

Jim White  
VT Wildlife Coalition  
[jwapptree70@outlook.com](mailto:jwapptree70@outlook.com)  
802-355-5963  
Senate Natural Resources and Energy Committee - S.321  
2/27/2020

## Vermont Wildlife Coalition Extended Testimony - H. 581

### Abstract

The Vermont Wildlife Coalition (VWC) requests passage of H.581, calling for a legislative working group to provide assessment and recommendations regarding funding of the Vermont Department of Fish & Wildlife (DFW). Authoritative national and state voices have identified funding levels as a crisis that challenges state wildlife agencies' ability to meet ever broadening and pressing responsibilities. An even more compelling reason is the direct link between funding and agencies' capacity to address the emerging threats to wild species, evident at the global, national and state levels. In Vermont, changing demographics and social trends have reduced funding from hunting and fishing license sales and created increased dependence on the state general fund and federal dollars, both unstable funding sources. The working group must consider the funding challenge from the perspective of increasing financial resources so the department can meet 21st century obligations. New funds should be from stable sources, be from diversified sources that include the broad public, and be targeted to contemporary needs.

\*\*\*\*\*

The VWC requests that you pass H.581 and create a working group to address the funding challenges facing wildlife management in Vermont.

### A. There is a Funding Crisis

There is no doubt that a funding crisis exists, but please don't take our word for it.

1. In 2007, the Vermont Wildlife Partnership, consisting of 48 organizations and businesses, published *Vermont's Wildlife at the Crossroads*, raising a cry of alarm about wildlife funding:

Like most states in the nation, we face a growing threat. The traditional sources of funding for fish and wildlife conservation are providing less and less revenue. Underfunded state fish and wildlife agencies, including Vermont's, are being forced to cut programs, and the challenges they face are becoming more numerous and more complex.<sup>1</sup>

2. In 2016, the Association of Fish and Wildlife Agencies (AFWA), the official industry voice for all 50 state fish and wildlife departments (Vermont's DFW is a member), pointed directly at the emerging crisis in urgent reports, concluding, "The 20<sup>th</sup> century model of funding was never designed to meet the 21<sup>st</sup> century demands of fish and wildlife conservation."<sup>2</sup> The AFWA Blue Ribbon Panel's words are compelling:

For every game species that is thriving, hundreds of nongame species are in decline....Unlike the conservation finance system that was created for game and sport fish, there is no comparable funding mechanism to manage the majority of fish and wildlife under state stewardship."<sup>3</sup>

3. In 2018, the National Wildlife Federation, a non-profit serving hunters and non-hunters alike, issued their own major report on the funding shortfall:

Despite the dire condition of America's wildlife, the research is clear that collaborative conservation actions can make a difference, and can ensure that the nation's species not only survive but thrive. These successes depend on a variety of factors ... perhaps most importantly, adequate resources and funding....Yet while we now have a firm grasp of the scale of the problem as well as plans in place to turn the situation around, the amount of funds currently available for wildlife conservation are only capable of meeting a small fraction of the need.<sup>4</sup>

4. In 2017, the Vermont Department of Fish & Wildlife acknowledged the crisis. In a budget performance report, the Department stated, "To remain financially stable long term, the department will need to address its funding crisis."<sup>5</sup>

5. In late 2019, Vermont Digger quoted a DFW spokesperson reacting to declining hunting and fishing license sales, "**Further drops in licenses would pose a serious financial, administrative and bureaucratic threat.**"<sup>6</sup>

6. In fact, the very existence of the federal State Wildlife Grants (SWG) program that currently funds roughly one third of Vermont's DFW annual budget reflects a significant, entrenched, and long term shortfall in wildlife conservation funding:

There has always been a serious lack of funding for those species that are not hunted or fished. State Wildlife Grant funds help Vermont and other states address the needs of those species for which little funding has been available.<sup>7</sup>

What does this funding crisis look like in Vermont? There are three major sources of DFW funding. About one third of the budget comes from license fees. However, hunting and angling license fees, as has been well-documented, are in

decline, and have been since at least 2006, because of demographic shifts and changes in cultural values and attitudes resulting in fewer people wanting to hunt and fish.<sup>8</sup>

Another third of the budget is the state general fund, comprised of tax dollars. The DFW is increasingly drawing on state general fund dollars to replace lost revenue, so that contribution grows over time.

The final third comes from federal grant money. This money is problematic because the state must provide match from license sales to draw down funds. As license sales decrease, the amount of qualified drawdown decreases also. We need to reverse this trend by increasing state match. Another issue is that the federal dollars available are simply inadequate to meet the goals of Vermont's Wildlife Action Plan (WAP):

To do justice to this Action Plan, and to help the many SGCN [Species of Greatest Conservation Need] and habitats in need, **we need to add one problem to the list ... that our technical teams did not identify directly in their assessments, but it was often discussed during team meetings—the lack of sufficient funding for wildlife conservation.** Without sufficient funding we will not be able to implement many of the conservation strategies identified in this report. The [federal] State Wildlife Grants program is a critical first step in funding SGCN conservation, but more is needed. And, to make the most of SWG funds, Vermont will have to develop the required matching stateside funds.<sup>9</sup>

The National Wildlife Federation echoed this point, "In fiscal year 2017, \$52 million was allocated, meaning that most states received less than \$1 million [in federal SWG funds] to implement their State Wildlife Action Plans, a sum that falls far short of the funding needed."<sup>10</sup>

The budget adjustments between these three pots underscore the DFW's effort to maintain an adequate operational funding level at a time when the DFW has more responsibilities than ever before. The DFW strategic plan notes, "Over time, the people of Vermont through its General Assembly have increased and diversified the responsibilities of the department. The department is now responsible for the conservation of all wildlife in its broadest sense."<sup>11</sup> It goes on to say that the broadest sense includes 21,000 species and 80 types of natural communities. To meet that obligation, services encompass wildlife management, fisheries, search and rescue, law enforcement, species monitoring and restoration, habitat conservation, public education programming and administration, the last involves managing \$8 million in grants received and dispensing over a million dollars in grants to partners. DFW today is light years away from, say, 1876 when the legislature gave fish commissioners authority over game as well as fish.

## **B. There is More Than Funding at Stake**

Thus, there is a long term funding crisis confronting the department that holds vital natural resources of Vermonters in trust and that should be reason enough for a legislative review. **But there's a far more compelling reason. The very future of our wildlife is in peril -- funding and the capacity to address the emerging threat to wild species are inexorably connected.** The WAP states, "Decades of inadequate funding have prevented the states from implementing the proven, cost effective strategies needed to keep fish and wildlife healthy."<sup>12</sup>

In fact, the health of fish and wildlife is in serious jeopardy:

1. It's happening globally. Called the "sixth mass extinction," the population of wild animals has halved since 1970. The last time so many species disappeared was when the dinosaurs got wiped out.
2. It's happening in the U.S. **"As many as one-third of America's wildlife species are at increased risk of extinction, according to a new report by the National Wildlife Federation, the American Fisheries Society and the Wildlife Society."**<sup>13</sup> Collin O'Mara, president and CEO of the National Wildlife Federation says "America's wildlife are in crisis ... "Fish, birds, mammals, reptiles and invertebrates are all losing ground. We owe it to our children and grandchildren to prevent these species from vanishing from the earth."<sup>14</sup> The president of the Wildlife Society agrees, "Wildlife in America need help. Species are increasingly at risk in all regions of the country and across all categories of wildlife."<sup>15</sup>
3. It's happening in Vermont. Vermont's WAP reports that 976 Vermont species qualified as "Species of Greatest Conservation Need" (SGCN) as of 2015. This classification also includes species that are classified as threatened or endangered. Five years ago, the WAP concluded, **"A significant number of wildlife species need help because of threats such as habitat loss, fragmentation and degradation; invasive exotic species; diseases; and climate change."**<sup>16</sup>

One part of the dilemma is that historically a lot of conservation money has bypassed non-game species. The Association of Fish and Wildlife Agencies report states, **"Yet what is hidden from most Americans is another impending fish and wildlife crisis. For every game species that is thriving, hundreds of nongame species are in decline...."**<sup>17</sup> Non-game species vastly outnumber game species, and their vulnerability is pervasive, "Today, over 12,000 species of fish and wildlife have been designated as species of greatest conservation

need.<sup>18</sup> ....In the coming years, thousands of species could be added to the list of federal threatened and endangered species.<sup>19</sup> If DFW is struggling to sustain operational funding now, how will it fund the level of response required in the future to address wildlife protection needs?

### **C. What Challenges Do Wildlife Face?**

The following is a whirlwind summary of major challenges to Vermont wildlife going forward. We are quoting at some length from the WAP and the DFW

Strategic Plan in order to give some scope and depth to the under-recognized plight of wildlife.

#### **Climate change**

What makes the issue of climate change particularly intractable is the breadth of interconnections between these climate-driven impacts and numerous non-climate stressors such as habitat fragmentation, habitat degradation, and pollution – which have been the focus of conservation efforts for some time. Given the magnitude of climate impacts, rates of increasing variability, and the synergy between climate and non-climate stressors on wildlife and the habitats upon which they depend, **there is an urgent need to prepare for and respond to these impacts** (Stein, B. et al. 2014).<sup>20</sup>

#### **Habitat loss and fragmentation**

The integrity of various natural communities and habitats (e.g., floodplain forests, sandplains, clayplains and large forest blocks) are at risk because of fragmentation, isolation, and degradation due to continuing land use changes (e.g. roads, subdivisions, invasion of non-native species and climate change).<sup>21</sup>

#### **Impacts of roads and transportation systems**

The number of vehicle miles traveled by Vermont residents is growing at seven times the rate of population growth, according to information from the Vermont Agency of Transportation (VTrans) (1999). Transportation systems can cause numerous problems for SGCN including: vehicle-wildlife collisions; reducing animal and fish passage, thus limiting habitat availability and isolating populations; vehicle emissions of pollutants such as ozone and greenhouse gases; and facilitating the spread of an exotic, invasive species into otherwise healthy areas.<sup>22</sup>

#### **Pollution**

The introduction of exotic materials from point and non-point sources can

significantly impact SGCN, particularly aquatic species. Pollutants and sediments include sands and silts, chemicals and toxins; excess nutrients from farm and municipal sewage plants; garbage and other solid waste; radioactive materials; road salt; excessive noise; excessive heat; and light pollution that disturbs animals and disrupts migration patterns. Sediments can be a problem for SGCN through their physical presence alone. For example, soils can wash into a stream from a construction site and smother fish eggs and other aquatic species living in the spaces between rocks and gravel streambed. The history of polluted runoff—rainwater and snowmelt draining from parking lots, roads and streets, logging roads, farm fields and croplands, and lawns—carrying sediments and nutrients, including phosphorus, into streams and rivers and directly into Lake Champlain is stimulating excessive growth of algae which is bad for lake species and people.<sup>23</sup>

### **Invasive species**

The introduction and spread of nuisance exotic and native species (plants and animals) may lead to the elimination of native wildlife populations, threaten long-term stability of habitats and even lead to extirpation by out-competing a native species, displacing its food source or altering a key process or function of a habitat. Invasive exotic species in Vermont include Eurasian watermilfoil, purple loosestrife, common buckthorn, Japanese knotweed, Morrow's honeysuckle, goutweed, black swallow-wort, hemlock wooly adelgid and zebra mussels.<sup>24</sup>

### **Disease**

Shortly after the first Wildlife Action Plans were submitted, White-Nose Syndrome (WNS) was discovered in New York and then Vermont in 2008 followed quickly by several other states. In a few short years WNS nearly wiped-out several bat populations in the Northeast.

... Subsequently, Snake Fungal Disease was discovered killing Rattlesnakes in Vermont and elsewhere, and *Heterosporis* appeared in Yellow Perch in Lake Champlain. Additionally, diseases not yet found in Vermont are potential threats. They include: Chronic Wasting Disease (deer), Viral Hemorrhagic Septicemia (fishes), *Batrachochytrium salamandrivorans* (salamanders) and Avian Influenza (birds). The Vermont Fish & Wildlife Department has steadily increased surveillance and is devoting additional resources to the threats posed by these and other diseases.<sup>25</sup>

It should be noted that DFW unquestionably takes these threats seriously. Its latest WAP gives particular and in depth attention to climate change. And the agency for some time has been a leader in underscoring and addressing the problem of habitat loss. Wildlife disease and pollution have only recently been getting the full attention of the larger scientific community.<sup>26</sup>

These are all complex issues and their unpredictability makes it hard to know the directions they will take and the responses that will be appropriate. One thing that's clear is that DFW needs the funding to tackle this job if we want our wildlife around in the years ahead.

#### **D. What Are the Funding Solutions?**

It seems clear that the status quo will not provide needed solutions. DFW has been trying to restore hunter licence revenues by recruiting more license-buying hunters. A very recent article in Digger highlighted these efforts. **Hunters have been and will be an important force for conservation, but the downward trend in hunting and fishing participation is expected to continue, according to DFW project coordinator Chris Saunders.<sup>27</sup> A 2018 DFW budget report notes, "no matter how successful, these efforts will not replace lost license sales revenue."<sup>28</sup>**

As mentioned earlier, the general fund and federal grant money are the other two major revenue sources for the Department. Both of these mechanisms are subject to the same weakness -- instability due to the potential for changing political winds. With the constant and ever-expanding budget pressure on state government, it's anyone's guess as to the ebb and flow of general fund dollars for covering gaps in the department budget, let alone for providing for future DFW budget expansion, especially in the face of administration change over time. Federal money is even more susceptible to political tides. **Vermont's WAP states that State Wildlife Grants face "additional cuts every year."** The report continues:

Annual SWG allocations have declined by 40% since 2002 and additional cuts are threatened every year. Currently Vermont receives less than 10% of what would be needed for full Wildlife Action Plan implementation.<sup>29</sup>

#### **Funding Must Increase**

Any proposed solution must allow for increased funding over time, given the identified challenges. We have already mentioned the anticipated threat of species loss, perhaps eventually on the scale of one third of all species. Addressing this potential catastrophe will place new and heavy demands on scientific capacity, beginning with the need for monitoring and research. Again, we turn to the WAP:

Monitoring is clearly a linchpin in the adaptive management process. Monitoring is also a complex, demanding and expensive task that never ends. Monitoring was also the weakest link of virtually every Wildlife Action Plan in 2005. **The reason is that with the funding and staffing resources available to states, monitoring the status of all SGCN and their habitat and threats was simply not possible.<sup>30</sup>**

Organizing and utilizing this science in Vermont will fall to a great degree on DFW personnel.

Another responsibility is habitat protection. Wildlife and habitat are inextricable. The department, as mentioned, is already a leader in advocating for, procuring, restoring and protecting habitat through its own efforts and through collaboration with partners. One example is what the department calls its “critical role” in the Act 250 process.<sup>31</sup> Part of that role is to evaluate the importance of habitat potentially subject to Act 250. Is there adequate funding for the department to perform these evaluations not just at present, but in the event that Act 250 is expanded? In any case, habitat is continually being lost or degraded and more effort is necessary while we can still do something about it. Involvement by DFW in addressing that will cost money.

The department’s role in meeting the threats to species will inevitably expand **and it will expand in combination with increased responsibility in a variety of areas, including the demand for services by the public.** One such service

will be meeting the expectations of so-called wildlife watchers, “Vermont leads the nation in wildlife viewing, and more services are being demanded by this constituency. Limited opportunity and access to viewing and photographing wildlife may reduce participation.”<sup>32</sup> **Although wildlife viewing is growing in popularity in leaps and bounds, this vast subset of Vermonters, except for their contributions to the general tax code, is untapped as a source of funds for the Department:**

....Additionally, because wildlife viewing provides no significant revenue stream to the department that would allow for management of the resources viewed and development of viewing opportunities, this goal has the potential to create resource priority conflicts.<sup>33</sup>

As a side note, more dedicated support of wildlife watchers would help the Department accomplish its often expressed goal of keeping the public invested in the outdoors.

### **Funding Must Be Stable**

We’ve already discussed the instability of the three primary streams of funds to the Department -- license fees depend on sufficient hunters and anglers; general fund dollars are subject to political winds; federal money, likewise susceptible to politics, is too little and on the decline. One might argue that there is no such thing as stable funding in a political environment. **That doesn’t deny that greater stability is possible, and would be highly desirable. With stable funding, the Department would have a fighting chance to protect one of Vermont’s premier resources.** The health of wildlife is critical to the health of all participants in the ecosystem, including humans; it is essential to the quality

of life of the state's residents; and it is a key aspect of our economy and identity, one that has the potential to expand in importance over time. One way to increase stability will be found in the next section.

### **Funding Must Be Diversified**

Anyone familiar with building budgets knows that the more diversity there is to the sources of funding, the more stable that funding will be. It is the whole principle behind mutual fund investing versus buying individual stock shares. **By "diversified," we mean not only multiple sources of funding, but also because the state holds wildlife in trust for all citizens, all citizens should be participating in financing the protection and conservation of wildlife.** The responsibility cannot fall to just a small subgroup of the whole.

**Involving all citizens would also help keep the public invested in the department's efforts to protect wildlife.** Many citizens have little idea about what fish and wildlife departments do. If they did know, and know that they had a financial role in sustaining the department's work, their commitment would be more likely, and stronger. Again we turn to the Association of State Wildlife Agencies:

Although core constituencies like hunters and anglers will continue to be key allies, **there is a need to broaden stakeholder representation to ensure fish and wildlife conservation remains relevant and supported by people from all walks of life.**<sup>34</sup>

Such support would be critical in addressing a period of crisis for wildlife.

Hunters will be quick to point out their major role in funding conservation, and that would be true. A century ago, sports hunters protected various game species from the destruction caused by commercial hunters. Hunters had a huge role in launching the wildlife conservation movement in the U.S. Two notes about this -- first, historically, sports funding, while providing some benefit to non-game, was primarily directed towards game animals, hunters' main priority. That focus is part of the reason there is insufficient funding for non-game now. Second, hunter funding is decreasing at the same time the need for funding is rapidly expanding.

The traditional funding source for wildlife conservation by state fish and wildlife agencies has been sportsmen.... But the pressures on wildlife have both changed and increased in intensity since these funding programs began in the early decades of the 1900's. Today, these funds, most of which are dedicated for game and sportfish species, are stretched thin as the Fish & Wildlife Department addresses new issues and problems such as development, Act 250 reviews, pollution, invasive species and overabundant wildlife.<sup>35</sup>

As the Association says, the last century's funding model was never meant to meet the needs of the new century we find ourselves in.

One might ask - although hunters and anglers have a long history of spending money on wildlife, thus setting up a funding stream that could be tapped for conservation, is the same true of the broader public? **The short answer is that there are other segments of the public similarly, if not better, positioned to contribute.** The US government estimates that wildlife watchers spend about \$3 on their avocation for every \$1 spent by hunters.<sup>36</sup> In 2017, DFW noted:

The economic impact of bird feeding in Vermont cannot be overestimated. Half of Vermont households feed birds and almost all of the seed and related supplies are bought locally.<sup>37</sup>

The money is there, and there's a lot of it, but will the public want to contribute? We think so. The increase in general fund dollars means it's happening now, although most people aren't aware of that. But more to the point, Vermont ranks number one among states for public interest in wildlife and Vermonters are likely to step up to the plate.<sup>38</sup> The DFW reported a 2015 poll that shows 91% of Vermonters agree that "wildlife-related outdoor recreation is important to them."<sup>39</sup> The department seems to believe that Vermonters will contribute. A

2017 report references their 2015 poll question, "Among the various options for future funding of [DFW], I would prefer a one-eighth of 1% increase in the state general sales tax designated for conservation." **61% of respondents voted "yes" to this question.**<sup>40</sup>

### **Funding Must Be Targeted to Contemporary Needs**

Funding should be targeting the needs of the 21<sup>st</sup> century. **Part of the job of the working group will be to assess what those needs are. This will require an examination of how the department allocates funding, what groups currently benefit from those allocations and in what proportions, and if the allocations actually make sense in today's world and in light of current priorities. It will also involve making recommendations about sources and amounts of new funding.** Obviously, the Vermont Wildlife Coalition strongly believes that sustaining the health of our wildlife must be the major priority. After that, we can figure out how to determine funds to support human activities. **Gaining real public support probably will require DFW to put at least the level of resources into broader public programming and services that it now devotes to hunters and anglers.** That scaling up is just part of why the department needs more funds rather than a belt-tightening outlook.

## E. Conclusion

VWC is not going to suggest specific funding solutions. Legislators must assume that task because they can access the expertise and records necessary to do the required assessment and to create new taxes or whatever mechanism they decide makes sense. Our purpose is to draw attention to why we can't ignore the funding challenge any longer, and to suggest that many more Vermonters should, and likely, want to be participating in this long term project to protect our wildlife. The department notes, **"A long-lasing remedy to these issues (the decline in license sales and associated funding) will likely require other changes beyond those controlled by the department."**<sup>41</sup> We agree and ask the legislature to fulfill its role.

---

<sup>1</sup>*Vermont's Wildlife at the Crossroads*, Vermont Wildlife Partnership, 2007, 2

<sup>2</sup>*The Future of America's Fish and Wildlife: A 21<sup>st</sup> Century Vision for investing in and Connecting People to Nature*, Association of Fish and Wildlife Agencies (AFWA), 2016, 6

<sup>3</sup>AFWA., 2.

<sup>4</sup>*Reversing America's Wildlife Crisis: Securing the Future of Our fish and Wildlife*, the National Wildlife Federation(NWF), 2018, 23-24

<sup>5</sup>*Fish & Wildlife Department Performance Based Budget - FY2017*, Vermont Department of Fish & Wildlife (2017 Performance), 20

<sup>6</sup>"*Vermont Tradition in Decline: Hunting Fall Victim to Demographic Shifts*," Vermont Digger, Dec. 29, 2019

<sup>7</sup>Vermont Department of Fish & Wildlife website Q & A on the State Wildlife Grant Program.

<sup>8</sup>Digger, 2019

<sup>9</sup>WAP, 2-9

<sup>10</sup>NWF, 24

<sup>11</sup>Vermont Department of Fish & Wildlife Strategic Plan 2017-2021 (Strategic Plan), 6

<sup>12</sup>AFWA, 6

<sup>13</sup>NWF, 2

<sup>14</sup>NWF website, 2018

<sup>15</sup>NWF website, 2018

<sup>16</sup>WAP, 5-1

<sup>17</sup>AFWA, 2

<sup>18</sup>AFWA, 3

<sup>19</sup>AFWA, 6

<sup>20</sup>WAP. 3:1

<sup>21</sup>Strategic Plan, 8

<sup>22</sup>WAP, 2:7

<sup>23</sup>WAP, 2:7

<sup>24</sup>WAP, 2:7

<sup>25</sup>WAP, 2:8

<sup>26</sup>WAP, 2:5

<sup>27</sup>Digger, 2019

<sup>28</sup>*Fish & Wildlife Department Performance Based Budget - FY2018*, Vermont Department of Fish & Wildlife (2018 Performance), 1

<sup>29</sup>WAP, 1:4

<sup>30</sup>WAP, 7:4

<sup>31</sup>2018 Performance, 8

<sup>32</sup>Strategic Plan, 13

---

<sup>33</sup>From questions and answers on State Wildlife Grants on the Department of Fish & Wildlife website in answer to the question -- What does the Vermont Fish & Wildlife Department consider to be its greatest challenge to comply State Wildlife Grant requirements?

<sup>34</sup>AFWA, 9

<sup>35</sup>WAP, iv

<sup>36</sup>2016 National Survey of Fishing, Hunting and Wildlife-Associated Recreation. U.S. Fish & Wildlife Service, 35,39. Hunters spent \$26.2 billion versus 75.9 billion by wildlife watchers.

<sup>37</sup>2017 Performance, 6

<sup>38</sup>*Conserving Vermont's Natural Heritage*, Vermont Department of Fish & Wildlife and Agency of Natural Resources, 2013, 8

<sup>39</sup>2017 Performance, 19

<sup>40</sup>2017 Performance, 20

<sup>41</sup>2018 Performance, 1