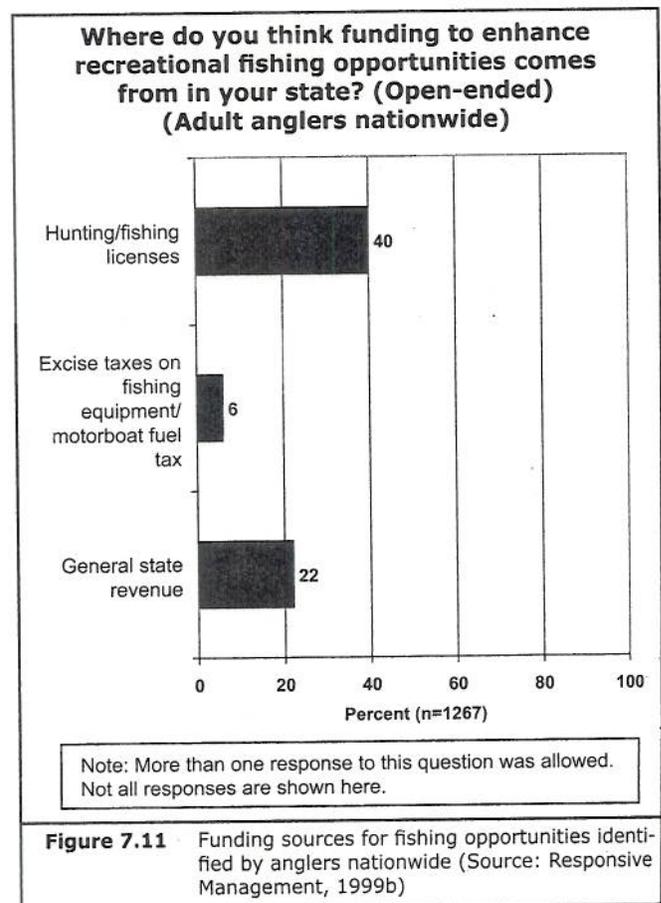
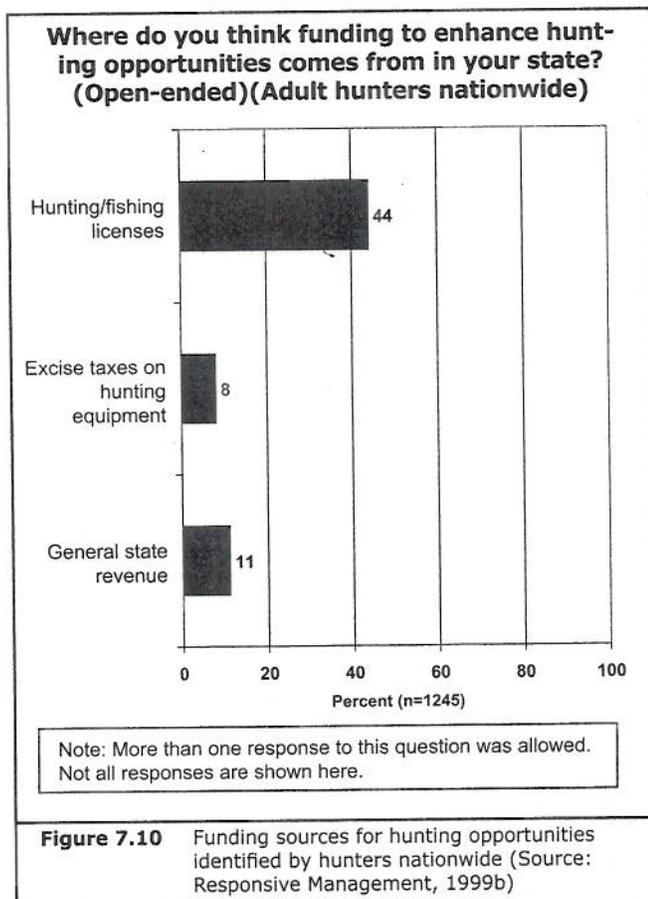
of each) oppose large inflationary adjustments every 6 to 10 years (Responsive Management, 2000c).

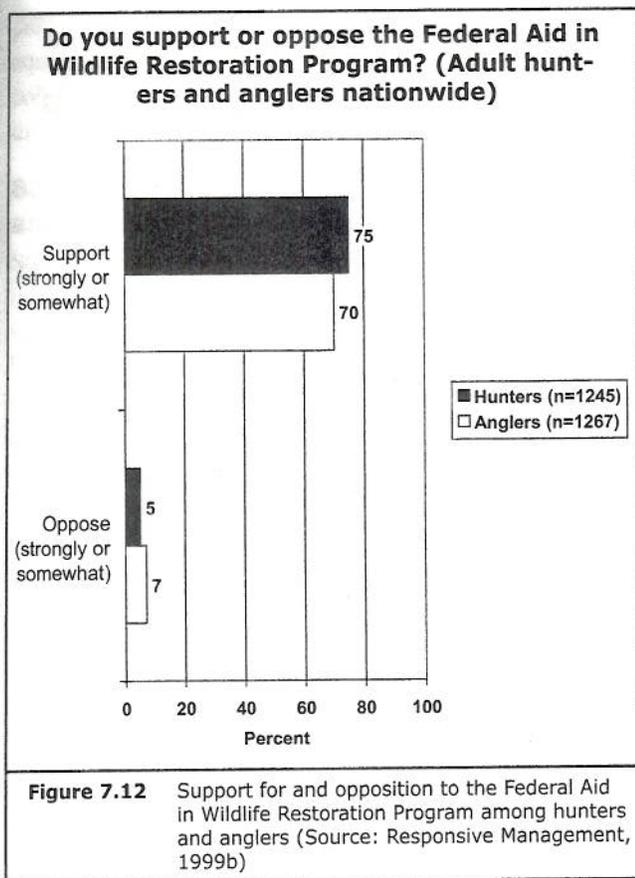
The majority of northeastern and southeastern U.S. hunters and anglers agree that costs for managing fish and wildlife should be paid for with specific user fees, such as hunting and fishing licenses (Responsive Management, 2004j, 2005aa).

Opinions on Federal Aid

While most hunters and anglers are not aware of the Federal Aid in Wildlife Restoration and Federal Aid in Sport Fish Restoration programs (since renamed the Wildlife and Sport Fish Restoration grant programs), almost all are supportive of them, once informed, and vehemently reject using the funds for purposes other than fish and wildlife programs. In a national study, the majority of sportsmen support the Federal Aid in Wildlife Restoration Program (75% of hunters and 70% of anglers) and the Federal Aid in Sport Fish Restoration Program (76% of hunters and 77% of anglers) after receiving a full description of each program (Figures 7.12 and 7.13) (Responsive Management, 1999b).

Sportsmen also oppose using the Federal Aid/WSFR funds for purposes other than programs that benefit hunting, fishing, boating, shooting, and wildlife

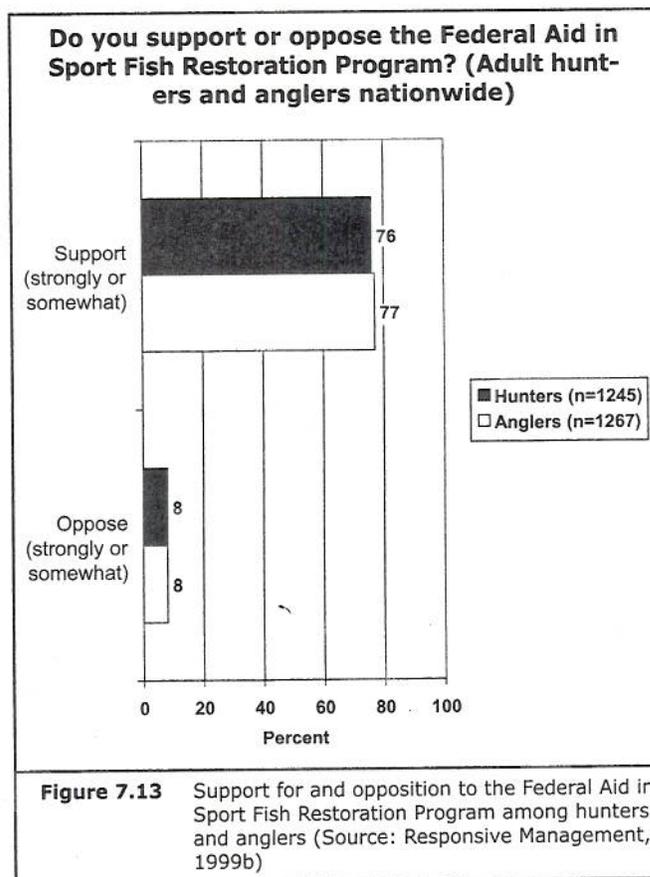




and fisheries management. Most of this opposition is strong. In a nationwide survey, sportsmen were informed of some of the other purposes for which Federal Aid/WSFR funds could be used, such as crime prevention, maintaining highways, and reducing the national debt, and the majority opposed these uses. The large majority of hunters opposed (85% opposed, 75% *strongly* opposed) using money collected from excise taxes on hunting equipment for purposes other than to benefit hunting and wildlife management (Figure 7.14, p. 158). Similarly, the majority of anglers were opposed (86% opposed, 71% *strongly* opposed) to using money collected from excise taxes on sport fishing equipment and motorboat fuel for purposes other than to benefit sport fishing and fisheries management (Figure 7.15, p. 158) (Responsive Management, 1999b).

Effects of Increasing Hunting and Fishing License Fees on Fish and Wildlife Agency Funding

Hunting and fishing license fees are a primary funding source for state fish and wildlife agencies (PR and DJ funds being the other primary sources). Thus, license fee increases are an important issue for state agencies

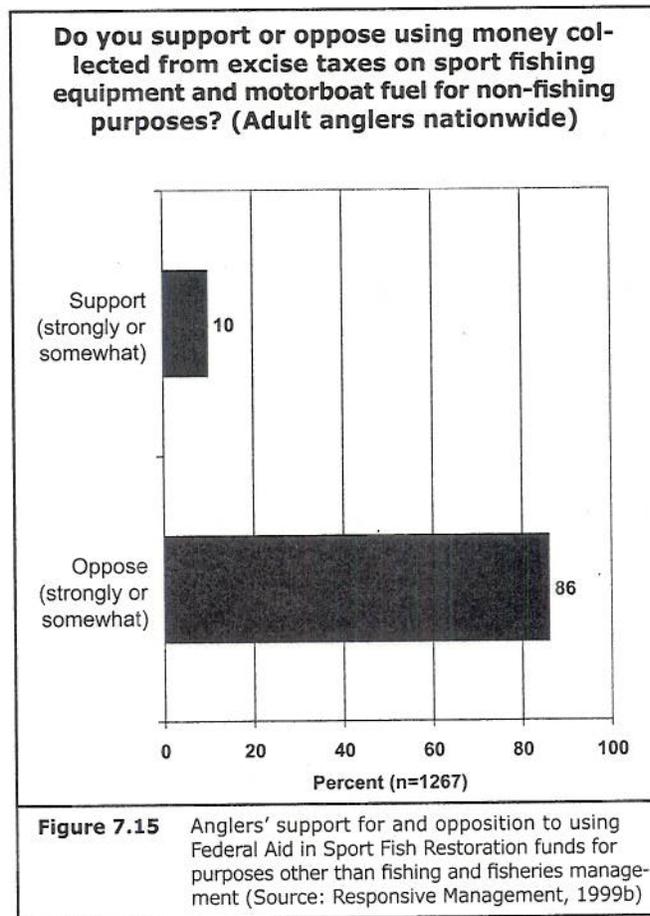
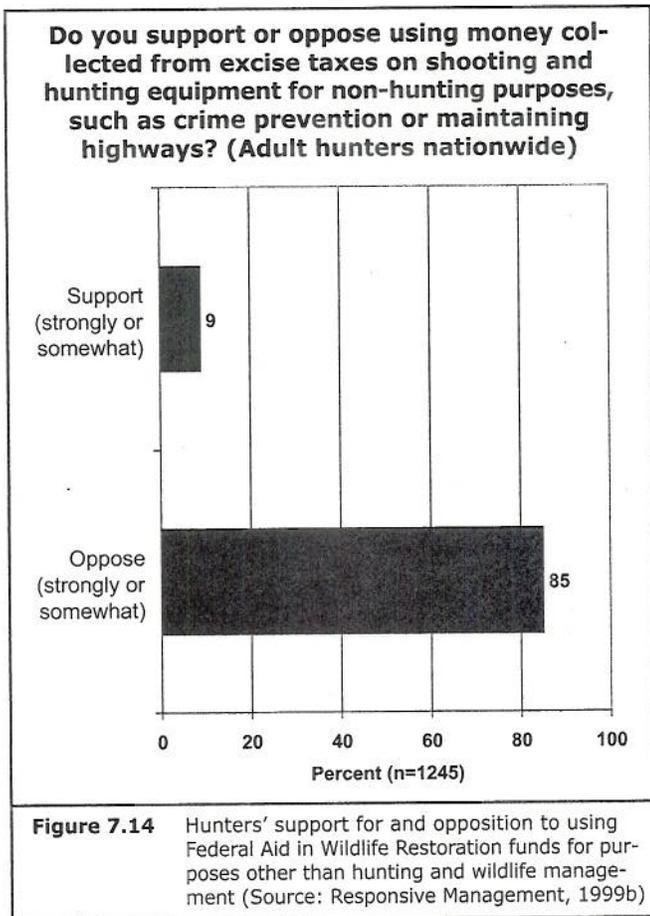


because, although fee increases initially provide increased revenue, the long-term impact on agency funding must be considered.

Decreased Participation

The immediate increase in revenue is the primary incentive for raising license fees. However, hunting and fishing license fee increases consistently result in a decrease in participation and licenses sold. A national study of factors that affect fishing license sales found that a \$1 increase in the cost of a state resident annual fishing license resulted in a 4.7% decrease in license sales (Fedler & Sweezy, 1990). For example, in South Carolina, the most recent increase in fishing license fees occurred in 1985; the \$2.50 cost increase produced \$257,932 more in revenue, but there was a 12.4% decrease in sales (25,470 fewer licensed anglers) the following year (Nash, 2002).

While many agencies may be willing to accept a temporary decline in sales and participation for the increased revenue, the resulting sales drops are not necessarily temporary. The drop in license sales is often long-term. Nash (2002) reported that, as of 2002, fishing license sales in South Carolina had not returned to the same level as before the 1985 increase. It is also important to consider the impact of decreased



participation on future recruitment: Not only do some lapsed anglers never return to fishing, but those same lapsed anglers will not recruit or mentor young anglers to increase or maintain future license sales as desertion occurs for age and health reasons (Southwick, Allen, Leonard, & Teisl, 2005).

It is especially interesting to note the decrease in license sales that accompanies fee increases because license fees are relatively low-cost for resident sportsmen (those who have residency in the state for which they purchase a license) and because the license fees are such a small percentage of sportsmen's overall expenses for participating in the activity. Although license revenues are a primary funding source for all state fish and wildlife agencies, license fees are a very minor expense for sportsmen: only 3.2% of hunters' annual costs for hunting and 1.2% of anglers' annual costs for fishing (see Figures 7.1 and 7.2) (U.S. Fish and Wildlife Service/U.S. Census Bureau, 2007). Nonetheless, license cost increases still negatively impact sales. In a study of ex-anglers, 13% indicated that the cost of a license influenced their decision to quit (Responsive Management, 1995b).

Inflation

In general, license fee increases have not kept pace with general inflation, resulting in a better "deal" financially each year for hunters and anglers. Unfortunately, the long-term decline in sales coupled with fees that are not increased each year for inflation will have a more lasting impact. When license sales do not return to pre-increase levels over time and inflation continually decreases the value of the license, revenue will again fail to meet the funding needs of the agency.

Federal Funding

As a result of long-term decreased license sales, Federal Aid/WSFR sources of funding may also be impacted, decreasing a state's apportionment in two ways. First, PR funds from the Wildlife Restoration Grant Program and DJ funds from the Sport Fish Restoration Grant Program will decrease because state apportionments of PR and DJ funds are partially based on the number of licensed hunters and anglers. Fewer licensed sportsmen mean a smaller apportionment of funds. Second, PR and DJ funds originate from excise taxes on hunting and fishing equipment. Although some sportsmen may risk illegal participation in hunting or fishing without a license, a decrease in

participation will likely be followed by a decrease in equipment sales as well. Thus, fewer excise taxes are collected, resulting in fewer PR and DJ funds to be distributed among the states.

Balancing Funding Needs, Fee Increases, and Negative Impacts

State agencies must consider the impact of license fee increases on funding overall. The calculation must include the predicted decrease in future license sales based on the increase amount, as well as PR and DJ funding decreases. While fee increases may be necessary, the specific increase amount must be balanced with other factors. Studies have been conducted to identify a formula for calculating the fee increase that will maximize revenue and minimize negative impacts.

An American Sportfishing Association study on pricing and maximizing revenue from state fishing licenses analyzed the factors that might impact license sales. In the study, several pricing scenarios were statistically tested to determine the impact of license cost increases. The study found that optimizing license revenue would have a greater negative impact on long-term funding than would smaller increases. For example, in Illinois, increasing license fees so that license revenue would be optimized would result in a 40% decrease in license sales. The revenue increase would initially offset the necessary reduction in DJ funds, but the increase would not be ideal for maintaining future revenue (Southwick et al., 2005).

A fishing license pricing analysis conducted in New Hampshire found that anglers prefer the current license options to proposed changes that might maximize revenue for the state agency. Majorities of both active and lapsed anglers indicated that they had no interest in the new license options. Interestingly, the analysis demonstrated that the length of time a license is valid has more of an impact on New Hampshire anglers' license purchasing behavior than does cost. Nonetheless, the analysis showed that maximum revenue would be obtained by maintaining the existing season-long license at the current price, with the addition of another temporary license costing between \$25 and \$30. Maximum fishing participation would be obtained through maintaining the current license at the current price, but also offering a one-day license for \$10. Although cost did not have as much of an impact as the number of days a license is valid in this study, both revenue and participation were still maximized through options that maintained the current price of the license; the impact on Federal Aid/WSFR funds was not assessed. The analysis also found that a large percentage of "lapsed" anglers, or those who

did not purchase a license, may actually be actively participating in fishing without a license (Responsive Management, 2004f).

While the projected long-term loss in license sales and Federal Aid/WSFR funding associated with license fee increases is disconcerting for state fish and wildlife agencies, not raising fees has an impact as well. When a license cost has not increased in 10 years and an agency must continue to operate with expenses that have increased with inflation, some programs and services are likely to be reduced or eliminated. For example, after seven years without a hunting license fee increase, the Pennsylvania Game Commission was under a hiring freeze and working at 90% capacity, it had not held a training class for new wildlife conservation officers in four years, dedicated funds for land acquisition had been eliminated from the budget, toll-free numbers for regional offices were disconnected, and free information for public schools had been discontinued (Zidock, 2006; Reilly, 2006).

Sportsmen's Opposition to License Fee Increases

Studies show that the majority of hunters and anglers think the current fees for hunting and fishing licenses are about the right amount (Responsive Management, 2004j, 2005aa). Although sportsmen support the use of license fees for managing fish and wildlife and for providing hunting and fishing opportunities, and even express some support for increases in license fees for these purposes, license fee increases are typically met with resistance among sportsmen and a decrease in license sales.

Although license fees account for a very small percentage of a sportsmen's total annual costs associated with fishing and/or hunting, sportsmen are resistant to license fee increases. There may be several reasons for this.

Historically, hunting and fishing in this country were free. An important reason that many Europeans immigrated to America was unrestricted access to natural resources; therefore, hunting and fishing may still be perceived as among our rights as free Americans rather than as a privilege or service to be paid for (see the related discussion in Chapter 1).

Another reason sportsmen may not actively support license fee increases is a lack of information. As discussed earlier in this chapter, sportsmen are only slightly more likely than the general population to know how state fish and wildlife agencies are funded. Nationwide, more than a third of sportsmen do not know that hunting and fishing licenses are a source of revenue. Furthermore, those who know that license

revenues support state agencies may not know that those funds are dedicated to fish and wildlife management programs and the enhancement of hunting and fishing opportunities. Some sportsmen fear the funds are used as general state or federal revenue and are being used for purposes other than fish and wildlife management.

Educating Sportsmen About License Fee Revenues

Public support, especially among sportsmen, for license fees is important in order for state agencies to obtain funds that keep pace with inflation and to maintain hunting and fishing participation for maximizing revenue and obtaining federal aid. To increase support, fish and wildlife management agencies need to change sportsmen's attitudes regarding license fees. Many view licenses as a regulatory mechanism when they should perhaps view licenses as a service agreement in which the fees for hunting and fishing are used to ensure that the opportunities to hunt and fish will continue to be available through proper fish and wildlife management.

Education is the primary means by which sportsmen's attitudes can be changed and support for license fees increased. Sportsmen need to be educated on how fish and wildlife agencies are funded, exactly how those funds are used, and on other license fee facts. Fish and wildlife agencies would benefit from well-planned and executed public communications campaigns that inform sportsmen, as well as the public, of the following, using examples (tailored or customized for the state) where useful:

- Hunting and fishing license fees are one of the two primary funding sources for state fish and wildlife agencies.
- Hunting and fishing license sales have a major impact on the other primary sources of funding (the WSFR grant programs).
- Hunting and fishing license revenues and Federal Aid/WSFR funds are dedicated to fish and wildlife management only; the fees go to the state agency and not to any general fund.
- The resulting fish and wildlife management protects hunting and fishing opportunities.
- A very small percentage of some state fish and wildlife agencies' funds are made up of general

state taxes. State fish and wildlife agencies are not funded by general federal taxes. (Note that this information would need to be tailored or customized to the state for accuracy.)

- Hunting and fishing license fees have not kept pace with inflation. If the current license fee were increased to match inflation, the cost of a license would be \$___ rather than the current cost of \$___.
- Hunting and fishing license fees make up an extremely small portion of hunters' and anglers' total costs associated with their activities.
- A license fee increase of \$2 would result in only an additional \$10 in 5 years for one sportsman, but an estimated additional \$_____ in revenue for the state agency to take care of our fish and wildlife and provide hunting and fishing opportunities.