



REGULATORY IMPACT ANALYSIS FOR PROPOSED AMENDMENTS TO LICENSE FEE RULE

Rule Amendments: 15A NCAC 10A .1601 LICENSE FEES

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Impact Summary: State Government: Yes
Local Government: Unlikely
Private Impact: Yes
Substantial Impact: Yes

Authority: G.S. 113-270.1B; 113-134

I. Summary

The proposed rule amendment increases fees for all licenses, permits, stamps, and certifications the Wildlife Resources Commission issues and administers, by the total increase in the Consumer Price Index for All Urban Consumers (CPI-U) since the last fee increase, rounded up to the next whole dollar, as allowed by Paragraph (e) of 113- 270.1B. These fees were last increased on January 1, 2020.

The NC Wildlife Resources Commission (Commission or NCWRC) anticipates that the proposed fee increase will help the agency address funding issues related to increased operating costs exacerbated by inflation, increased demand for agency services, and stagnant state appropriations. Revenue from the proposed increase will better equip the NCWRC to meet the demands on its operating budget for the

rising costs of employee salaries and benefits and other operating expenses. Specifically, the increased revenue will enable the Commission to accomplish several goals: 1) fund existing employee salary increases to align to the market, keep up with inflation, and retain staff; 2) fund a pay plan that is aligned to the market, is competitive, and sets the basis for equity to attract and recruit staff; 3) fund new positions needed to fulfill the demands of managing and maintaining programs and infrastructure to meet the agency's mission; and 4) keep pace with expenditures that have increased, on average, by approximately \$5.6 million per year (6.28% per year) since the last fee increase that became effective January 1, 2020 (Appendix A).

The proposed fee increase is anticipated to provide up to an additional \$8.1 million to the State annually.¹ Of this additional revenue, approximately \$6.35 million per year is estimated for the NCWRC and an estimated \$1.73 million will go to the Division of Marine Fisheries (DMF). Of the NCWRC's potential additional revenue, \$4.67 million will go to the operating budget and \$1.68 million is estimated for the Endowment Fund. Additional operating revenue is needed to cover increasing annual expenses related to personnel and benefits and operating expenses associated with managing and maintaining programs and infrastructure.

The burden of the fee increase will fall on the public. No direct local government impacts are anticipated unless a significant number of individuals discontinue licensed activities. Depending on license(s) purchased, individuals could incur an additional cost of \$2 to \$188 on annual licenses and from \$1.50 to \$309 on lifetime licenses. Proposed license fees can be found in Appendix B.

II. Background

The NCWRC is tasked with conserving and sustaining the State's fish and wildlife resources and their habitats through research, scientific management, wise use, and public input. The Commission is also the regulatory agency responsible for the enforcement of North Carolina's hunting, fishing, trapping, and boating laws.

Historically, all fees for licenses issued and administered by the Commission were established in statute. However, in accordance with G.S. 113-270.1B(e), the Commission adopted rules to establish fees for all licenses, permits, stamps and certifications it issues and administers, except those specified in G.S. 113-173, in 2019 (effective January 1, 2020). The Commission also has the ability, via G.S. 113-270.1B(e), to increase these fees by the total increase in the Consumer Price Index for All Urban Consumers (CPI-U) rounded up to the next whole dollar, since the last fee change as needed. The 2020 increase adjusted the fees for most licenses under G.S. 113.270 by 6%.

The Commission is funded by a combination of receipts, federal grants, and general fund appropriations. The agency sells 99 licenses, permits, and privileges for activities associated with hunting, fishing, trapping, and regulated activities. Of those, 71 generate revenue exclusively for the

¹ Three-year average in 2023 dollars, based on projected license sales data from 2019 – 2023.

NCWRC, 15 generate revenue for the NCWRC and DMF, and 13 generate revenue exclusively for the DMF.

The NCWRC license receipt revenue is directed into one of two funds depending on the item purchased. Annual license revenue is deposited into the agency’s operating fund. Lifetime license revenue is directed to the agency’s Endowment Fund. While the Wildlife Endowment Fund is often regarded as a fallback measure for the agency, it is important to note the Commission is limited in the use of funds in this account.² The Commission has the authority to use a portion of the interest earned annually on this fund for “furthering the conservation of wildlife resources and the efficient operation of the North Carolina Wildlife Resources Commission in accomplishing the purposes of the agency as set forth in G.S. 143-239.” However, use for personnel and recurring operational costs would not serve the purpose for which the Wildlife Endowment Fund was established. Additionally, the quantity and frequency of purchases of equipment and materials necessary to manage and provide access to the resources would exceed available interest withdrawals (Table 1). Thus, the agency is forced to find other sources of income which do not negatively impact the present level of support being provided to the public.

Table 1: Endowment fund interest withdraws FY 2019 – FY 2023

	2019	2020	2021	2022	2023
Transfer to Operating	\$816,741.90	\$812,142.00	\$833,091.10	\$626,010.24	\$1,536,244.00
Transfer to Capital	\$170,000.00	\$879,200.00	\$405,000.00	\$2,304,600.00	\$600,900.00
Transfer to Special Revenue	\$0.00	\$0.00	\$680,000.00	\$0.00	\$0.00
Debt Service Paid to DST	\$2,066,724.00	\$461,914.00	\$2,970,692.00	\$2,859,559.00	\$2,796,761.00
Total	\$3,053,465.90	\$2,153,256.00	\$4,888,783.10	\$5,790,169.24	\$4,933,905.00

This fiscal note examines and summarizes the costs and benefits associated with supporting the continued resource management activities of the NCWRC through increasing fees to fund work associated with these activities as authorized by G.S. 113-270.1B(e). The Commission has determined that the proposed rule amendment has impacts to State Government and private individuals. No immediate, direct impact has been identified to local governments. However, if a significant number of individuals discontinue the licensed activities because of this proposed fee increase, local government impacts may be realized from reduced local recreational activity. The foundations of economic theory contend that an increase in price will result in a decrease in the quantity of licenses demanded by the public. However, the magnitude of any decline in license sales due to the proposed fee increase is unknown, as it is not possible to isolate the effect of fee changes from other factors that affect sales both positively and negatively with the existing data.

III. Statement of Need

As of FY 2023, the Commission has an operational budget, based on a historical 5-year average, of approximately \$95 million per year. The agency currently has 682 full time employees, including

² [G.S.143-250.1](#)

biologists, technicians, wildlife law enforcement officers, conservation educators, public information officers, customer service representatives, information technologists, and administrative professionals. Due to the rising costs of employee salaries, associated benefits, and the general inflation of goods and services, expenses associated with agency operation and the recruitment and retention of employees have and will continue to increase. Because most NCWRC funding comes from federal grants and license receipts, the agency has limited options for pacing with inflation and rising costs.

The following is a general breakdown of average agency revenue sources for the past 5 fiscal years:

Federal funds:	33%
License receipts:	25%
Vessel receipts:	14%
Appropriations:	14%
Other receipts:	14%

The implementation of annual legislative increases and the Revised and Enhanced Pay Plans come without funding for agencies. Annual legislative salary increases in the 2021-2023 budget cost the agency approximately \$2,628,857. Implementation of the salary adjustments to address wage compression issues in June 2022 impacted approximately 69 full time employees, increasing the agency’s salaries and benefits costs by approximately \$331,290 annually. Legislative increases in the 2023 – 2025 budget are expected to exceed \$3.5 million over the biennium (Table 2).

Table 2: Legislative increase cost to agency FY 2024 – 2025

	Number of employees	% Increase	Total
FY 2024			
State Employee Increase	484	4%	\$1,088,501
Law Enforcement Increase	198	6%	\$769,287
Agency Total FY 2024	682		\$1,857,788
FY 2025			
State Employee Increase	484	3%	\$849,031
Law Enforcement Increase	214	6%	\$866,324
Agency Total FY 2025	698		\$1,715,355

*Note: 16 new Wildlife Law Enforcement positions were assigned to the agency in FY 2023. Totals assume that those positions will be filled by FY 2025 and will be eligible for the 6% LE increase.

Additionally, the agency’s operational costs have increased over the past several years largely due to inflation. Management of the state’s fish and wildlife populations and regulating use of the resources and boating throughout the State requires the agency to purchase and maintain a fleet vehicles, agricultural equipment, specialized commercial trucks, boats, and trailers. While these items are purchased over time, repairs and replacement of equipment and vehicles substantially increase operating costs. The price of the agency’s 4x4 trucks has increased by almost 20% over the past three years. Retail fuel prices for operating these vehicles and equipment have increased by

33% from January 2020 to October 2023.³

Providing access to the public waters of North Carolina is another responsibility of the NCWRC. As such, the agency builds and maintains public access infrastructure, including public fishing and boating access areas. The Commission currently provides 250 public fishing areas and 250 boating access areas. Making the resources publicly accessible involves the purchase of construction materials and equipment, the costs of all of which have dramatically increased since the agency’s last fee increase in 2020. The price of lumber alone was approximately 24% higher in October 2023 than in January 2020.⁴

Providing access to public land, specifically the two-plus million acres of game lands in the state, is also under the NCWRC’s purview. While not every area requires the same infrastructure, providing parking lots, access roads, gates, blinds, and impoundments requires significant resources. This type of construction also requires materials and agricultural equipment, the price of which is continually increasing. From January 2020 to August 2023, the average price of construction sand and gravel has increased 30%.⁵

Table 3: Expenses by category for the last 5 fiscal years

Category	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Net Change Since 1/2020
Salary & Fringe	\$48,677,360	\$50,328,052	\$52,435,535	\$55,848,447	\$58,588,601	20.4%
Vehicles	\$917,137	\$97,073	\$486,011	\$1,064,385	\$1,781,428	94.2%
Agricultural Equipment	\$326,608	\$901,738	\$1,448,868	\$1,461,501	\$1,242,360	280.4%
Boats	\$997,611	\$875,842	\$42,059	\$919,091	\$2,098,130	110.3%
Fuel	\$1,214,497	\$1,164,159	\$911,104	\$1,534,480	\$1,501,975	26.7%
Lumber/Construction Materials	\$2,677,822	\$3,104,174	\$3,406,739	\$3,470,322	\$2,860,925	6.8%
Other	\$26,519,294	\$27,824,053	\$33,236,682	\$34,137,553	\$35,614,257	
TOTAL EXPENDITURES	\$81,330,329	\$84,295,091	\$91,956,898	\$98,435,780	\$103,687,676	27.5%
Average Annual Increase in Expenditures						\$5,589,337

The projected NCWRC revenue from the proposed fee increase will help the NCWRC fund salary needs associated with legislative increases, maintaining pay plans and compensation packages that attract and retain employees, and mitigating inflation on equipment and materials needed to accomplish the agency’s mission.

³ Federal reserve Bank of St. Louis (Jan 2020 – Oct 2023, seasonally-adjusted) <https://fred.stlouisfed.org/series/CUSR0000SETB01>

⁴ Federal reserve Bank of St. Louis (Jan 2020 – Oct 2023, seasonally-adjusted) <https://fred.stlouisfed.org/series/WPS081>

⁵ Federal reserve Bank of St. Louis (Jan 2020 – Oct 2023, seasonally-adjusted) <https://fred.stlouisfed.org/series/WPS1321>

IV. Purpose & Goals

The CPI- U for this proposed fee increase, 18.75%, has been calculated using the seasonally-adjusted average increase in the CPI-U from January 2020 through October 2023. The CPI-U was applied to 99 license types (Appendix A). The 18.75% increase applied to these items ranges from \$2 to \$188 on annual licenses and from \$1.50 to \$309 on lifetime licenses. The complete list of licenses and associated fees increased by the CPI-U can be found in Appendix B.

The proposed fee increases are necessary to meet the NCWRC’s goal of employee salaries that keep pace with inflation and are aligned to the market to improve employee recruitment and retention efforts in alignment with the State Office of Human Resources’ Pay Administration Policy.⁶ The proposed fee increase would also cover rising costs associated with other operational expenses over the next three fiscal years that are projected to outpace projected revenue from currently available sources (Figure 1). The proposed license fee increase will provide approximately \$6.35M per year to the NCWRC and close the agency’s anticipated funding gap (Figure 2). This revenue would afford the Commission the opportunity to fund existing employee salary increases to align to the labor market, keep up with inflation, and retain staff; fund a pay plan that is aligned to the labor market, is competitive, and sets the basis for equity to attract and recruit staff; fund new positions needed to fulfill the demands of managing and maintaining programs and infrastructure to meet the agency’s mission; and keep pace with operating expenditures that have increased, on average, by approximately \$5.6 million per year over the past four years. This revenue could also free up other funds for operating needs and create operating reserves for unexpected expenses.

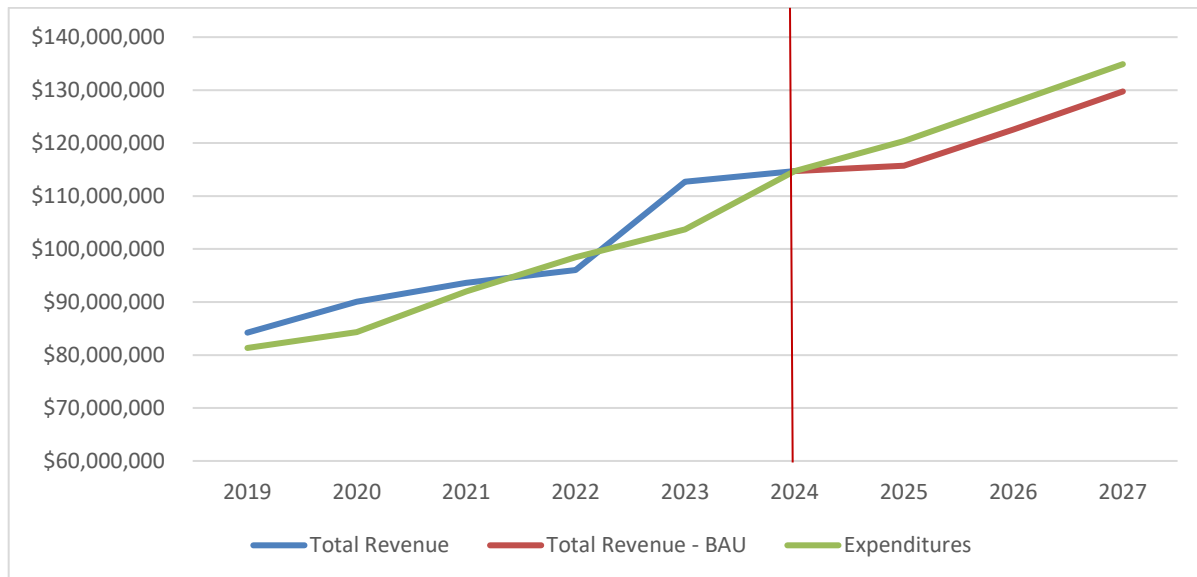


Figure 1: BAU revenue and expenditure projections (does not include proposed fee increases.) Revenue and expenditure projections were based on a 5-year (FY2019-2023) weighted moving average with exponential smoothing.

⁶ State Human Resources Pay Administration Policy (2023): <https://oshr.nc.gov/documents/pay-administration-policy/open>.

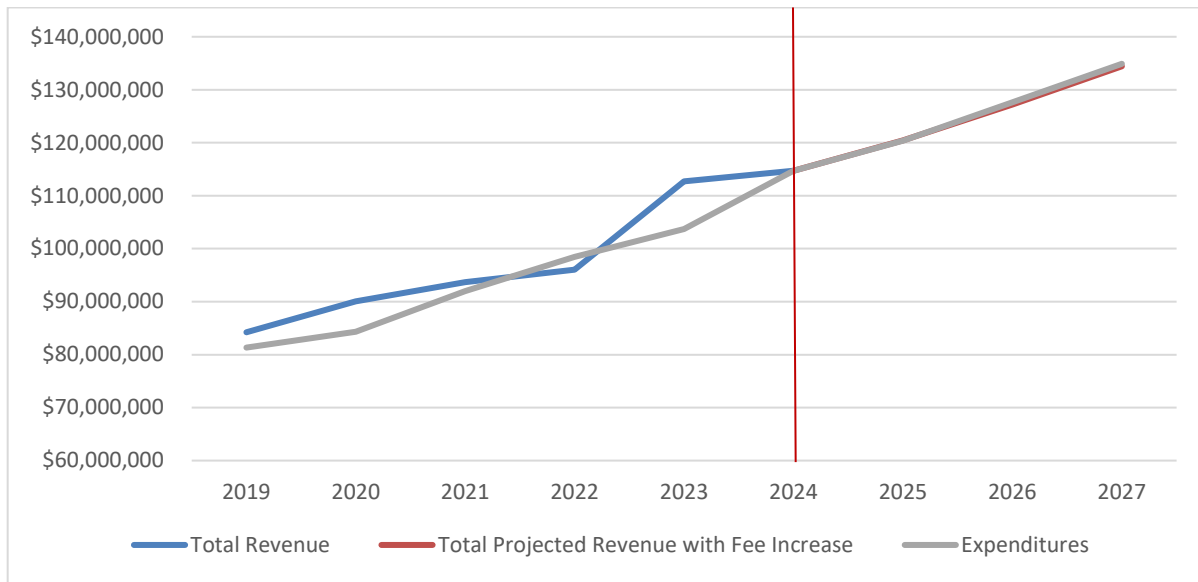


Figure 2: Revenue and expenditure projections including revenue from proposed fee increases. Revenue and expenditure projections were based on a 5-year (FY2019-2023) weighted moving average with exponential smoothing.

V. Anticipated Impacts

State Agencies

The revenue generated by the proposed fee increase will have a substantial impact on the overall revenue generated by the Commission and is anticipated to contribute significantly towards providing the funding needed to overcome the NCWRC’s funding gap (Figure 3) while offering opportunities for the agency to mitigate recruitment and retention challenges in accordance with NC State Human Resources Power Tools Policy.⁷ While the fee increase relating to the CPI- U represents a moderate increase relative to the cost of individual licenses, the cumulative effect of revenue generated annually is substantial. The potential revenue generation per license is detailed in Appendix B.

⁷ State Human Resources Power Tools Developed to Assist with Recruitment and Retention Challenges (2022).

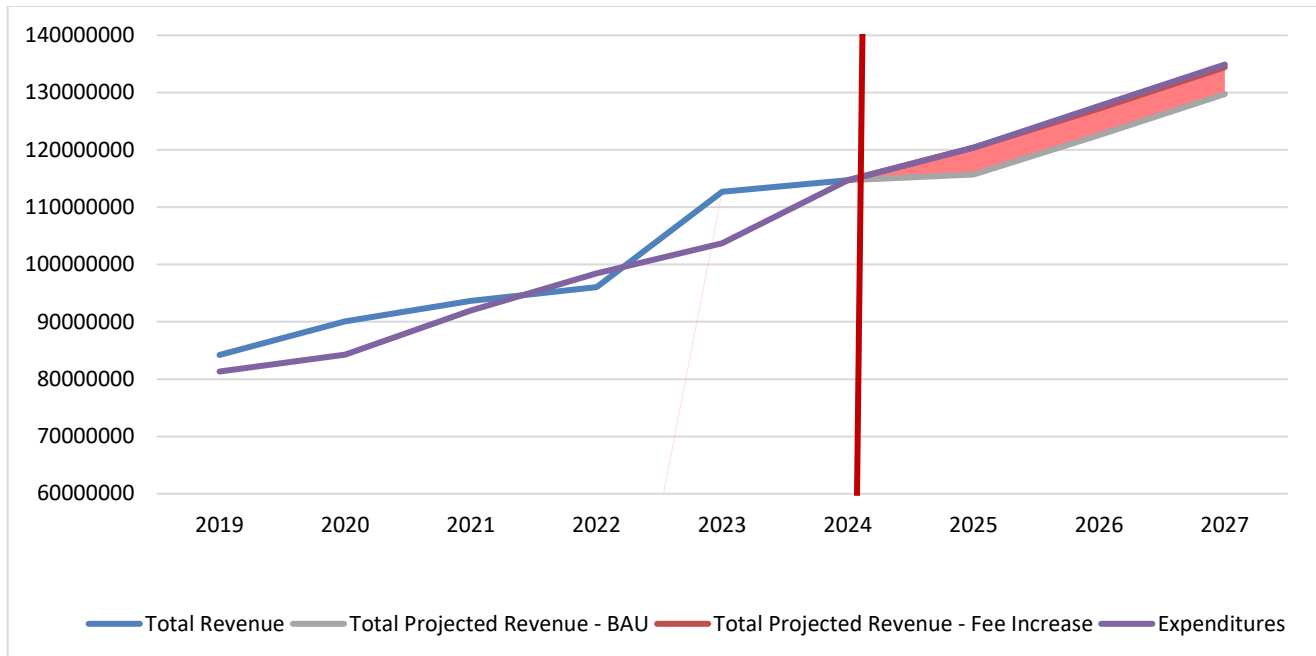


Figure 3: Estimated change in NCWRC revenue and funding gap from license sales after proposed fee increase Revenue and expenditure projections were based on a 5-year (FY2019-2023) weighted moving average with exponential smoothing.

As a conservative measure, the projected sales of all 99 affected licenses through FY 2027 were calculated via linear regression forecasting using the weighted moving average, with exponential smoothing, of annual sales from FY 2019 to FY 2023. Statistical analyses of annual license sales from FY 2015 - 2022, found that while total sales in 2021 were higher than the previous years, it was not a significant outlier year for overall sales for the time-series, which suggests this sample frame will follow typical sales trends. Where longitudinal sales figures were not available, trends were estimated from the FY 2023 sales data. In certain instances, using the weighted moving average, with exponential smoothing, can result in a negative estimate of sales. While it is impossible to sell a negative number of licenses, on the rare occasion that negative estimates were derived, the license sales were set to zero to maintain a conservative estimate.

In addition, the expected impacts of price elasticity on demand were calculated for licenses that were identified as normal goods (negative elasticity to price increase) following the previous price increase. Price elasticity of demand was calculated based on the most recent price increase (2020), and the impacts on quantities of licenses sold. While an accurate assessment of price elasticity could not be obtained due to various uncertainties in the current economic space, the elasticity function was applied to licenses which demonstrated a clear reduction in sales following the previous price increase as a conservative measure. This reduced the expected sales quantities of these goods. Licenses acting as Giffen goods – non-normal goods that defy the normal laws of supply and demand, and increase in quantity demanded as prices increase, were not multiplied by their elasticity as this would likely provide an overestimate. Instead, as a conservative measure, they were held constant to the “business-as-usual” sales estimates based on moving averages with

exponential smoothing. Revenue increases are based on the estimated quantity of licenses sold over the past 5 years multiplied by their corresponding proposed price increases. The permanent rule is anticipated to be effective at the beginning of FY 2025, therefore impacts and revenue increases from this rule assessed herein are applicable from FY 2025 through FY 2027. Projected revenue for FY 2024 has been estimated using the current license fee structure.

The increased license sales from the past three years could be related to the COVID-19 pandemic. From around April 2020 until mid-2022, recreational activities were altered due to government restrictions, and various public health and safety measures. This is especially true for the behavior of outdoor recreationists, where in many instances around the world, there were noticeable increases in participation at the inception of the pandemic. Activities such as fishing during this period are likely associated with the idea that respondents considered recreational angling to be a COVID-19 safe activity in places like North Carolina.⁸ However, for many recreational activities, these increases in participation have returned to previously observed levels as the perceived threat of the COVID-19 also diminishes.⁹ While a dramatic decrease in license sales since the peak of the COVID-19 pandemic has not been realized by the NCWRC, it may occur in upcoming years. In addition, during this same period, there was a substantial increase in inflation, reducing the purchasing power of household incomes. This may have resulted in what is known as a substitution effect, whereby, the substantial price increases of meat and fish products may have led individuals to the more affordable alternative of harvesting their own wild captured meat and fish. As a result, it is hard to predict what the impacts on sales will be and whether the increase in sales from the previous increase in price was an artifact of the global pandemic or some other factor(s).

Including the proposed fee increase increases, the total annual average projected license revenue to the State (WRC and DMF) is anticipated to be \$49,393,273 for FY 2025 through FY 2027 (Figure 4).

⁸ Midway, S. R., Lynch, A. J., Peoples, B. K., Dance, M., & Caffey, R. (2021). COVID-19 influences on US recreational angler behavior. *PloS one*, *16*(8), e0254652.

⁹ Britton R.J. et al, (in-press). Global responses to the COVID-19 pandemic by recreational anglers: considerations for developing more resilient and sustainable fisheries. Submitted to *Fish and Fisheries*

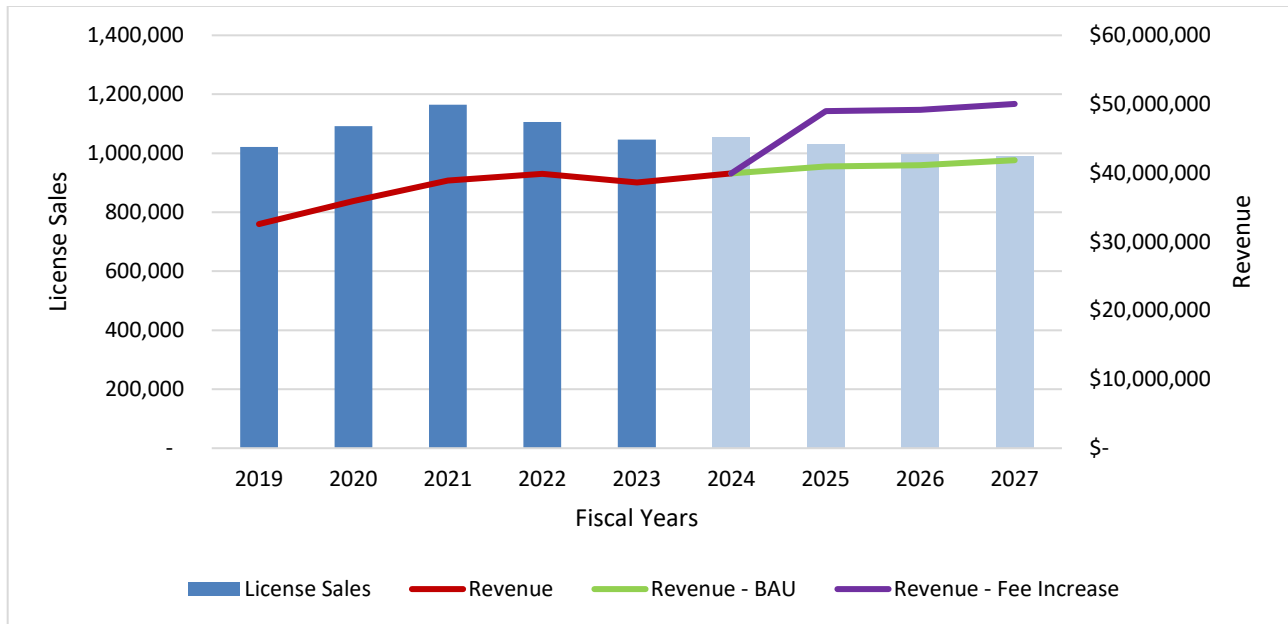


Figure 4: Total license revenue projection

Of the 99 affected licenses in the proposed fee increase, 71 are NCWRC licenses, 15 are NCWRC/DMF licenses, and 13 are DMF licenses. Based on projected sales for FY 2025 through FY 2027, an annual average of \$39,257,320 of the anticipated total license revenue will go to the NCWRC and \$10,135,954 will go to the DMF. This equates to an annual average increase in revenue of \$6,352,486 to the NCWRC and \$1,732,030 to the DMF. In total, between FY 2025 and FY 2027, the proposed fee increases are projected to increase revenue to NCWRC by approximately \$19,057,457 (\$15,570,662 NPV) and to DMF by approximately \$5,196,091 (\$4,249,649 NPV)¹⁰ (Table 4).

Table 4: Change in revenue over BAU

	Business-as-Usual			18.75% Fee Increase		
	NCWRC License Revenue	DMF License Revenue	Total State Revenue	NCWRC License Revenue	DMF License Revenue	Total State Revenue
2025	\$32,523,961	\$8,434,863	\$40,958,824	\$38,801,513	\$10,188,380	\$48,989,894
2026	\$32,776,494	\$8,338,333	\$41,114,827	\$39,103,460	\$10,056,161	\$49,159,622
2027	\$33,414,048	\$8,438,574	\$41,852,622	\$39,866,985	\$10,163,318	\$50,030,304
3-Year Average	\$32,904,834	\$8,403,923	\$41,308,757	\$39,257,320	\$10,135,954	\$49,393,273
Average Annual Δ in Revenue				\$6,352,486	\$1,732,030	\$8,084,516
3-Year Total Revenue Change Due to Proposed Fee Increase				\$19,057,457	\$5,196,091	\$24,253,548
				(\$15,570,662 NPV)	(\$4,249,649 NPV)	(\$19,820,312 NPV)

*NOTE: Numbers in parentheses represent NPV at 7% discount rate in 2023\$.

For the NCWRC, approximately \$28,672,383/year will be expendable income, while \$10,584,936 will go

¹⁰ Net Present Value (NPV) was calculated using 7% discount rate, 2023 dollars.

directly into the Endowment Fund over the next three fiscal years (Figures 5 & 6).¹¹

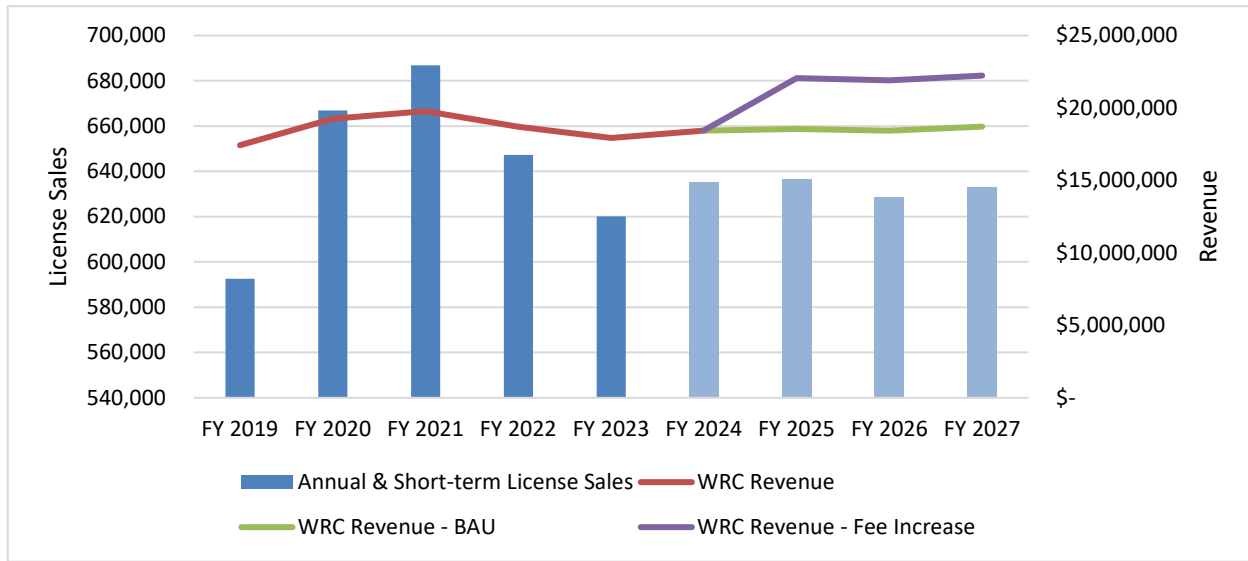


Figure 5: NCWRC Expendable license revenue projection

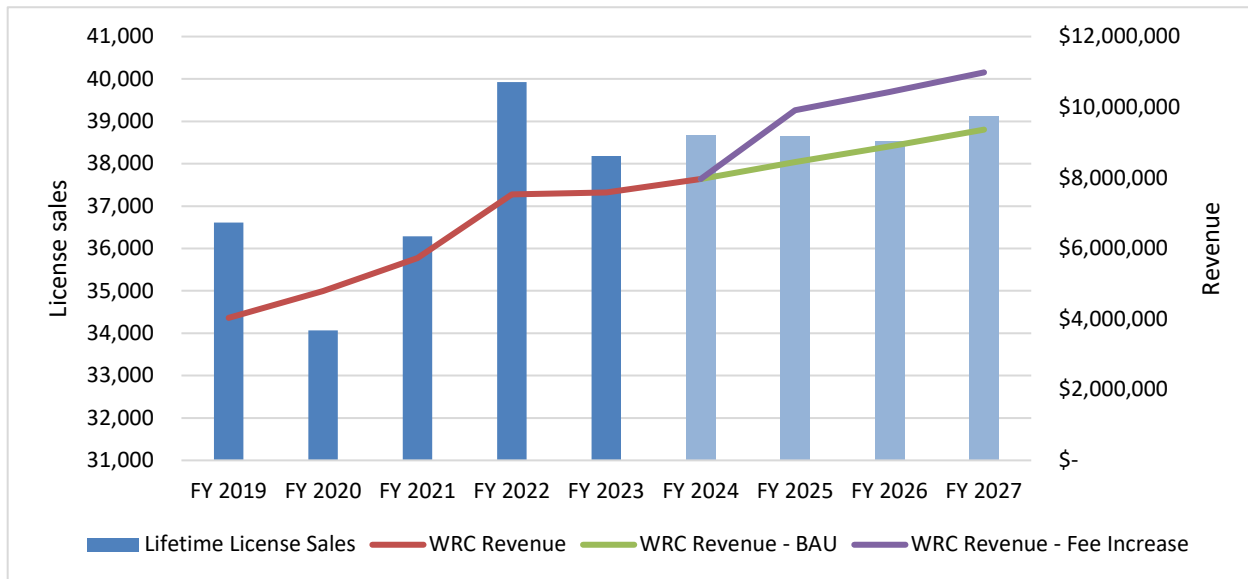


Figure 6: NCWRC Endowment license revenue projection

The largest annual NCWRC revenue increases are expected from the sale of the *Resident State Inland Fishing* license and *Annual Sportsman License*. While the fee increases per license are relatively insignificant, \$5 and \$10 respectively, the number of these licenses sold is expected to cumulatively comprise an average of approximately \$9 million in revenue annually (\$4,410,000/year + \$4,650,000/year = \$9,060,000/year), \$1,475,000 more than BAU (\$3,710,000/year + \$3,875,000/year = \$7,585,000/year). Another substantial portion of revenue

¹¹ Per G.S. 143-250.1, proceeds from the sale of lifetime licenses go directly into the Endowment Fund.

historically comes from the sale of the inter-agency *Annual Resident Unified Sportsman/Coastal Recreational Fishing* license. The proposed fee increase of \$29/year on this license has the potential to increase inter-agency revenue by an average of \$1,072,000 annually over BAU, which contributes approximately \$653,920 annually to the NCWRC.

Economic Impact – Private Individuals

The burden of costs associated with the proposed CPI-U fee increases fall on the individual licensees. However, because the increases to individual licenses are relatively small, the agency does not anticipate significant negative impacts on license sales and, therefore, the economic contributions of licensed individuals. In January of 2020, WRC license fees were adjusted by a CPI-U of 6% rounded up to the nearest whole dollar amount. Using annual license data from 2018- 2021, we attempted to calculate the price elasticity of demand for each license where data were available (Appendix C). Using the formula $e_{(p)} = \frac{\Delta Q}{\Delta p}$ where $e_{(p)}$ is the elasticity based on price, ΔQ is the change in quantity, and Δp is the change in price.

The results indicated that license sales generally increased since the previous price increase. All else equal, economic theory would suggest a decrease in demand for licenses in response to an increase in price. It was noted that many of the licenses did not follow this behavior of “normal” goods. Instead, most license sales increased after the 2020 fee increase. This could suggest that there are confounding factors that could not be controlled for in our elasticity calculation, for example, the effects of the COVID-19 pandemic, that results in an inability to accurately assess the impacts of a price increase on the number of licenses demanded separate from other economic, demographic, and social factors that also affect license sales.

A total of 9 licenses showed a negative response to the 2020 price increases, while the remaining licenses did not demonstrate elasticity. Eight of these licenses (Age 70 resident lifetime sportsman, Age 70 resident lifetime inland fishing, Age 70 resident lifetime unified sportsman CRFL, Age 70 resident lifetime CRFL, Resident disabled veteran & totally disabled lifetime hunting & inland fishing, bonus antlerless deer, Non-resident state trapping, and Non-resident special device), had sales of less than 100 annually in recent years suggesting that impacts would be minimal. However, the annual CRFL displayed a high price elasticity of 1.1, which, based on the price increase could reduce the annual number of sales by roughly 12.7%. However, the revenue increase is expected to compensate for the revenue loss due to decreased sales.

While there are a few instances of negative elasticity associated with the potential sale of licenses at an increased price, these represent a very small impact to overall sales of licenses. However, the nature of our calculation seemed to be confounded by factors other than price which may potentially have a more significant impact on purchasing behavior. These include the effects of the COVID-19 pandemic, income effects, and substitution effect. At the fundamental level of economic theory, any increase in the price of a good should result in a relative decrease in the quantity of that good sold. However, in the absence of an experimental study that controls for those non-price factors, it is impossible to determine how much of an effect the price increase will have on sales compared to

what would occur without the fee increase. And while the agency has seen a decrease in license sales before the pandemic and since the end of the pandemic, the increased participation in outdoor activities experienced during the COVID-19 pandemic may contribute to a “reactivation” of previous wildlife associated activity participants which could result in increased license sales in future years. However, the factors impacting license sales in any given year combined with the events experienced globally in recent years render these assumptions speculative at best.

VI. Alternatives

The agency continuously works to reduce its operating expenditures to offset the increasing costs of salaries, benefits, equipment, supplies, and other operating expenses. The agency has implemented cost saving measures such as purchasing in bulk, using optional state contracts for discounted supplies, and performing regular reviews of purchases and services such as cell phones and software, to ensure under-utilized accounts are deactivated. Additionally, purchases of costly items like agricultural equipment and vehicles have been deferred beyond the typical replacement schedule and machinery has been serviced to extend usable life beyond the recommended replacement cycle(s). However, this model will not continue to be effective as these items need to be replaced and costs continue to increase with inflation. The agency’s costs associated with vehicles has increased 94% since the last fee increase in January 2020. The cost of agricultural equipment has increased 280% since January 2020. The agency cannot maintain this model if the demand for services and infrastructure is to be met. Thus, several alternatives have been considered to mitigate the effects of inflation before proposing amendments to the rule in Appendix A. Options evaluated included no fee increase (BAU), a 10% increase, the CPI-U increase unrounded, and the CPI-U increase rounded up to the next whole dollar for selected licenses.

The Commission dismissed the alternative of leaving the fees as-is in favor of utilizing the CPI-U, as allowed by statute, to raise the fees and assist with mitigation of increasing agency expenses over the next several years. The BAU approach was rejected, as this would result in a continually growing agency funding deficit. The option of applying a 10% increase to the current license fees without rounding to the nearest whole dollar, would amount, on average, to a total of \$3.2 million/year less than the proposed increase, leaving a significant amount of needed revenue on the table and a lost opportunity to recoup that loss in future CPI-U increases. Applying the proposed 18.75% CPI-U increase to the current license fees without rounding up to the nearest whole dollar would provide, on average, \$916,860 less revenue per year than the proposed round-up increase and was rejected because of the lost opportunity in addition to the potential confusing nature of instituting fees that are not whole dollar amounts that customers are accustomed to. Finally, the option of applying the CPI-U to selected licenses was rejected, as this option again presented a lost opportunity, significant loss of potential revenue, and no consistent way to determine which license fees would be increased and which would remain the same (Table 5).

Table 5: Average annual revenue increase based on fee increase alternatives.

Alternative Scenario	WRC Revenue Increase	DMF Revenue Increase	Annual Revenue Increase to State	Difference from Round-up increase
No Increase	\$0	\$0	\$0	\$(8,084,516)
10% Increase	\$2,968,124	\$840,392	\$3,808,516	\$(3,240,967)
CPI-U Un-rounded	\$5,591,920	\$ 1,575,736	\$7,167,656	\$(916,860)
CPI-U Rounded-up	\$6,352,486	\$1,732,030	\$8,084,516	\$0

VII. Uncertainties Regarding Participants’ Sensitivity to Proposed Fee Increases

Determining future trends in the number of licenses sold is difficult based on the inherently uncertain and uncontrollable nature of factors to consider. Information in this section has been compiled from actual license sale and trend data since the last license fee increase on January 1, 2020. While this increase was applied to nearly all existing licenses, with the exception of those set by the State legislature at the time, there were some new licenses that did not receive the CPI-U increase in 2020. Therefore, it is unknown how these license sales may behave following a price increase as their price elasticity could not be accurately determined. However, the fee increases in FY 2020 were similar to those being proposed now, ranging from \$2 to \$188 on annual licenses. In FY 2021, there was an increase in overall license sales.

While the sample frame is rather small following the 2020 price increase, total licenses purchased have since decreased over time. In absence of research that controls for other economic, demographic, and social factors that also affect sales, it is not possible to determine how much of an effect the price increase will have on sales compared to what would occur without the fee increase. Nonetheless, FY 2023 sales data would suggest a continued decline in sales as the factors that likely contributed to the increase in FY 2021 are no longer present. The COVID-19 pandemic, which began shortly after the fee increase resulted in increased outdoor recreation.¹² However, the effects of these price increases are impossible to fully understand as they can be affected by a multitude of factors outside of typical economic analysis including various sociological factors. Based on available data, it is assumed that any effects of the proposed price increases on license sales will not result in a significant reduction in licenses sold.

¹² Rice, W. L., Mateer, T. J., Reigner, N., Newman, P., Lawhon, B., & Taff, B. D. (2020). Changes in recreational behaviors of outdoor enthusiasts during the COVID-19 pandemic: analysis across urban and rural communities. *Journal of Urban Ecology*, 6(1)

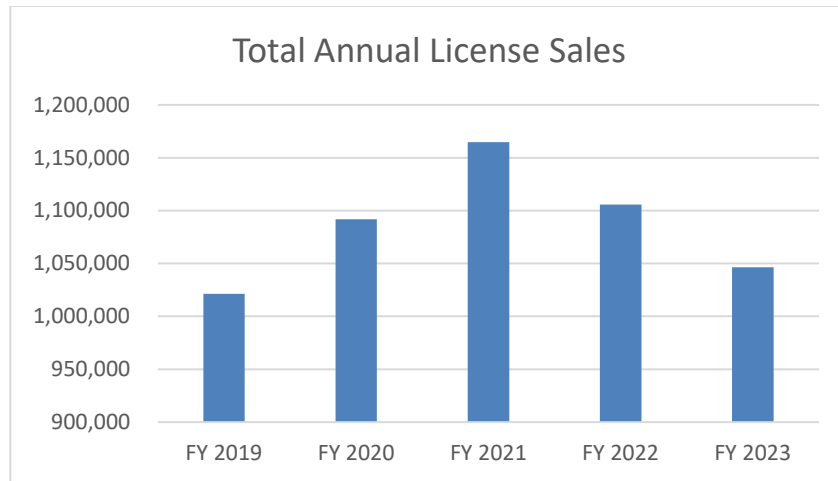


Figure 6: Annual number of licenses purchased before and after the fee increase in 2020.

Sensitivity Analysis

As a substantial increase in the sale of licenses has been recorded in the years following the last fee increase, which could be attributed to a number of factors, it is unlikely that buyer resistance to price increases outweighed other factors affecting sales in a positive manner. However, if price sensitivity is higher than expected, agency revenues could be lower than projected. While individuals may simply choose not to purchase a license due to the price increase, they could also choose to purchase a different, less costly license instead. Regardless, the agency will realize less revenue.

Direct Impacts from Proposed Rules

State: For FY 2025 to FY 2027, the agency projects license sale revenue to WRC and DMF will increase by an average of approximately \$8.1 million per year, for a total of approximately \$24.2 million over the affected three fiscal years (\$19.8 million NPV adjusted). Of the average annual total, approximately \$6.35 million/year will benefit the NCWRC (\$4.7 million in expendable/operating income and \$1.7 million in Endowment income), while \$1,732,030/year will go to the DMF. For the NCWRC, this will help mitigate increasing personnel costs and inflation on the cost of materials, fuel, and equipment.

Private: In aggregate, licensees will incur the equivalent cost increases above, averaging \$8.1 million per year beginning in FY 2025. Depending on license(s) purchased, individuals could incur an additional cost of \$2 to \$188 for annual licenses or an additional one-time cost of \$1.50 to \$309 for lifetime licenses.

VIII. Conclusions

On average, 25% of the agency's annual revenue comes from the sale of hunting, fishing, trapping, and activity licenses and permits. Since the previous fee increase in January 2020, operating costs have risen substantially, by approximately \$5.6 million per year, with inflation. Due to the nature of the agency's funding structure, there are few options available to mitigate the growing operational expenses in the upcoming fiscal years.

The proposed inflation-based license fee increases are expected to mitigate funding needs beginning in the first fiscal year of implementation. However, based on projected sales and increasing expenses, the WRC will continue to incur increasing needs without further fee changes or additional revenue from other sources.

The Commission believes that the anticipated fiscal benefits to the agency from the proposed fee increases of approximately \$6.35 million/year (\$15.6 million 3-year NPV) far outweigh the proposed costs (\$1.50 to \$309) per license to constituents and will allow the agency to continue its conservation mission and provide additional access and opportunities for the public to enjoy wildlife-associated recreation in North Carolina.

Appendix A: Proposed Rule Text

15A NCAC 10A .1601 LICENSE FEES

- (a) License fees established by the Commission in this Rule shall be subject to the requirements of G.S. 113-270.1B(e).
- (b) The following fees shall apply to combination hunting and inland fishing licenses issued by the Commission, as set forth in G.S. 113-270.1C:
- (1) Resident Annual Combination Hunting and Inland Fishing License - ~~\$35.00~~; \$42.00.
 - (2) Resident Disabled Veteran Lifetime Combination Hunting and Inland Fishing License - ~~\$41.00~~; \$14.00.
 - (3) Resident Totally Disabled Lifetime Combination Hunting and Inland Fishing License - ~~\$11.00~~; \$14.00
- (c) The following fees shall apply to sportsman licenses issued by the Commission, as set forth in G.S. 113-270.1D:
- (1) Annual Sportsman License - ~~\$53.00~~; \$63.00.
 - (2) Infant Lifetime Sportsman License - ~~\$212.00~~; \$252.00.
 - (3) Youth Lifetime Sportsman License - ~~\$371.00~~; \$441.00.
 - (4) Adult Resident Lifetime Sportsman License - ~~\$530.00~~; \$630.00.
 - (5) Nonresident Lifetime Sportsman License - ~~\$1,272.00~~; \$1,511.00.
 - (6) Age 70 Resident Lifetime Sportsman License - ~~\$16.00~~; \$19.00.
 - (7) Resident Disabled Veteran Lifetime Sportsman License - ~~\$106.00~~; \$126.00.
 - (8) Resident Totally Disabled Lifetime Sportsman License - ~~\$106.00~~; \$126.00.
- (d) The following fees shall apply to hunting licenses issued by the Commission, as set forth in G.S. 113-270.2:
- (1) Resident State Hunting License - ~~\$25.00~~; \$30.00.
 - (2) Lifetime Resident Comprehensive Hunting License - ~~\$265.00~~; \$315.00.
 - (3) Controlled Hunting Preserve Hunting License - ~~\$22.00~~; \$27.00.
 - (4) Resident Annual Comprehensive Hunting License - ~~\$39.00~~; \$47.00.
 - (5) Nonresident State Hunting Licenses:
 - (A) Season License - ~~\$100.00~~; \$119.00.
 - (B) Ten-Day License - ~~\$80.00~~; \$95.00.
 - (6) Falconry Hunting License - ~~\$25.00~~; \$30.00.
- (e) The following fees shall apply to special activity licenses issued by the Commission, as set forth in G.S. 113-270.3:
- (1) Resident Big Game Hunting License - ~~\$14.00~~; \$17.00.
 - (2) Nonresident Bear Hunting License - ~~\$239.00~~; \$284.00.
 - (3) Bear Management Stamp - ~~\$11.00~~; \$14.00.
 - (4) Nonresident Big Game Hunting License:
 - (A) Season License - ~~\$100.00~~; \$119.00.
 - (B) Ten-Day License - ~~\$80.00~~; \$95.00.
 - (5) Bonus Antlerless Deer License - ~~\$11.00~~; \$14.00.
 - (6) Game Land License - ~~\$16.00~~; \$19.00.
 - (7) Falconry License - ~~\$11.00~~; \$14.00.
 - (8) Migratory Waterfowl Hunting License - ~~\$14.00~~; \$17.00.

- (9) Resident American Alligator License - ~~\$250.00~~, \$297.00.
- (10) Nonresident American Alligator License - ~~\$500.00~~, \$594.00.
- (11) Resident Elk License - ~~\$500.00~~, \$594.00.
- (12) Nonresident Elk License - ~~\$1,000.00~~, \$1,188.00.

(f) The following fees shall apply to hunting and fishing guide licenses issued by the Commission, as set forth in G.S. 113-270.4:

- (1) Resident Hunting and Fishing Guide License - ~~\$16.00~~, \$19.00.
- (2) Nonresident Hunting and Fishing Guide License - ~~\$159.00~~, \$189.00.

(g) The following fees shall apply to trapping licenses issued by the Commission, as set forth in G.S. 113-270.5:

- (1) Resident State Trapping License - ~~\$32.00~~, \$38.00.
- (2) Resident Lifetime Trapping License - ~~\$300.00~~, \$357.00.
- (3) Nonresident State Trapping License - ~~\$133.00~~, \$158.00.

(h) The following fees shall apply to hook-and-line licenses in inland and joint fishing waters issued by the Commission, as set forth in G.S. 113-271:

- (1) Resident State Inland Fishing License - ~~\$25.00~~, \$30.00.
- (2) Lifetime Resident Comprehensive Inland Fishing License - ~~\$265.00~~, \$315.00.
- (3) Nonresident State Inland Fishing License - ~~\$45.00~~, \$54.00.
- (4) Short-Term Inland Fishing License:
 - (A) Resident 10-day Inland Fishing License - ~~\$9.00~~, \$11.00.
 - (B) Nonresident 10-day Inland Fishing License - ~~\$23.00~~, \$28.00.
- (5) Age 70 Resident Lifetime Inland Fishing License - ~~\$16.00~~, \$19.00.
- (6) Resident Disabled Veteran Lifetime Inland Fishing License - ~~\$11.00~~, \$14.00.
- (7) Resident Totally Disabled Lifetime Inland Fishing License - ~~\$11.00~~, \$14.00.
- (8) Special Landholder and Guest Fishing License - ~~\$106.00~~, \$126.00.
- (9) Mountain Heritage Trout Waters 3-Day Fishing License - ~~\$8.00~~, \$10.00.

(i) The following shall apply to special device licenses issued by the Commission, as set forth in G.S. 113-272.2:

- (1) Resident Special Device License - ~~\$80.00~~, \$95.00.
- (2) Nonresident Special Device License - ~~\$530.00~~, \$630.00.

(j) The non-refundable fees for a collection license issued by the Commission, as set forth in G.S. 113-272.4 shall be ~~\$10.00~~, \$12.00.

(k) The following non-refundable fees shall apply to captivity licenses issued by the Commission, as set forth in G.S. 113-272.5:

- (1) Captivity License for Holding - ~~\$50.00~~, \$60.00.
- (2) Captivity License for Rehabilitation - ~~\$10.00~~, \$12.00.

(l) The following non-refundable fees shall apply to dealer licenses issued by the Commission as set forth in G.S. 113-273:

- (1) Resident Fur-dealer License - ~~\$64.00~~, \$76.00.
- (2) Nonresident Fur-dealer License - ~~\$318.00~~, \$378.00.
- (3) Fur-dealer Station License - ~~\$128.00~~, \$152.00.

- (4) Controlled Hunting Preserve Operator License - ~~\$100.00.~~ \$119.00.
- (5) Controlled Hunting Preserve Rabbit Operator License - ~~\$25.00.~~ \$30.00
- (6) Game Bird Propagation License - ~~\$10.00.~~ \$12.00.
- (7) Furbearer Propagation License - ~~\$27.00.~~ \$33.00.
- (8) Taxidermy License - ~~\$50.00.~~ \$60.00.
- (9) Taxidermy Cervid Certification - ~~\$5.00.~~ \$6.00.
- (10) Wildlife Control Agent License - ~~\$50.00.~~ \$60.00.
- (11) Wildlife Control Technician Certification - ~~\$25.00~~ \$30.00
- (12) Alligator Control Agent Certification - ~~\$25.00.~~ \$30.00.

(m) The following non-refundable fees shall apply to permits issued by the Commission, as set forth in G.S. 113-274:

- (1) Possession Permit - ~~\$10.00.~~ \$12.00.
- (2) Exportation or Importation Permit - ~~\$10.00.~~ \$12.00.
- (3) Trophy Wildlife Sale Permit - ~~\$10.00.~~ \$12.00.-
- (4) Endangered Species Permit - ~~\$10.00.~~ \$12.00.
- (5) Field Trial Permit - ~~\$10.00.~~ \$12.00.

(n) Unified hunting and fishing licenses issued by the Commission, as set forth in G.S. 113-351:

- (1) Annual Resident Unified Sportsman/Coastal Recreational Fishing License - ~~\$69.00.~~ \$82.00.
- (2) Annual Resident Unified Inland/Coastal Recreational Fishing License - ~~\$41.00.~~ \$49.00.
- (3) Lifetime Unified Sportsman/Coastal Recreational Fishing Licenses:
 - (A) Infant Lifetime Unified Sportsman/Coastal Recreational Fishing License - ~~\$292.00.~~ \$347.00.
 - (B) Youth Lifetime Unified Sportsman/Coastal Recreational Fishing License - ~~\$477.00.~~ \$557.00.
 - (C) Resident Adult Lifetime Unified Sportsman/Coastal Recreational Fishing License - ~~\$716.00.~~ \$851.00.
 - (D) Nonresident Adult Lifetime Unified Sportsman/Coastal Recreational Fishing License - ~~\$1,643.00.~~ \$1,952.00.
 - (E) Resident Age 70 Lifetime Unified Sportsman/Coastal Recreational Fishing License - ~~\$32.00.~~ \$38.00.
 - (F) Resident Disabled Veteran Lifetime Unified Sportsman/Coastal Recreational Fishing License - ~~\$117.00.~~ \$140.00.
 - (G) Resident Totally Disabled Lifetime Unified Sportsman/Coastal Recreational Fishing License - ~~\$117.00.~~ \$140.00.
- (4) Resident Lifetime Unified Inland/Coastal Recreational Fishing License - ~~\$477.00.~~ \$567.00.

(o) The following fees shall apply to Coastal Recreational Fishing Licenses issued by the Commission, as set forth in G.S. 113-174.2:

- (1) Annual Resident Coastal Recreational Fishing License - ~~\$16.00.~~ \$19.00.
- (2) Annual Nonresident Coastal Recreational Fishing License - ~~\$32.00.~~ \$38.00.
- (3) Ten-Day Resident Coastal Recreational Fishing License - ~~\$6.00.~~ \$8.00.
- (4) Ten-Day Nonresident Coastal Recreational Fishing License - ~~\$11.00.~~ \$14.00.

- (5) Infant Lifetime Coastal Recreational Fishing License - ~~\$106.00.~~ \$126.00.
- (6) Youth Lifetime Coastal Recreational Fishing License - ~~\$159.00.~~ \$189.00.
- (7) Resident Adult Lifetime Coastal Recreational Fishing License - ~~\$265.00.~~ \$315.00.
- (8) Nonresident Adult Lifetime Coastal Recreational Fishing License - ~~\$530.00.~~ \$630.00.
- (9) Resident Age 70 Lifetime Coastal Recreational Fishing License - ~~\$16.00.~~ \$19.00.
- (10) Resident Disabled Veteran Coastal Recreational Fishing License - ~~\$11.00.~~ \$14.00.
- (11) Resident Totally Disabled Coastal Recreational Fishing License - ~~\$11.00.~~ \$14.00.

Appendix B: Rounded up to nearest dollar CPI-U (17%) fee increases and potential increased revenue for each individual license FY2025-2027

Statutory Reference	License Type	Current Fee	Proposed Fee	Increase	% Increase	Avg annual revenue change from BAU	NPV 3-yr (7% discounted)
WRC Annual & Short-Term Licenses							
113-270.1C (b) (1)	Resident Annual Combination Hunting & Inland Fishing License	\$35	\$42.00	\$7.00	20.0%	\$105,000	\$588,785
113-270.1D (a)	Annual Sportsman License	\$53	\$63.00	\$10.00	18.9%	\$700,000	\$4,121,495
113-270.2 (c) (1)	Resident State Hunting License	\$25	\$30.00	\$5.00	20.0%	\$100,000	\$560,748
113-270.2 (c) (4)	Controlled Hunting Preserve Hunting License	\$22	\$27.00	\$5.00	22.7%	\$13,000	\$65,607
113-270.2 (c) (5)	Resident Annual Comprehensive Hunting License	\$39	\$47.00	\$8.00	20.5%	\$211,467	\$1,161,090
113-270.2 (c) (6) (a)	Nonresident State Hunting - Season License	\$100	\$119.00	\$19.00	19.0%	\$176,067	\$1,030,592
113-270.2 (c) (6) (b)	Nonresident State Hunting - Ten-Day License	\$80	\$95.00	\$15.00	18.8%	\$132,000	\$781,308
113-270.2 (c) (7)	Falconry Hunting License	\$25	\$30.00	\$5.00	20.0%	\$537	\$3,009
113-270.3 (b) (1)	Resident Big Game Hunting License	\$14	\$17.00	\$3.00	21.4%	\$76,500	\$405,140
113-270.3 (b) (1a)	Nonresident Bear Hunting License	\$239	\$284.00	\$45.00	18.8%	\$72,750	\$429,097
113-270.3 (b) (1b)	Bear Management Stamp	\$11	\$14.00	\$3.00	27.3%	\$128,500	\$560,436
113-270.3 (b) (2) (a)	Nonresident Big Game Hunting - Season License	\$100	\$119.00	\$19.00	19.0%	\$137,433	\$804,455
113-270.3 (b) (2) (b)	Nonresident Big Game Hunting - Ten-Day License	\$80	\$95.00	\$15.00	18.8%	\$84,000	\$497,196
113-270.3 (b) (2a)	Bonus Antlerless Deer License	\$11	\$14.00	\$3.00	27.3%	\$199	\$868
113-270.3 (b) (3)	Game Land License	\$16	\$19.00	\$3.00	18.8%	\$-	\$-
113-270.3 (b) (4)	Falconry License	\$11	\$14.00	\$3.00	27.3%	\$-	\$-
113-270.3 (b) (5)	Migratory Waterfowl Hunting License	\$14	\$17.00	\$3.00	21.4%	\$44,800	\$237,259
113-270.3 (b) (6)	Resident American Alligator License	\$250	\$297.00	\$47.00	18.8%	\$-	\$-
113-270.3 (b) (7)	Nonresident American Alligator License	\$500	\$594.00	\$94.00	18.8%	\$-	\$-

113-270.3 (b) (8)	Resident Elk License	\$500	\$594.00	\$94.00	18.8%	\$-	\$-
113-270.3 (b) (9)	Nonresident Elk License	\$1,000.00	\$1,188.00	\$188.00	18.8%	\$-	\$-
113-270.5 (b) (1)	Resident State Trapping License	\$32	\$38.00	\$6.00	18.8%	\$17,400	\$102,991
113-270.5 (b) (3)	Nonresident State Trapping License	\$133	\$158.00	\$25.00	18.8%	\$833	\$4,922
113-271 (d) (2)	Resident State Inland Fishing License	\$25	\$30.00	\$5.00	20.0%	\$775,000	\$4,345,794
113-271 (d) (5)	Nonresident State Inland Fishing License	\$45	\$54.00	\$9.00	20.0%	\$414,000	\$2,321,495
113-271 (d) (6) (a)	Short-Term Resident Inland Fishing - 10-Day License	\$9	\$11.00	\$2.00	22.2%	\$60,000	\$308,411
113-271 (d) (6) (b)	Short-Term Nonresident Inland Fishing - 10-Day License	\$23	\$28.00	\$5.00	21.7%	\$310,000	\$1,622,430
113-271 (d) (9)	Special Landholder & Guest Fishing License	\$106	\$126.00	\$20.00	18.9%	\$7,000	\$41,215
113-272 (e)	Mountain Heritage Trout Waters 3-Day Fishing License	\$8	\$10.00	\$2.00	25.0%	\$29,667	\$138,629
113-272.2 (c) (1a)	Resident Special Device License	\$80	\$95.00	\$15.00	18.8%	\$1,875	\$11,098
113-272.2 (c) (2a)	Nonresident Special Device License	\$530	\$630.00	\$100.00	18.9%	\$-	\$-
113-270.4(b)(1)	Resident Hunting and Fishing Guide License	\$16	\$19.00	\$3.00	18.8%	\$8,330	\$49,305
113-270.4(b)(2)	Nonresident Hunting and Fishing Guide License	\$159	\$189.00	\$30.00	18.9%	\$4,200	\$24,729
113-272.4(c)	Collection License (Consists of Wildlife Collection & Scientific Fish Collection Licenses)	\$10	\$12.00	\$2.00	20.0%	\$360	\$336
113-272.5(b)	Captivity License for Holding License	\$50	\$60.00	\$10.00	20.0%	\$250	\$234
113-272.5(b)	Captivity License for Rehabilitation License	\$10	\$12.00	\$2.00	20.0%	\$1,007	\$941
113-273(f)(1)	Resident Fur-Dealer License	\$64	\$76.00	\$12.00	18.8%	\$76	\$71
113-273 (f)(2)	Nonresident Fur-Dealer License	\$318	\$378.00	\$60.00	18.9%	\$180	\$168
113-273 (f)(3)	Fur-dealer Station License	\$128	\$152.00	\$24.00	18.8%	\$48	\$45
113-273(g)	Controlled Hunting Preserve Operator License	\$100	\$119.00	\$19.00	19.0%	\$-	\$-
113-273(g)	Controlled Hunting Preserve Operator License - Rabbits	\$25	\$12.00	\$2.00	20.0%	\$1,240	\$1,159
113-273(h)	Game Bird Propagation License	\$10	\$33.00	\$6.00	22.2%	\$6	\$6
113-273(i)	Furbearer Propagation License**	\$27	\$60.00	\$10.00	20.0%	\$6,067	\$5,670

113-273(k)	Taxidermy License	\$50	\$6.00	\$1.00	20.0%	\$583	\$545
113-273(k)	Taxidermy Cervid Certification	\$5	\$60.00	\$10.00	20.0%	\$6,983	\$6,526
113-273(l)	Wildlife Control Agent	\$50	\$30.00	\$5.00	20.0%	\$50	\$47
113-273(l1)	Wildlife Control Technician Certification	\$25	\$12.00	\$2.00	20.0%	\$180	\$168
113-273(m)	Alligator Control Agent Certification	\$25	\$12.00	\$2.00	20.0%	\$76	\$71
113-274(1c)	Possession Permit (Consists of Reptile & Amphibian Possession, Wildlife Possession and Salvage, and Restricted Species Permits)	\$10	\$12.00	\$2.00	20.0%	\$440	\$411
113-274(3)	Exportation or Importation Permit	\$10	\$12.00	\$2.00	20.0%	\$373	\$349
113-274(3a)	Trophy Wildlife Sale Permit	\$10	\$12.00	\$2.00	20.0%	\$763	\$713
113-274(3d)	Endangered Species Permit	\$10					
113-274(3e)	Field Trial Permit	\$10					
WRC Lifetime Licenses							
113-270.1C (b) (5) 113-270.1C (b) (6)	Resident Disabled Veteran & Totally Disabled Lifetime Combo Hunting & Inland Fishing License (one item)	\$11	\$14.00	\$3.00	27.3%	\$630	\$2,748
113-270.1D (b) (1)	Infant Lifetime Sportsman License	\$212	\$252.00	\$40.00	18.9%	\$98,133	\$577,794
113-270.1D (b) (2)	Youth Lifetime Sportsman License	\$371	\$441.00	\$70.00	18.9%	\$43,167	\$254,159
113-270.1D (b) (3)	Adult Resident Lifetime Sportsman License	\$530	\$630.00	\$100.00	18.9%	\$145,000	\$853,738
113-270.1D (b) (4)	Nonresident Lifetime Sportsman License	\$1,272	\$1,511.00	\$239.00	18.8%	\$22,705	\$134,154
113-270.1D (b) (5)	Age 70 Resident Lifetime Sportsman License	\$16	\$19.00	\$3.00	18.8%	\$800	\$4,735
113-270.1D (b) (7) 113-270.1D (b) (8)	Resident Disabled Veteran & Totally Disabled Lifetime Sportsman License (one item)	\$106	\$126.00	\$20.00	18.9%	\$2,000	\$11,776
113-270.2 (c) (2)	Lifetime Resident Comprehensive Hunting License	\$265	\$315.00	\$50.00	18.9%	\$70,500	\$415,093
113-271 (d) (3)	Lifetime Resident Comprehensive Inland Fishing License	\$265	\$315.00	\$50.00	18.9%	\$83,333	\$490,654
113-271 (d) (6a)	Age 70 Resident Lifetime Inland Fishing License	\$16	\$19.00	\$3.00	18.8%	\$3,400	\$20,125
113-271 (d) (6b) 113-271 (d) (6c)	Resident Disabled Veteran & Totally Disabled Lifetime Inland Fishing License	\$11	\$14.00	\$3.00	27.3%	\$4,350	\$18,972
113-270.5 (b) (1a)	Resident Lifetime Trapping License	\$300	\$357.00	\$57.00	19.0%	\$12,730	\$74,514

113-276(o)	Adult Resident Lifetime Sportsman License/Firefighter	\$265	\$315.00	\$50.00	18.9%	\$500	\$2,944
113-276(o)	Lifetime Resident Comprehensive Hunting License/Firefighter	\$132.50	\$158.00	\$25.50	19.2%	\$204	\$1,181
113-276(o)	Lifetime Resident Comprehensive Inland Fishing License/Firefighter	\$132.50	\$158.00	\$25.50	19.2%	\$255	\$1,477
113-276(o)	Resident Lifetime Trapping License / Firefighter	\$150	\$179.00	\$29.00	19.3%	\$-	\$-
113-276(o)	Resident Disabled Veteran & Totally Disabled Lifetime Inland Fishing License / Firefighter	\$5.50	\$7.00	\$1.50	27.3%	\$-	\$-
113-276(o)	Resident Disabled Veteran & Totally Disabled Lifetime Combo Hunting & Inland Fishing License /Firefighter	\$5.50	\$7.00	\$1.50	27.3%	\$-	\$-
113-276(o)	Resident Disabled Veteran & Totally Disabled Lifetime Sportsman License /Firefighter	\$53	\$63.00	\$10.00	18.9%	\$-	\$-
113-270.1D (b) (3)	Resident Age 50 & Older Sportsman	\$265	\$315.00	\$50.00	18.9%	\$205,000	\$1,207,009
WRC/DMF Annual Unified Licenses							
113-351 (c) (1)	Annual Resident Unified Sportsman/Coastal Recreational Fishing License	\$69	\$82.00	\$13.00	18.8%	\$502,667	\$2,963,240
113-351 (c) (2)	Annual Resident Unified Inland/Coastal Recreational Fishing License	\$41	\$49.00	\$8.00	19.5%	\$1,072,000	\$6,136,449
WRC/DMF Lifetime Unified Licenses							
113-351 (c) (3) (a)	Infant Lifetime Unified Sportsman/Coastal Recreational Fishing License	\$292	\$347.00	\$55.00	18.8%	\$407,000	\$2,399,813
113-351 (c) (3) (b)	Youth Lifetime Unified Sportsman/Coastal Recreational Fishing License	\$477	\$567.00	\$90.00	18.9%	\$112,500	\$662,383
113-351 (c) (3) (c)	Resident Adult Lifetime Unified Sportsman/Coastal Recreational Fishing License	\$716	\$851.00	\$135.00	18.9%	\$324,000	\$1,908,785
113-351 (c) (3) (d)	Nonresident Adult Lifetime Unified Sportsman/Coastal Recreational Fishing License	\$1,643	\$1,952.00	\$309.00	18.8%	\$7,725	\$45,607
113-351 (c) (3) (e)	Resident Age 70 Lifetime Unified Sportsman/Coastal Recreational Fishing License	\$32	\$38.00	\$6.00	18.8%	\$3,100	\$18,349

113-351 (c) (3) (f)	Resident Disabled Veteran Lifetime Unified Sportsman/Coastal Recreational Fishing License	\$117	\$140.00	\$23.00	19.7%	\$46,000	\$261,682
113-351 (c) (3) (g)	Resident Totally Disabled Lifetime Unified Sportsman/Coastal Recreational Fishing License	\$117	\$140.00	\$23.00	19.7%	\$5,597	\$31,838
113-351 (c) (4) (a)	Resident Lifetime Unified Inland/Coastal Recreational Fishing License	\$477	\$567.00	\$90.00	18.9%	\$144,000	\$847,850
113-276(o)	Resident Lifetime Unified Inland/Coastal Recreational Fishing License / Firefighter	\$238.50	\$283.50	\$45.00	18.9%	\$1,125	\$6,624
113-276(o)	Resident Adult Lifetime Unified Sportsman/Coastal Recreational Fishing License / Firefighter	\$358	\$425.50	\$67.50	18.9%	\$9,450	\$55,673
113-276(o)	Resident Disabled Veteran Lifetime Unified Sportsman/Coastal Recreational Fishing License / Firefighter	\$58.50	\$70.00	\$11.50	19.7%	\$-	\$-
113-276(o)	Resident Totally Disabled Lifetime Unified Sportsman/Coastal Recreational Fishing License / Firefighter	\$58.50	\$70.00	\$11.50	19.7%	\$-	\$-
113-351 (c) (3) (c)	Resident Age 50 & Older Unified Sportsman/Coastal Recreational Fishing License	\$358	\$425.50	\$67.50	18.9%	\$303,750	\$1,789,486
DMF Annual & Short-Term Coastal Licenses							
113-174.2 (c) (1)	Annual Resident Coastal Recreational Fishing License	\$16	\$19.00	\$3.00	18.8%	\$155,000	\$917,445
113-174.2 (c) (1a)	Annual Nonresident Coastal Recreational Fishing License	\$32	\$38.00	\$6.00	18.8%	\$189,000	\$1,118,692
113-174.2 (c) (4)	Ten-Day Resident Coastal Recreational Fishing License	\$6	\$8.00	\$2.00	33.3%	\$54,667	\$204,361
113-174.2 (c) (4a)	Ten-Day Nonresident Coastal Recreational Fishing License	\$11	\$14.00	\$3.00	27.3%	\$357,000	\$1,557,009
DMF Lifetime Coastal Licenses							
113-174.2 (c) (6) (e)	Infant Lifetime Coastal Recreational Fishing License	\$106	\$126.00	\$20.00	18.9%	\$3,000	\$17,664
113-174.2 (c) (6) (f)	Youth Lifetime Coastal Recreational Fishing License	\$159	\$189.00	\$30.00	18.9%	\$5,650	\$33,266
113-174.2 (c) (6) (g)	Resident Adult Lifetime Coastal Recreational Fishing License	\$265	\$315.00	\$50.00	18.9%	\$42,500	\$250,234

113-174.2 (c) (6) (h)	Nonresident Adult Lifetime Coastal Recreational Fishing License	\$530	\$630.00	\$100.00	18.9%	\$9,000	\$52,991
113-174.2 (c) (6) (i)	Resident Age 70 Lifetime Coastal Recreational Fishing License	\$16	\$19.00	\$3.00	18.8%	\$2,300	\$13,614
113-174.2 (c) (6) (j)	Resident Disabled Veteran Coastal Recreational Fishing License	\$11	\$14.00	\$3.00	27.3%	\$3,380	\$14,741
113-174.2 (c) (6) (k)	Resident Totally Disabled Coastal Recreational Fishing License	\$11	\$14.00	\$3.00	27.3%	\$850	\$3,707
113-276(o)	Resident Disabled Veteran & Totally Disabled Coastal Recreational Fishing License / Firefighter	\$5.50	\$7.00	\$1.50	27.3%	\$-	\$-

Appendix C: Goods classification and price elasticity of license types based on 2020 price increase.

License	Change in sales	Change in price	Price elasticity	Elasticity Type	Type of Good	Expected Change in Demand
WRC Annual & Short-Term Licenses						
Resident Annual Combination Hunting & Inland Fishing License	0.02	0.40	0.04	Inelastic	Non-normal	0.00
Annual Sportsman License	0.20	0.06	3.34	Elastic	Non-normal	0.38
Resident State Hunting License	0.00	0.25	0.01	Inelastic	Non-normal	0.00
Controlled Hunting Preserve Hunting License	0.14	0.10	1.42	Elastic	Non-normal	0.16
Resident Annual Comprehensive Hunting License	0.23	0.08	2.71	Elastic	Non-normal	0.31
Nonresident State Hunting - Season License	0.11	0.25	0.44	Inelastic	Non-normal	0.05
Nonresident State Hunting - Ten-Day License	0.01	0.33	0.02	Inelastic	Non-normal	0.00
Falconry Hunting License						
Resident Big Game Hunting License	0.02	0.08	0.30	Inelastic	Non-normal	0.03
Nonresident Bear Hunting License	0.22	0.06	3.47	Elastic	Non-normal	0.40
Bear Management Stamp	0.18	0.10	1.79	Elastic	Non-normal	0.21
Nonresident Big Game Hunting - Season License	0.12	0.25	0.49	Inelastic	Non-normal	0.06
Nonresident Big Game Hunting - Ten-Day License	-0.02	0.33	-0.05	Inelastic	Normal	-0.01
Bonus Antlerless Deer License	-0.97	0.10	-9.67	Elastic	Normal	-1.11
Game Land License	0.25	0.07	3.73	Elastic	Non-normal	0.43
Falconry License	-0.01	0.10	-0.07	Inelastic	Normal	-0.01
Migratory Waterfowl Hunting License	0.25	0.08	3.25	Elastic	Non-normal	0.37
Resident American Alligator License						
Nonresident American Alligator License						
Resident Elk License						
Nonresident Elk License						
Resident State Trapping License	0.05	0.07	0.69	Inelastic	Non-normal	0.08
Nonresident State Trapping License	-0.19	0.06	-2.94	Elastic	Normal	-0.34
Resident State Inland Fishing License	0.08	0.25	0.33	Inelastic	Non-normal	0.04
Nonresident State Inland Fishing License	0.15	0.25	0.59	Inelastic	Non-normal	0.07
Short-Term Resident Inland Fishing - 10-Day License	0.26	0.29	0.90	Inelastic	Non-normal	0.10

Short-Term Nonresident Inland Fishing - 10-Day License	0.15	0.28	0.52	Inelastic	Non-normal	0.06
Special Landholder & Guest Fishing License	-0.03	0.06	-0.44	Inelastic	Normal	-0.05
Mountain Heritage Trout Waters 3-Day Fishing License	0.86	0.60	1.44	Elastic	Non-normal	0.16
Resident Special Device License	-0.02	0.07	-0.29	Inelastic	Normal	-0.03
Nonresident Special Device License	-0.50	0.06	-8.33	Elastic	Normal	-0.95
Resident Hunting and Fishing Guide License	0.20	0.07	2.96	Elastic	Non-normal	0.34
Nonresident Hunting and Fishing Guide License	0.27	0.06	4.56	Elastic	Non-normal	0.52
Collection License (Consists of Wildlife Collection & Scientific Fish Collection Licenses)	-0.20	1.00	-0.20	Inelastic	Normal	-0.02
Captivity License for Holding License	-0.09	9.00	-0.01	Inelastic	Normal	0.00
Captivity License for Rehabilitation License	0.08	1.00	0.08	Inelastic	Non-normal	0.01
Resident Fur-Dealer License	0.21	0.07	3.21	Elastic	Non-normal	0.37
Nonresident Fur-Dealer License	0.00	0.06	0.00			
Fur-dealer Station License	0.25	0.07	3.75	Elastic	Non-normal	0.43
Controlled Hunting Preserve Operator License	0.04	1.00	0.04	Inelastic	Non-normal	0.00
Game Bird Propagation License	0.32	1.00	0.32	Inelastic	Non-normal	0.04
Furbearer Propagation License**						
Taxidermy License	-0.18	4.00	-0.05	Inelastic	Normal	-0.01
Taxidermy Cervid Certification						
Wildlife Control Agent						
Alligator Control Agent Certification						
Possession Permit (Consists of Reptile & Amphibian Possession, Wildlife Possession and Salvage, and Restricted Species Permits)						
Exportation or Importation Permit						
Trophy Wildlife Sale Permit						
Endangered Species Permit						
Field Trial Permit						
Resident Disabled Veteran & Totally Disabled Lifetime Combo Hunting & Inland Fishing License	-0.11	0.10	-1.15	Elastic	Normal	-0.13
WRC Lifetime Licenses						
Infant Lifetime Sportsman License	0.01	0.06	0.13	Inelastic	Non-normal	0.02
Youth Lifetime Sportsman License	0.22	0.48	0.45	Inelastic	Non-normal	0.05
Adult Resident Lifetime Sportsman License	0.51	0.06	8.46	Elastic	Non-normal	0.97

Nonresident Lifetime Sportsman License	0.19	0.06	3.19	Elastic	Non-normal	0.37
Age 70 Resident Lifetime Sportsman License	-0.55	0.07	-8.32	Elastic	Normal	-0.95
Resident Disabled Veteran & Totally Disabled Lifetime Sportsman License	0.15	0.06	2.45	Elastic	Non-normal	0.28
Lifetime Resident Comprehensive Hunting License	0.57	0.06	9.48	Elastic	Non-normal	1.09
Lifetime Resident Comprehensive Inland Fishing License	1.13	0.06	18.83	Elastic	Non-normal	2.16
Age 70 Resident Lifetime Inland Fishing License	-0.28	0.07	-4.17	Elastic	Normal	-0.48
Resident Disabled Veteran & Totally Disabled Lifetime Inland Fishing License	0.07	0.10	0.67	Inelastic	Non-normal	0.08
Resident Lifetime Trapping License				Inelastic		
Adult Resident Lifetime Sportsman License / Firefighter				Inelastic		
Lifetime Resident Comprehensive Hunting License / Firefighter				Inelastic		
Lifetime Resident Comprehensive Inland Fishing License / Firefighter				Inelastic		
Resident Lifetime Trapping License / Firefighter				Inelastic		
Resident Disabled Veteran & Totally Disabled Lifetime Inland Fishing License / Firefighter				Inelastic		
Resident Disabled Veteran & Totally Disabled Lifetime Combo Hunting & Inland Fishing License / Firefighter				Inelastic		
Resident Disabled Veteran & Totally Disabled Lifetime Sportsman License / Firefighter				Inelastic		
Resident Age 50 & Older Sportsman				Inelastic		
WRC/DMF Annual Unified Licenses						
Annual Resident Unified Sportsman/Coastal Recreational Fishing License (WRC \$53)	0.07	0.06	1.23	Elastic	Non-normal	0.14
Annual Resident Unified Inland/Coastal Recreational Fishing License (WRC \$25)	0.85	0.00	0.00	Inelastic		0
WRC/DMF Lifetime Unified Licenses						
Infant Lifetime Unified Sportsman/Coastal Recreational Fishing License (WRC \$212)	0.07	0.06	1.21	Elastic	Non-normal	0.14
Youth Lifetime Unified Sportsman/Coastal Recreational Fishing License (WRC \$371)	0.43	0.06	7.19	Elastic	Non-normal	0.82
Resident Adult Lifetime Unified Sportsman/Coastal Recreational Fishing License (WRC \$530)	0.34	0.06	5.72	Elastic	Non-normal	0.65
Nonresident Adult Lifetime Unified Sportsman/Coastal Recreational Fishing License (WRC \$1,272)	0.67	0.06	11.11	Elastic	Non-normal	1.27

Resident Age 70 Lifetime Unified Sportsman/Coastal Recreational Fishing License (WRC \$16)	-0.61	0.07	-9.21	Elastic	Normal	-1.05
Resident Disabled Veteran Lifetime Unified Sportsman/Coastal Recreational Fishing License (WRC \$106)	0.29	0.06	4.81	Elastic	Non-normal	0.55
Resident Totally Disabled Lifetime Unified Sportsman/Coastal Recreational Fishing License (WRC \$106)	0.13	0.06	2.24	Elastic	Non-normal	0.26
Resident Lifetime Unified Inland/Coastal Recreational Fishing License (WRC \$265)	1.08	0.06	17.98	Elastic	Non-normal	2.06
Resident Lifetime Unified Inland/Coastal Recreational Fishing License / Firefighter (WRC \$132.50)						
Resident Adult Lifetime Unified Sportsman/Coastal Recreational Fishing License / Firefighter (WRC \$265)						
Resident Disabled Veteran Lifetime Unified Sportsman/Coastal Recreational Fishing License / Firefighter (WRC \$53)						
Resident Totally Disabled Lifetime Unified Sportsman/Coastal Recreational Fishing License / Firefighter (WRC \$53)						
Resident Age 50 & Older Unified Sportsman/Coastal Recreational Fishing License (WRC \$265)						
DMF Annual & Short-Term Coastal Licences						
Annual Resident Coastal Recreational Fishing License	-0.07	0.07	-1.11	Elastic	Normal	-0.13
Annual Nonresident Coastal Recreational Fishing License	0.14	0.07	2.03	Elastic	Non-normal	0.23
Ten-Day Resident Coastal Recreational Fishing License	0.07	0.20	0.35	Inelastic	Non-normal	0.04
Ten-Day Nonresident Coastal Recreational Fishing License	0.05	0.10	0.52	Inelastic	Non-normal	0.06
DMF Lifetime Coastal Licences						
Infant Lifetime Coastal Recreational Fishing License	0.18	0.06	2.94	Elastic	Non-normal	0.34
Youth Lifetime Coastal Recreational Fishing License	0.11	0.06	1.90	Elastic	Non-normal	0.22
Resident Adult Lifetime Coastal Recreational Fishing License	0.65	0.06	10.84	Elastic	Non-normal	1.24
Nonresident Adult Lifetime Coastal Recreational Fishing License	0.70	0.06	11.73	Elastic	Non-normal	1.34
Resident Age 70 Lifetime Coastal Recreational Fishing License	-0.34	0.07	-5.07	Elastic	Normal	-0.58
Resident Disabled Veteran Coastal Recreational Fishing License	0.10	0.10	0.96	Inelastic	Non-normal	0.11
Resident Totally Disabled Coastal Recreational Fishing License	-0.01	0.10	-0.11	Inelastic	Normal	-0.01

