





The Benefits to Business from Hunting and Fishing Excise Taxes

SOUTHWICK ASSOCIATES
FISH AND WILDLIFE ECONOMICS AND STATISTICS

Andrew Loftus Consulting
Specializing in Natural Resources Services

SPORT FISH & WILDLIFE RESTORATION



Imagine a solid business investment that routinely returns over 1,000% annually to your company. However, there's no need to imagine as sportfishing, hunting and shooting sports manufacturers have enjoyed such an investment for more than 60 years.

A CYCLE OF SUCCESS

Every three months, manufacturers and importers of fishing, hunting, and shooting-sports equipment write checks to the federal government. These excise-tax payments—10% to 11% on most products—can be seen as an investment by those companies in their own future. That's because the excise-tax funds are specifically dedicated *by law* to the maintenance and enhancement of America's fish and wildlife populations on which the future of those companies depends.

On a basic level, the formula for the excise-tax-funded Wildlife and Sport Fish Restoration programs is simple. Abundant, sustainable wildlife and fish populations yield abundant and diverse hunting and fishing opportunities. Sportsmen and women respond to those opportunities by purchasing hunting, fishing, and target shooting equipment manufactured by the companies that pay the tax.

To a large extent, everybody wins. Populations of fish and wildlife benefit from the ongoing and improved management this funding makes possible. Hunters and anglers benefit from the continuation and improvement of opportunities to hunt and fish. Related industries benefit from continued and often increased sales. Even non-game species benefit as a result of improved habitat and other environmental enhancements.

INVESTMENTS THAT PAY OFF

These relationships are often so direct that the excise monies paid by industry can be viewed not as taxes but as purposeful business investments that generate measurable returns. As a very general example, excise-tax collections for Wildlife Restoration from 1970 to 2006 averaged $251 million per year. Over the same period, hunters and shooters purchased an average of roughly $3.1 billion (wholesale value) in tax-related items per year (all figures in 2009 dollars). This results in an estimated average annual return on investment to industry of approximately 1,100%. Considering the poor quality hunting available in the 1930s, the returns are impressive.

Did you know...

BETWEEN 1970 AND 2006, hunting and shooting sports manufacturers saw a 1,000% annual return on their excise tax investments. Between 1955 and 2006, sport fishing manufacturers saw a 2,157% annual return on excise taxes paid.

The Sport Fish Restoration program has shown similar outstanding returns over time. Excise-tax collections and import duties averaged $110 million annually between 1955 and 2006 (equipment only, not motorboat fuels). At the same time, wholesale-adjusted purchases of taxable fishing equipment by anglers averaged $2.3 billion per year, resulting in an average annual return on investment of 2,157%.

Not all individual fish or wildlife projects show such huge returns. Some are less, a few are even greater. And the nature of some projects is such that a return simply can't be quantified. However, today's $30 billion hunting and fishing equipment industries



have been built on a foundation of plentiful hunting and fishing opportunities—thanks to the Sport Fish and Wildlife Restoration excise taxes paid by business. Follow along through this summary report to see precisely how such returns can happen. You'll find that the sound management of fish and wildlife populations can be very good business indeed.

PROTECTED MONEY

It's important to note first that federal excise taxes on fishing and hunting equipment existed long before they were dedicated to improve fisheries and wildlife. However, conservation leaders, politicians, and businesses of the day (1937 for wildlife and 1950 for sport fishing) recognized the need for a stable funding source to bolster America's struggling wildlife and sport fish populations and redirected the taxes specifically to fish and wildlife conservation.

Not only did they capture these funds for sport fish and wildlife purposes, but they protected them in unique ways. By federal law, these are permanent appropriations that must go to the respective Wildlife or Sport Fish Restoration programs. Also, all funds "must remain available until expended."

That means in times of tight budgets and political maneuvering, Congress can't divert these monies elsewhere. This is not a small matter. Excise-tax collections in 2009 for Sport Fish Restoration topped $667 million (including gas taxes paid by recreational boaters). For Wildlife Restoration, the 2009 figure was more than $484 million.

THEN & NOW

BY 1950, POLLUTION AND siltation had reduced or even eliminated fish in many waters that once were highly productive. Sport Fish Restoration investments have turned many fisheries around and sparked a 200% increase in tackle sales (in constant dollars) since 1955.

The protections don't stop there. The monies are disbursed to fish and wildlife agencies in all states and territories by the U.S. Fish and Wildlife Service, based partly on geographic area and also on the number of hunting and fishing licenses sold. Those monies are distributed as 3 to 1 matching grants, with a particular state putting up at least 25% of a project's cost.

By law, industry's excise tax payments and sportsmen's license dollars can only be used for fish and wildlife enhancement.

Before any state gets this excise-tax money—often in the millions of dollars—it must not divert any revenue from state hunting and fishing licenses outside of its fish and wildlife agency. Nationwide, annual state hunting license sales exceeded $764 million in 2009. Fishing license sales topped $604 million.

So not only are federal excise-tax revenues for fish and wildlife protected and eventually sent to the states, but state license sale revenues are also protected at the same time. As more and more states experience dire financial straits these days, the pool of license monies is a tempting target for politicians trying to balance statewide budgets. Fortunately for hunters, shooters, anglers and their related industries, that pool of license money is off-limits, thanks to the Sport Fish and Wildlife Restoration acts.

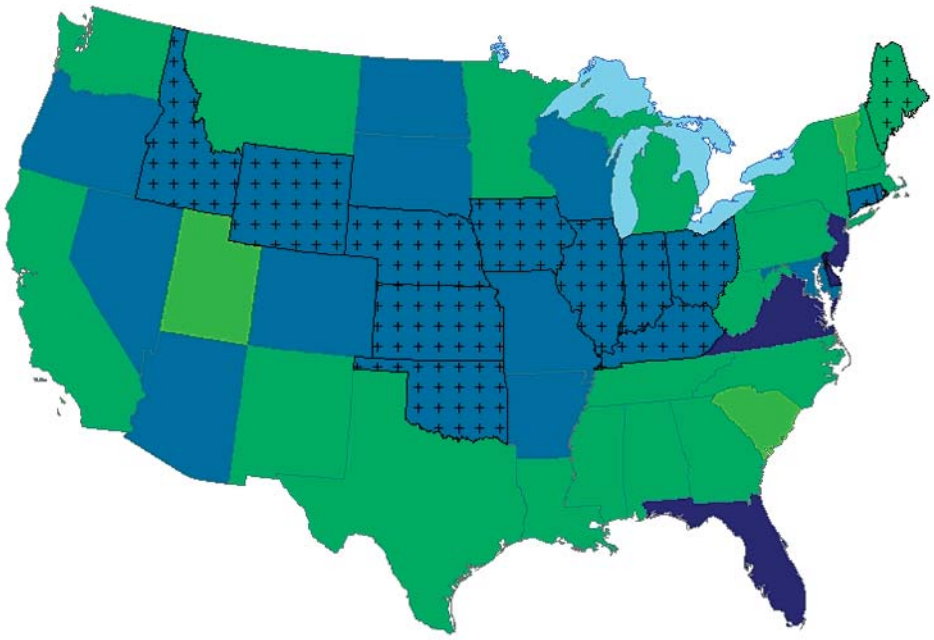
INVESTMENT RETURNS: SPORT FISHING

Here's the first of three abbreviated examples of how excise-tax monies, when put to work, can yield what amounts to a positive return on investment. (*For a more detailed analysis, see the extended Sport Fish Restoration or Wildlife Restoration report at www.SouthwickAssociates.com/excisetaxROI*).

In southwestern Oregon, near Crater Lake National Park, Diamond Lake has been managed for recreational fishing for 100 years. Since 1954, the exceptional rainbow trout fishery supported up to 140,000 angler trips per year. However, the introduction of an invasive minnow used by anglers



Growth in Deer Hunting Opportunities
1937 to the Present



Growth in Deer Hunting Days*

- No open season or local seasons only in 1937
- 1-50 day increase
- 51-100 day increase
- 101-150 day increase
- Greater than 151 day increase

*All types of deer (whitetail, mule, blacktail)

THEN & NOW

IN 1937, THE DEER POPULATION in Illinois was estimated to be 3,000 animals, and the hunting season was closed. In 2010, hunters in Illinois could potentially hunt deer for 108 days. In 2008, hunters harvested more than 188,400 deer.

In 1937, Missouri's hunters harvested 108 deer. In 2009, hunters took more than 295,000 deer.

From 1937 to 1965, deer hunting was not allowed in Kansas. Now, over 100,000 are harvested each year.

In 1937, New Jersey deer hunters had six days of opportunity available. In 2009, there were more than 161 deer hunting days available to Garden State hunters.



as bait upset the delicate balance in the lake and contributed to a severe decline in rainbow trout. By 1998, fewer than 20,000 angler trips were made—an 85% decline from the peak. This drop in angler activity caused a loss of $4.9 million in annual sales and $1.4 million in labor income for the three surrounding counties.

THEN & NOW

BY THE 1950s, the oily and inedible alewife littered the beaches of the Great Lakes and sport fishing was nearly nonexistent. Now, thanks in part to Sport Fish Restoration funds, world class sport fisheries in the Great Lakes for salmon, trout, walleye, and yellow perch annually generate more than $2 billion in retail sales and support more than 58,000 jobs.

An investment of $663,046 of Sport Fish Restoration funds between 1997 and 2007 laid the groundwork for a resurgence. These funds, used for necessary on-site research and monitoring, also became the base for other matching funds, and the total investment grew to more than $5 million. This money was used to remove the invasive minnow, restock rainbow trout, and restore the natural balance of Diamond Lake.

Anglers responded with enthusiasm to the treatment of Diamond Lake. One year later in 2007, 72,085 angler trips, fishing mainly on stocked catchable—size trout, generated an estimated $3.76 million in sales and $2.57 million in labor income in the area. By 2009, more than 51,000 angler trips were generating $2 million in economic benefits for the local economy.

Annually, the Diamond Lake fishery generates fishing-equipment sales in excess of $357,000. Considering the project's estimated 40-year lifespan, fishing tackle manufacturers who pay the excise tax are receiving a cumulative return-on-investment of 575%. If the fishery ultimately expands to earlier levels, annual fishing tackle sales could near $1 million and the return-on-investment could exceed 1,700%. This tremendous new fishery would not exist without the initial investment of $663,046 in Sport Fish Restoration funds.

This example, then, follows the basic concepts explained earlier. Excise taxes paid by the fishing industry are invested in improving or restoring fishing opportunities. Anglers respond by fishing more often and buying equipment. The fishing-tackle industry as a whole then benefits from the increased angling and economic activity.

INVESTMENT RETURNS: TARGET SHOOTING

Not all worthwhile projects take place on a huge scale, but can nonetheless produce excellent returns. One example is the shooting range operated by the Sportsman's Club of Brown County in northeastern South Dakota.

Built starting in 1996 with about $215,000 in Wildlife Restoration funds, the range is open to the public for seven months a year with two days of shooting per week. The range is staffed by volunteers and also hosts some youth and hunter-education programs. There was an average of about 2,750 shooter visits (shooter days) per year from 1999 to 2008.

Purchases of taxed ammunition and firearms by target shooters were estimated at $13.48 per day, per shooter. The total purchases of taxed firearms and ammunition as a result of the range over that 10-year interval can then be estimated at about $371,000.

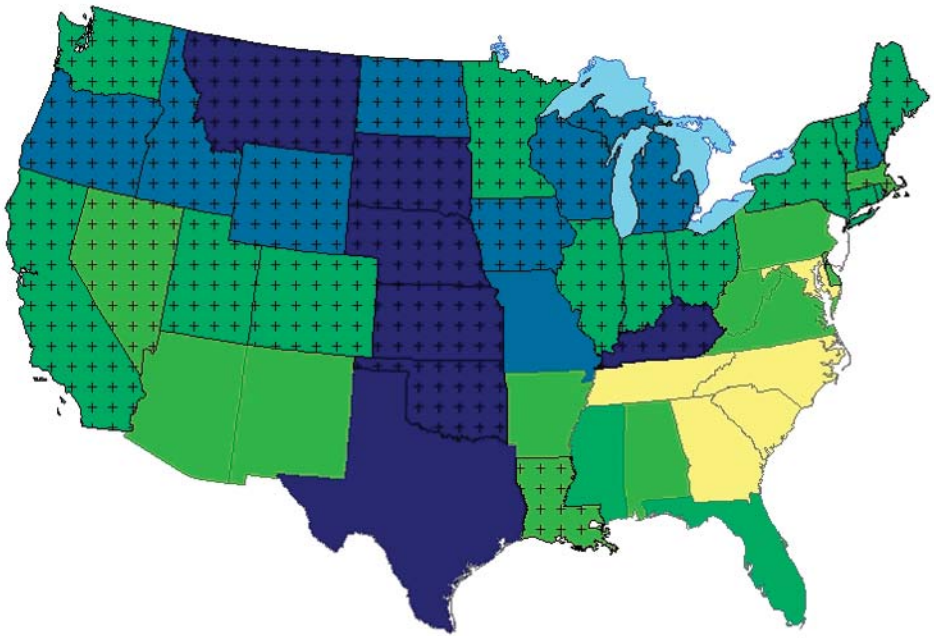
Total sales of taxed products minus the initial range development cost shows a net benefit of more than $155,000—a 72% return on the initial Wildlife Restoration investment of about $215,000.

As in the previous example, excise-tax funds were used to create an opportunity for sportsmen and women. Target shooters, in this case, use the new range and spend money on tax-related items such as ammunition in the process. Therefore, the shooting-sports industry ultimately benefits through its initial Wildlife Restoration investment.

INVESTMENT RETURNS: HUNTING

One of this country's great wildlife-management success stories has been the restoration and

Growth in Turkey Hunting Opportunities
1937 to the Present



Growth in Turkey Hunting Days

- No open season or local season only in 1937
- No season indicated or species not present (with the exception of NJ where there was no change in the number of days)
- Regulated seasons established*
- 1-50 day increase
- 51-100 day increase
- 101-150 day increase
- Greater than 151 day increase

*Historically, long seasons led to very low turkey populations and little hunting. Modern management re-established populations and greatly increasing hunting activity and harvests.

THEN & NOW

NORTH CAROLINA'S FALL TURKEY SEASON was closed in 1971, and a spring season established in 1972. During the spring of 1977, 144 wild turkeys were reported taken. By 2008, the spring harvest was10,404 birds—an increase of 7,200%.

While Arkansas hunters had a 30-day turkey season in the 1930's, only an estimated 300 birds were taken each year. Today, turkey hunters in Arkansas enjoy a 72-day season and harvest more than 11,700 birds.

In 1937, turkey hunting in Kentucky was closed. Today, Kentucky hunters enjoy 159 days of turkey hunting annually.

During Ohio's first turkey season in 1966, hunters took 12 birds. In 2009, they took 20,710 turkeys.



expansion of wild turkey populations. Not surprisingly, the growth in turkey numbers and the corresponding growth in turkey hunting has had some huge economic effects, thanks in large part to industry investment through Wildlife Restoration funds.

North Carolina is a good example. In 1977, the first year of mandatory harvest reporting, approximately 4,800 hunters were in the field 33,000 days and reported 144 birds taken. By 2008, after wild turkey numbers and range had expanded substantially, 72,609 hunters hunted 400,489 days and harvested 10,404 birds.

All those hunters spent money on tax-related hunting gear. The total purchases of taxed ammunition and firearms by turkey hunters in North Carolina over the last 18 years range between $405,000 (1990) and $3.8 million (2008) annually. Adding in purchases of non-taxed hunting equipment such as decoys, blinds and calls, the total spent in 2008 by North Carolina's turkey hunters was approximately $7 million.

Much of the turkey-restoration work was funded through the Wildlife Restoration program. Between 1990 and 2008, excise-tax funds invested in North Carolina wild turkey programs ranged from $43,000 to $264,000 per year.

Purchases of tax-related items by anglers have increased nearly 200% in constant dollars since 1955.

Because of the huge growth in turkey hunting's popularity—and corresponding spending by hunters—the return on investment of Wildlife Restoration funds has ranged from 191% per year up to 5,040% per year with a long-term annual average of 1,865%.

With most companies fortunate to see any level of positive earnings growth in recent years, returns in the hundreds and thousands of percent seem unbelievable. However, for turkey and many other game species, the "factories" are woods and farms already in place and the raw materials are the naturally reproducing birds descendent from initial transplanting efforts. With very little capital construction requirements and low variable costs, high return rates are common.

THEN & NOW

IN 1937, STATES ON AVERAGE allowed 30 days of waterfowl hunting. In 2010, 11 states provide 150 or more waterfowl hunting days, 23 states provide 120 days, and 13 states provide more than 90.

SOME RETURNS CANNOT BE MEASURED

It's important to note that not all programs funded through excise taxes will show a distinctly measurable investment return. That doesn't mean a particular program isn't worthwhile.

One good example is the Southeastern Cooperative Wildlife Disease Study, a specialized unit of the University of Georgia's College of Veterinary Medicine. This wildlife-disease unit was started in 1957 as 11 southeastern state wildlife agencies pooled their money to study a disease outbreak that threatened ongoing efforts to restore and expand regional whitetail-deer populations. So began one of the world's leading wildlife-disease laboratories, funded then and now partly by Wildlife Restoration funds.

Numerous federal agencies and private wildlife conservation organizations also contribute to the disease unit's budget, so separating out the Wildlife Restoration contribution would be difficult. More important, though, is that the disease unit's work doesn't do so much to create hunting opportunities as it does to preserve them. Similar programs are in place for fisheries.

Think of the many insurance policies any business maintains to protect its investments. The study and possible remediation of various wildlife diseases is critical not just to the health of fish and



wildlife, but also to the health of fishing, hunting, and their dependent industries. Few would argue with that benefit, funded in part by the Wildlife and Sport Fish Restoration programs, even though it might not provide an immediately discernible return on investment.

THEN AND NOW

It's difficult to tell just what America's hunting and fishing would look like if the Wildlife and Sport Fish Restoration excise taxes had never existed or were somehow lost or diverted elsewhere. One indicator, though, is in considering the way things were before these taxes were directed to wildlife and fisheries (1937 and 1950 respectively) compared to the present day.

Deer hunting is a good example. In 1937, 11 states had no open seasons for deer and three others had only local seasons. Virtually all of the remaining states had far more restrictive seasons than enjoyed today. Since that time, and thanks in large part to Wildlife Restoration programs, deer hunting opportunities have grown enormously in all 50 states as sustainable deer populations have likewise grown, with many states having extended their deer hunting seasons by 100 days or more since 1937.

There are many similar stories on the Sport Fish Restoration side, too. One is the dramatic recovery of coastal Atlantic striped-bass numbers, which has fostered huge increases in both the numbers of anglers pursuing them and in the monies spent by those anglers on fishing.

During the 1970s, striped-bass stocks had become severely diminished by overfishing and other factors, so much so that fishing was completely shut down in some prime coastal areas while being severely restricted in others. Partly enabled by Sport Fish Restoration funds, federal and state research, management, and regulation of striped-bass fishing intensified, and by 2004 striped-bass numbers had increased by 700% over what they were in 1982. As the fishery recovered, the number of angler trips—and sales—from Maine to North Carolina increased by more than 1,000%.

THEN & NOW

IN 1937, WYOMING ELK HUNTERS had only limited local seasons. Today, 170 days of elk hunting are available for various specialty hunts. More than 53,000 hunters put in more than 412,000 hunter-days devoted to elk hunting, harvesting approximately 23,000 elk.

The federal excise tax on fishing tackle is the foundation for the most successful conservation and fisheries-restoration program in the world. Diminishment of the payments made into the excise tax would have immediate impacts on the ability of state agencies to provide continued fishing opportunities.

A quick look toward other nations provides good insights. Unlike most places in the world, in the U.S., people can hunt and fish because those opportunities are available as public resources. The millions of sportsmen and women who enjoy time afield or on the water are there because industry-paid excise taxes have enabled the states to provide not only abundant fish and wildlife populations but also access to land and waters. No other nation has done more to help sustain broad-based participation in hunting and fishing, which in turn keeps related industries healthy and growing.



Returns on Investments from Hunting Equipment Excise Taxes
(Consult technical report for methodology and additional years)

Year*	Excise Tax-Related ROI
1970	1,088%
1980	1,136%
1985	1,199%
1991	982%
1996	1,540%
2001	1,094%
2006	957%
Average Annual Return-on-Investment, 1970-2006 = 1,100%	

*In years prior to 1970, purchases of hunting equipment were reported in a form that did not permit analysis.

Returns on Investments from Fishing Tackle Excise Taxes
(Consult technical report for methodology and additional years)

Year	Excise Tax-Related ROI
1970	1,585%
1980	2,643%
1985	1,951%
1991	1,607%
1996	1,959%
2001	1,459%
2006	1,911%
Average Annual Return-on-Investment, 1955-2006 = 2,157%	

A DIRE ALTERNATIVE

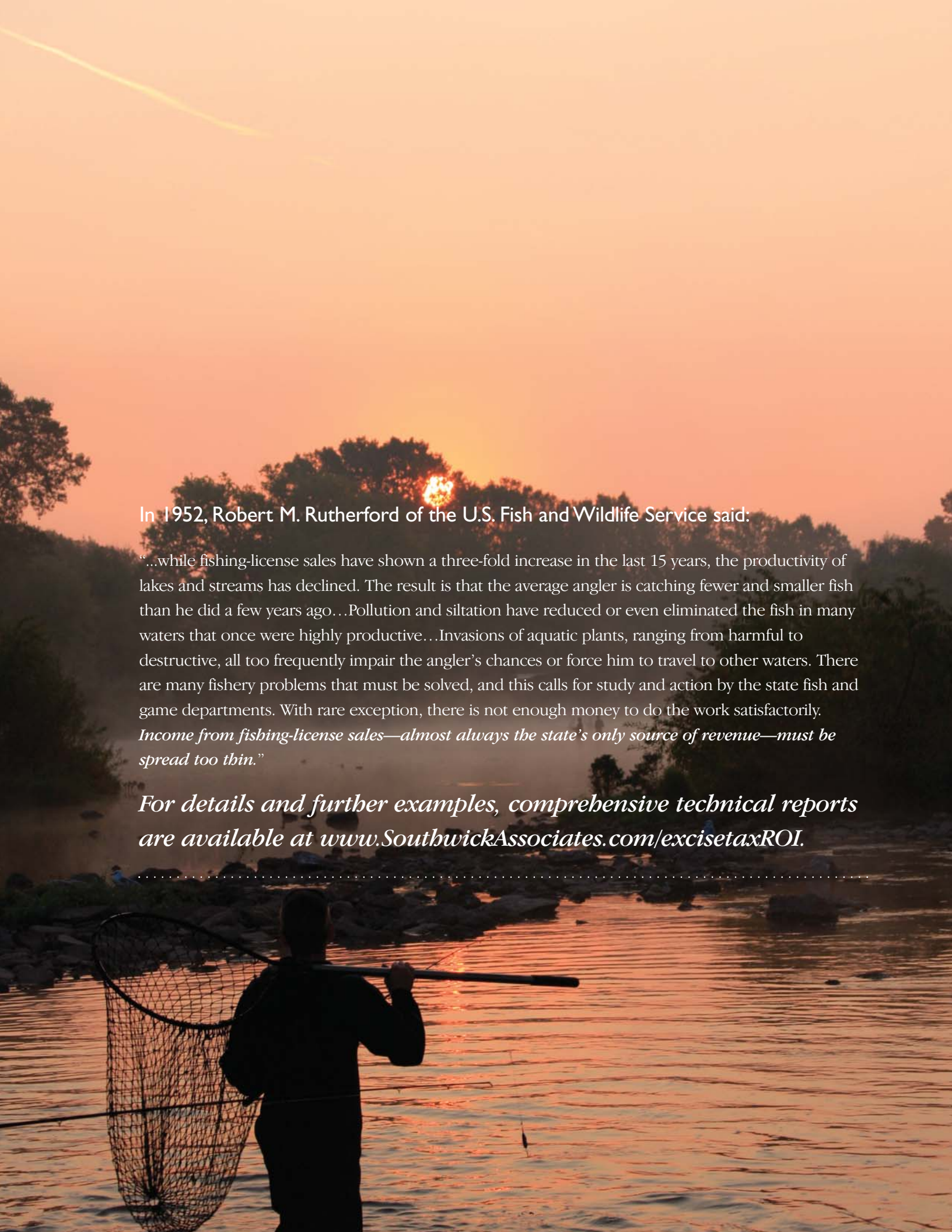
If the Sport Fish Restoration and Wildlife Restoration programs were rescinded or reallocated by Congress, the results would be a disaster on many fronts. All state fish and wildlife agencies would all immediately lose a major part of their annual budgets with a corresponding loss of programs.

Further, state hunting and fishing license revenues would no longer be protected and thus likely diverted, at least in part, to other state budgetary needs unrelated to fish and wildlife. At the same time, states might attempt to increase license fees, either as a means of preserving some fish and wildlife programs or to increase revenue for a general fund. In that scenario, fewer people will hunt or fish as licenses become substantially more expensive.

This would not just be a disaster for America's hunters and anglers. Fewer participants means reduced sales of hunting, fishing, and target-shooting gear. Those industries collectively enjoy some $30 billion in annual sales nationwide. Their sales are predicated on investments in fish and wildlife made through excise-tax-funded programs. There is no other funding source that could take up the slack on the scale of our excise-tax-funded Sport Fish and Wildlife Restoration programs. Losing that excise-tax investment would literally be the end of hunting and fishing as we know it.

This is not some fictional threat. In 1982 and again in 1994, some members of Congress proposed that these excise taxes be directed elsewhere. Conservationists, wildlife agencies, sportsmen's groups, and various industry representatives rallied in defense of the current trust fund system and prevailed.

The continued existence of the Sport Fish Restoration and Wildlife Restoration programs—as positive contributors to fisheries and wildlife conservation and to the hunting and fishing industries—depends on a vigilant defense and a strong alliance from all of its partners.



In 1952, Robert M. Rutherford of the U.S. Fish and Wildlife Service said:

"...while fishing-license sales have shown a three-fold increase in the last 15 years, the productivity of lakes and streams has declined. The result is that the average angler is catching fewer and smaller fish than he did a few years ago…Pollution and siltation have reduced or even eliminated the fish in many waters that once were highly productive…Invasions of aquatic plants, ranging from harmful to destructive, all too frequently impair the angler's chances or force him to travel to other waters. There are many fishery problems that must be solved, and this calls for study and action by the state fish and game departments. With rare exception, there is not enough money to do the work satisfactorily. ***Income from fishing-license sales—almost always the state's only source of revenue—must be spread too thin.***"

For details and further examples, comprehensive technical reports are available at www.SouthwickAssociates.com/excisetaxROI.

A copy of the full reports, with technical details, are available from www.SouthwickAssociates.com/excisetaxROI.

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