N.C. Wildlife Resources Commission's Report on Federal Grants

As required by Section 14.1 of Session Law 2014-100

Feb. 1, 2015

SUBMITTED BY:

THE NORTH CAROLINA WILDLIFE RESOURCES COMMISSION





WILDLIFE RESOURCES COMMISSION'S MISSION

The mission of the Wildlife Resources Commission (WRC) is "To conserve North Carolina's wildlife resources and their habitats and provide programs and opportunities that allow hunters, anglers, boaters and other outdoor enthusiasts to enjoy wildlife-associated recreation."

In order to fulfill this mission and the statement of purpose for creating the WRC in G.S. 143-239, "the function, purpose, and duty of which shall be to manage, restore, develop, cultivate, conserve, protect, and regulate the wildlife resources of the State of North Carolina, and to administer the laws relating to game, game and freshwater fishes, and other wildlife resources enacted by the General Assembly to the end that there may be provided a sound, constructive, comprehensive, continuing, and economical game, game fish, and wildlife program directed by qualified, competent, and representative citizens, who shall have knowledge of or training in the protection, restoration, proper use and management of wildlife resources", the WRC utilizes a variety of revenue streams ranging from user fees such as vessel registrations and license purchases to federal grants from excise taxes collected on firearms and ammunition.

WILDLIFE RESOURCES COMMISSION BUDGET REVENUES

The revenue from various sources to the WRC has changed significantly in the previous 8 years; however, the sources of the funds have remained constant. While general fund appropriations have significantly decreased since 2008, revenue from federal grant programs has increased. The charts below illustrate the changing percentages from each revenue source over the past 6 years.

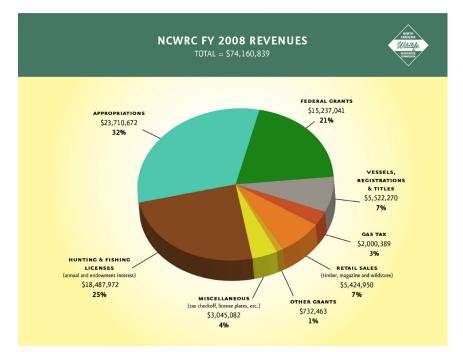


Figure 1: FY 2008 WRC Revenue Sources

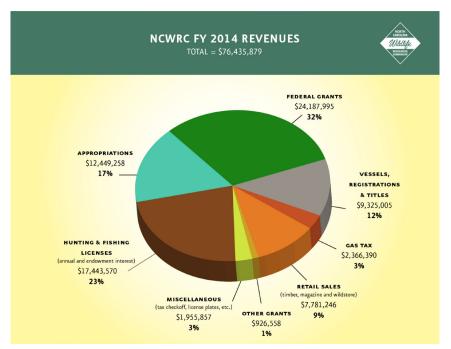


Figure 2: FY 2014 WRC Revenue Sources

As one can see, federal grant sources have increased from 21% of total revenue in 2008 to 31% in 2014, while appropriations have decreased from 32% to 17%.

Federal grant funds are derived primarily from four programs, Wildlife Restoration (Pittman-Robertson), Sportfish Restoration (Dingell-Johnson), State Wildlife Grants (SWG) and Boating Safety. The proportion each program contributes to the total federal revenues is illustrated below.

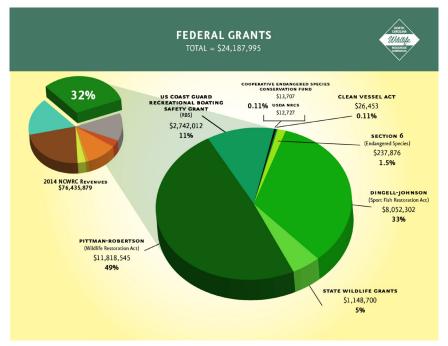


Figure 3: FY 2014 Federal Revenues by Source Funds

In order to better understand these federal grant programs, it is critical to understand the history and intent of each, as well as, the revenue sources contributing to their funding. The basis for all of these programs begins with the North American Model of Conservation.

North American Model of Wildlife Conservation

The North American Model of Wildlife Conservation is the only one of its kind in the world. In the mid-1800's hunters and anglers realized they needed to set limits in order to protect rapidly disappearing wildlife, and assume responsibility for managing wild habitats. Hunters and anglers were among the first to crusade for wildlife protection and remain some of today's most important conservation leaders.

History

As early settlers made their way West, North America's wildlife populations diminished due to market-hunting and habitat loss. Many species were on the brink of extinction. Elk, bison, bighorn sheep, black bears—even whitetail deer—had all but disappeared across the country. Hunters and anglers realized they needed to set limits in order to protect what they loved and assume responsibility for the stewardship of our natural resources.

Hunters like Theodore Roosevelt and George Bird Grinnell rallied fellow sportsmen. They pushed for hunting regulations and established conservation groups to protect habitat.



Basic Principles

Their efforts are the backbone of the North American Wildlife Conservation Model. The model has two basic principles – that our fish and wildlife belong to all Americans, and that they need to be managed in a way that their populations will be sustained forever.

The principles of the North American Wildlife Conservation Model are explained more fully through a set of guidelines known as the Seven Sisters of Conservation.

Sister #1 - Wildlife is Held in the Public Trust

In North American, natural resources and wildlife on public lands are managed by government agencies to ensure that current and future generations always have wildlife and wild places to enjoy.

Sister #2 - Prohibition on Commerce of Dead Wildlife

Commercial hunting and the sale of wildlife is prohibited to ensure the sustainability of wildlife populations.

Sister #3 - Democratic Rule of Law

Hunting and fishing laws are created through the public process where everyone has the opportunity and responsibility to develop systems of wildlife conservation and use.

Sister #4 - Hunting Opportunity for All

Every citizen has an opportunity, under the law, to hunt and fish in the United States and Canada.

Sister #5 - Non-Frivolous Use

In North America, individuals may legally kill certain wild animals under strict guidelines for food and fur, self-defense and property protection. Laws restrict against the casual killing of wildlife merely for antlers, horns or feathers.

Sister #6 - International Resources

Wildlife and fish migrate freely across boundaries between states, provinces and countries. Working together, the United States and Canada jointly coordinate wildlife and habitat management strategies. The Migratory Bird Treaty Act of 1918 demonstrates this cooperation between countries to protect wildlife. The Act made it illegal to capture or kill migratory birds, except as allowed by specific hunting regulations.

Sister #7 - Scientific Management

Sound science is essential to managing and sustaining North America's wildlife and habitats. For example, researchers put radio collars on elk to track the animals' movements to determine where elk give birth and how they react to motor vehicles on forest roads.

The tenets of this conservation model were the foundation of all pieces of legislation regarding conservation for decades to come and continue to guide wildlife management decisions to this day.

FEDERAL GRANT PROGRAMS

Over the past 75 years, a number of federal grant programs have been established by Congress for the purposes of conservation and outdoor opportunities. These programs are administered by the US Fish & Wildlife Service's Wildlife and Sport Fish Restoration Program.

US Fish & Wildlife Service: Wildlife and Sport Fish Restoration Program

The U.S. Fish & Wildlife Service, Wildlife and Sport Fish Restoration Program (WSFR) works with states, tribes, insular areas and the District of Columbia to conserve, protect, and enhance fish, wildlife, their habitats, and the hunting, sport fishing and recreational boating opportunities they provide. The Division of Wild-



life and Sport Fish Restoration Program provides oversight and/or administrative support for the following grant programs:

- Wildlife Restoration Grant Program
- Sport Fish Restoration Grant Program
- Clean Vessel Act Grant Program
- Boating Infrastructure Grant Program
- National Coastal Wetlands Conservation Grant Program
- State Wildlife Grant Program
- Landowner Incentive Grant Program
- Multistate Grant Program
- Tribal Wildlife Grant Program
- Tribal Landowner Incentive Grant Program

The Wildlife and Sport Fish Restoration (WSFR) Program addresses the challenges of managing America's natural resources with effective, targeted grant programs designed to benefit fish and wildlife while capitalizing on recreational opportunities across the country. The Pittman-Robertson Wildlife Restoration Act (PR), passed in 1937, and the Dingell-Johnson Sport Fish Restoration Act (DJ), passed in 1950, authorized grant programs that provide funding to States and territories for on-the-ground wildlife and fisheries conservation. The majority of PR funds are spent on acquisition, development, and operation of wildlife management and public use areas involving about 68 million acres. The PR Hunter Education Program trains students on conservation values and safe, responsible use of firearms. Various DJ funded programs address conservation and public recreation needs in fresh, estuarine and marine waters. DJ funds support projects that improve and manage aquatic habitats and fisheries resources, protect coastal wetlands, and provide critical infrastructure for recreational boaters. The DJ funded Aquatic Resources Education Program reaches into classrooms and other environments to teach aquatic conservation principles. The WSFR Program also administers the State Wildlife Grant program which supports a strategic national conservation framework through individual State Wildlife Action Plans. These plans, developed in coordination with government agencies, conservation organizations and the public, are integral to national efforts to effectively address threats to priority habitats and species of greatest conservation need. The core value of all WSFR Programs is fostering cooperative partnerships between Federal and State agencies, working alongside hunters, anglers, and other outdoor interests, to enhance recreational opportunities while advancing sustainable resource goals.¹

Wildlife Restoration Program

America the Beautiful is still the home of wondrous numbers and varieties of wild creatures. Yet, only a few decades ago, wildlife's survival was very much in doubt. The early settlers had encountered a spectacular

¹ U.S. Fish and Wildlife Service, Wildlife and Sport Fish Restoration Program

abundance of wildlife. But, in their zeal to conquer an untamed continent, they squandered that legacy for centuries, wiping out some species and reducing others to a remnant of their original numbers.

Then a remarkable thing happened. At the urging of organized sportsmen, State wildlife agencies, and the firearms and ammunition industries, Congress extended the life of an existing 10 percent tax on ammunition and firearms used for sport hunting, and earmarked the proceeds to be distributed to the States for wildlife restoration. The result was called the Federal Aid in Wildlife Restoration act, better known as the Pittman-Robertson (or "P-R") Act after its principal sponsors, Senator Key Pittman of Nevada, and Representative A. Willis Robertson of Virginia. The measure was signed into law by President Franklin D. Roosevelt on September 2, 1937.

Shared Costs, Shared Benefits

Federal Funding from P-R pays for up to 75% of project costs, with the States putting up at least 25%. The assurance of a steady source of earmarked funds has enabled the program's administrators, both State and Federal, to plan projects that take years to complete, as short-term strategies seldom come up with lasting solutions where living creatures are involved.

Benefits to the economy have been equally impressive. National surveys show that hunters now spend some \$10 billion every year on equipment and trips. Non-hunting nature lovers spend even larger sums to enjoy wildlife, on travel and on items that range from bird food to binoculars, from special footwear to camera equipment. Areas famous for their wildlife have directly benefited from this spending, but so have sporting goods and outdoor equipment manufacturers, distributors and dealers. Thousands of jobs have been created.

Non-Hunters and Non-Game Benefit, Too

Although Pittman-Robertson is financed wholly by firearms users and archery enthusiasts, its benefits cover a much larger number of people who never hunt but do enjoy such wildlife pastimes as birdwatching, nature photography, painting and sketching, and a wide variety of other outdoor pursuits. Almost all the lands purchased with P-R money are managed both for wildlife production and for other public uses. Wildlife management areas acquired by the States for winter range also support substantial use by hikers and fishermen, campers and picnickers. Wetlands for summer waterfowl nesting are useful to nature lovers in other seasons. Recent estimates indicate about 70% of the people using these areas are not hunting, and in some localities the ratio may go as high as 95%.



Numerous non-game species enjoy P-R benefits, too. Ground cover for game birds is also used by all sorts of other birds and small animals. Bald eagles benefit significantly under careful management of forested areas where they typically nest. Fortunately, the Pittman-Robertson act does not restrict use of funds to game species, but instead allows their use for any species of wild bird or mammal.

Hunter Safety and Sportsmanship

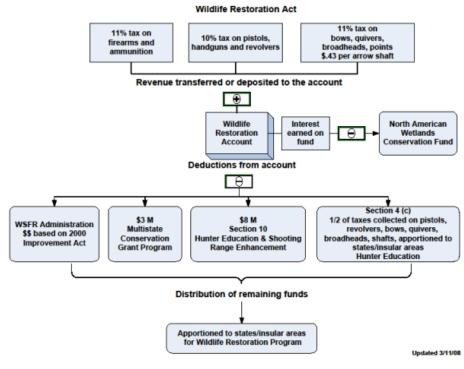
Congress in the early 1970's expanded the P-R revenue base to include handguns and archery equipment, and authorized States to spend up to half those revenues on hunter education and target ranges.

Hunter education is designed to make each hunter aware of how his/her behavior affects others. Hunters learn safe and proper handling of hunting equipment, responsible hunting conduct afield, the identification of wildlife and understanding of its habits and habitats, and respect -- for the animals, and for other hunters, landowners, and the general public.²

Revenues

Revenues from manufacturers' excise taxes on firearms, ammunition, archery equipment and arrow components are transferred or deposited to the Wildlife Restoration Account. The interest earned on the WR Account is transferred to the North American Wetlands Conservation Fund. Import duties on firearms and ammunition are deposited in the Migratory Bird Conservation Fund.

Figure 4: Wildlife Restoration Act Revenues

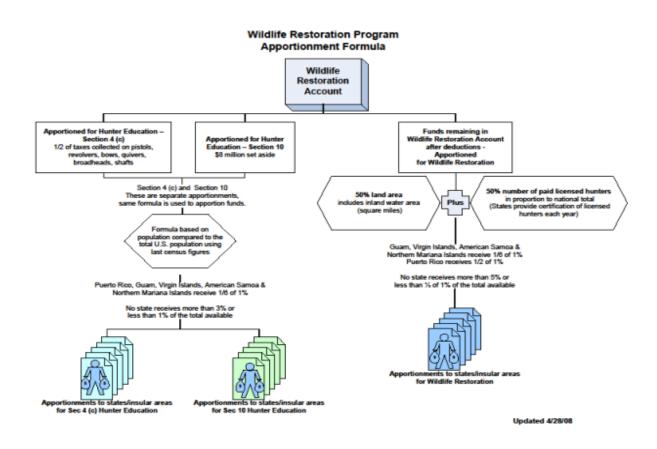


²U.S. Fish and Wildlife Service; Federal Aid Division

Apportionment

The formula for apportioning WR Funds to states is based on land area, number of paid license holders, minimums and maximums.

Figure 5: Wildlife Restoration Act Apportionment



Example Projects in North Carolina

Of the numerous projects currently underway in NC using Wildlife Restoration Act funds, two were chosen as examples of these funds being used in the field.

<u>Urban Bear Project (Phase I)</u> - Cooperative work with NCSU. Estimated Cost = \$700,000 (\$525,000 W-66 federal funds and \$175,000 waived overhead from NCSU). In North Carolina, black bear populations occupy 61% of the state and their range continues to expand. Additionally, the human population in North Carolina has increased and growth continues unabated. Humans and black bears are now living in closer proximity to each other, resulting in increased human-bear interactions and some areas of the state may have reached or exceeded the social carrying capacity. In several of these areas, population management options appear limited, as hunting is often restricted in residential and urban developments. With the changes that have

occurred over the past 30+ years, coupled with future human population growth, NCWRC will be challenged to make science-based management decisions regarding bear populations living in close proximity to residential development without further research on the ecology of these bears. This effort will be conducted in two phases (note that only Phase I is covered in this project) to provide data on black bear movements and population ecology in urban/suburban habitats for use in guiding management decisions that meet the NCWRC's black bear management goal:



"Use science-based decision making and biologically-sound management principles to manage lack bear populations in balance with available habitats and human expectations to assure long-term existence and hunting opportunities."

Objectives: 1. Determine cause-specific mortality and survival rates of black bears in urban/suburban habitats, 2. Determine movements (annual and seasonal home range, seasonal movements, dispersal, etc.) and activity patterns of black bears in urban/suburban habitats, 3. Determine features of travel corridors and

model corridors likely to be used by black bears accessing urban/suburban environments, 4. Determine reproductive parameters, habitat characteristics of dens, and timing of den entry/exit of black bears in urban/ suburban habitats. Status = ongoing.

Expanding Knowledge about Northern Bobwhite Population Demographics in North Carolina Project -Cooperative work with NCSU. Estimated Cost = \$262,627 (\$196,970 W-66 federal funds and \$65,657 waived overhead from NCSU). Northern bobwhite quail have been declining or extirpated from across their natural range due to habitat loss. Bobwhite suitable habitat loss has been attributed to suppression of fire, industrial forests, urbanization and intensive farming. The North Carolina Wildlife Resources Commission (NCWRC) started the Cooperative Upland habitat Restoration and Enhancement (CURE) program in 2000 to try to negate some of the habitat losses. NCWRC staff currently work on privately owned CURE areas and one CURE Game Land in northern Bladen County. While efforts to improve quail habitat have been successful in some areas, little is known about quail dispersal from the sources of improved habitat and dispersal rates from areas with no improved habitat. Quail will be captured with funnel traps and fitted with radio collars to track their movements. Management work could be improved if bobwhite emigration characteristics were known. NCWRC staff have monitored quail populations on these restored habitat areas since 2003 by using point count methodology. While point counts provide a useful index, they only provide a small snapshot for that particular day and time. However, little is known about the accuracy of the population index as nothing is known about quail detectability and availability. Creating new mod-



els from learning detection rates and probabilities from knowing where the radio collared quail are would greatly improve the accuracy of the population indexes. Monitoring generally is conducted by state agencies which have limited resources available to dedicate to monitoring efforts. Therefore, the main issue at hand is how one can create a cost-efficient and standardized monitoring protocol for bobwhite populations across their range while also accounting for variation in detection and availability. In addition, the dynamics of bobwhite populations are greatly influenced by dispersal, which is currently a poorly understood phenomenon. It is clear that improving our understanding of dispersal and detection of bobwhite will provide useful knowledge in developing monitoring protocols and improving management actions. Objectives: 1. Determine influence of dispersal from source landscape on northern bobwhite populations in adjacent areas, 2. Compare dispersal rates of individuals from a landscape with high cover of useable habitat,

presumed to be a source landscape, to individuals from surrounding areas with lower cover of useable habitat, and 3. Compare accuracy and cost among several commonly implemented survey techniques to identify the most effective and cost efficient method to consistently monitor bobwhite populations across their range long term. Status = ongoing.

With the success of the Wildlife Restoration Act, members of Congress decided to build upon these accomplishments and replicate the Pittman-Robertson Act for sport fish.

Sport Fish Restoration Program

The Federal Aid in Sport Fish Restoration Act, commonly referred to as the Dingle-Johnson Act, adopted by Congress on August 9, 1950, was modeled after the Pittman-Robertson Act, aimed at creating a similar program for the management, conservation, and restoration of fishery resources.

Funds to support the Federal Aid in Sport Fish Restoration programs are received from excise taxes on fishing equipment, fish finders, motorboat fuels, small engine fuels, and import duties. State agencies that sell fishing licenses are the only entities eligible to receive grant funds. Each state's share is based 60% on the number of its licensed anglers (fishermen) and 40% on the size of its land and water area.



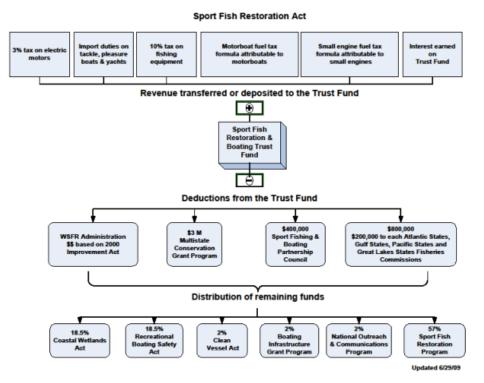
Amendments

The Sport Fish Restoration Act (SFR) has been amended 6 times since it was first adopted by Congress. Congressional amendments to the SFR Act occurred in 1984, 1991, 1992, 1998, 2004 and 2005. These amendments made changes to taxable items and tax rates as well as authorizations and distribution of the funds.

Revenues

Revenues from manufacturers' excise taxes on sport fishing equipment, import duties on fishing tackle, yachts and pleasure craft and a portion of the gasoline fuel tax attributable to small engines and motorboats are deposited or transferred into the Sport Fish Restoration and Boating Trust Fund (SFRBT) along with interest credited to the Fund.

Figure 6: Sport Fish Restoration Program Revenues



Apportionment

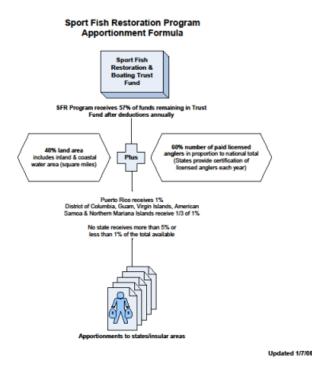
The SFR Act authorizes annual distributions from the SFRBTR Fund for the following:

- Administration of the Sport Fish Restoration Program
- Multistate Conservation Grant Program
- Atlantic, Gulf, Pacific, and Great Lakes States Fisheries Commissions
- Sport Fish and Boating Partnership Council

The remaining funds are allocated to the following programs according to the Act:

- Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) 18.5%
- Boating Safety 18.5% (Administered by U.S. Coast Guard)
- Clean Vessel Act 2%
- Boating Infrastructure 2%
- Recreational Boating and Fishing Foundation 2%
- Sport Fish Restoration 57% apportioned to states/DC/insular areas (includes funding for Aquatic Resource Education and Boating Access)

Figure 7: Sport Fish Restoration Program Apportionment



Example Projects in North Carolina

<u>Armstrong Hatchery Renovations – Capital Improvement Project (4K17)</u>. Estimated Cost = \$2,000,000 (\$1,500,000 F-105 federal funds and \$500,000 fishing license receipts). Fish hatcheries play a critical role in the fishery management activities conducted by the North Carolina Wildlife Resources Commission (Commission). Hatcheries are essential to managing recreational, put-and-take fisheries as well as providing fish for enhancement and restoration. The diversity of fishery programs available to the fishery managers and anglers in the state is dependent upon the ability to produce high-quality animals and the flexibility to produce the size and species required.

In North Carolina, there are over 1,000 miles of marginal trout waters, which are incapable of supporting sustainable wild trout populations. The Commission manages these waters through its hatchery supported and delayed harvest programs. These programs require substantial dedication of hatchery reared trout in order to remain viable. In 2006, North Carolina had an estimated 131,055 resident trout anglers (Responsive Management 2007). In 2008, anglers spent approximately 1 million days fishing for trout in hatchery supported and delayed harvest waters, and the total economic output associated with these trout fishing activities was estimated in excess of \$119 million dollars (Responsive Management 2009).

Management requests for hatchery reared trout have increased to a total of 908,698 catchable trout (10-inch) for 2013, fish currently in the hatchery system. These increases have been met through increased produc-

tion efficiencies and new technologies. However, the Commission's two primary cold water hatcheries are currently operating at capacity. In order for management biologists to continue to expand existing opportunities for anglers, there is a significant need for Commission hatcheries to provide increased numbers of catchable trout.

The Armstrong State Fish Hatchery (Armstrong) is currently producing and distributing approximately 336,000 catchable trout annually. Due to the design of the lower raceways and limit-



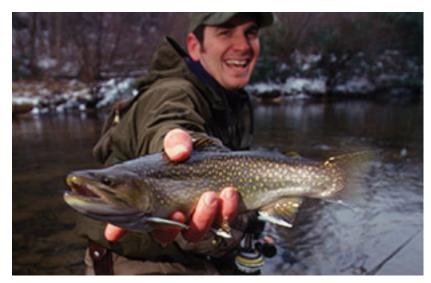
ed available water, increases in production are not currently possible. The inefficient use of available water during drought periods also makes it difficult to maintain this level of production. Renovation of the lower raceways at Armstrong will enable us to increase trout production to increase efficiency of water supplies and increase production capacity in order to meet many of the increasing requests for hatchery reared trout. Objective: To design and construct renovations of the lower raceways at Armstrong to increase catchable trout production for stocking in North Carolina's hatchery supported and delayed harvest waters. Status is ongoing.

<u>Stocked Trout Survival, Behavior, and Ecology in North Carolina Streams – Cooperative work with NCSU</u>. Estimated Cost = \$518,000 (\$388,500 F-98 federal funds and \$129,500 NCSU waived overhead). Stocking surface waters with hatchery-reared trout (Salmonidae) to support local recreational fisheries is common practice among state and federal agencies in the United States. Trout fishing is among the most popular freshwater fishing pursuits in the United States behind that of black bass and closely tied with panfish and catfish (U.S. Fish and Wildlife Service and U.S. Census Bureau 2006). According to the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, fishing in the United States is a \$42 billion industry. Of 30 million anglers in 2006, 25.4 million fished in freshwater. In North Carolina during 2008, 92,769 mountain trout anglers fished for 1.42 million angler-days and spent \$146 million (NCWRC 2009). Thus, the great demand for trout fishing compels substantial attention and effort from fishery and natural resource managers. In response to that demand, trout stocking is widespread and intensive; 70 federal hatcheries, 48 states, and 8 Canadian provinces stocked 276 million coldwater sport fishes during 1995-1996 (Heidinger 1999). These fishing survey statistics clearly document that trout fishing is economically important at national, state, and local scales.

The positive recreational and economic effects of trout stocking and associated fisheries have been widely recognized for decades. However, recent concerns for the biological, ecological, and economic efficacy of the practice require careful planning prior to fish stocking (Wiley et al. 1993, Johnson et al. 1995, Aprahamian et al. 2003). Trout stocking may be performed to meet a number of varying fishery objectives. Fish may be stocked to introduce a species where it is not extant, either historically or due to environmental changes, or trout may be stocked to supplement existing fisheries, and in many cases, the fishery is nearly or entirely dependent on stocking. Trout stocking may occur at two general size ranges; subharvestable-size fish may be stocked for harvest and are not expected to grow or reproduce. Catchable trout are often stocked in marginally suitable habitat during the fall or spring in water bodies where habitat becomes unsuitable for trout during the summer due to high temperature, low dissolved oxygen, or restricted flow.

Trout anglers are a diverse fishery constituency. While many trout anglers are content to catch and harvest recently stocked hatchery fish, a grow-

ing segment of trout anglers prefers a more naturalized fish and is less interested in harvesting fish (e.g., Taylor 1992, White 1992, Gigliotti and Peyton 1993). The most important reason anglers gave for trout fishing in North Carolina was for "the sport" (37%), and only a small number of anglers (10%) cited "catching fish for food" as their primary motivation (NCWRC 2007). Many state and federal agencies are seeking to accommodate those preferences in their coldwater stream management programs. A put-grow-and-take stocking and harvest regime integrates the use of hatchery-reared



fish to produce a more naturalized fish for anglers to pursue.

In North Carolina, two of the primary trout fishery management approaches implemented by the North Carolina Wildlife Resources Commission that incorporate stocking hatchery fish are Hatchery-Supported trout waters and Delayed-Harvest trout waters (Borawa et al. 1993, 2002). Hatchery-Supported trout waters are managed as put-and-take fisheries, wherein trout may be harvested immediately after they are stocked within the season duration all year (excluding March). Delayed-Harvest trout waters are managed to combine aspects of put-and-take and put-grow-and-take management approaches, with trout initially stocked during the fall (October) under no-harvest, catch-and-release angling regulations until late spring (early June) when they are available for harvest. These two complementary approaches to hatchery-supplemented trout fisheries are designed to provide quality fishing to multiple segments of the trout fishing constituency.

The effectiveness of a Delayed-Harvest fishery is highly dependent on the extended availability of stocked trout for angling, but angler perceptions, recent field assessments, and personal observations suggest that stocked fish may not persist in designated reaches for the expected prolonged periods (Wallace 2010). Repeated sampling in two Delayed-Harvest streams by Borawa et al. (2002) estimated that less than 20% of trout stocked during the fall survived through the following NCWRC winter. Other researchers have examined survival and mortality of naturalized and DESIGNATED PUBLIC MOUNTAIN stocked trout in other fisheries (e.g., Besler et al. 2005, Baird et al. 2006, Quinn TROUT WATER and Kwak 2011), but such statistics for Delayed-Harvest waters are rather an-AYED ecdotal for this specialized management approach. Furthermore, the extent, HARVFST dynamics, and mechanisms of the limited persistence of stocked trout re-ORER 1 TO FOLLOWING FIRST SATURDAY IN ILIN TROUT MAY BE POSSESSED main unknown. Likely contributing factors include migration, natural mortali-IATCHERY SUPPORTEI REGULATIONS APPLY ty, live-release hooking mortality, and illegal harvest. Research is needed to define the extent and causes of stocked trout migration and mortality among species and to elucidate the mechanisms responsible. Objective: The goal of this research is to define the extent and causes of stocked trout migration and mortality among species and to elucidate the mechanisms responsible. We will combine intensive and extensive studies to determine the persistence of stocked trout in designated reaches and streams, and then the associated processes and mechanisms will be sought in a subset of stream reaches. Fish behavior and ecology will be examined to gain an understanding of the factors that may affect stocked fish growth, condition, and survival. Results may be used to inform and guide management actions to improve resource management strategies and to educate fishery constituents and the public. Status is ongoing.

State Wildlife Grant (SWG)

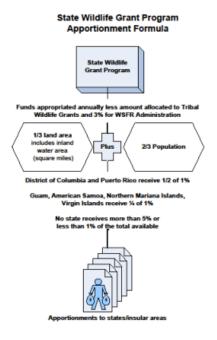
Congress appropriates funds for the State Wildlife Grant Program on an annual basis. Funds are apportioned to States, commonwealths, and U.S. territories based on a formula.

The State and Tribal Wildlife Grants Program provides federal money to every state and territory for cost-effective conservation aimed at preventing wildlife from becoming endangered and keeping common species common. For more than a decade, states and their partners have used this program to combat invasive species, protect natural areas, restore habitat, conduct research, and implement monitoring programs that will provide better data on imperiled species and their habitats. The more than 6,300-member Teaming With Wildlife Coalition includes state fish and wildlife agencies, wildlife biologists, hunters, anglers, birdwatchers, hikers, nature-based businesses and other conservationists who support the goal of restoring and conserving our nation's wildlife. A State and Federal Partnership for Conserving Species & Ecosystems Funding through the State and Tribal Wildlife Grants Program enables the implementation State Wildlife Action Plans.

These plans, which have been developed by every state and territory, are a primary tool for keeping fish and wildlife healthy and off the list of federally threatened and endangered species. State Wildlife Action Plans are unique in that they were developed by the nation's top wildlife conservationists in collaboration with private citizens and community partners.

Revenues and Apportionment

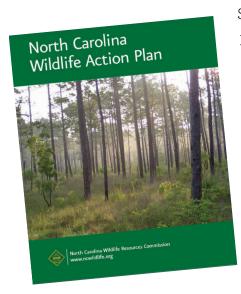
Figure 8: State Wildlife Grants Apportionment



Updated 1/7/08

Example Projects in North Carolina

<u>SWG 2010 NC Wildlife Action Plan Coordination –Supports WRC staff activities</u>. Estimated Cost = \$555,289 (\$363,967 T-15 federal funds and \$191,322 nongame and endangered species fund). The NC Wildlife Resources Commission's (Commission) purpose is to manage, restore, and conserve the state's wildlife resources. This task requires cooperative efforts by many different stakeholders to achieve the goals and strategies outlined in the NC Wildlife Action Plan (Plan). There is a need for coordinated efforts by the Commission to foster participation and track achievements of other organizations and private citizens to conserve North Carolina's wildlife diversity and habitats. Additionally, there is a need to update and produce the Plan by 2015 as required by the U.S. Fish and Wildlife Service (USFWS).



Since 2001, the U.S. Congress has made funds available to the states to plan and conduct conservation activities for a broad range of species and their habitats through the State Wildlife Grants Program. A mandatory condition of this program was completion of a comprehensive wildlife conservation plan. North Carolina's Wildlife Action Plan was accepted by the USFWS in fall of 2005. The Plan provides a guide for the sound management of North Carolina's fish and wildlife resources. It identifies important wildlife resources and habitats across the state and sets a mechanism to determine priorities for conserving those resources. It also provides guidance for measuring the effectiveness of the different methodologies through monitoring of the activities and results. The inclusion of conservation partners in developing and implementing key conservation objectives is also an important attribute of the Plan.

This project will provide the necessary coordination and direct resources to-

wards working with Plan stakeholders and assessing its performance in meeting conservation objectives. Objective: To implement and track implementation progress of North Carolina's 2005 Wildlife Action Plan in coordination with conservation and scientific communities, and to revise and produce the Wildlife Action Plan. This includes incorporating climate change impacts per USFWS guidance issued in 2007. Status is ongoing.

<u>SWG 2013 Refining protocols for the captive propagation of Alasmidonta raveneliana, Elliptio steinstansana, and Planorbella magnifica – Cooperative work with NCSU.</u> Estimated Cost = \$46,154 (\$30,000 T-24 federal funds and \$16,154 NCSU waived overhead). There is a need to refine hatchery techniques for the NC Wildlife Action Plan's priority species. These projects will enable future attempts to restore or augment populations of these species. Freshwater stream fauna throughout North America have been imperiled by centuries of land-use practices that have shown little regard for the health of aquatic species. Changes to the phyiscal, chemical and biological conditions in surface waters have driven many native freshwater invertebrates to the

brink of extinction. More than 70% of the state's freshwater mussels are considered imperiled (Bogan 2002), and similar declines have been noted througout the natural home range of the majority of North America's freshwater mussel species. A growing number of aquatic gastropods are also considered imperiled (Lydeard 2004).

The Tar River Spinymussel (*Elliptio steinstansana*) in NC is limited to a small number of refuge streams and is federally endangered and imperiled throughout its natural range in the Tar and Neuse River Basins in North Carolina. These remnant populations are limited in distribution and abundance. A number of factors, including erosion and sedimentation appear to have contributed to its decline. Few individuals have been encountered after extensive survey effort. Population declines further exacerbate the problem as the declining distribution and abundance increases the spatial distance between adult mussels and potentially prevents spawning.

The Applachian Elktoe (*Alasmidonta raveneliana*) is found at geographically fragmented locations in Western North Carolina and Tennessee. In Tennessee, it is only found in a short reach of the Nolichucky River. In North Carolina, relatively small, scattered populations still remain in the Nolichucky, Upper French Broad, and Little Tennessee River systems (USFWS 2003). The species is imperiled and was federally listed as endangered in 1994. Any additional impacts to this population could result in its extirpation. The Applachian Elktoe predominately resides in lotic rocky streams with a stable substrate (Fridell 2003). No single specific factor has been associated with its extirpation from



Applachian Elktoe

rivers systems in Tennessee and NC. However, water impoundments that limit stream flow, and construction related activities that disrupt and alter stream sediments have been suggested as reasons for their decline (Fridell 2003). The rapid expansion of the distribution and abundance of the nonnative bivalve, Corbicula fluminea, which resides in the Little Tennessee River and other systems in which A. raveneliana is found, may also be contributing to its decline.

A global decline in the distribution and abundance of aquatic gastropods has been documented. In North Carolina, the Magnificent Ramshorn (*Planorbella magnifica*) is one of the most imperiled of remaining gastropod fauna. The Magnificent Ramshorn is limited to a few privately owned small ponds in New Hanover County in eastern North Carolina. Three captive populations also serve as refugia for remaining individuals. Although relatively fecund in captivity, opportunities for population augmentation or reestablishment of populations within its previously known geographic range may be limited. The potential augmentation of natural populations of freshwater mussels with captive reared stock is dependent on our ability to sustain and support the growth of juveniles in captivity until they reach a sufficient size for their release into streams. We propose studies to refine protocols for rearing Alasmidonta raveneliana and Elliptio steinstansana, and to propagate *Planorbella magnifica*. The need for these actions is supported on pages 295, 298, 305, 309, 367, 374, 378, 383, and 387 of the NC Wildlife Action Plan. Objective: To refine the use of *Bacillus subtilis* as a constituent of the captive diet of Applachian Elktoe (*Alasmidonta raveneliana*); determine if Fathead Minnows (*Pimephales promelas*) and/or Golden Shiners (*Notemigonus crysoleucas*) can be used as hosts for the captive propagation of Tar River Spinymussel (*E. steinstansana*) and propagate Magnificent Ramshorn (*Planorbella magnifica*). In addition to addressing three key questions concerning the propagation of the noted species in captivity, the proposed studies will expand the size of their captive populations. Status is ongoing.

Cooperative Endangered Species Conservation Fund (Section 6)

Because more than half of all species currently listed as endangered or threatened spend at least part of their life cycle on privately owned lands, the U.S. Fish and Wildlife Service (Service) recognized that success in conserving species will ultimately depend on working cooperatively with landowners, communities, and Tribes to foster voluntary stewardship efforts on private lands. States play a key role in catalyzing these efforts.

A variety of tools are available under the Endangered Species Act (ESA) to help States and landowners plan and implement projects to conserve species. One of the tools, the Cooperative Endangered Species Conservation Fund (section 6 of the ESA) provides grants to States and Territories to participate in a wide array of voluntary conservation projects for candidate, proposed, and listed species. The program provides funding to states and territories for species and habitat conservation actions on non-federal lands. States and territories must contribute a minimum non-federal match of 25 percent of the estimated program costs of approved projects, or 10 percent when two or more States or Territories implement a joint project. A state or territory must currently have, or enter into, a cooperative agreement with the Secretary of the Interior to receive grants. Most states and territories have entered into these agreements for both plant and animal species.



Federally Endangered Carolina Northern Flying Squirrel



Federally Endangered Green Salamander

Section 6 Grant Programs

This table shows the different grant programs funded through the Cooperative Endangered Species Conservation Fund, with the funding levels for this fiscal year.

Grant Program	Purpose	Species Benefiting	Applicants	Competition	Financial Match Requirement*
Conservation Grants	implementation of conservation projects	federally listed threat- ened or endangered species	States that have en- tered into cooperative agreements with the Service for endangered and threatened species conservation	formula	25% of estimated proj- ect cost; or 10% when two or more States or Territories implement a joint project
Recovery Land Acquisition	acquisition of hab- itat in support of approved recovery goals or objectives	federally listed threat- ened or endangered species	States that have en- tered into cooperative agreements with the Service for endangered and threatened species conservation	tegional competition	25% of estimated proj- ect cost; or 10% when two or more States or Territories implement a joint project
Habitat Conservation Planning Assistance	support development of Habitat Conserva- tion Plans (HCPs)	federally listed threat- ened or endangered species, proposed and candidate species, and unlisted species pro- posed to be covered by the HCP	States that have en- tered into cooperative agreements with the Service for endangered and threatened species conservation	national competition	25% of estimated proj- ect cost; or 10% when two or more States or Territories implement a joint project
Habitat Conservation Plan (HCP) Land Acquisition	acquisition of land associated with ap- proved HCPs	federally listed threat- ened or endangered species, unlisted (including State-listed species), proposed and candidate species cov- ered by the HCP**	States that have en- tered into cooperative agreements with the Service for endangered and threatened species conservation	national competition	25% of estimated proj- ect cost; or 10% when two or more States or Territories implement a joint project

Example Projects in North Carolina

<u>Conservation of habitat for the Spotfin Chub, Littlewing Pearlymussel, and Appalachian Elktoe –Land Acquisition Project (4N01)</u>. Estimated Cost = \$297,500 (\$142,500 E-18 federal funds and \$155,000 Clean Water Management trust funds – through Land Trust for the Little Tennessee). There is an urgent need to provide a refuge of protected habitat for the conservation and recovery of the federally-listed Spotfin Chub (Recovery Plan Number [RPN] 11), Littlewing Pearlymussel (RPN 4), and Appalachian Elktoe (RPN 5). The NC Wildlife Action Plan (NCWRC 2005, pages 295- 296) lists the Spotfin Chub, Littlewing Pearlymussel, and Appalachian Elktoe as priority aquatic species in the Little Tennessee River basin, and their habitats in the main stem Little Tennessee River as a priority area for freshwater conservation. Providing support for land protection (e.g., property purchase, conservation easements) is among the priority conservation actions for the area (NCWRC 2005, page 299).

Acquisition and protection of land along the Little Tennessee River would contribute to stated recovery goals for the Appalachian Elktoe (USFWS 1996). Goal 1 of the recovery plan is to maintain existing populations and habitat". This proposed acquisition would qualify as "essential habitat" as it is within the portion of the Little Tennessee River which is designated critical habitat for the Appalachian Elktoe (Federal Register 2002). The urgent need for protection of habitat is underscored by the latest five-year review (USFWS 2009) of the species which states that "The amount of suitable habitat in the reach of the Little Tennessee River supporting the Appalachian elktoe appears to be declining. This population occurs in the reach of the river between the dam at Lake Emory below the city of Franklin, North Carolina and the backwaters of Fontana



Releasing spotfin chub into Cheoah River

Reservoir." The five-year review also states that there is a need to "continue working with partners to establish conservation easements and restore forested buffers and in-stream habitat" which would be accomplished by this action. Acquisition of the Duvall tracts would also help meet goal 2.1 of the recovery plan (USFWS 1996) which calls for eliminating threats to the species' survival. A major threat to the survival of the Appalachian Elktoe is thought to be habitat degradation from siltation (USFWS 1996). Acquisition of the Duvall tract will help provide a permanently protected and managed intact riparian buffer and reduce siltation and runoff.

Acquiring and protecting the Duvall tracts also support the recovery plan of the Spotfin Chub. Goal 1 of the recovery plan (USFWS 1983) calls for protection of Spotfin Chub habitat. As with the Appalachian Elktoe, this parcel borders designated critical habitat for the Spotfin Chub (USFWS 1983). In a like manner, this acquisition would also help meet goal 1 (protecting habitat) of the Littlewing Pearlymussel recovery plan (USFWS 1989).

Butler (2002b) assessed conservation priorities for fishes in the Southern Appalachian Ecoregion (SAE, as defined by the US Fish & Wildlife Service). In North Carolina, the SAE includes all Tennessee River tributary basins, as well as the New, upper Roanoke, Yadkin-Pee Dee, Catawba, and Savannah basins in the Blue Ridge and eastern foothills. That effort prioritized stream systems having extant populations of imperiled fishes; identified fishes with a relatively high potential for imperilment and deemed to have the greatest need for conservation status assessment; and proposed critical research and conservation needs for those fishes. While federally-listed species were obviously high priorities, emphasis was placed on the non-federally listed fish fauna of the SAE with the intent of preventing further declines. The Little Tennessee and Hiwassee river systems (primarily in North Carolina) were identified among the highest priority stream systems in the SAE for fish conservation. In addition, Butler (2002a) identified the upper Little Tennessee basin in North Carolina and Georgia as one of the highest priority areas for crayfish conservation in the SAE.

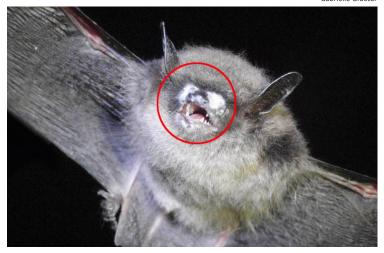
The NC Wildlife Action Plan and the recovery plans for these three federally-listed species outline the need for landscape-level habitat conservation to maintain buffers and forest. While the current Needmore Game Lands provide a degree of watershed protection, additional riparian land conservation is needed to protect and connect the system's important aquatic habitat. This will allow the Commission to expand a protected core area that can serve as a refuge for these three federally-listed species. Objective: The objective of this project is for the Commission to acquire for perpetual management approximately 39 acres with 2,600 feet of stream footage on the Little Tennessee River. This will help form a core area of protected habitat for Spotfin Chub, Littlewing Pearlymussel, Appalachian Elktoe, and Sicklefin Redhorse conservation and augmentation. This will help the Commission meet the larger objectives of preventing the extinction of and eventually leading to the recovery of these federally-listed species. Status is ongoing.

White-Nose Syndrome Grant 2013 Funds - Wildlife Management Project – Estimated Cost = \$52,500 (\$52,500 Federal funds and \$0 State Funds. A diverse assemblage of bat species utilizes the wide range of habitats available in North Carolina. There are 17 species of bats found in North Carolina and 8 of those are federally and/or state listed bat species. North Carolina has 9 species of cave hibernating bats and 20 communal hibernacula that commonly contain greater than 50 bats. However, there are more than 95 known hibernacula that support smaller numbers of bats. The wildlife health crisis named White-nose Syndrome (WNS) was first documented in New York in the winter of 2006-07 (see www.whitenosesyndrome.org). White-nose Syndrome is caused by a newly identified fungus, Pseudogymnoascus destructans, which thrives in the cold and humid conditions characteristic of the caves and mines used by bats for hibernation. Since being documented in New York, WNS has spread north, south, and westward, and has now been documented in 5 Canadian provinces and 29 states, including North Carolina. WNS was first detected in North Carolina during in the winter of 2011 and is now documented in a total of eight counties, with an additional two counties considered suspect for WNS. Prior to the discovery of WNS in the state, we developed "North Carolina's White-nose

Gabrielle Graeter

Syndrome Surveillance and Response Plan" in collaboration with conservation partners (www.whitenosesyndrome.org/resource/white-nose-syndrome-surveillance-and-response-plan-north-carolina). In 2009-2011, the Plan provided guidance on protocols in the early stages of surveillance, and today, the Plan continues to be a critical tool for bat conservation in the state. Only three years later, surveys in January – March 2014 in North Carolina showed very steep declines in many of our cave hibernating species. At some sites, the total

number of hibernating bats has decreased by as much as 99% since discovery of the disease. For example, at an Avery county mine that was confirmed WNS+ in winter 2011, we have observed a 98.6% decrease from the average total number of bats present each winter prior to WNS (from approximately 1,200 to 17 bats), including a 99.4% decline in Perimyotis subflavus and a 99.6% decline in Myotis species. Likewise, at a hibernacula in Haywood County that was confirmed WNS+ in February 2012, we've documented a 98.5% decline in the total number of hibernating bats since WNS arrived (from about 3700 to 55 bats),



Little brown bat with white-nose syndrome

including a 99.5% decrease in Perimyotis subflavus and a 90.9% decline in Myotis species. At this Haywood county site, the number of hibernating Myotis leibii has been relatively stable and will be an interesting population to monitor in the future. In fact, if you remove the Myotis leibii from the general assessment of Myotis at this site, the decline for all other Myotis species is much steeper – 98.8%. In summary, the most affected cave bat species in NC appear to be Myotis septentrionalis, M. lucifugus, and Perimyotis subflavus. Direct mortality of native wildlife due to exotic or invasive species is identified as a threat in the North Carolina Wildlife Action Plan (NCWAP; p. 34) and WNS appears to be this type of threat. The NCWAP also states, "Currently, the most critical information needs are basic surveys, inventories, research and monitoring, especially for small mammals and bats across the state" (NCWAP,pgs. 90 & 478).

United States Coast Guard Recreational Boating Safety Grant (RBS)

The Recreational Boating Safety (RBS) Federal financial assistance program was first established by the Federal Boat Safety Act (FBSA) of 1971 to "encourage greater State participation and uniformity in boating safety efforts, and particularly to permit the States to assume the greater share of boating safety education, assistance, and enforcement activities" (46 U.S.C. 13101). The Secretary of Transportation delegated administration of the program to the U.S. Coast Guard. Funding for the grants was provided from general revenue through the Coast Guard's Operating Expenses (OE) appropriations.

Authorization for the RBS grant program expired in 1979, but was reestablished by the Recreational Boating Safety and Facilities Improvement Act of 1980 (the Biaggi Act). The Biaggi Act also provided that a portion

of Federal excise tax receipts attributable to motorboat fuel use would be transferred from the Highway Trust Fund to a new Recreational Boating Safety fund to provide monies for the program. In utilizing the fuel taxes being paid by boaters, the Biaggi Act ensured that those receiving the benefits of the program would also pay the costs. The first appropriations under this new mechanism were approved in 1982.

The Aquatic Resources (Wallop-Breaux) Trust Fund was established in the Deficit Reduction Act of 1984 to improve funding to the States for the RBS program administered by the Coast Guard and the Sport Fish Restoration program administered by the U.S. Fish and Wildlife Service. The legislation provided that the two separate funds for those programs would become individual accounts under the single umbrella of the new Wallop-Breaux fund. Trust fund receipts consist of Federal excise taxes attributable to motorboat and small-engine fuel use and on sport fishing equipment, along with import duties on fishing equipment, yachts and pleasure craft. The Boat Safety Account is funded solely from motorboat fuel taxes. The Sport Fish Restoration Account receives a portion of the motorboat fuel tax as well as all other trust fund receipts. The State grant programs funded through Wallop-Breaux are excellent examples of "user pays/user benefits" since all monies deposited into the trust fund are paid by boaters and fishermen. No general tax revenues are involved.

Eligibility

To be eligible to participate in the state Recreational Boating Safety grant program, a state recreational boating safety program must have:

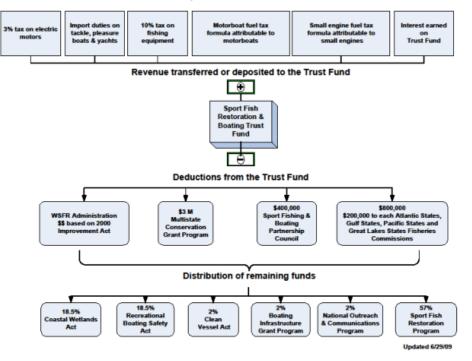
- A vessel numbering system.
- A cooperative boating safety assistance program with the Coast Guard.
- Sufficient patrol and other activity to ensure adequate enforcement of applicable state boating safety laws and regulations.
- A state boating safety education program that includes the dissemination of information concerning the hazards of operating a vessel under the influence of alcohol or drugs.
- A marine casualty reporting system.

All states and U.S. territories participate in the RBS grant program. Alaska received conditional approval of its program in 1999 pending enactment of additional legislation.

Revenues

Revenues from manufacturers' excise taxes on sport fishing equipment, import duties on fishing tackle, yachts and pleasure craft and a portion of the gasoline fuel tax attributable to small engines and motorboats are deposited or transferred into the Sport Fish Restoration and Boating Trust Fund (SFRBT) along with interest credited to the Fund.

Figure 9 Recreational Boating Safety Grant Revenues



Sport Fish Restoration Act

Apportionment

Of the funds appropriated for the state grant program, the Coast Guard is authorized to retain not more than two percent for the costs of administering the state program, and up to five percent for grants to national nonprofit public service organizations to conduct national boating safety activities. The balance is allocated to the states as follows:

- One-third allocated equally among participating states.
- One-third allocated in the same ratio as the number of vessels numbered in the state bears to the number of vessels numbered in all participating states.
- One-third allocated in the same ratio as the amount of the state's prior-year expenditures for boating safety bears to the total prior-year expenditures for boating safety of all participating states.

A state cannot receive more than one-half of the total cost of its RBS Program, and must provide matching funds from general state revenues, undocumented vessel numbering and license fees, or state marine fuels taxes.

Allowable Uses

Federal funds provided for a state's boating safety program may be used for any of the following:

- Providing facilities, equipment, and supplies for boating safety education and law enforcement, including purchase, operation, maintenance, and repair.
- Training personnel in skills related to boating safety and to the enforcement of boating safety laws and regulations.
- Providing public boating safety education, including educational programs and lectures, to the boating community and the public school system.
- Acquiring, constructing, or repairing public access sites used primarily by recreational boaters.
- Conducting boating safety inspections and marine casualty investigations.
- Establishing and maintaining emergency or search and rescue facilities, and providing emergency or search and rescue assistance.
- Establishing and maintaining waterway markers and other appropriate aids to navigation.
- Providing state recreational vessel numbering and titling programs.

Example Project in North Carolina

<u>Recreational Boating Safety Education and Enforcement</u> – Cost = \$3,034,786 (\$1,427,855 federal funds and \$1,606,931 state funds). With the passage of the Federal Boating Act of 1958, states became essential partners in boating safety. In 1959, the North Carolina General Assembly adopted Chapter 75A, the "Boating and Water Safety Act". G.S. 75A-1 reads "It is the policy of this State to promote safety for persons and property in and connected with the use, operation, and equipment of vessels, and to promote uniformity of laws relating thereto." The Wildlife Resources Commission is responsible for enforcing and administering the provisions of this Chapter.



The Recreational Boating Safety grant is utilized to implement the NCWRC strategic plan. In 2009, the Wildlife Resources Commission revised its strategic plan and mission statement in direct alignment with enabling legislation and statutory authorities. The mission statement, "To conserve North Carolina's wildlife resources and their habitats and provide programs and opportunities that allow hunters, anglers, boaters and other outdoor enthusiasts to enjoy wildlife-associated recreation", directs the agency's daily work. Goal 1, "All North Carolina citizens have the opportunity for safe and readily available participation in hunting, fishing, boating and other wildlife-related activities" charges Commission staff specifically with providing opportunities for participation in a safe boating environment.

The main focus of the Boating Safety Program is to protect the lives, welfare, and property of people using the states waters. A secondary goal is to provide services to enhance the enjoyment of those who participate in water sports.

The NCWRC uses a multifaceted approach to make the states waterways and those that use them safe and enjoyable. The NCWRC Division of Law Enforcement is responsible for law enforcement and education for the boating public. The division utilizes a proactive approach to law enforcement to include high visibility patrol, public outreach and education, public safety, and free courtesy boating safety inspections. The division also provides courses for mandatory boater education as required by G.S. 75A-16.2. The division is responsible for investigating all boating accidents that occur in state waters and reporting the accident information into the national Boat Accident Reporting Database maintained by the US Coast Guard.

Protection of Federal Grant Funds

In this era of dire economic times for state governments across the country, elected officials face daunting challenges in finding ways to fund essential governmental services. Some are tempted to dip into any fund that carries a positive balance in order to find money. A few look at the Game and Fish Fund with dollar signs in their eyes. Not only is this short-sighted in terms of adversely affecting the state's ability to sustain wildlife and fisheries resources that provide the base upon which hunting and fishing and the related huge economic engine depend, but it is illegal. Thankfully, our money, as hunters and anglers, is protected from such raids by both a provision of the Pittman-Robertson Act (P-R) and a provision of state law.

Carl Shoemaker, an attorney and journalist, is referred to by some as the "father" of the P-R program. Shoemaker began his career as an attorney in Ohio, later tiring of the profession and moving to Oregon and becoming owner and publisher of the Roseburg Evening News. His interest in conservation matters eventually led to his appointment as head of the Oregon Fish and Game Commission. Shoemaker frequently travelled to Washington, D.C. on state business, and learned



his way around. In 1930, he was appointed special investigator for the newly-created U.S. Senate Special Committee on Conservation of Wildlife Resources. Shoemaker wrote the Federal Aid in Wildlife Restoration bill, and did the necessary work in Washington to secure legislative sponsors. Shoemaker called Congressman A. Willis Robertson of Virginia and invited him to lunch in the Senate Dining Room. Robertson was chair of the House Select Committee on Conservation of Wildlife Resources. Before being elected to Congress, Robertson had headed the Virginia Game and Inland Fisheries Commission.

Shoemaker and Robertson met for lunch, and Shoemaker handed Robertson a copy of the bill to read. Robertson read the bill and asked Shoemaker for a pencil. He inserted a short clause, and said, "With this amendment I have inserted I will gladly introduce the bill in the House."

Robertson's Words

The words Robertson inserted prohibited states from tampering with or diverting their own hunting license dollars and receiving the federal matching funds provided by the bill. What he wrote following the enacting clause itself, read, "...and which shall include a prohibition against the diversion of license fees paid by hunters for any other purpose than the administration of said State fish and game department..."

Robertson's experience on the Virginia Game and Inland Fisheries Commission had taught him that state legislatures, in that era, were not above taking hunting and fishing license receipts from state game and fish agencies and using them for other purposes. This was a common occurrence in those days, but Robertson put a stop to it with 29 penciled-in words. Those simple, straightforward words have meant many millions of dollars for wildlife conservation work over the past ¾ century.

In order to qualify for funding under the Act, states were required to pass legislation "assenting" to the provisions of Federal Aid to Wildlife Restoration, specifically Robertson's 29 words. Within 12 months of the passage of the Act, 43 of the 48 states had passed the required "assent legislation", prohibiting the use of hunting license revenue for any purpose other than to operate the wildlife agency. In time, the remaining states passed the required legislation, with all states then becoming eligible to receive 3-to-1 matching funds for wildlife work.

US Code Requiring Assent

16 U.S. Code § 669 - Cooperation of Secretary of the Interior with States; conditions The Secretary of the Interior is authorized to cooperate with the States, through their respective State fish and game departments, in wildlife- restoration projects as hereinafter in this chapter set forth; but no money apportioned under this chapter to any State shall be expended therein until its legislature, or other State agency authorized by the State constitution to make laws governing the conservation of wildlife, shall have assented to the provision of this chapter and shall have passed laws for the conservation of wildlife which shall include a prohibition against the diversion of license fees paid by hunters for any other purpose than the administration of said State fish and game department, except that, until the final adjournment of the first regular session of the legislature held after September 2, 1937, the assent of the Governor of the State shall be sufficient. The Secretary of the Interior and the State fish and game department of each State accepting the benefits of this chapter, shall agree upon the wildlife-restoration projects to be aided in such State under the terms of this chapter and all projects shall conform to the standards fixed by the Secretary of the Interior.

North Carolina's Assent Statute

After the passage of the Wildlife Restoration Act (P-R), North Carolina adopted the following legislation in 1939.

\$ 113-307.1. Legislative assent to specific federal acts.

(a) The consent of the General Assembly of North Carolina is hereby given to the making by the Congress of the United States, or under its authority, of all such rules and regulations as the federal government shall determine to be needful in respect to game animals, game and nongame birds, and fish on such lands in the western part of North Carolina as shall have been, or may hereafter be, purchased by the United States under the terms of the act of Congress of March 1, 1911, entitled "An act to enable any state to cooperate with any other state or states, or with the United States, for the protection of the watersheds of navigable streams, and to appoint a commission for the acquisition of lands for the purposes of conserving the navigability of navigable rivers" (36 Stat. 961), and acts of Congress supplementary thereto and amendatory thereof, and in or on the waters thereon.

Nothing in this subsection shall be construed as conveying the ownership of wildlife from the State of North Carolina or permit the trapping, hunting, or transportation of any game animals, game or nongame birds, or fish by any person, including any agency, department, or instrumentality of the United States or agents thereof, on the lands in North Carolina, as shall have been or may hereafter be purchased by the United States under the terms of any act of Congress, except in accordance with the provisions of this Subchapter and its implementing regulations. Provided, that the provisions of G.S. 113-39 apply with respect to licenses.

Any person, including employees or agents of any department or instrumentality of the United States, violating the provisions of this subsection is guilty of a Class 1 misdemeanor.

(b) The State of North Carolina hereby assents to the provisions of the act of Congress entitled "An act to provide that the United States shall aid the states in wildlife restoration projects, and for other purposes," approved September 2, 1937 (Public Law 415, 75th Congress), and the Wildlife Resources Commission is hereby authorized, empowered, and directed to perform such acts as may be necessary to the conduct

and establishment of cooperative wildlife restoration projects, as defined in said act of Congress, in compliance with said act and rules and regulations promulgated by the Secretary of the Interior thereunder; and no funds accruing to the State of North Carolina from license fees paid by hunters shall be diverted for any other purpose than the protection and propagation of game and wildlife in North Carolina and administration of the laws enacted for such purposes, which laws are and shall be administered by the Wildlife Resources Commission.

(c) Assent is hereby given to the provisions of the act of Congress entitled "An act to provide that the United States shall aid the states in fish restoration and management projects, and for other purposes," approved August 9, 1950 (Public Law 681, 81st Congress), and the Wildlife Resources Commission is hereby authorized, empowered, and directed to perform such acts as may be necessary to the conduct and establishment of cooperative fish restoration projects, as defined in said act of Congress, in compliance with said act and rules and regulations promulgated by the Secretary of the Interior thereunder; and no funds accruing to the State of North Carolina from license fees paid by fishermen shall be directed for any other purpose than the administration of the Wildlife Resources Commission and for the protection, propagation, preservation, and investigation of fish and wildlife.

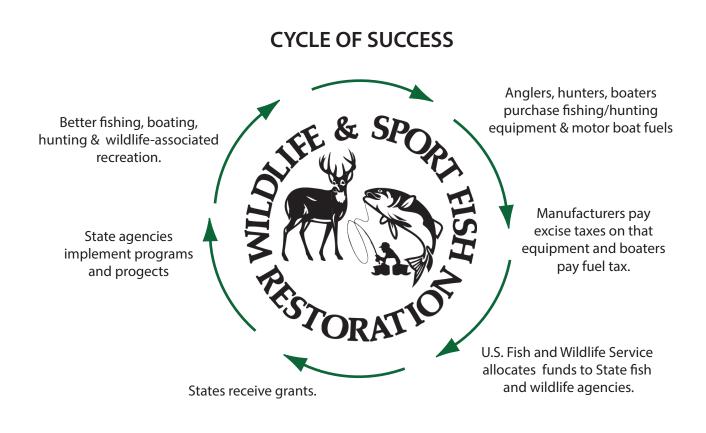
(d) If as a precondition to receiving funds under any cooperative program there must be a separation of license revenues received from certain classes of licensees and utilization of such revenues for limited purposes, the Wildlife Resources Commission is directed to make such arrangements for separate accounting within the Wildlife Resources Fund, or for separate funding, as may be necessary to insure the use of the revenues for the required purposes and eligibility for the cooperative funds. This subsection applies whether the cooperative program is with a public or private agency and whether the Wildlife Resources Commission acts alone on behalf of the State or in conjunction with some other State agency.

Combined with the protections in federal law, this state statute has guarded North Carolina's hunting and fishing license fees for over 75 years. While other "trust funds" and interest bearing accounts have been raided throughout the years, the protections afforded by this assent legislation have proven invaluable.



Federal Grant Cycle of Success

This graphic summarizes the entire federal grant process. It succinctly illustrates the user pay/user benefit model.



Conclusion

Federal grant revenues compromised 32% of the Wildlife Resources Commission's revenues in Fiscal Year 2014. Six years ago that number was 21%. The Commission has continued to rely more heavily on federal grants as state appropriations have declined. However, market fluctuations in sales of firearms and ammunition as sources of some federal grants will affect available funding levels. State wildlife agencies will be searching for additional revenue sources and new customers. The Commission has increased participation in historically declining demographics through marketing and outreach. The key to the future of conservation and the economy it supports is a balanced approach to funding sources in the long term.