

# **Revenue Options for Wisconsin Fish, Wildlife and Habitat Management**

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Wisconsin Department of Natural Resources

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## About This Report

In the last biennial budget, 2015 Act 55, the Wisconsin Legislature directed DNR to develop a report on the Fish & Wildlife Account. The specific language in the biennial budget reads:

“REPORT ON FUNDING OF FISH AND WILDLIFE MANAGEMENT ACTIVITIES. The department of natural resources shall prepare a report on a plan to address the insufficiency of revenue from hunting and fishing approval fees to cover the cost of activities of the department that relate to fish and wildlife management. The department shall prepare this report in consultation with stakeholders, including hunters, anglers, trappers, and conservationists. The report shall include recommendations for program reductions and hunting and fishing approval fee increases necessary to ensure that the revenue from hunting and fishing approval fees is sufficient to cover the cost of fish and wildlife management activities. Before January 1, 2017, the department of natural resources shall submit the report to the joint committee on finance.”

## Executive Summary: Revenue options for fish, wildlife and habitat management



*Hunters contribute \$2.5 billion annually to Wisconsin's economy.*

For more than a century, hunters, anglers and trappers have paid for the fish and wildlife management that has created world-class hunting, fishing and trapping in Wisconsin.

Our **top ranking in the Boone and Crocket and Pope and Young** record books for trophy whitetail bucks, top-tier turkey and black bear hunting, **world-record** musky, brown trout and bass fishing, and our globally **unique lake sturgeon spear fishing opportunities** are just a few reasons why hunting and fishing are so popular and such big business in Wisconsin.

Residents **hunt at nearly three times the national rate and fish at twice the national rate**. Wisconsin is second nationally in nonresident hunters and third in nonresident anglers. These hunters and anglers **spend \$4 billion in Wisconsin annually, support 56,000 jobs and generate \$375 million in local and state revenue**.

Ninety percent of fish and wildlife management funding relies on hunters, anglers and trappers. Their investment of money, time and labor benefit all those who enjoy Wisconsin's outdoors. Healthy fish and wildlife and habitats provide the foundation for our \$19.3 billion tourism economy, our image and our quality of life.

### **At a conservation crossroads with tough choices ahead**

It took a great deal of effort and funding to get to this level of accomplishment, including bringing back wild turkey, elk, fisher and lake sturgeon. However, state revenue to maintain these and other fish and wildlife populations and their habitats is decreasing. Hunting license sales are declining, license fees remain at levels set a decade or more ago and inflation, combined with the increased cost of doing business are decreasing buying power. Significant discounts for some licenses are also having an impact. These same factors are affecting states across the nation and 17 have already addressed their funding gaps, in part, by increasing fees, including neighboring Minnesota and Michigan.

In Wisconsin, these trends have resulted in annual gaps of \$4 million to \$6 million between authorized expenditures and revenue collected. To avoid overspending, DNR has reduced habitat management, warden patrols, invasive species control, fish stocking and other activities by \$20 million over the past five years, mostly by keeping vacant positions unfilled. The DNR also has undertaken a major effort to prioritize workload and align functions to be as efficient with funding and staff as possible to accomplish the workload with existing resources.

Stakeholder groups have asked DNR to increase license and stamp fees to generate more revenue to maintain their quality of hunting, fishing and trapping and the Legislature has instructed DNR to develop a report to address the gap.

Legislators face tough choices:

- **Maintain the funding status quo, with the result of limiting the level of fish and wildlife management and the quality of recreation opportunities for hunters, anglers and trappers DNR can provide; or**
- **Increase revenue in order to restore fish and wildlife management to authorized levels and respond to hunter, angler and trapper expectations to manage more acres and provide more opportunities.**

## **Revenue Options for Legislative Consideration**

### **Short-term recommendations**

Funding options that rely on hunters, anglers and trappers can increase revenue and close the annual gap between revenue and authorized spending. Key stakeholder groups have asked the state to increase license and stamp fees, most of which were last increased a decade ago and some 20 years ago, to generate revenue for fish and wildlife management. Some of these recommendations can be implemented immediately while others require more time. Many can work together to raise sufficient revenue.

#### **Option A: Increase fees**

- **Increase fees and link to the Consumer Price Index.** Establish a process whereby license fees shall be subject to a possible cost adjustment every two years to keep pace with inflation. Following the example of other states, this process could be initiated by the department and subject to approval by the Natural Resources Board and the Joint Finance Committee. This process may result in \$10 million to \$12 million in additional revenue after the first adjustment and provide additional revenue over time.
- **Enact a one-time license fee increase.** A one-time increase based on inflation may result in \$10 million to \$12 million of additional revenue. Alternatively, increases could occur on a select number of underpriced license types based on a comparison to surrounding states' license fees. This may result in \$4 million to \$12 million in additional revenue depending on selected licenses and fee changes. Examples include a \$4 increase to the resident gun deer license, which may contribute \$1.5 million and a \$3 increase to the resident annual fishing license, which may contribute \$1.4 million.
- **Simplify discount licenses by establishing prices in relation to standard licenses.** The discounts for groups of licenses would be uniform across all licenses in that group and tied to the price of a standard license. Groups could include Junior, Senior, Spousal Fishing and Combination licenses (Sports and Conservation Patron Licenses). For example, all junior licenses (12 to 17 years old) could be 20 percent off a standard license price. This would result in a simpler fee structure and a more consistent price structure for the public. Depending on established discounts, some over-discounted licenses may increase in cost while under discounted licenses may decrease. Discounts ranging from 10% to 50% on the above groups may result in \$300,000 to \$1 million in increased annual revenue.
- **Eliminate or reduce first-time buyer licenses.** In an effort to increase participation in outdoor activities, the first-time buyer license was created to provide an opportunity to purchase a license at a significantly reduced rate. Recent analysis shows that 80 percent of first-time buyers were unaware of this incentive when purchasing hunting, fishing or trapping license. Eliminating first-time buyer licenses could result in \$2.7 million of additional revenue annually. Alternatively, eliminating only nonresident first-time buyer licenses could increase revenue by \$1.4 million annually.

## **Option B: New and flexible license packaging options**

Conservation Patron and Sports License sales have each dropped more than 40 percent since the late 1990s and early 2000s, and DNR research suggests hunters are narrowing the types of hunting they do. New combinations of licenses and new licensing options may better respond to today's customers. Ideas to be evaluated would include a la carte license packages in which customers choose the package and receive a discount over full price; multi-year licenses, early bird discounts and more license options recommended by the Sporting Heritage Council. Evaluating these options would require lawmakers to authorize additional licensing flexibility.

## **Option C: Customer engagement and loyalty programs**

In any given year, 28 percent of hunters and 40 percent of anglers in Wisconsin's population of hunters and anglers do not purchase a license, consistent with national rates. Reducing these turnover rates can increase state revenue and leverage more federal funds. Maximizing the potential will require adequate time to conduct the needed customer analysis and develop targeted marketing strategies to reactivate lapsed participants, improve customer satisfaction and assure that license buying processes are customer friendly. As well, it will require increased licensing flexibility to meet customer needs. Customer loyalty pricing, auto-renewals and license options recommended by the Sporting Heritage Council are all retention strategies DNR would like to evaluate, but would require lawmakers to authorize additional licensing flexibility.

## **Option D: Individual access fee for state wildlife, fishery and state natural areas**

Charging admission to 600 DNR-owned state natural, fishery and wildlife areas would require a contribution from all users, including wildlife watchers, hikers and other users who benefit from these lands but do not now contribute financially. Directing the money to habitat management would increase quality public hunting grounds, producing more game and potentially easing crowding on public lands. Access to these lands would be included with the purchase of a hunting, fishing or trapping license.

## **Option E. Non-motorized watercraft registration fee**

Requiring mandatory registration of non-motorized boats including kayaks, canoes and paddleboards can help pay for the boating facilities, enforcement and accident response this user group benefits from, freeing up Fish and Wildlife Account funds for other needs. Minnesota requires a 3-year registration fee of \$10.50 for canoes, kayaks, sailboards, paddleboats and paddleboards. Wisconsin owners now voluntarily register more than 18,000 non-motorized watercraft and pay an \$11 fee, indicating support among this user group for helping pay their fair share. Wisconsin DNR recreation safety officials estimate that 335,000 non-motorized boats use Wisconsin waterways each year.

## **Option F. Gift cards and E-License gift certificates**

There is currently no opportunity for someone to provide family or friends a hunting, fishing or trapping license, permit, or fee as a gift. Making gift cards available for purchase and creating an online gift certificate could help increase license sales and revenue and respond to customer interest. Michigan and Kentucky are among the states that have such gifting opportunities. Michigan, for example, sells such online gift certificates in denominations of \$20, \$50, or \$100; the gift certificates are delivered electronically with a receipt and may be printed or emailed to recipient(s) and stored on smartphones.

## **Long-term considerations**

Due to demographic, cultural and land use changes driving an accelerating loss of hunting license revenue, options that continue to rely on hunters, anglers and trappers are not long-term fixes. Identifying and servicing the needs of a more diverse and urban society may hold the key to funding fish and wildlife conservation. Separate scientific household surveys in Wisconsin in 2016 indicate a majority of the public supports having everybody paying something for fish and wildlife management but such options are beyond the scope of lawmakers' instructions for this report.

## **Ongoing and Potential Reductions**

To close the funding gap in past years, DNR has primarily kept vacant positions unfilled, resulting in less habitat, population and property management. To make sure DNR is focused on the highest priority work and is working as efficiently as possible, the department has launched a strategic alignment. This effort will allow DNR to provide habitat management and species management at current levels. However, even with this effort the department will need to continue reductions made over the past five years and evaluate more reductions if no new revenue is generated. Ongoing and potential reductions include:

- **Fewer warden patrols**
- **Fewer miles of stream bank easements acquired**
- **Less habitat management, producing less wildlife**
- **Significant reduction in the stocking of larger walleye**
- **Fewer fish surveys, providing less accurate information to sustainably manage complex fisheries**
- **2,000 acres of wetland impoundments left unmanaged**
- **50 percent reduction in pheasant stocking**
- **Less collaboration with conservation groups on habitat development**
- **Reduction in stocking of coldwater and warmwater fish species**
- **Reduction in trout habitat improvement work**
- **Enrollment capped in the Deer Management Assistance Program**

## **Potential Impacts to Tourism, Economic Growth, Recreation**

DNR fish and wildlife management programs, in collaboration with partners, directly provide or enhance outdoor recreation critical to our tourism economy and economic development.

- In 2015, tourism in Wisconsin generated a \$19.3 billion economic impact, supported 190,717 jobs and generated \$1.5 billion in state and local revenues, saving Wisconsin taxpayers \$640 per household. See Appendix A for County Tourism Stats.
- Wisconsinites participate in outdoor recreation at twice the national rate or more for fishing, hunting, hiking and other activities. Such recreational amenities are important for attracting young people to live in Wisconsin, a key need identified for job creation and economic growth.

## **RECREATION BY THE NUMBERS**

**With adequate funding Wisconsin can maintain its status as a world-class outdoor destination!**

- ❖ #1 in annual revenue from hunting - ~\$2.5 billion or \$2,833 per average hunter
- ❖ #1 in Boone and Crockett trophy whitetail entries (2005 – 2010)
- ❖ # 1 in black bear harvest
- ❖ #2 in total number of hunters
- ❖ #3 in turkey hunters, top 5 for harvest
- ❖ #3 in number of trappers
- ❖ #6 for Canada goose, #7 for duck harvest



- ❖ Residents fish at twice the U.S. rate
- ❖ #3 in visiting anglers, spending upwards of \$445 million annually in Wisconsin.
- ❖ Leader in world record musky caught; reigning world record brown trout
- ❖ Top 10 bass and walleye state
- ❖ World's largest lake sturgeon population and unique spear fishing opportunities
- ❖ 13,000 miles of classified trout streams
- ❖ 15,081 inland lakes, 2 Great Lakes, the Mississippi River, 44,000 stream miles

*Sources: 2011 National Survey of Hunting, Fishing and Wildlife-Associated Recreation; The Association of Fish and Wildlife Agencies; QDMA 2016 Harvest Report; National Wild Turkey Federation; In-Fisherman magazine.*

- The No. 1 reason visitors travel to and within Wisconsin is “to enjoy outdoor activities.” They cite beautiful fall colors, excellent fishing, beautiful scenery and nature as Wisconsin’s top strengths compared to key competing states.
- Wisconsin gets its highest rankings in key business climate surveys in the “quality of life” category, of which outdoor recreation is a major component.
- Proactive conservation addressing threats to fish and wildlife well before species become endangered translates into reduced regulations for business and lower recovery costs for species. In turn, this cost efficient approach helps safeguard the economy and ensure sustainable fish and wildlife.
- Further reductions in fish and wildlife management in Wisconsin, coupled with investments made by surrounding states, put our competitive advantage and differentiation at risk.

### **What other states are doing**

Wisconsin relies heavily on hunters, anglers and trappers to fund fish and wildlife management. Some states facing the same revenue challenges from declining hunting license revenue are taking some proactive approaches to address this problem. For example, Michigan has recently restructured and increased hunting and fishing license fees to invest more in outdoor recreation. Minnesota has increased its fees as well and has been able to supplement its base fish and wildlife management budget through revenue generated by a nominal sales tax for conservation and dedicated proceeds from the state lottery. The list of actions, and examples of states taking those actions, follows.

- Increased license fees (At least 17 states since 2013, including MN, MI, MT)
- Voter-approved nominal sales tax to pay for fish and wildlife management (MO, MN, AR)
- Lottery proceeds directed to fish and wildlife management (MN, CO, NE, OR)
- Entry fee required to access state-owned recreational lands (MI, TX)
- Linked the cost of hunting and fishing license fees to the annual inflation rate (FL, AL, MT)
- Restructured licensing and/or reducing discounted licenses (MI, MT, NH)
- Increased revenue through hunter and angler retention efforts (GA, PA)
- Reallocated other tax revenues including document recording fees on the transfer of real estate (TX, VA)
- Voluntary measures like an optional walleye stamp (MN)



## SECTION 1: Introduction

Hunters in 1897, and anglers in 1915, started paying for licenses (\$1 each for residents) to provide the first funding for conservation in Wisconsin. Since those early days, the investments made by hunters, anglers and trappers have served Wisconsin well by creating some of the best hunting and fishing in the world and supporting broad public benefits including our \$19.3 billion tourism economy, healthy wildlife and habitats, clean air and water and a range of outdoor recreation opportunities. The importance of hunting, trapping and fishing was evident in April 2003 when 82.1 percent of voters approved amending the Wisconsin Constitution to ensure the right to fish, hunt, trap and take game.<sup>1</sup>

However, state revenue to maintain these and other fish and wildlife populations and their habitats is decreasing. Hunting license sales are declining, license fees remain at levels set a decade or more ago and inflation combined with the increased cost of doing business, are decreasing buying power. Significant discounts for some licenses are also having an impact. Despite recruitment efforts, fewer people are buying hunting licenses each year. This decrease in participation is expected to continue as Wisconsin becomes older, more urban and more racially and ethnically diverse, because these segments of the population hunt at much lower rates.<sup>2</sup>

At the same time, growing numbers of people are enjoying other outdoor recreation activities that rely on, or are enhanced by state fish and wildlife management, but do not pay for that management through a fee or permit.<sup>3</sup> These factors have resulted in an annual gap of \$4 million to \$6 million between authorized expenditures and revenue collected from a system that relies almost exclusively on hunters, anglers and trappers to pay for the fish, wildlife and habitat management that broadly benefits Wisconsin residents.

In 2015, the Legislature recognized the funding challenge and the importance of outdoor recreation to Wisconsin's future. Lawmakers directed DNR to "prepare a report on a plan to address the insufficiency of revenues from hunting and fishing approval fees to cover the cost of activities that relate to fish and wildlife management."<sup>4</sup>

To respond to this legislative directive, DNR created a team with representatives from programs primarily funded through the Fish and Wildlife Account and asked staff to:

- Gather social and economic information about license fees, structures and other funding mechanisms among Midwestern states;
- Review what the scientific literature shows are the effects of increasing fees on participation;
- Synthesize research in Wisconsin and elsewhere about current and future participation trends;
- Conduct a scientific mail survey of 2,000 Wisconsin households to gather residents' opinions about revenue options to support fish and wildlife management in the state; and
- Develop options and recommendations for consideration by the legislature.

## SECTION 2: Recommended Revenue Options for Legislative Consideration

Lawmakers' charge for this report was that DNR "shall include recommendations for program reductions and hunting and fishing approval fee increases necessary to ensure that the revenue from hunting and fishing approval fees is sufficient to cover the cost of fish and wildlife management activities."

We identify fee increase options to generate more revenue to sustain our world-class hunting, fishing and trapping, as at least 17 states have done since 2013. These increases are in line with what neighboring states have done. Other options seek to meet customer needs in a changing market, while others look to simplify license pricing.

We also provide some options for broadening the users and beneficiaries who pay for fish and wildlife management. State and national research shows that due to demographic, cultural and land use changes driving an accelerating loss of license revenue, options that continue to rely on hunters, anglers and trappers may not be long-term fixes. Identifying and servicing the needs of a more diverse and urban society may hold the key to funding fish and wildlife conservation. Separate scientific household surveys in Wisconsin in 2016 indicate a majority of the public supports having everybody paying something for fish and wildlife management.

### A. Increase fishing and hunting fees

#### Fee change options - See Appendix D for tables illustrating these options.

1. **Raise fees and link to the Consumer Price Index.** Establish a process whereby license fees shall be subject to a possible cost adjustment every two years up to the change in the Consumer Price Index for All Urban Consumers in the Midwest (CPI-U) since the licenses were last adjusted. Following the example of other states, this process could be initiated by the department and subject to approval by the Natural Resources Board. If approved, the recommendation could then require approval by the Joint Finance Committee. This would provide the flexibility to not raise fees when appropriate. For example, Wisconsin's bear hunting licenses are above the average of Midwest states and may not be good candidates for an increase. This option may result in \$10 million to \$12 million in additional revenue after the first adjustment and provide additional revenue over time.
2. **Enact a one-time license fee increase.** A one-time fee based on the CPI-U may result in \$10 million to \$12 million of additional revenue. Alternatively, increases could occur on a selection of underpriced license types based on the CPI-U and/or a comparison to surrounding states' license fees. This may result in \$4 million to \$12 million in additional revenue depending on selected licenses and increases. A \$4 increase to the resident gun deer licenses may contribute \$1.5 million annually and a \$3 increase to the resident annual fishing license may contribute \$1.4 million annually.
3. **Simplify discount licenses by establishing prices in relation to standard licenses.** Discounts now vary widely among licenses in the same group, i.e. junior licenses, senior licenses, military licenses, such that a 17-year-old hunter qualifies for a 17-percent discount on a gun-deer license and a 65 percent discount on his fishing license. Making discounts uniform and setting them in relation to standard license prices can raise more revenue, simplify the structure and increase the consistency of pricing. License groups could include Junior, Senior, Spousal Fishing and Combination licenses (Sports and Conservation Patron Licenses). For example, all junior licenses (12-17 years old) could be 20 percent off a standard license. Depending on established discounts, some over-discounted licenses may increase in cost while under discounted licenses may decrease. Standardizing discounts ranging from 10 percent to 50 percent on the above groups may result in \$300,000 to \$1,000,000 in increased annual revenue.
4. **Eliminate or reduce first-time buyer licenses.** In an effort to increase participation in outdoor activities, the first-time buyer license was created to provide an opportunity to purchase a license at a significantly

reduced rate. Recent analysis shows that 80 percent of first-time buyers are unaware of this incentive when purchasing a license. Of the 20 percent that are aware of this incentive, it may not be the deciding factor in hunting, fishing or trapping for the first time. Eliminating first-time buyer licenses may result in increased annual revenue of \$1.42 million from resident licenses and \$860,000 from nonresident. Alternatively, if first-time buyer licenses were adjusted to a 10 percent to 20 percent discount annual revenue could increase by \$1.42 to \$1.68 million for resident licenses and \$860,000 to \$1.16 million for nonresident licenses.

### **Background:**

Many of Wisconsin's hunting, fishing and trapping license fees were set more than a decade ago with some dating back to 1991. Since these fees were set, inflation has caused the value of the revenue from license fees to decrease. For example, the price of a deer license was set at \$24 in 2005. From 2005 to 2015 the buying power of a dollar decreased to \$0.84 meaning a \$24 license in 2005 has a value of \$20.17 in 2015. Over this 10-year period, the difference caused by inflation equals more than \$24 million in 2015 for gun-deer licenses.

### *Comparison to other states' fees*

Many popular Wisconsin hunting and fishing license fees are underpriced compared to surrounding states offering similar opportunities. For example, Wisconsin's \$24 resident gun-deer license is \$13.90 (37 percent) below the average of Midwest states. The nonresident gun-deer license of \$160 is \$80.65 (34 percent) below the average of Midwest states. With few exceptions, Wisconsin's fees are comparable or underpriced compared to surrounding Midwest states.

### *Discounts vary widely among and between groups, and impact revenue*

Wisconsin has many licenses that can be classified as discount licenses such as a senior fishing license or a junior deer license. The prices of these licenses are not directly related to their full-price counterparts, an annual fishing license and deer license in the examples above. As a result, some license prices have changed over time while their discounted counterparts remained unchanged. For example, the resident annual fishing license was increased in 2004 and 2005 while the senior fishing license was not. As a result, the senior license changed from a 50 percent discount in 2003 to 59 percent in 2004 and 65 percent starting in 2005.

Another discount, which began in 2012, is the first-time buyer licenses. These discounts are offered to both residents and nonresidents for a number of licenses including deer, annual fishing, turkey and trapping licenses. Residents receive a \$5 license and nonresidents receive about a 50 percent discount. DNR has begun evaluating the impacts of the first-time buyer program and preliminary results suggest that 80 percent of first-time buyers are unaware of the discount before they make their purchase, similar to results from a 2012 DNR study. As well, a review of Wisconsin's resident first-time buyer fishing licenses from 2012 to 2014 indicates that only about 27 percent of first-time buyers bought an annual license the year following the purchase of their first license; that figure is 22 percent two years after the initial purchase, and 19 percent after 3 years.

### *Effect of raising rates on sales volume*

A 2016 DNR literature review of studies on how fee increases affect license sales shows that increases in prices for hunting and fishing licenses generally led to net revenue gains despite decreased demand. The magnitude and duration of the resulting declines in license sales depends on both the initial cost of the license and the magnitude of the price change. One can expect the greatest decrease in license sales volume in the first two to four years after a fee increase. Sales then typically rebound to previous levels as the price people have in their mind adjusts to the new price. The review also found that increasing the price for combination package licenses like the Conservation Patron License, which

provides an array of hunting and fishing privileges decreased sales much more substantially, as did increasing nonresident licenses. Demand for resident licenses has often been found to be unresponsive to price as hunting and fishing in-state typically remains cheaper than the alternative of pursuing the same activity in a neighboring state.

#### *Angler and hunter support for fee increases*

Wisconsin hunters and anglers have been generally supportive of increasing fees. The Conservation Congress has placed 23 questions regarding options for increasing revenue to the Fish & Wildlife Account on the Spring Hearings Questionnaire from 2011-2016. Participants have generally supported license fee increases, passing 5 of 6 questions that specifically asked about fee increases during the six-year study period, including 62 percent of voters supporting the most recent (2016) proposal to increase hunting, fishing, and trapping fees. In a 2016 DNR scientific mail survey of 2,000 adults, 55 percent of those identifying as anglers supported increases; support was lower among those respondents identifying as hunters.

### **B. New and flexible license packaging**

Sales of Conservation Patron and Sports Licenses have each dropped more than 40 percent since the late 1990s and early 2000s. DNR researchers hypothesize hunters are narrowing the types of hunting they do and no longer see value in buying a license package with many privileges they do not use. New combinations of licenses and new licensing options may better respond to the hunters of today. Ideas to be evaluated would include a la carte license packages in which customers choose the package and receive a discount over full price; multi-year licenses, early bird discounts, and more ideas from the Sporting Heritage Council. Evaluating these options would require lawmakers to authorize additional licensing flexibility.

Ideas to be evaluated include:

- Early bird discounts of 5 percent;
- Fifth consecutive license purchase is \$2 (amount required for license holder to be counted for SFR and PR grant formulas);
- A la carte license packages in which customers choose the package and receive a discount over full price;
- Multi-year licenses;
- Badger for Life privileges recommended by the Sporting Heritage Council would enable anyone who at one time was a resident of Wisconsin and bought a resident license (any license other than a \$5 first-time buyer license) to continue to buy all future licenses at resident prices. This option would allow students and other family members and friends who have moved away to participate in their family hunting tradition; and
- Customer loyalty pricing that commits to never increasing their license fee as long as the customer is loyal and purchases a license every year. Once a customer drops out, they pay the current fee upon return.

### **C. Customer engagement programs to reactivate former anglers and hunters**

In any given year, 28 percent of hunters and 40 percent of anglers in Wisconsin's population of hunters and anglers do not purchase a license, consistent with national rates. Reducing these turnover rates can increase state revenue and leverage more federal funds. Maximizing the potential will require adequate time to conduct the needed customer analysis and develop targeted marketing and other strategies to retain hunters, anglers and trappers and reactivate lapsed participants, improve customer satisfaction and assure the license buying process is customer friendly.

There are now a growing number of customer retention models to learn from and best-practice guidelines to follow from the Wildlife Management Institute, Recreational Boating & Fishing Foundation and the Aquatic Resources Education Association. As well, DNR's automated licensing system and now our Go Wild web-based platform allow for better analysis of customers' buying habits.

With minimal staff time, Georgia's targeted emails to lapsed anglers resulted in selling nearly 10,000 licenses while Pennsylvania's creation of three and five-year licenses added 59,000 anglers and generated \$1.5 million in license revenues. While some of the retention and reactivation strategies will be similar for lapsed hunters and anglers, there will also be differences because there are some differences in why hunters and anglers drop out. Effectively reducing turnover rates will require time to analyze customer data and respond with marketing and other efforts providing the biggest return on investment

Customer loyalty pricing, auto-renewals, and license options recommended by the Sporting Heritage Council are all retention strategies DNR would like to evaluate but would require lawmakers to authorize additional licensing flexibility.

Wisconsin's angler and hunter support for increasing efforts to recruit and retain hunters and anglers is very strong: 71 percent of anglers in an April 2016 DNR scientific mail survey and 74 percent of hunters supported boosting recruiting and retention as a method of increasing conservation funding, second only to creating a mechanism in which everybody pays for conservation.

#### **D. Individual access fee for state wildlife, fishery and state natural areas**

Charging admission to 600 state fishery areas, wildlife areas and natural areas can raise revenue for the Fish & Wildlife Account and is in line with the public's desire to have everybody contribute financially to fish and wildlife management. Directing the funding to pay for managing these properties would also increase access to quality lands for hunting, addressing one of the biggest reasons hunters say they drop out.

The fee could be offered through DNR's new Go Wild purchasing system as part of a comprehensive tiered recreation pass. Individuals could purchase a pass with different pricing levels for property access depending on the amenities provided by those properties. Access to these lands would be included with the purchase of a hunting, fishing or trapping license.

There are currently no estimates for how many people use these public properties or their activities. Thus, it is difficult to identify a reasonable rate to charge for access to these properties, many of which are undeveloped without trails, restrooms and other facilities. In FY 2016, DNR conducted a pilot program at Southern Kettle Moraine State Forest to gauge the accuracy of different methods of collecting user estimates which will allow the department to have a better understanding of use and potential revenue of this concept in coming years.

Support among the general public and hunters and anglers is strong for an access fee. Sixty-nine percent of respondents in an April 2016 DNR scientific mail survey backed a \$5 annual fee and 62 percent a \$10 charge to access these lands.

#### **E. Non-motorized watercraft registration fee**

Creating a mandatory registration fee for canoes, kayaks and other non-motorized boats could raise additional revenue for the Boating Fund, which could then be used to offset funding from the Fish and Wildlife Account for enforcement. Instituting non-motorized watercraft registration would help move toward a funding system in which everybody pays something to support fish and wildlife management and recognizes that users of non-motorized craft benefit from boating-related facilities, education, enforcement and accident investigation.

Wisconsin does not require mandatory registration of non-motorized boats like kayaks, canoes and paddleboards but several states do, including Minnesota, Michigan, Ohio, Oklahoma, New Jersey, and South Carolina. Minnesota's three-year fee of \$10.50 applies to canoes, kayaks, sailboards, paddleboats, paddleboards and rowing shells. There is an initial \$7 filing fee and a \$5 fee on top of that for aquatic invasive species (AIS) prevention work. Minnesota has registered 193,789 craft and the funding goes to access, law enforcement, education, grants, land acquisition, river gauges, AIS prevention and river and lake improvement efforts for both motorized and non-motorized watercraft.

Wisconsin DNR recreation safety officials estimate approximately 335,000 non-motorized boats use Wisconsin waterways each year. Already, more than 18,000 non-motorized watercraft have voluntarily registered in Wisconsin and

paid an \$11 fee, indicating support among this user group for helping pay their fair share. Making that registration mandatory may raise approximately \$1.1 million annually, assuming 100,000 non-motorized craft would be registered each year. Groups with multiple non-motorized watercraft or unique circumstances (ex. Boy Scouts, Girl Scouts, etc.) could pay a special group fee.

“Observing scenic beauty” and “being close to nature” were among paddlers’ top five motivations for getting outside in a national survey of paddlers conducted for The Outdoor Foundation in 2015. Having paddlers help contribute to healthy fish, wildlife and habitats would allow them to contribute towards preserving the scenic beauty and nature. As well, increasing education efforts for non-motorized boaters can help address the number of such boaters injured or killed on the water.

## F. DNR E-License Gift Certificate

There is currently no opportunity for someone to provide family or friends a hunting, fishing or trapping license, permit or fee as a gift. Creating an online gift certificate could help increase license sales and revenue. Michigan already sells such online gift certificates in denominations of \$20, \$50 or \$100; the gift certificates are delivered electronically immediately with a receipt and may be printed or emailed to recipient(s) and stored on their smartphones.

# SECTION 3: Fish & Wildlife Account Status, Impacts and Trends

## A. Fish & Wildlife Account revenue and expenditure breakdowns

Why does Wisconsin have a gap between state revenue collected and authorized conservation work? This section seeks to explain the trends and factors behind the gap, the benefits of fish and wildlife management, the actions DNR has taken to close the gap, and the impacts of past program reductions and potential future reductions if no new funding is generated.

Currently, nearly 90 percent of revenue to manage the state’s fish and wildlife resources comes from hunting, fishing and trapping license fees and the federal excise tax on the sale of hunting and fishing equipment including firearms and ammunition and a portion of the gas tax attributable to motorboats and small engines.<sup>5</sup> Wisconsin relies more heavily on these sources of funding than any other Midwestern state and is among the top 10 states most reliant on anglers and hunters to fund fish and wildlife conservation.<sup>6</sup> This funding system remains in place despite scientific household surveys spanning 20 years showing that the general public believes healthy fish and wildlife populations benefit the state’s economy and that everybody should financially support fish and wildlife management.<sup>7,8</sup>

F&W Account Funded Programs	Percent
<b>Law Enforcement</b>	25.55%
<b>Fisheries Management</b>	24.75%
<b>Wildlife Management</b>	18.04%
<b>Support Programs<sup>1</sup></b>	12.46%
<b>Debt Service</b>	6.16%
<b>Facilities and Lands</b>	5.20%
<b>Program Management</b>	2.81%
<b>Science Services</b>	1.95%
<b>Natural Heritage Conservation</b>	0.82%
<b>Development</b>	0.80%
<b>Aids</b>	0.68%
<b>Department Administration</b>	0.55%
<b>Acquisition</b>	0.22%

<sup>1</sup>Support programs include Customer Service, Finance, Technology Services, Human Resources, Office of Communications, Legal Services and Management & Budget

## State revenue

Fish and Wildlife Account revenue is used to support DNR conservation law enforcement and fish and wildlife management functions. DNR develops, maintains, and enhances fish and game habitat, propagates and stocks some species, studies and monitors fish and game populations, promotes the safe use of natural resources through enforcement and education efforts and purchases land to provide additional hunting and fishing opportunities.<sup>9</sup> Some fish and wildlife account revenues are dedicated to supporting specific activities, such as the wildlife damage claims and

abatement program and stamp-funded programs for the management of habitat and monitoring of specific species including pheasant, salmon, trout, waterfowl and wild turkey.<sup>10</sup>

#### *Decreasing hunting license revenue*

State revenue from licenses have slowly declined from \$69.6 million in FY 2006 to \$65.5 million in FY 2015 as hunter participation has decreased. The biggest declines in state license sales occurred in DNR's two combination packages. Sports license purchases, which provide gun-deer hunting, small game hunting and fishing privileges, have declined 46 percent since 1999. Sales of resident Conservation Patron licenses, which provide buyers with all the basic fishing and hunting privileges have declined 43 percent since peak sales of over 81,000 in 2002.<sup>11</sup>

#### *Senior fishing, hunting discounts impact revenue*

Revenue has also decreased due to the aging of the population. Wisconsin participation rates decline after age 55 for hunting and increase after age 65 for fishing.<sup>12</sup> Over the 25-year period between 2010 and 2035, Wisconsin's under 65 population is expected to grow by less than 4 percent while the 65-plus population increases by 90 percent.<sup>13</sup> These opposing trends combine to produce the same result: decreasing revenue for the Fish and Wildlife Account as more hunters drop out and more anglers qualify for significantly discounted senior licenses.

Reduced price senior fishing licenses have been available for Wisconsin residents since 1992 when it was offered at \$5, a 58 percent discount to the then \$12 annual fishing license. The senior fishing license increased to \$7 in 1997 but has remained the same price since then while the annual license fee has increased. Consequently, the senior fishing license is now offered at a 65 percent discount to the annual \$20 resident license.

On average, sales of the \$7 senior license have increased by about 4,870 per year while sales of the annual fishing license have declined by about 3,440 per year. Senior fishing licenses have grown from 10 percent of the sales volume of regular licenses in 1999 to almost 25 percent in 2014. There were 53,163 senior fishing licenses sold in 1999 and 121,101 licenses sold in 2014.

Senior Wisconsin residents also have access to a discounted Small Game License costing \$9 and its sales have risen on average by 560 a year while regular small game licenses, costing \$18, have been declining on average by 1,000 per year. Consequently, senior license sales accounted for over 18 percent of the sales volume relative to regular small game licenses in 2014, up from 7.5 percent in 1999.

#### *Discounted first time buyer licenses impact revenue*

First-time buyer License discounts were first offered in 2012 to both residents and nonresidents, with fishing and certain hunting and trapping approvals sold at a reduced fee to people who have not been issued that same type of license, a conservation patron license or a sports license in any of the previous 10 years. The aim of the discounts was to recruit new participants.

Qualifying Wisconsin residents could buy an annual license for fishing, for many hunting seasons or for trapping for \$5. That compares to regular annual license rates of \$20 for fishing, \$24 for gun deer and \$24 for trapping. Nonresidents can qualify for discounts of 50 percent: \$25.75 instead of \$50 for fishing; \$79.75 for gun-deer instead of \$160; and \$75.75 instead of \$150 for trapping.

DNR is now evaluating the effectiveness of this program in recruiting new participants and the impacts on revenue; preliminary results suggest similar results to a 2012 DNR study on the impact of the discounted licenses.<sup>14</sup> The reduced license rate is not the motivating factor for most first-time buyers to purchase a license and is impacting license revenues. Eighty percent of first-time buyers were not aware of the discount before it was applied at the end of their

transaction. If those same residents and nonresidents had bought regular licenses instead, DNR would have collected \$1,813,000 more annual fishing license revenue and \$986,000 gun/archer deer license revenue per year, based on average sales from 2012-2015. At current pricing, DNR needs to sell four times as many resident first-time buyer licenses and two times as many nonresident first-time buyer licenses to break even.

### *Increased costs of doing business, inflation reduce buying power of Fish & Wildlife Account*

While state revenues from licenses have decreased, the cost of doing business has increased since fees were last adjusted more than a decade ago. Employee health care costs, technology, fleet rates, biosecurity measures at hatcheries, and feed for fish are just some areas in which costs have increased.

Inflation has also reduced the buying power of license revenue. Between 2006 and 2016, the U.S. dollar experienced inflation at an average rate of 1.71 percent per year so that \$118.44 today has the same buying power as \$100 in 2006.<sup>15</sup> To keep pace with inflation, resident gun deer hunting licenses would cost \$28.04 instead of \$24 and fishing licenses \$23.66 instead of \$20.

### *Trends lead to revenue falling short of spending authority*

The result of declining revenue, inflation and increasing costs has been a structural gap of \$4.3 million between authorized spending, \$78.5 million in FY 2015, and the \$74.2 million in revenue collected. State Fish and Wildlife Account revenues consist largely of hunting, fishing and trapping fees but also include timber sale revenue, permit fees and other sources.

DNR has managed its budget to maintain a positive account balance, mostly by leaving vacant positions open. In 2016, conservation wardens maintained a 10 percent vacancy rate; fisheries management 15.5 percent; and wildlife management 12.2 percent. These vacancies are on top of a 20 percent workforce reduction since 1999 in positions funded by the Fish and Wildlife Account.

Spending authority has decreased from \$80.5 million in FY 2007 to \$78.5 million in FY 2015. Since FY 2011, actual expenditures have been lower than revenue. Fluctuations in license revenue make it difficult to know year from year how much will actually be generated so managers do not fill vacancies in order to avoid overspending. Many of these challenges are what inspired the agency to undergo a strategic alignment analysis of its core work. The agency identified efficiencies to maximize the return on existing revenues and to meet our customer's high expectations.

## **Bigger fish, bigger costs**

The **Gov. Tommy G. Thompson State Fish Hatchery in Spooner**, which raises more extended growth walleye and musky than any other state facility, provides a few examples of increasing costs.

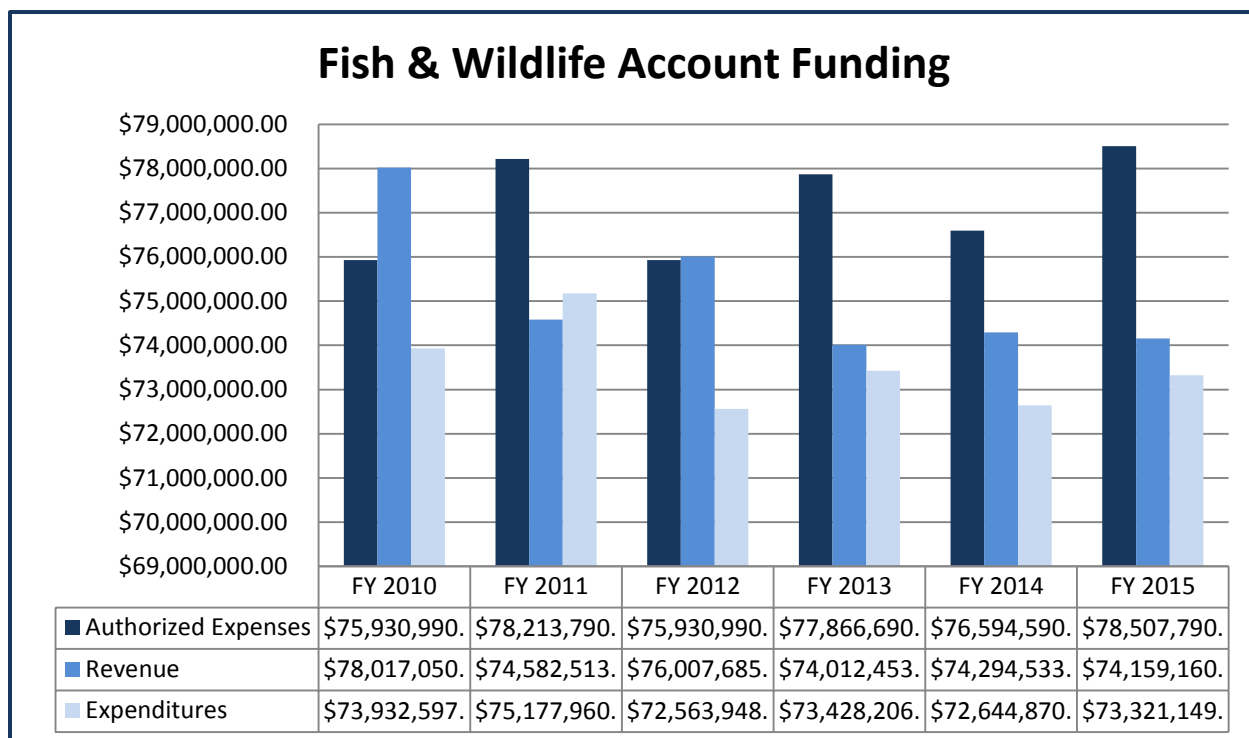
- ❖ The total cost of minnows to feed walleye and musky increased \$88,000 just over the past year.

### **Forage Cost at Gov. Thompson Hatchery**

<u>Year</u>	<u>Grade 11-18 /gal.</u>
2002	\$6.70
2004	\$8.00
2006	\$10.95
2012	\$15.00
2013	\$13.98
2014	\$13.40
2015	\$13.74
2016	\$19.10

- ❖ The state's charge to DNR for one hatchery truck has nearly doubled from 58 cents per mile in 2007 to \$1.06 today.
- ❖ Multiple rounds of fish health testing, required since the 2007 discovery of viral hemorrhagic septicemia, or VHS, in wild fish, have added significantly to costs.
- ❖ This year, as new equipment comes on, utility costs, which have risen about \$300 to \$400 a month over the same period, are expected to go up again.





*Over the last 6 years, available revenue has not kept pace with legislatively authorized expenses requiring the DNR to curtail expenditures.*

## Federal funds

Most federal aid is awarded through two formula grants: the Sport Fish Restoration Program (SFR) and the Wildlife Restoration Program, also commonly referred to as Pittman-Robertson (PR). These programs are supported by federal excise taxes on sporting arms and ammunitions and on fishing equipment, electric motors and a portion of gasoline tax attributable to motorboats and small engines. The federal apportionment formulas factor in the number of a state's licensed hunters and anglers and its geographic size; a state must provide a 25 percent in matching funds.<sup>16</sup>

While Wisconsin's SFR apportionment has averaged \$11.8 million from 2010-2016, federal PR funding coming to Wisconsin has increased from \$16.8 million in Fiscal Year 2006 to \$24.9 million in Fiscal Year 2015. The increase is largely the result of a surge in sales of guns and ammunition since 2008; the Pittman-Robertson tax applies to all gun and ammunition sales, regardless of whether they are hunting-related.

This increased federal funding has helped offset decreasing state revenue but may not be sustainable at recent levels. PR funding in Fiscal Year 2016, for example, was 15 percent lower at \$21 million.

### *Projects and research funded by increased PR funds*

The increase in PR revenue is not a long-term sustainable component of base funding and as a result, the department has invested the additional funding on specific, limited-term projects. The funding has been invaluable in making important research possible, including;

- Deer research and management projects
- Elk restoration and management
- Wolf research and population management
- Deer Trustee Report Implementation
- Public Lands Management Activities

The work accomplished through these projects would not have been possible with the current state revenues available for fish, wildlife and habitat management. A complete list of projects is available in Appendix B.

*Prospect of increased federal funding for conservation of declining wildlife: Blue Ribbon Panel Recommendations*

Legislation introduced in July 2016 in the U.S. House of Representatives raises the prospect that Wisconsin and other states may get more federal funding to help conserve the full array of fish and wildlife and their associated habitats, particularly those that are declining and have little or no other source of conservation funding.<sup>17</sup>

The legislation would enact recommendations from the Blue Ribbon Panel on Sustaining America's Diverse Fish & Wildlife Resources, chaired by Johnny Morris, founder of Bass Pro Shops and David Freudenthal, former Wyoming governor. The panel examined the current system of conservation funding and alternatives to provide a stable source of dedicated funding.

Blue Ribbon Panel Key Findings and Recommendations:

- While state license fees and federal excise taxes fund management of game fish and wildlife, there is no similar source of dedicated funding for thousands of species that are not hunted or fished. As a result, an increasing number of species are becoming rare and imperiled.
- Nearly 1,600 species of animals and plants are already on the federal endangered species list and the states have identified more than 12,000 species in State Wildlife Action Plans that are in greatest conservation need.
- Each state needs an average of \$26 million in new funding annually to effectively implement State Wildlife Action Plans to prevent species from becoming threatened or endangered.
- Congress should dedicate up to \$1.3 billion annually in existing revenues from energy and mineral resources on federal lands and waters to implement State Wildlife Action Plans designed to conserve wildlife species in decline.
- A working group should be convened to make recommendations on how programs and agencies can evolve to engage and serve broader constituencies.<sup>18</sup>

This new funding would allow more proactive conservation to address threats to fish and wildlife well before the species become listed as threatened or endangered and require regulatory protections. It also would allow management and conservation of habitats important to sustaining harvestable fish and wildlife and would mean hunters and anglers shoulder less of the burden of conserving shared natural resources and benefit from improved access for their pursuits.<sup>19</sup>

## B. Benefits of conservation

Hunting, fishing, target shooting and wildlife watching provide jobs and generates local and state revenue. Collectively, these activities generate an estimated \$600 million annually in Wisconsin general purpose revenue.

### Annual economic impact of fish and wildlife-related outdoor recreation in Wisconsin

<b>Activity</b>	<b>Direct Expenditures</b>	<b>Indirect Impacts</b>	<b>Salaries &amp; Wages</b>	<b>State &amp; Local Tax Revenue</b>	<b>Federal Tax Revenue</b>	<b>Jobs</b>
Angling	\$1.46B	\$2.27B	\$667M	\$149M	\$166M	21,542
Hunting	\$2.57B	\$3.95B	\$1.03B	\$228M	\$263M	34,180
Target Shooting	\$199M	\$328M	\$109M	\$27M	\$27M	3,439
Wildlife Watching	\$1.49B	\$2.63B	\$975M	\$236M	\$194M	36,462

Source: U.S. Fish and Wildlife Service's 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

### *Bedrock for tourism*

Many other outdoor activities are enhanced by, or made possible by, Wisconsin fish and wildlife management. “The outdoors” and outdoor recreation are the No. 1 travel motivators for adult travelers living in Minnesota, Missouri, Michigan, Illinois, Iowa and Indiana, states that Wisconsin competes with for tourists.

These travelers ranked Wisconsin’s top strengths relative to the other states’ strengths as beautiful fall colors, excellent fishing, truly beautiful scenery, great for exploring nature and good for viewing wildlife and birds.

Travelers who have visited Wisconsin in the past two years rate it much higher in attributes such as a good place to live, start a business, attend college, or purchase a retirement home than those who have not visited.<sup>20</sup>

In 2015, tourism delivered broad economic benefits to Wisconsin residents including:<sup>21</sup>

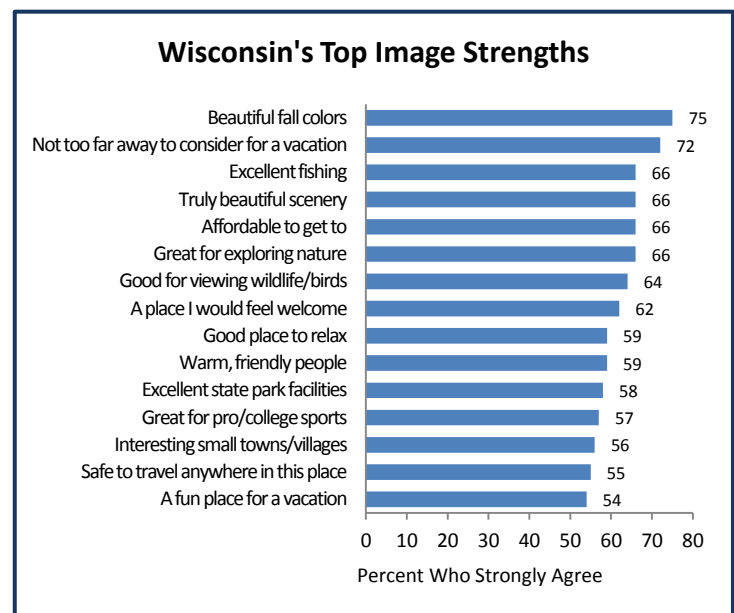
- Visitor spending of \$11.9 billion generated \$19.3 billion in total business sales in 2015 as traveler dollars flowed through the Wisconsin economy.
- Visitor activity sustained 190,717 jobs in 2015, both directly and indirectly, amounting to 8 percent of total statewide employment.
- Wisconsin tourism generated \$1.5 billion in state and local taxes.

In an increasingly competitive environment, “Wisconsin must focus its marketing efforts on core strengths and differentiation to stand out,” the Wisconsin Tourism Department concludes. Management of Wisconsin fish, wildlife and habitats will remain a key to maintaining those core strengths.”<sup>22</sup>

### *Local jobs, local impacts*

Much of the outdoor recreation Wisconsin residents enjoy occurs right in their own communities or nearby, keeping the economic impact close to home. The Outdoor Industry Association estimates that outdoor recreation in Wisconsin, both by residents and nonresidents and including everything from hunting and fishing to biking, hiking, camping and paddle sports, generated an estimated \$11.9 billion in consumer spending, 142,000 jobs and \$3.6 billion in wages and salaries. Importantly, these activities generate nearly \$844 million in state and local tax revenue.<sup>23</sup>

Many of Wisconsin’s 600 public properties managed with funding from the Fish & Wildlife Account are destination locations providing a significant source of employment and local tax revenue. The benefits of these lands are widely recognized by Wisconsinites. An April 2016 scientific survey of 2,000 Wisconsin adults shows there is nearly unanimous agreement that public lands benefit all Wisconsin citizens and that thriving fish and wildlife populations significantly benefit the state’s economy.<sup>24</sup>



Source: Wisconsin 2015 Tourism Advertising Evaluation & Image Study, Longwoods International

### *Reduced regulations for business*

Proactive conservation that addresses threats to fish and wildlife well before species become threatened or endangered translates into reduced regulations for business and lower recovery costs for fish and wildlife, which in turn helps safeguard the economy and ensure a sustainable future for fish and wildlife.<sup>25</sup>

### *Amenities for entrepreneurs and attracting college graduates from other states*

Wisconsin's outdoors and outdoor recreation are important for job creation. Over 25 percent of gross job creation in the state comes from new business start-ups, more than businesses of any other age group.<sup>26</sup> Quality of life is one of entrepreneurs' top considerations for deciding where to locate their businesses.<sup>27</sup> When asked to evaluate the importance of 16 location characteristics, the top two were quality of life/amenities and access to local business services. Importantly, quality of life is the category in which Wisconsin ranks highest in business climate surveys, and outdoor recreation is a key component.<sup>28,29,30</sup>

Endeavor Insight's study interviewing 150 founders of some of the fastest growing companies in the United States concluded: "We believe that the magic formula for attracting and retaining the best entrepreneurs is this: a great place to live plus a talented pool of potential employees and excellent access to customers and suppliers."<sup>31</sup>

Research shows that regions with higher levels of scenic amenities typically have higher levels of economic activity. As economic opportunities move from goods-producing activities, which are often tied to locations with physical resources, to more service-based activity, people have more flexibility in deciding where to live and work. In the 1990s, the growth of entrepreneurs was stronger in rural places that enjoyed high levels of natural amenities. Regression analysis supports the idea that high-value entrepreneurs often choose scenic areas to run their businesses.<sup>32</sup>



**One Lake, millions of benefits**

**Fishing contributes \$156 million in direct spending** and 3,500 jobs to the Lake Winnebago region annually and another \$78.5 million and 800 jobs indirectly.

**More than \$3.5 million pours** into the local Lake Winnebago economy every February during Wisconsin's unique spearfishing season for lake sturgeon.

**Photo:** Ron Grishaber of Appleton set a new state record with this 212.2 pound lake sturgeon he speared in 2010.

**Source:** Cook, C. & Neiswender, C. (2007). "The Economic Impact of Angling on the Lake Winnebago System" by Oshkosh, WI: University of Wisconsin-Extension.



### *Ecological balance, clean water and flood control*

Hunting helps keep wildlife populations in balance with their habitats, particularly in the absence of top level predators, protects forest productivity and can reduce the human and health care costs of wildlife-related diseases.

Fish and wildlife properties have numerous 'non-market values' as well. Wetland areas and natural vegetation play a particularly important role in protecting water quality by avoiding or reducing the amount of runoff from rain and snowmelt that can carry pollutants into lakes and streams. Conservation lands that control runoff help reduce downstream flood damages as well as localized flooding, preventing millions of dollars in property damage costs.

### **C. Recreation trends impacting revenues**

Fishing and hunting remain very popular among Wisconsin residents: 20 percent of all adults fish (twice the national average) and 15 percent of adults hunt (nearly three times the national average). Hunting participation exceeds 50 percent among men in some counties.<sup>33</sup> Appendix C shows how many licensed anglers and hunters are in each county.

Many other outdoor activities like wildlife watching that depend on, or are enhanced by fish and wildlife management, are increasingly popular in Wisconsin as well. Viewing and photographing wildlife, day hiking, bicycling, walking for pleasure and birdwatching were among the top 10 recreational activities gaining the most new participants between 2004 and 2009. Many of these users and beneficiaries do not contribute financially to fish and wildlife management.<sup>34</sup>

#### *Hunting trends*

Hunting participation has been on a four-decade decline nationally in both absolute numbers and on a per-capita basis. Wisconsin seemed somewhat insulated from this national trend until about a decade ago. Gun-deer hunting, the largest generator of hunting license sales, is declining in both the number of participants and in hunter effort statewide although Wisconsin's per capita rate of 15 percent is 2.5 times larger than the national rate of 6 percent.<sup>35</sup>

Overall, gun deer hunting has declined by 12 percent since the peak in 1999. Age and cohort analyses conducted by researchers at the University of Wisconsin-Madison Population Laboratory in 2011 predict a 28 percent decline in the number of male gun deer hunters by 2030.<sup>36</sup> This creates cascading effects on efforts to recruit youth into deer hunting as adults do not introduce their children to hunting.<sup>37</sup>

Archery licenses increased 25 percent between 1999 and 2014, with most of that increase occurring before elimination of age/disability requirements for crossbows in 2014. The increase in archery licenses is generally considered to reflect more existing gun-deer hunters taking up archery rather than the creation of new customers.<sup>38</sup>

Purchases of other types of hunting licenses over the past 15 years are largely declining. Small game license sales have



*Changing demographics have contributed to decreased funding for conservation efforts benefiting Wisconsin's state mammal, the white-tailed deer.*

dropped 12 percent since 1999 and mourning dove hunting has lost half of its initial participants since the season started a decade ago. Wild turkey hunting, which experienced exponential growth in participation during the late 1990s and early 2000s, plateaued in 2009. Turkey stamp sales have fallen 14 percent to fewer than 104,000 since that year.<sup>39</sup>

#### *Reasons behind the decline in hunting participation*

Changing cultural, demographic and land use patterns are key factors behind the decline in hunting participation and they will be difficult to overcome for a variety of reasons.

Wisconsin's population is becoming older, more urban and more ethnically and racially diverse. These demographic segments hunt and fish at lower rates and will continue to do so barring some cultural shift in participation.<sup>40</sup>

Research also suggests that declining participation results from more people choosing to do other things with their free

time which may allow for more desirable social identities, are more convenient or all of the above. Declines in numerous forms of outdoor recreation began in the early 1980s coinciding with the rise of personal electronic media.<sup>41</sup>

Lack of access to private lands for hunting and hunters' perception of crowding on public lands are major reasons why fewer people are hunting. DNR researchers have documented that dissatisfaction with crowding and hunt quality on public lands are important reasons why gun-deer hunters drop out. Studies have found that people who hunt public land are less likely to buy licenses every year than those hunters with private land access.<sup>42</sup>

Compared to a generation ago, most huntable, private, nonindustrial land in Wisconsin is now closed to access or spoken for by landowners and their friends and family. Initiatives to encourage private land access have largely been unsuccessful on the scale necessary to meet the demand. Surveys of Wisconsin landowners suggest they are not interested in opening their land to public hunting even with financial incentives, leaving little opportunity to gain additional private land access for Wisconsin hunters. Consequently, private land access for hunting may limit the ability to reverse declines in hunting participation. As well, efforts to introduce new hunters to Wisconsin may run counter to retaining hunters by exacerbating crowding on public hunting lands.

One negative effect of urbanization on hunting and fishing may be a changing mindset. Hunting and fishing may become less alluring for people living detached "from the land" and for whom there are more accessible alternative entertainment choices than in rural areas. Studies have suggested that our post-modern urban society has shifted away from utilitarian values regarding fish and wildlife.<sup>43</sup>

#### *Fishing trends*

Fishing remains very popular in Wisconsin by many measures and has increased slightly in absolute numbers. Twenty percent of Wisconsin adults fish, twice the national average.<sup>44</sup> Nearly 40 percent of individuals 16 and older say they fish, although they may not do so every year nor buy a license every year.<sup>45</sup> Only Florida and Michigan had more nonresident anglers than Wisconsin in 2011.<sup>46</sup>

Wisconsin Population Change Projection				
<u>Age Group</u>	<u>Census 2010</u>	<u>Projected 2040</u>	<u>Num. Change</u>	<u>Pct. Change</u>
0-4	358,443	373,940	15,497	4.3%
5-17	981,049	1,007,370	26,321	2.7%
18-24	549,256	563,995	14,739	2.7%
25-44	1,447,360	1,493,595	46,235	3.2%
45-64	1,573,564	1,517,370	-56,194	-3.6%
65-84	658,809	1,251,765	592,956	90.0%
85 & over	118,505	283,600	165,095	139.3%

*Wisconsin's growing population of people 65 and older is one of the changing demographic factors contributing to lower hunting participation. Source: Wisconsin's Future Population 2010-2040, UW-Madison Applied Population*

Resident fishing license holders have increased 9 percent since 2002, with Wisconsin selling over 819,000 resident annual licenses in 2014 (DNR internal data). Yet nationally and in Wisconsin, per capita participation is decreasing even as overall numbers hold steady or increase slightly as a function of overall population increase. Nationally, per capita fishing rates are expected to drop 9 percent by 2060.

DNR researchers do not expect angling decreases to be nearly as severe as hunting for several reasons, including the lower investment to take up fishing and the fact that anglers generally do not face access issues in Wisconsin like hunters do.

Wisconsin has a lot of water – 15,081 lakes, 44,000 miles of perennially flowing streams and Wisconsin waters of two Great Lakes. Navigable waters belong to all Wisconsinites and are held in trust for them by the state under the Public Trust Doctrine. Public waters available for fishing are also fairly well distributed throughout the state, including proximity to urban centers with the possible exception of some counties in southwestern Wisconsin that have trout streams but few inland lakes. While physical access to water is generally secure, the perceived desirability of that access may change in the future if water quality declines.<sup>47</sup>

#### **D. Staffing reductions taken due to revenue gap and impacts to hunters, anglers, trappers**

To keep a positive balance in the Fish & Wildlife Account, DNR has kept vacant positions open, resulting in vacancy rates ranging from 10 percent of conservation warden positions, to 12.2 percent in wildlife management and 15.5 percent in fisheries management. These vacancies are in addition to reductions in authorized full-time positions, or FTEs, since 1999, shown in the table below.

<b>Full-time staff paid for by the Fish &amp; Wildlife Account</b>			
<b>Fish &amp; Wildlife Account Funded Programs</b>	<b>1998-99</b>	<b>2016-17</b>	<b>Change</b>
Wildlife	130.07	124.76	-5.31
Fisheries	216.67	172.99	-43.68
Law Enforcement	135.38	132.31	-3.07
Facilities & Lands	35.16	36.12	0.96
Research	19.11	9.74	-9.37
Licensing	56.95	23.11	-33.84
Support Programs <sup>1</sup>	100.37	50.56	-49.81

<sup>1</sup>Support programs include Finance, Technology Services, Human Resources, Office of Communications, Legal Services and Management & Budget

Scientific surveys show that hunters, anglers, trappers and the general public do not want to reduce state fish and wildlife management activities further. An April 2016 scientific survey of 2,000 Wisconsin households found that reducing DNR operating costs, i.e. cutting staff and services, was the least popular option for handling current funding shortfalls among five options presented. Having everybody pay for fish and wildlife management was the preferred option.<sup>48</sup>

#### **E. Other steps taken to counter revenue trends**

##### **Strategic Alignment Initiative**

Recognizing the need to continuously evaluate and prioritize efforts, the department began evaluating and defining its core work in July 2015 and is aligning staff and resources accordingly. The alignment increases operational efficiencies and coordination while reducing duplication of effort and training within the Fisheries, Wildlife Management and Law Enforcement programs. These changes find new efficiencies through specialization, consolidation, prioritization and partnerships while still meeting customers' varied and increasing needs. Examples of the changes being implemented through this effort are identified below:

- **Specialization and prioritization of habitat management:** A DNR assessment in 2010 defined a significant gap between the funding/staff need for all habitat management and the existing resources available. To meet our customers' high expectations, DNR will adopt a specialization and prioritization model for habitat management. This effort will decrease redundancy in management activities across the agency by consolidating habitat management responsibility to the program with that expertise. For example, the Division of Forestry will lead prescribed fire activities for the agency since the same training qualifications and equipment are required to complete fire suppression responsibilities which Forestry already handles. This adjustment will significantly reduce the number of staff that will maintain prescribed fire qualifications resulting in cost savings and efficiencies in training and equipment.
- **Recreation, property management and law enforcement:** Alignment will consolidate all recreation and property management functions to the program with the proven expertise in providing quality experiences across our DNR managed lands, our parks program. This will allow our fish and wildlife staff to focus more on their core work of population and habitat management. In addition, all credentialed law enforcement activities and personnel across various programs will be consolidated within the Bureau of Law Enforcement. Both of these alignment efforts will more efficiently use staff and equipment based on geographical locations and property needs while focusing on individual programs' functional expertise, historical factors and trends.
- **Game and non-game management specialization** - Wildlife Management program staff will specialize their time and efforts on game species population and habitat management efforts and coordination while direction of rare and non-game species management will be consolidated in the Natural Heritage Conservation program where this expertise resides.

Although these efforts will not result in additional funding or staff provided to the programs funded through the Fish and Wildlife Account, this effort is intended to result in more efficient and transparent use of the current funding available by focusing staff on their areas of expertise and training while enhancing customer experiences. Additionally, prioritization efforts will ensure funding is utilized for the largest impact.

### **R 3 Activities (Recruitment, retention and reactivation of hunters, anglers and trappers)**

Hunter, angler and trapper recruitment, retention and reactivation efforts, also known as "R 3" activities, have been underway for many years with partners. There is a growing focus on evaluating programs to see if they have met established strategic goals and adapting our approach to enhance and measure effectiveness.

Collaborative efforts to recruit new hunters, anglers and trappers are critical to Wisconsin's funding, heritage, tourism and conservation over the long-term and examples of these efforts follow later in this section. From a revenue standpoint, the focus of this report, recruiting new hunters is important because of the revenue it generates and the additional federal money it leverages, but also because of the economic impact hunters have in local communities.

In the short-term, aligning policies and making investments to increase the retention of anglers and hunters may be more efficient in sustaining revenues to the Fish and Wildlife Account than recruiting new participants.<sup>49</sup> Wisconsin, like other states, has many people who identify as hunters and anglers but do not buy a license every year. Wisconsin's annual turnover rate is 40 percent among anglers and 28 percent among hunters, according to analysis of DNR licensing records.<sup>50</sup> This means that in any given year, 28 percent of gun-deer hunters and 40 percent of anglers in Wisconsin's population of hunters and anglers do not purchase a license. These state turnover rates are consistent with national rates of 25 percent for hunters and 50 to 70 percent for anglers.



Increasing purchase avidity by these anglers, trappers and hunters needs to be investigated. It may be the low-hanging fruit in sustaining state revenues for fish and wildlife management. These customers have already shown an interest in the activities and already have the equipment, making it easier and less expensive for them to return to hunting, fishing and trapping than someone starting from scratch.<sup>59</sup> As well, retaining more customers will increase federal SFR and PR apportionments and such an approach is in line with broad public support for efforts to recruit and retain hunters and anglers.<sup>51</sup>

Focusing more on retention in the short-term could increase the timeframe to develop effective and tested techniques to recruit new hunters and anglers. National research shows that recruiting new anglers and hunters takes repeated exposure to the activity, mentors and a network of friends and family who are interested in the activity, all of which will likely take significantly more time, labor and expense than many retention strategies.<sup>52</sup>

#### *Retention and reactivation efforts*

To increase fishing license sales, the state partnered with the Recreation Boating and Fishing Foundation from 2008-2014 on a direct mail marketing campaign targeting former resident and nonresident anglers, often referred to as “lapsed” anglers. The effort showed no significant differences between license purchases from those that received a postcard and the control group that did not receive a postcard. New reactivation techniques are being explored based on research done in other states that has shown success.

The state is now working with Southwick Associates to use customer data from DNR’s new Go Wild system to better understand our customers. This is a first step in developing targeted marketing strategies to reactivate lapsed participants, to improve customer satisfaction and assure the license buying process is customer friendly.

Another retention effort has, since 2013, stocked 1.9 million larger young walleye into 367 waterbodies around the state to jumpstart self-sustaining walleye populations in those waters. Walleye are anglers’ favorite target and the fish stocked through the Wisconsin Walleye Initiative should reach legal size over the next few years and provide better walleye fishing opportunities. DNR fisheries surveys continue to be an important part of this effort as biologists evaluate fish survival, growth and reproduction to help steer future stockings.

#### *Recruitment efforts*

DNR and partners have invested significant effort in recruiting more adult novice hunters, anglers, and trappers and becoming more effective at targeting new participants from different segments of Wisconsin’s population, particularly women and people of color. All of the following examples are from the biennial report of the Sporting Heritage Council.<sup>53</sup>

## Hunters

In FY 2015, adults comprised 30 percent of participants in Learn to Hunt programs, which combine classroom instruction and field work before a novice hunts with an experienced hunter. That is nearly double the proportion over the past years and more events are reporting participation by people of color. DNR is analyzing if participants are continuing to buy licenses and hunt.

### *Learn to Hunt for Food*

In 2016 eight courses around Wisconsin involved 100 new adult hunters in this pilot program aimed at people with no prior hunting experience and no pathway to start but who are very interested in hunting for food. Novices are given detailed hands-on training in hunting deer and /or wild turkey and participate in a hunt with an experienced mentor.

### *Discounted licensing options*

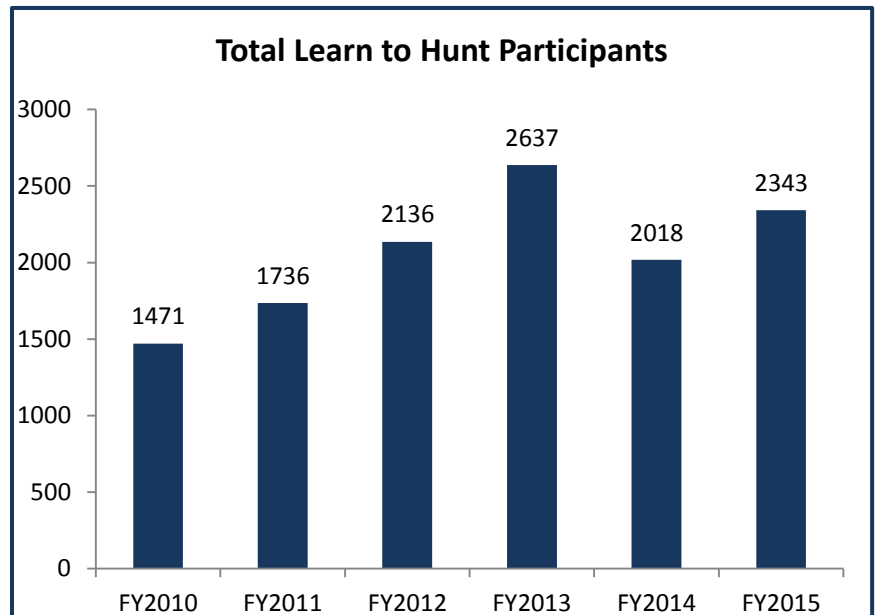
Several discounted licenses have been created in recent years with the aim of helping recruit more new hunters. Mentored hunting licenses, authorized in 2009, allowed anyone 10 or older to hunt under certain conditions. Sales of these licenses have increased steadily to 32,000 but appear to be slowing. This likely reflects these licenses are encouraging children of hunters to start hunting two years earlier but not reaching new groups of hunters.

First-Time Buyers License discounts were first offered in 2012, with fishing and certain hunting and trapping approvals sold at a reduced fee to people who have not been issued that same type of license, or a conservation patron license, or a sports license, in any of the previous 10 years. For Wisconsin residents, \$5 buys an annual license for trapping, or fishing, or for many hunting seasons. Nonresidents also qualify for discount rates. DNR is now evaluating the impacts of this program on recruiting new participants and the impacts on revenue; preliminary results suggest the reduced license rate is not motivating people to buy a license. Eighty percent of the people who ultimately get the discount were not aware of it until the discount was applied at the end of their transaction.

Recruiter rewards provide experienced hunters who recruit and mentor novices half-price license discounts under a state program recognizing the importance of mentors. If a mentor is listed by three new participants as their recruiter, the mentor can receive a license at half price.

### *Shooting range development and upgrades*

Other efforts to support hunting include developing target ranges and upgrading existing ones at 14 public shooting ranges. A Columbia County site has been selected for a public shooting range to be built in 2017 and the master plan for the Lower Wisconsin State Riverway includes consideration for establishing a range. Two new archery range projects



*Wisconsin's Learn to Hunt program has grown 59% since 2010 and adults are an increasing proportion of participants. Source: Biennial Report on the Status of Recruitment and Retention of Hunters, Trappers and Anglers, the Sporting Heritage Council, 2016.*

await implementation and a grant program has been established to help local rod and gun clubs manage and improve ranges in exchange for providing public access.

### Anglers

Until recently, angler recruitment efforts focused on introducing kids to fishing through training teachers, club members and youth leaders who in turn introduced kids to fishing. In recent years, DNR has focused more attention on working with partners to help introduce more people of color to fishing, including efforts with the Urban Ecology Center in Milwaukee, the Boys & Girls Club and Centro Hispano in Madison. Adults have been targeted with a multi-session course capitalizing on interest in sustainable, local foods. In the first two years of this Fishing for Dinner pilot program, 82 adults have learned the basics of fishing, gone fishing with a partnering conservation club and learned how to clean, cook and enjoy eating the fish caught.

### Trappers

With strong interest and involvement from the Wisconsin Trappers Association, a growing variety of trapper education opportunities have increased the number of trapper education graduates from 500 10 years ago to more than 1,600 each of the last three years. Standard courses are offered throughout the state by volunteer instructors as well as specialized opportunities including a correspondence course available for those without access to a class, a Trapper Camp and a University Fur School for two universities and one college. Most recently, via 2011 Wisconsin Act 168, a high school pupil may earn credit for successful completion of a qualifying program.

## **F. Current and potential impacts from reductions to conservation in Wisconsin**

Over the last 10 years, the department has countered declining revenue by reducing the number of positions, reducing operating costs by focusing staff and resources on core work through a strategic alignment, increasing volunteer opportunities and working with partners to recruit new hunters, anglers and trappers. Unfortunately, these efforts have not been adequate to overcome existing and projected gaps between revenue and the funding necessary to accomplish the authorized workload. DNR has made \$20 million in reductions over the last five years to keep a positive balance in the Fish and Wildlife Account and projections of the gap between revenue and work in coming years will require additional reductions.

### Current Impacts

- **Less public access to prime trout streams.** Fewer fish biologist and real estate positions contributed to acquiring 32 miles of streambank easements instead of the stated goal of 100 miles, limiting anglers' access to streams and reducing economic benefits to local communities.
- **Less fish and game produced where most hunters, anglers and trappers live.** Decreased habitat management and invasive species control on 41,000 acres of public lands in southern Wisconsin means reduced food and habitat for deer, turkey and other game, leading to less wildlife and reduced hunting opportunities where most hunters and anglers live. (See Appendix C for hunter and angler numbers by county)
- **Less accurate information to sustainably manage complex fisheries.** A 20 percent reduction in fish surveys annually results in less information to set regulations and sustainably manage fish populations, particularly on complicated systems.

- **Fewer warden patrols.** Fewer wardens means fewer interactions with hunters and anglers and an overall reduction in patrol effort. This translates into reduced fish/game protection, public safety and compliance. Prior to alignment, 10 to 20 warden jobs were held open to meet funding limitations. Open stations often result in counties without an assigned field warden. Vacancies require adjacent wardens to cover expanded territories. The average warden covers 391 square miles, 41,520 residents and 51,513 acres of water, handles 593 general calls for service, contacts 7,000 people on patrol, and conducts 33 hotline investigations and 65 accident or non-hotline investigations per year.
- **Reduced opportunities for collaboration to address competing needs.** Lower staffing levels reduce the ability for biologists and technicians around the state to work closely with user groups to understand and resolve the competing interests between user groups.
- **Waterfowl habitat in northern Wisconsin decreased.** Fewer wildlife biologist positions result in less frequent wetland drawdowns and water level manipulation, decreasing the availability of food and cover for waterfowl and furbearers. In recent years, DNR has left 2,000 acres of wetland impoundments unmanaged and thus without water in northern Wisconsin.
- **Less collaboration with conservation groups on habitat and other management to improve the resource.** Conservation groups provide significant dollars, labor and equipment to help improve habitat, from walleye spawning grounds on the Winnebago System to trout habitat statewide to waterfowl habitat across the state. Fewer DNR biologists results in reduced attendance at conservation club and lake association meetings and reduce direct collaboration with conservation groups on the design, location and implementation of habitat projects and cooperative projects to raise fish. This reduces the amount of habitat work done on the ground and in the water.

### **Potential impacts**

- **50 percent reduction in pheasant stocking.** The sale of pheasant stamps provides about half the funding necessary to produce the 75,000 birds stocked annually. To align production with the revenue, it may be necessary to cut production to levels sustainable by stamp sales. Birds available for harvest may drop below acceptable levels for hunters, pushing them elsewhere.
- **Reduction in statewide habitat management.** Less habitat management on public lands means less wildlife. At the same time quality managed hunting lands become more crowded. The reduction in habitat management impacts public land where conservation groups have invested money and labor to improve habitat and now stand to see that investment degraded through lack of sustained state management.
- **Limit enrollment in the Deer Management Assistance Program.** The number of landowners voluntarily enrolling in DMAP, which provides habitat and wildlife management assistance to landowners interested in managing their property for wildlife, has grown every year but that number may be capped to service existing customers if staff numbers are reduced further.
- **Reduction in stocking of coldwater and warmwater fish species.** Coldwater species and warmwater species will be stocked at lower levels due to the closure of rearing and brood stock stations. Without more supplemental funding to continue Gov. Scott Walker's Wisconsin Walleye Initiative, significant cuts must be

made in stocking extended growth walleye. These larger fish survive better than smaller stocked fish and are the heart of efforts to jumpstart lagging walleye fisheries, particularly in northern Wisconsin.

- **Reduction in trout habitat improvement work.** DNR will decrease temporary trout habitat crew members, resulting in less work being completed and less habitat improvement aimed at producing more fish. Instream improvements boost spawning habitat, create cover where fish can hide from predators and pools for fish to overwinter and are documented to boost fish numbers tenfold downstream from the project.

## **G. Opportunities for hunters, anglers and trappers if additional revenue is available**

Increasing revenue to avoid future funding shortfalls can restore the habitat management, public safety, resource protection and customer service to the levels that hunters, anglers and trappers expect. Additional revenue beyond closing the annual gap would allow DNR to implement the new ideas that stakeholders have provided in recent years.

State fish and wildlife management programs have shown that when they receive funding above base levels, hunters, anglers and trappers win, including these examples:

- **The reintroduction of wild turkey** in 1976 has resulted in statewide distribution of the bird, hunting opportunities for more than 130,000 hunters annually and status as one of the nation's top turkey hunting states;
- Governor Scott Walker's **Wisconsin Walleye Initiative** has stocked 1.9 million extended growth walleye into 367 waterbodies across Wisconsin and upgraded state, private and tribal walleye hatcheries, setting the table for more fishing opportunities for anglers' favorite quarry;
- The nationally recognized **trapper education program** with the Wisconsin Trappers Association has more than tripled the number of graduates;
- The 172 projects completed on state wildlife or fishery areas with earmarked Knowles-Nelson Stewardship funding has improved parking lots, roads, signage and access to **make it easier for hunters, anglers, trappers** and other users to enjoy state wildlife and fisheries areas;
- **The Fields and Forest Lands Interactive Gamebird Hunting Tool, FFlight for short**, helps hunters locate woodcock and ruffed grouse hunting areas, pheasant-stocked public hunting grounds and dove fields found on public hunting lands throughout Wisconsin.
- **State research and projects related to deer, elk, wolves, public lands management and access improvement** that has been funded by an increase in Pittman-Robertson funding and are listed on page 16, would not be possible within the current state revenue for fish and wildlife.

The following initiatives from stakeholders could be implemented if additional revenue is generated:

- **Expand the Young Forest Initiative to provide more deer, woodcock and ruffed grouse habitat.** Habitat for deer and ruffed grouse as well as for high conservation priority species such as the American Woodcock is being created through the Young Forest initiative. Private landowners can get state technical help and federal funding to increase active forest management on their land. Current goals are to add 20,000 new managed acres annually while maintaining 110,000 acres of young forest in 21 Northern Wisconsin counties. Adding state funding would assure the effort continues and expands even if federal funding does not, creating more habitat for production of deer, grouse and woodcock.
- **Increase habitat for trout, ducks and other waterfowl.** Additional stamp revenue would allow DNR and partners to improve more habitats for waterfowl, pheasant and grassland birds; expand grazing and

share cropping to improve habitat on public lands; increase the restoration of wetlands on public and private lands to boost waterfowl production and improve hunting opportunities; and improve trout habitat along Wisconsin trout streams beyond current levels.

- **More administrative support for County Deer Advisory Councils.** More resources will enable more administrative support for CDACs to help them carry out their responsibilities of providing input and recommendations to the state wildlife management program on deer management within their county.
- **Furbearer research to allow for more harvest.** Additional revenue garnered through a \$3 increase to applications for river otter harvest permits (limited draw species) would fund additional research to generate new population estimates for otter, potentially allowing more harvest of this species. Revenue would also be used to fund research on other semi-aquatic furbearer species.
- **Provide matching grants to partners caring for state-owned lands.** By providing matching grants to local volunteers willing to Adopt-a-Fish & Wildlife Areas and to help care for state natural areas, more public lands would get the management they need to provide better habitat for game and nongame wildlife including endangered species.
- **Continue stocking bigger walleye and musky to improve fishing.** Hatchery-raised walleye and musky stocked at larger sizes survive better than smaller fish but cost significantly more. Increased revenues would allow Wisconsin to continue stocking the larger walleye now made possible by GPR dollars and would assure that funding would be available to raise larger musky, now supported by donations from conservation clubs.
- **More hunting and fishing access to private and public lands.** Voluntary Public Access, or VPA, provides financial incentives to private landowners to allow the public access their private properties for hunting, fishing, trapping and wildlife observation and about 36,000 acres are now enrolled. The \$1.3 million in funding for the federal grant expires in September 2018. By assuring ongoing funding for VPA, hunters can gain access to more private lands, a need they expressed in surveys and focus groups.
- **Boost management of fisheries in Wisconsin's most lake-rich areas.** Oneida County has 1,129 lakes and Vilas County 1,318, lots of nonresident fishing pressure and a shared fishery between Chippewa tribal members and sports anglers -- all of which makes sustaining healthy fish populations more complex. One state biologist is assigned to each county to manage all of these waters. Focusing more resources here would allow management of more lakes to benefit local anglers, tribal fishers and tourism.

## SECTION 4 – What Other States Are Doing

With hunting license sales declining nationwide, some states have responded to funding shortfalls by raising hunting and fishing license fees; others have broadened their funding sources, often with approval from voters and which clearly identified the key areas to receive the additional funding. Missouri voters, for example, approved separate constitutional amendments in 1976 and 1984 to nominally increase their sales tax to raise money for fish and wildlife management and for state parks and soil and water conservation; voters reauthorize this latter tax every 10 years.<sup>54</sup> Some states have both raised rates and broadened funding sources, like Minnesota.

A 2005 study of different wildlife funding mechanisms used by states found that picking a mechanism with statewide appeal, broadening the constituency for the funding mechanism, and using strategic planning were all key factors in successfully adopting these mechanisms. The researchers also noted that several of the mechanisms were not approved on the first try. “Agencies should think creatively, evaluate their options, and use public opinion polling to determine which mechanism is right for a given state at a given time.”<sup>55</sup>

A mix of funding mechanisms examined in that April 2005 study, as well as others adopted since that study, follow.

### A. Higher license fees

Since 2013, 17 states have raised hunting and fishing license fees, including neighboring states of Minnesota and Michigan. Wisconsin last raised hunting and fishing license fees a decade ago.<sup>56</sup> Resident gun-deer licenses in Wisconsin and Indiana are the lowest among Midwestern states at \$24, \$11.58 below the average. The total cost to hunt a turkey for Wisconsin residents, including the application, tag/license and turkey stamps is \$23.25, the lowest of six Midwestern states averaging \$34.17.<sup>57</sup> Michigan has raised its senior fishing license to \$12 while Minnesota now has one rate for individual annual fishing licenses for anglers 18 and over and on up to 90. Wisconsin’s \$7 senior fishing license has been at the same price since 1997.

### B. Price indexing

Florida and Alabama have linked the cost of hunting and fishing license fees to the annual inflation rate, allowing conservation funding to keep up with rising costs and avoid big future increases. In the early 1980s, Wisconsin had a de facto price indexing approach. DNR had worked out an agreement with the Wisconsin Conservation Congress, the citizen group that advises the Natural Resources Board, to plan budgets so the agency would only seek license fee and permit increases once every four years.<sup>58</sup> The four-year cycle was designed to keep up with inflation, not routinely increase programs or staff size and prevent large leaps in fees. Increases have occurred over much longer cycles starting in the mid-1990s. Wisconsin resident gun deer hunting licenses would be \$28.04 instead of \$24 and fishing licenses \$23.66 instead of \$20 if they were tied to the CPI when prices last increased for hunting in 2005 and fishing in 2006.

### C. Hunter, angler and trapper retention and reactivation strategies

Pennsylvania and Georgia are among states successfully increasing revenue for fish and wildlife management by using customer retention and reactivation strategies based on new guidelines from the Wildlife Management Institute, Recreational Boating and Fishing Foundation (RBFF) and the Aquatic Resources Education Association. Georgia’s targeted emails to lapsed anglers resulted in selling nearly 10,000 licenses. Meanwhile, the state’s pilot program with RBFF to send first-time fishing license purchasers renewal reminders, newsletters and a follow-up survey and/or a discounted license renewal price promotion resulted in a 4.7 percent increase in the license renewal rate, generating \$18,000 in added revenue.<sup>59</sup> Pennsylvania started offering three and five year fishing licenses in 2012 to residents and nonresidents alike and research by Southwick Associates concluded that creation of those licenses added 59,000 anglers

and generated \$1.5 million by reducing the number of lapsed anglers.<sup>60</sup> Wisconsin angler and hunter support for recruitment and retention efforts is very strong: 71 percent of anglers in an April 2016 DNR scientific mail survey and 74 percent of hunters supported boosting recruitment and retention efforts to increase revenues.<sup>61</sup> Additional licensing flexibility would be needed for Wisconsin to evaluate some of the same recommended retention and reactivation strategies.

#### **D. License restructuring**

Michigan, Montana and New Hampshire are among the states that restructured licenses to increase revenue. Michigan, for example, increased hunting and fishing fees for most residents and non-residents while reducing license types from more than 200 to around 40. A base hunting license is now needed for any individual who wants to buy any other hunting licenses for specific species with one exception. The fishing license was broadened to include fishing for all species. Michigan did not generate as much revenue as projected, attributed in part to a bigger than anticipated drop in nonresident fishing and base hunting license sales, but still brought in \$7.8 million in additional funding. Michigan has subsequently lowered some nonresident fees.<sup>62</sup>

#### **E. General sales tax for conservation**

Missouri, Minnesota and Arkansas are among the states where voters backed a nominal increase in their sales tax to help fund conservation. Missouri voters in 1976 approved a constitutional amendment that sets aside  $\frac{1}{8}$  of 1 percent sales tax for the Missouri Department of Conservation to generate a broad, stable financial base for conservation of forests, fish and wildlife. For every \$8 spent on taxable items, one penny goes to conservation. In 2015, the conservation department received \$110 million from the sales tax.<sup>63</sup>

Missouri voters also approved a separate constitutional amendment in 1984 that sets aside  $\frac{1}{10}$  of 1 percent sales tax to fund its state parks and soil and water conservation efforts and called for voters to reauthorize the tax every 10 years.<sup>12</sup> This tax generates about \$90 million annually for parks and soil and water conservation. Missouri voters have reauthorized the tax four times, including on Nov. 8, 2016, when 80 percent voted for continuing the tax and resubmitting it for voter approval in 2026.<sup>64</sup>

Minnesota voters in 2009 passed an amendment to the state's constitution that increased the state sales tax by  $\frac{3}{8}$  of 1 percent with the revenue going to the Minnesota Legacy Fund and split four ways between the Outdoor Heritage Fund and three other funds, two of which also benefit natural resources and outdoor recreation and a third benefitting art and cultural heritage. The Outdoor Heritage Fund gets one-third of the proceeds and "may be spent to restore, protect, and enhance wetlands, prairies, forest and habitat for fish, game and wildlife." The sale tax increase began on July 1, 2009 and will end in 2034. Between 2009 and 2012, the tax generated more than \$1 billion, including \$332 million for the Outdoor Heritage Fund.<sup>65</sup>

#### **F. Dedicated portion of existing sales tax on sporting goods**

Virginia and Texas dedicate a share of the existing sales taxes collected on sporting equipment to wildlife conservation. Virginia uses expenditure estimates from the U.S. Fish & Wildlife National Survey of hunting, fishing and wildlife-based recreation to make the allocation, which it caps at \$13 million annually.<sup>66</sup>

#### **G. Dedicated lottery funds to conservation**

Minnesota, Colorado, Nebraska, Oregon and Arizona dedicate state lottery revenue to conservation.<sup>67</sup> In Minnesota, for example, 40 percent of the net proceeds from the Minnesota State Lottery are deposited into the Environmental Trust Fund each year and this contribution is guaranteed by the Minnesota Constitution until December 31, 2024. Proceeds



fund environmental projects "for the public purpose of protection, conservation, preservation, and enhancement of the statewide air, water, land, fish, wildlife, and other natural resources." Since 1991, the trust fund has provided about \$500 million to 1,000 projects around Minnesota.<sup>68</sup>

## **H. Real Estate Transfer Tax**

Illinois, Florida, South Carolina and Arkansas dedicate a portion of the existing document recording fees on the transfer of real estate for conservation.<sup>69</sup> In Arkansas, the tax generates a total of \$40 million to \$60 million annually to split between game and fish and state parks. Other states use revenue from this source for open space development.<sup>70</sup>

## **I. Voluntary measures**

Minnesota's voluntary walleye stamp started in 2009 to raise money to buy walleye fingerlings from private hatcheries. Every customer who purchases a fishing license online is asked if he or she would like to buy the \$5 stamp. Revenue has ranged from \$141,000 in 2012 to \$87,000 in 2015 and has been trending downward. Minnesota has about 1.4 million licensed anglers; about 17,500 walleye stamps were sold in 2015. Minnesota uses some of that revenue to administer the program with a part-time employee, reducing the amount available to purchase walleye.<sup>71</sup>

# **SECTION 5 - Public Input on Fish and Wildlife Management Revenue**

Fish, wildlife and habitat management are important to Wisconsin hunters, anglers and trappers as well as the general public. Both groups support increasing revenue for such state management as detailed in the following votes, scientific surveys, and online questionnaires.

### *Wisconsin Conservation Congress votes*

Thousands of Wisconsin citizens attend the annual Spring Fish and Wildlife Rules Hearings and Wisconsin Conservation Congress county meetings held simultaneously in April in all 72 counties. These meetings allow citizens to comment and provide input on DNR proposed fish and wildlife rule changes and advisory questions as well as Conservation Congress advisory questions. The Conservation Congress has placed 23 advisory questions on the questionnaires concerning license fees and conservation funding over the past six years (2011-2016). Participants have passed five of the six questions that specifically asked about fee increases during the six-year study period. Most recently, 62 percent of voters in the 2016 Spring Fish and Wildlife Rule Hearings approved a question asking if they supported the legislature increasing hunting, fishing and trapping license fees.<sup>72</sup>

The 2016 question read:

"Wisconsin has not had a license fee increase in over 8 years. A \$2 to \$3 per license increase on average would potentially raise \$4 million to \$6 million or more. This additional money could allow the DNR to fund more biologists and wardens to better protect and understand the resources and ensure quality experiences for all resource users. Do you support the Legislature increasing hunting, fishing, and trapping license fees?"<sup>73</sup>

### *Stakeholder group votes and other feedback*

The Wisconsin Fisheries Advisory Council, which includes representatives of statewide fishing groups, advises DNR's fisheries management board and the Wisconsin Conservation Congress on statewide issues including the DNR's long-term fisheries plan, has asked DNR to increase fishing license fees. Members of the group include Trout Unlimited, the Wisconsin Wildlife Federation, the Wisconsin Federation of Great Lakes Sport Fishermen, Walleyes for Tomorrow and Musky Clubs Alliance.

The Wisconsin Waterfowl Association, Ducks Unlimited and the Wisconsin Wildlife Federation in 2015 worked to advance legislation to increase the price of the state waterfowl stamp from \$7, set in 1997, to \$12 to increase the buying power of the stamp to help fund habitat work.

Ducks Unlimited surveyed attendees at the 2015 Wisconsin Waterfowl Hunters Conference to see if they supported an increase in the state waterfowl stamp. Ninety people responded, with 93 percent of waterfowl hunters in favor of raising the fee.

72 percent of the 10,000+ people providing online input in 2014 to help DNR develop its 10-year Fish, Wildlife & Habitat Management Plan and the Wisconsin Wildlife Action Plan indicated that Wisconsin's fish, wildlife and habitat was of "great" interest and 61 percent indicated that all citizens of the state should help pay for the management of state-owned properties.<sup>74</sup>

### *Scientific household surveys*

#### April 2016 survey

To help inform this report, DNR researchers conducted a scientific mail survey of 2,000 Wisconsin households in April 2016 to gauge how important fish and wildlife management were to them and gauge their support or opposition to five options for addressing the gap between revenue and authorized management work.<sup>75</sup> The results were as follows:

- 87 percent of respondents expressed a "great" or "moderate" interest in Wisconsin fish and wildlife.
- 95 percent of respondents "strongly" or "moderately" agreed that public lands benefit all citizens of the state.
- 96 percent of respondents agreed that thriving fish and wildlife populations provide a significant benefit to the state's economy.
- Of the five options presented for addressing the gap between revenue and authorized work, the most popular option was creating a mechanism for all residents to pay something for fish and wildlife management. This option received a majority of support across the general public (51%) and among anglers (57%), hunters (61%) and wildlife viewers (64%). The second most popular option was to do more to increase the number of hunters, trappers and anglers. The third most popular option was raising license fees for people who hunt, fish and trap and the fourth most popular option was having users of public lands like wildlife, fishery and state natural areas pay an access fee. The least popular option was having DNR reduce operating costs by cutting staff and reducing services. Fifty-eight percent of the general public opposes reduction to Wisconsin DNR operating costs, while only 20 percent support more reductions.

#### July 2016 survey

A scientific mail survey conducted in July 2016 by DNR researchers to inform the statewide recreation plan DNR is required to submit to the federal government revealed that more than 60 percent supported having everybody help pay for fish and wildlife management. Two-thirds of the respondents also said the public should pay at least half for maintaining DNR managed properties.<sup>76</sup>

## SECTION 6 – Conclusion

The state's fish, wildlife and habitat management programs, in collaboration with conservation groups, provide the foundation for healthy fish, wildlife and habitats. These natural resources are critical to hunters, anglers and trappers exercising their constitutional right to hunt, fish and trap. Their investments through their license fees and excise taxes on equipment have helped Wisconsin provide world-class hunting, fishing and trapping. These natural resources also are central for Wisconsin's economy, culture and quality of life. Continued reliance on a 19th century funding model puts all of these at risk.

Twenty million dollars in reductions made over the past five years to keep a positive balance in the Fish and Wildlife Account have decreased management of public lands and water, recreational opportunities and service to hunters, anglers and trappers as well as the general public.

Less restoration and maintenance of habitat means less fish and wildlife produced for hunters, anglers and wildlife watchers; less work to control invasive species on public lands and waters puts more private lands at risk of infestation; larger territories for fewer wardens to patrol degrades service and protection to the public and fish and game and can potentially lead to lower compliance with laws and reduced public safety; less maintenance of boat ramps, fishing piers, restrooms and other public facilities degrades the quality of user's experience and reduce opportunities for the public to fish, hunt and explore the lands and natural resources that belong to them.

In addition to the efficiencies the department will gain through alignment, a variety of funding options can close the immediate gap between revenue and authorized fish, wildlife and habitat management work, including raising select hunting and fishing licenses through a variety of approaches. Funding options relying on hunters and anglers may not fix the problem long-term, however, because of demographic and land use changes that will continue to cause hunting participation and license revenue decline. Identifying and servicing the needs of a more diverse and urban society may hold the key to funding the fish and wildlife conservation critical to a strong future.

Wisconsin residents support short-term and long-term fixes to increase revenue to pay for fish, wildlife and habitat management. Healthy fish and wildlife populations are important to them, and they believe these resources benefit the state's economy. Hunters, anglers and trappers have shown support for immediate actions such as raising hunting and fishing license fees. Hunters and anglers and the general public also support long-term fixes including having everybody pay something for fish and wildlife conservation.

## Endnotes

### Section 1

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- <sup>2</sup> Robert Holsman, "[What the Evidence Suggests for the Future of Fishing and Hunting License Sales in Wisconsin](#)," Bureau of Science Services, Wisconsin Department of Natural Resources, 2016, p. 18.
- <sup>3</sup> Jeff Prey, David Marcouiller, Anna Haines, "[Wisconsin Statewide Comprehensive Outdoor Recreation Plan \(SCORP\) 2011 - 2016 plan](#)," Wisconsin Department of Natural Resources, 2011, p. 2-9.
- <sup>4</sup> Wisconsin Legislature, "[2015 Wisconsin Act 55](#)," 2015.

### Section 3

- <sup>5</sup> Holsman, p. 3.
- <sup>6</sup> Paul Stuiber, Conor H. Smyth, Ben Monty, "[An Evaluation: Fish and Wildlife Funding, Department of Natural Resources](#)," Wisconsin Legislative Audit Bureau. 2006, p. 42.
- <sup>7</sup> Robert Holsman, Kofi Nkansah, Jordan Petchenik, Catherine Harris, Ben Beardmore, "[Conservation Funding for Fish and Wildlife in Wisconsin: A 2016 General Public Opinion Survey](#)," Bureau of Science Services, Wisconsin Department of Natural Resources, Madison, 2016, p. 3-5.
- <sup>8</sup> Robert Holsman, Jordan Petchenik, Catherine Harris, "Wisconsin Statewide Comprehensive Outdoor Recreation Survey 2016."
- <sup>9</sup> Stuiber, Smyth, Monty, p.3.
- <sup>10</sup> Wisconsin Legislative Fiscal Bureau. "[Joint Committee on Finance Paper #470, Fish and Wildlife Account Condition](#)," Madison, Wisconsin, 2015, p. 2.
- <sup>11</sup> Holsman, p. 10.
- <sup>12</sup> Ibid, p. 16.
- <sup>13</sup> James Schmidtkofer, "[2013-2015 Wisconsin Plan for Older People](#)," Department of Health Services, 2012; p. 6.
- <sup>14</sup> Robert Holsman, Bureau of Science Services, Wisconsin Department of Natural Resources, personal communication.
- <sup>15</sup> [U.S. Inflation Calculator](#).
- <sup>16</sup> U.S. Fish & Wildlife Service, "[Wildlife & Sport Fish Restoration Program](#)," 2016.
- <sup>17</sup> Association of Fish & Wildlife Agencies, "[The Blue Ribbon Panel on Sustaining America's Diverse Fish & Wildlife Resources Frequently Asked Questions](#)," 2016, p. 3.
- <sup>18</sup> Ibid, p. 2.
- <sup>19</sup> Ibid, p. 5.
- <sup>20</sup> Longwoods International. "Wisconsin 2015 Tourism Advertising Evaluation & Image Study," prepared for Travel Wisconsin, Wisconsin Department of Tourism, 2016.
- <sup>21</sup> Wisconsin Department of Tourism, "[The Power of Wisconsin Tourism](#)," 2016, p. 1.
- <sup>22</sup> Ibid, p. 2.
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# Appendix A

Total Tourism Impacts															
Wisconsin and Counties - Alphabetical															
County	Direct Visitor Spending			Total Business Sales			Employment			Total Labor Income			State and Local Taxes		
	Millions		%	Millions		%	Total		%	Millions		%	Millions		%
County	2014	2015	Change	2014	2015	Change	2014	2015	Change	2014	2015	Change	2014	2015	Change
Wisconsin	\$11,417.90	\$11,919.40	4.39%	\$18,474.40	\$19,291.70	4.42%	187,643	190,717	1.64%	\$4,829.90	\$5,065.70	4.88%	\$1,412.20	\$1,459.90	3.37%
Adams County	\$202.70	\$211.50	4.38%	\$253.90	\$265.00	4.40%	2,350	2,364	0.61%	\$47.30	\$50.10	5.90%	\$23.90	\$24.60	3.04%
Ashland County	\$33.90	\$34.50	1.64%	\$50.80	\$52.20	2.59%	570	577	1.17%	\$12.30	\$13.00	5.62%	\$4.40	\$4.50	2.16%
Barron County	\$94.10	\$97.10	3.26%	\$139.90	\$145.10	3.66%	1,406	1,433	1.89%	\$30.40	\$32.40	6.58%	\$10.70	\$10.90	2.44%
Bayfield County	\$42.40	\$45.20	6.70%	\$57.20	\$60.70	6.13%	588	598	1.56%	\$10.40	\$11.20	6.95%	\$5.50	\$5.80	4.97%
Brown County	\$588.80	\$613.70	4.22%	\$980.90	\$1,023.30	4.32%	11,201	11,293	0.82%	\$405.50	\$416.30	2.66%	\$85.30	\$86.70	1.67%
Buffalo County	\$10.80	\$11.10	3.07%	\$18.50	\$19.20	3.67%	189	194	2.44%	\$3.70	\$3.90	4.53%	\$1.30	\$1.30	1.97%
Burnett County	\$22.40	\$23.20	3.54%	\$33.30	\$34.60	3.86%	366	370	1.06%	\$6.60	\$6.90	5.18%	\$2.90	\$3.00	2.58%
Calumet County	\$28.90	\$29.80	3.05%	\$55.20	\$57.30	3.75%	641	657	2.56%	\$13.40	\$13.90	3.99%	\$3.80	\$3.90	3.09%
Chippewa County	\$77.70	\$83.90	8.03%	\$127.10	\$135.60	6.66%	1,313	1,332	1.40%	\$29.30	\$31.50	7.23%	\$8.90	\$9.40	5.24%
Clark County	\$27.20	\$28.00	3.06%	\$47.40	\$49.10	3.68%	356	354	-0.65%	\$6.50	\$6.60	1.52%	\$2.90	\$2.90	1.14%
Columbia County	\$115.50	\$126.00	9.11%	\$169.60	\$182.60	7.64%	1,699	1,766	3.89%	\$33.80	\$37.30	10.17%	\$13.60	\$14.60	7.30%
Crawford County	\$41.80	\$43.80	4.70%	\$60.00	\$62.80	4.64%	714	711	-0.43%	\$11.70	\$12.10	3.12%	\$5.60	\$5.70	2.78%
Dane County	\$1,086.90	\$1,154.10	6.18%	\$1,881.00	\$1,983.60	5.45%	20,395	21,009	3.01%	\$548.60	\$593.30	8.14%	\$142.10	\$148.30	4.32%
Dodge County	\$73.90	\$79.00	6.90%	\$139.20	\$147.30	5.77%	1,414	1,479	4.62%	\$31.70	\$33.60	5.99%	\$8.80	\$9.40	6.18%
Door County	\$314.60	\$332.80	5.79%	\$402.20	\$424.30	5.50%	3,029	3,110	2.68%	\$66.50	\$70.80	6.58%	\$34.20	\$35.90	5.13%
Douglas County	\$85.70	\$88.70	3.45%	\$125.20	\$130.00	3.78%	1,255	1,263	0.64%	\$25.40	\$26.60	4.57%	\$10.10	\$10.30	2.04%
Dunn County	\$46.40	\$46.70	0.71%	\$79.10	\$80.90	2.28%	864	858	-0.70%	\$17.20	\$17.60	2.63%	\$6.00	\$6.00	0.00%
Eau Claire County	\$215.70	\$216.10	0.18%	\$347.10	\$353.40	1.80%	4,056	4,150	2.31%	\$90.90	\$94.70	4.23%	\$27.10	\$27.60	1.98%
Florence County	\$4.70	\$4.90	2.90%	\$7.20	\$7.50	3.46%	90	91	0.79%	\$1.50	\$1.60	6.60%	\$0.60	\$0.60	1.63%
Fond du Lac County	\$120.00	\$132.20	10.20%	\$210.90	\$227.30	7.74%	2,495	2,574	3.15%	\$55.60	\$59.20	6.55%	\$16.00	\$16.90	5.62%
Forest County	\$12.30	\$12.90	4.99%	\$18.60	\$19.50	4.83%	215	219	1.78%	\$2.80	\$3.00	5.51%	\$1.60	\$1.70	3.74%
Grant County	\$42.50	\$43.20	1.74%	\$77.20	\$79.50	2.98%	883	887	0.42%	\$20.10	\$21.10	4.66%	\$5.30	\$5.30	1.28%
Green County	\$40.60	\$39.50	-2.76%	\$69.20	\$69.40	0.24%	780	764	-2.03%	\$17.30	\$17.80	2.47%	\$5.00	\$4.90	-2.18%
Green Lake County	\$35.30	\$37.90	7.46%	\$54.00	\$57.50	6.43%	763	777	1.85%	\$15.30	\$16.40	7.26%	\$5.40	\$5.70	5.04%
Iowa County	\$33.60	\$34.70	3.26%	\$52.60	\$54.60	3.71%	428	434	1.33%	\$10.90	\$11.40	4.38%	\$3.30	\$3.40	2.68%
Iron County	\$19.00	\$19.10	0.46%	\$26.10	\$26.50	1.55%	264	252	-4.41%	\$4.70	\$4.80	3.16%	\$2.40	\$2.40	-1.55%
Jackson County	\$36.10	\$38.60	6.93%	\$53.60	\$56.90	6.13%	545	575	5.48%	\$9.20	\$9.70	5.92%	\$4.40	\$4.70	6.53%
Jefferson County	\$87.10	\$90.60	4.06%	\$153.10	\$159.60	4.24%	1,613	1,645	1.97%	\$37.40	\$39.10	4.48%	\$10.40	\$10.70	3.40%
Juneau County	\$64.10	\$68.00	5.95%	\$90.30	\$95.30	5.53%	727	742	2.06%	\$13.00	\$13.60	4.38%	\$6.80	\$7.10	4.34%
Kenosha County	\$181.90	\$196.60	8.11%	\$306.60	\$327.00	6.64%	3,006	3,164	5.25%	\$75.20	\$80.80	7.57%	\$20.60	\$22.10	7.22%
Kewaunee County	\$17.80	\$17.40	-2.16%	\$32.00	\$32.30	0.79%	288	277	-3.95%	\$4.60	\$4.60	1.15%	\$2.10	\$2.00	-3.05%
La Crosse County	\$223.40	\$236.10	5.69%	\$368.60	\$387.80	5.21%	4,017	4,122	2.61%	\$93.00	\$98.90	6.35%	\$28.70	\$30.00	4.54%
Lafayette County	\$12.30	\$11.90	-3.24%	\$21.10	\$21.10	0.00%	198	190	-4.34%	\$3.00	\$2.90	-2.54%	\$1.50	\$1.50	-3.77%
Langlade County	\$44.70	\$47.40	6.10%	\$64.80	\$68.40	5.60%	508	503	-1.08%	\$10.20	\$10.60	3.30%	\$4.50	\$4.60	2.90%
Lincoln County	\$52.80	\$53.20	0.67%	\$81.90	\$83.60	2.03%	691	699	1.21%	\$14.10	\$14.90	5.54%	\$5.50	\$5.60	1.22%
Manitowoc County	\$111.00	\$115.30	3.87%	\$184.80	\$192.40	4.12%	2,089	2,094	0.23%	\$43.50	\$45.30	4.29%	\$14.90	\$15.30	2.71%
Marathon County	\$229.60	\$235.90	2.72%	\$390.80	\$404.20	3.45%	4,130	4,170	0.96%	\$96.70	\$100.90	4.36%	\$29.00	\$29.40	1.70%
Marinette County	\$144.40	\$154.30	6.86%	\$202.90	\$215.40	6.18%	1,592	1,632	2.50%	\$30.20	\$31.30	3.55%	\$14.80	\$15.50	5.16%
Marquette County	\$20.60	\$21.40	4.06%	\$31.00	\$32.30	4.21%	288	288	-0.07%	\$4.50	\$4.60	3.74%	\$2.50	\$2.60	2.48%
Menominee County	\$2.40	\$2.50	4.71%	\$4.50	\$4.70	4.63%	48	48	1.66%	\$0.60	\$0.60	0.52%	\$0.40	\$0.40	3.03%
Milwaukee County	\$1,794.50	\$1,858.20	3.55%	\$3,187.10	\$3,313.00	3.95%	30,899	31,323	1.37%	\$1,048.70	\$1,077.30	2.73%	\$217.70	\$223.60	2.67%
Monroe County	\$79.80	\$82.00	2.74%	\$121.10	\$125.10	3.34%	1,203	1,213	0.82%	\$24.60	\$25.40	3.20%	\$9.80	\$10.00	2.26%
Oconto County	\$78.90	\$83.80	6.21%	\$110.10	\$116.40	5.73%	853	870	1.98%	\$14.80	\$15.60	5.14%	\$7.90	\$8.20	4.53%
Oneida County	\$206.90	\$215.90	4.33%	\$273.70	\$285.70	4.37%	2,131	2,161	1.41%	\$46.60	\$48.50	3.91%	\$20.70	\$21.30	2.91%
Outagamie County	\$324.40	\$335.30	3.38%	\$558.70	\$580.10	3.84%	6,289	6,417	2.04%	\$154.00	\$162.70	5.68%	\$40.70	\$42.60	4.51%
Ozaukee County	\$89.80	\$92.50	2.95%	\$179.10	\$185.80	3.71%	1,996	2,018	1.06%	\$52.70	\$54.90	4.13%	\$11.40	\$11.80	3.46%
Pepin County	\$5.70	\$6.20	7.61%	\$10.10	\$10.80	6.26%	101	104	2.58%	\$1.80	\$1.90	4.48%	\$0.70	\$0.70	5.24%
Pierce County	\$25.00	\$24.90	-0.54%	\$47.00	\$47.90	1.83%	416	422	1.47%	\$8.20	\$8.60	4.94%	\$3.00	\$3.00	0.47%
Polk County	\$79.60	\$82.00	3.11%	\$119.20	\$123.50	3.57%	1,060	1,062	0.19%	\$20.30	\$21.40	5.49%	\$8.50	\$8.70	1.77%
Portage County	\$115.20	\$119.60	3.79%	\$202.30	\$210.50	4.09%	2,073	2,154	3.87%	\$42.40	\$44.70	5.37%	\$14.70	\$15.50	5.70%
Price County	\$17.70	\$18.50	4.86%	\$29.70	\$31.10	4.71%	317	321	1.26%	\$5.70	\$6.10	7.32%	\$2.40	\$2.40	3.68%
Racine County	\$227.80	\$232.30	1.98%	\$407.10	\$419.60	3.09%	4,109	4,091	-0.44%	\$104.40	\$108.60	4.06%	\$27.00	\$26.90	0.00%
Richland County	\$19.50	\$19.30	-0.98%	\$32.00	\$32.30	1.16%	321	320	-0.42%	\$6.60	\$6.70	1.52%	\$2.30	\$2.30	-1.03%
Rock County	\$203.00	\$220.50	8.66%	\$340.10	\$363.90	6.98%	3,798	3,891	2.45%	\$84.10	\$90.30	7.27%	\$25.60	\$26.80	4.75%
Rusk County	\$26.70	\$27.00	1.06%	\$38.90	\$39.70	2.14%	415	416	0.19%	\$7.90	\$8.20	3.96%	\$3.20	\$3.20	0.40%
St. Croix County	\$94.00	\$99.70	6.03%	\$158.20	\$166.80	5.41%	1,748	1,828	4.56%	\$38.00	\$41.20	8.50%	\$12.00	\$12.70	5.96%
Sauk County	\$945.30	\$1,005.30	6.35%	\$1,205.10	\$1,276.70	5.94%	10,649	10,928	2.62%	\$213.90	\$231.80	8.38%	\$110.60	\$117.40	6.16%
Sawyer County	\$83.70	\$85.60	2.28%	\$110.60	\$113.70	2.81%	971	971	-0.03%	\$20.50	\$20.90	2.28%	\$9.80	\$9.90	1.17%
Shawano County	\$60.20	\$61.90	2.76%	\$90.30	\$93.30	3.34%	872	886	1.59%	\$17.40	\$18.40	5.43%	\$6.90	\$7.00	2.56%
Sheboygan County	\$203.40	\$214.90	5.66%	\$340.90	\$358.60	5.18%	3,404	3,451	1.37%	\$73.50	\$78.50	6.76%	\$25.90	\$26.60	2.83%
Taylor County	\$25.50	\$26.50	3.76%	\$42.10	\$43.80	4.05%	352	356	1.12%	\$7.00	\$7.20	4.15%	\$2.70	\$2.80	2.57%
Trempealeau County	\$24.20	\$25.30	4.71%	\$47.40	\$49.60	4.60%	371	381	2.71%	\$7><					

## Appendix B

Projects and research efforts funded by the increased Pittman-Robertson funds

### Deer research and management projects

- **Buck Mortality Study:** Assessment of buck survival rates and mortality causes to improve data provided to County Deer Advisory Councils, or CDACs, as recommended by the Sex-Age-Kill review panel.
- **Southwest Wisconsin CWD and Predator Impacts Study:** Will provide information to better understand how CWD may or may not be interacting with other factors impacting the deer herd and will directly estimate the abundance and distribution of bobcats and coyotes within the study areas, and examine their impact on deer survival and behavior.
- **Estimating Survival and Cause-Specific Mortality of Adult Deer:** Study to assess deer survival rates and overall deer mortality causes to improve data provided to CDAC's as recommended by the Sex-Age-Kill review panel.
- **Forest Regeneration Impacts:** Study to provide CDACs information to better understand deer impacts on forest habitat and apply this knowledge to herd management through harvest quota setting and permit levels.
- **Deer Reproduction and Nutritional Condition:** Research to develop reproduction and body condition metrics for the CDACs to monitor the deer herd through car-killed deer carcass analysis statewide.
- **Human Dimensions Research:** Study to better understand constituent beliefs, attitudes, preferences, and behaviors related to various deer management goals and strategies, and to evaluate DMAP and CDAC efforts.
- **Snapshot WI:** Project is a recommendation of the Deer Trustee Report to combine citizen/hunter involvement and trail camera technology to assess distribution and relative abundance of predators and to develop an independent index of doe-to-fawn and buck-to-doe ratios to better estimate Wisconsin's deer herd.
- **Impact of Predation, Winter Weather and Habitat on Whitetail Deer Fawns:** Research to assess the impact of weather, habitat and predation on deer of all age-classes to improve data provided to CDACs.
- **CWD Surveillance:** Effort to track the spread of the disease, conduct research to understand impacts to deer populations and continue to provide opportunities for hunters to test their deer.

### Elk restoration and management

- **Elk Management/Restoration:** Effort in Jackson County with a long-term goal of providing a hunting opportunity and enhancing tourism through a herd of about 400 animals.
- **Elk Research:** Work to develop a comprehensive and efficient statewide monitoring system for the elk herd which will be used to make elk harvest management decisions and set harvest quotas.

### Wolf research and population management

- **Wolf Management Plan:** Develop a guide for future wolf management actions through public involvement and Natural Resources Board approval.
- **Wisconsin Wolf Education & Outreach:** Project to better inform the public on the state's wolf population to enhance input on wolf management in the state.
- **Alternative Wolf Population Monitoring Techniques:** Research to improve the current monitoring of the wolf population by developing new methods that use occupancy based modeling from multiple data sources and genetic capture-recapture models to inform future management decisions.
- **Evaluation of Satellite-based Wolf Monitoring Systems:** Evaluate the effectiveness and durability of GPS-based collar units and their associated data delivery systems to better understand wolf movement patterns at a lower cost.
- **Measuring Social Capacity of Wolves:** Research to measure public opinion about wolves and wolf management among state residents to inform wolf management plan recommendations.

- **Wisconsin Wolf Management Monitoring:** Effort to better understand the geographic distribution and size of the state's wolf population through VHF radio telemetry flights; trapping and radio collaring; winter track surveys; health testing; summer howl surveys; recovery of wolf carcasses; and hunter/trapper surveys.

#### Deer Trustee Report Implementation

- **Deer Trustee Report Implementation:** Public involvement process to review all aspects of Wisconsin's deer management program with a focus to include opportunities for hunters to become more involved in herd management recommendations through the CDACs, managing their properties for deer through DMAP as well as regulation changes to enhance the hunting experience.
- **Updating Wisconsin Land Cover Data:** Effort to improve understanding of statewide habitat information which will inform management decisions that directly impact hunting opportunity.
- **Deer Management Assistance Program (DMAP) Implementation:** Creation of the program to provide landowners with professional guidance on managing their land for deer and other wildlife.
- **Deer Management Assistance Program (DMAP) GIS and Database Development:** Helps program participants better measure and track management decisions, activities, and outcomes.

#### Public Lands Management Activities

- **Wildlife Area Master planning initiative:** Work resulting in the completion of master plans for many DNR-managed lands providing consistent, long term management activities on the properties while promoting public access, hunting, fishing and trapping opportunities.
- **Public Lands Management Activities:** Work resulting in lunker structures, stream bank brushing, prescribed burning, grassland and tree plantings, food plots, waterfowl flowages and invasive species control to ensure that property users have a quality experience when hunting, fishing and trapping on their public lands.
- **Public land Access Improvements:** Effort resulting in improved access to department lands by creating and maintaining parking lots, hunter walking trails, boat landings, signage and high quality maps to let our hunters, trappers and anglers know where their public lands are located.
- **Motorized Access Inventory:** Initiative resulting in a comprehensive summary of facilities on public lands including roads, trails, parking areas and other developments to lay the groundwork for department staff to embark on a comprehensive project to assess and improve recreational use opportunities beginning in 2017.

## Appendix C

### Average Fishing and Hunting License Sales per County 2009 - 2011



11/04/2016

## Appendix D

Consumer Price Index adjustments based on the year the price was established and 2014 license sales. This table is not inclusive of all licenses, applications and stamps, but serves as an example of how CPI adjustments would affect licenses.

License Name	Number Sold	Current Cost	Price Year	CPI Adjustment	Adjusted Cost	Increased Revenue
Resident Gun Deer	396,415	\$24.00	2005	\$4.00	\$28.00	\$1,585,660
Resident Annual Fishing	477,688	\$20.00	2005	\$3.00	\$23.00	\$1,433,064
Resident Conservation Patron	42,532	\$165.00	2005	\$30.00	\$195.00	\$1,275,960
Resident Archer Deer	143,824	\$24.00	2004	\$4.00	\$28.00	\$575,296
Resident Spousal Combo Fishing	109,995	\$31.00	2005	\$5.00	\$36.00	\$549,975
Resident Antlerless Bonus	73,315	\$12.00	1991	\$7.00	\$19.00	\$513,205
Resident Sports	48,669	\$60.00	2005	\$10.00	\$70.00	\$486,690
Resident Senior Annual Fishing	121,101	\$7.00	1997	\$2.00	\$9.00	\$242,202
Resident Crossbow Deer	44,395	\$24.00	2005	\$4.00	\$28.00	\$177,580
Resident Small Game	83,195	\$18.00	2005	\$2.00	\$20.00	\$166,390
Resident Spring Turkey License	81,424	\$15.00	2005	\$2.00	\$17.00	\$162,848
Resident Junior Gun Deer	50,290	\$20.00	2005	\$3.00	\$23.00	\$150,870
Resident Trapping	20,265	\$20.00	2004	\$4.00	\$24.00	\$81,060
Resident Junior Annual Fishing	33,470	\$7.00	1997	\$2.00	\$9.00	\$66,940
Resident Junior Conservation Patron License	3,593	\$75.00	2004	\$16.00	\$91.00	\$57,488
Resident Lake Winnebago Sturgeon Spearing	12,493	\$20.00	2003	\$4.00	\$24.00	\$49,972
Resident Junior Archer Deer	11,225	\$20.00	2005	\$3.00	\$23.00	\$33,675
Resident Disabled Annual Fishing	16,003	\$7.00	1996	\$2.00	\$9.00	\$32,006
Resident Fall Turkey License	13,402	\$15.00	2005	\$2.00	\$17.00	\$26,804
Resident Junior Sports	2,272	\$35.00	2004	\$7.00	\$42.00	\$15,904
Resident Senior Citizen Small Game	15,439	\$9.00	2005	\$1.00	\$10.00	\$15,439
Resident Junior Small Game	9,354	\$9.00	2004	\$1.00	\$10.00	\$9,354
Resident Junior Crossbow Deer	1,567	\$20.00	2005	\$3.00	\$23.00	\$4,701
Resident Upriver Sturgeon Spearing	480	\$20.00	2003	\$4.00	\$24.00	\$1,920
Nonresident Gun Deer	24,406	\$160.00	2004	\$35.00	\$195.00	\$854,210
Nonresident Annual Fishing	74,511	\$50.00	2005	\$9.00	\$59.00	\$670,599
Nonresident Archer Deer	6,459	\$160.00	2004	\$35.00	\$195.00	\$226,065
Nonresident 4-Day Fishing	55,092	\$24.00	2005	\$4.00	\$28.00	\$220,368
Nonresident 15-Day Fishing	24,284	\$28.00	2005	\$5.00	\$33.00	\$121,420
Nonresident 15-Day Family Fishing	14,858	\$40.00	2004	\$8.00	\$48.00	\$118,864
Nonresident Small Game	5,552	\$85.00	2005	\$15.00	\$100.00	\$83,280
Nonresident Antlerless Bonus	4,066	\$20.00	1991	\$13.00	\$33.00	\$52,858
Nonresident Crossbow Deer	1,278	\$160.00	2004	\$35.00	\$195.00	\$44,730
Nonresident Spring Turkey License	3,346	\$60.00	2004	\$13.00	\$73.00	\$43,498
Nonresident Sports	502	\$275.00	2004	\$62.00	\$337.00	\$31,124
Nonresident Junior Sports	3164	\$36.00	2005	\$6.00	\$42.00	\$18,984
Nonresident 5-Day Small Game	1,945	\$55.00	2005	\$9.00	\$64.00	\$17,505
Nonresident Conservation Patron	107	\$600.00	2004	\$135.00	\$735.00	\$14,445
Nonresident Junior Conservation Patron	814	\$77.00	2005	\$13.00	\$90.00	\$10,582
Nonresident Fall Turkey License	336	\$60.00	2004	\$13.00	\$73.00	\$4,368
Nonresident Lake Winnebago Sturgeon Spearing	231	\$65.00	2005	\$12.00	\$77.00	\$2,772
Nonresident Furbearer	52	\$160.00	2004	\$35.00	\$195.00	\$1,820
Nonresident Upriver Sturgeon Spearing	11	\$65.00	2005	\$12.00	\$77.00	\$132

**Total: \$10,252,627**

**Comparison of current and standardized discount license rates. All licenses presented are resident prices.**

License Name	Number Sold	Current Cost	Current Discount	Standardized Discount	Cost Change	Future Cost	Revenue Change
Junior Gun Deer	50,290	\$20.00	17%	10% to 25%	-\$2 to \$1.50	\$18 to \$21.50	-\$100,600 to \$75,400
Junior Archer Deer	11,225	\$20.00	17%	10% to 25%	-\$2 to \$1.50	\$18 to \$21.50	-\$22,500 to \$16,800
Junior Crossbow Deer	1,567	\$20.00	17%	10% to 25%	-\$2 to \$1.50	\$18 to \$21.50	-\$3,100 to \$2,400
Junior Small Game	9,354	\$9.00	50%	10% to 25%	\$4.50 to \$7	\$13.5 to \$16	\$42,100 to \$65,500
Junior Fishing	33,470	\$7.00	65%	10% to 25%	\$8 to \$11	\$15 to \$18	\$267,800 to \$368,200
Spousal Fishing	109,995	\$31.00	23%	15% to 25%	-\$1 to \$3	\$30 to \$34	-\$110,000 to \$330,000
Senior Small Game	15,439	\$9.00	50%	25% to 50%	\$0 to \$4.50	\$9 to \$13.50	\$0 to \$69,500
Senior Fishing	121,101	\$7.00	65%	25% to 50%	\$3 to \$8	\$10 to \$15	\$363,300 to \$968,800
Disabled Fishing	16,003	\$7.00	65%	25% to 50%	\$3 to \$8	\$10 to \$15	\$48,000 to \$128,000

**Total: \$485,000 to \$2,024,600**

**First-time buyer license revenue compared to standard license revenue for 2014 first-time buyer license sales**

License Name	Number Sold	First-Time Buyer Cost	Standard Cost	First-Time Revenue	Standard Revenue	Revenue Difference
Resident Annual Fishing - First-time Buyer	65,652	\$5.00	\$20.00	\$328,300	\$1,313,000	\$984,700
Resident Gun Deer - First-time Buyer	13,452	\$5.00	\$24.00	\$67,300	\$322,800	\$255,500
Resident Archer Deer - First-time Buyer	11,937	\$5.00	\$24.00	\$59,700	\$286,500	\$226,800
Resident Small Game - First-time Buyer	10,322	\$5.00	\$18.00	\$51,600	\$185,800	\$134,200
Resident Junior Gun Deer - First-time Buyer	8,189	\$5.00	\$20.00	\$40,900	\$163,800	\$122,900
Resident Spring Turkey - First-time Buyer	8,787	\$5.00	\$15.00	\$43,900	\$131,800	\$87,900
Resident Junior Archer Deer - First-time Buyer	4,841	\$5.00	\$20.00	\$24,200	\$96,800	\$72,600
Resident Junior Small Game - First-time Buyer	5,195	\$5.00	\$9.00	\$26,000	\$46,800	\$20,800
Resident Trapping - First-time Buyer	1,358	\$5.00	\$20.00	\$6,800	\$27,200	\$20,400
Resident Fall Turkey - First-time Buyer	1,677	\$5.00	\$15.00	\$8,400	\$25,200	\$16,800
Resident Senior Small Game - First-time Buyer	585	\$5.00	\$9.00	\$2,900	\$5,300	\$2,400
Nonresident Annual Fishing - First-time Buyer	34,401	\$25.75	\$50.00	\$885,800	\$1,720,100	\$834,300
Nonresident Gun Deer - First-time Buyer	3,546	\$79.75	\$160.00	\$282,800	\$567,400	\$284,600
Nonresident Archer Deer - First-time Buyer	2,220	\$79.75	\$160.00	\$177,000	\$355,200	\$178,200
Nonresident Small Game - First-time Buyer	2,719	\$42.75	\$85.00	\$116,200	\$231,100	\$114,900
Nonresident Spring Turkey - First-time Buyer	879	\$29.75	\$60.00	\$26,200	\$52,700	\$26,500
Nonresident Furbearer - First-time Buyer	83	\$79.75	\$160.00	\$6,600	\$13,300	\$6,700
Nonresident Fall Turkey - First-time Buyer	162	\$29.75	\$60.00	\$4,800	\$9,700	\$4,900
Nonresident Trapping - First-time Buyer	6	\$75.75	\$150.00	\$500	\$900	\$400

**Total: \$3,395,500**