



# RECOVERING AMERICA'S WILDLIFE ACT OF 2022

**AN ANALYSIS AND  
IMPLEMENTATION PLAN  
FOR THE RECOVERING  
AMERICA'S WILDLIFE ACT  
OF 2022 S.2372**

**WORKSHOP IN APPLIED  
EARTH SYSTEMS  
MANAGEMENT II  
FALL 2022**



---

# ACKNOWLEDGEMENTS

Manager: Mel Peh

Deputy Manager: Ezekiel Maben

Team Members:

Candice Asare

Morgan Lehman

Ishaan Ghose

Haotian Ni

Carrie Fernandes

Courtney Federico

Jackson (Ziqi) Liu

Moulika Aluri

Oliver Hegi

Faculty Advisor: Matthew Palmer

The workshop team would like to thank Paul Van Ryzin and Christina Milloy at United States Fish and Wildlife Service (USFWS) for their support and being generous with their time.

# TABLE OF CONTENTS

|                                      |    |
|--------------------------------------|----|
| 01 Executive Summary                 | 1  |
| 02 The Biodiversity Crisis           | 2  |
| 03 Recovering America's Wildlife Act | 4  |
| 04 Program Design                    | 5  |
| - Office of State Grants             | 6  |
| - Office of Innovation Grants        | 10 |
| - Oversight Committee                | 14 |
| 05 Master Calendar                   | 16 |
| 06 Conclusion                        | 19 |
| 07 References                        | 20 |



# EXECUTIVE SUMMARY

Biodiversity is declining around the world, and current extinction rates are estimated to be up to 100 times higher than historical background levels (Ceballos et al. 2015). Experts believe that we are currently in the sixth mass extinction event (WWF, 2022). In North America, approximately one third of all known US species are at risk of extinction (Almond et al., 2020). Declines in biodiversity and wildlife populations diminish the natural world but also harm humanity due to our dependence on wild plants, animals, and fungi. For instance, modern medicine is tightly-linked to biodiversity – roughly 70,000 medicinal plant species have provided the chemical foundation for staple drugs and natural remedies (Brauman et al., 2020). Furthermore, a wide variety of organisms are essential to maintaining agricultural systems, which feed billions of people. These are just two examples of the ecosystem goods and services provided by wildlife that benefit people. In order to help address the biodiversity crisis happening in the United States, members of the U.S. Congress have proposed the Recovering America's Wildlife Act of 2022.

In this report, we will describe the biodiversity crisis and the proposed legislation to address the crisis, the Recovering America's Wildlife Act of 2022. We present a program design and implementation plan for the bill. The proposed program design is for Title I of the bill, which has the largest portion of the expenditures. Our proposed program design has three main components: State Grants, Innovation Grants, and Oversight. This report discusses the roles, responsibilities, staffing, and budget for each of these components of the program design. A design for how the effectiveness of the program can be measured is included. We also present a calendar for the first year with descriptions of the main tasks.

America's wildlife is a vital asset that needs to be protected and restored. The Recovering America's Wildlife Act of 2022 would advance these goals by providing additional funding towards conservation efforts. The proposed program design shows how the bill can be implemented to achieve success. The successful implementation of this bill would make major strides towards recovering the biodiversity in the United States.



---

# THE BIODIVERSITY CRISIS

Biodiversity is in crisis as increasing numbers of species are being driven into extinction. On average, monitored species around the world have declined 69% in population size from 1970 to 2018 (Almond et al., 2022). Currently, there are more than 142,500 species on the IUCN Red List with more than 40,000 species threatened with extinction, including 41% of amphibians, 37% of sharks and rays, 34% of conifers, 33% of reef building corals, 26% of mammals, and 13% of birds (IUCN, 2022). In North America, approximately one third of all known US species are at risk of extinction (Almond et al., 2020). The total population of birds in the United States has declined almost 30% since 1970 partially due to habitat loss and chemical pollution (Rosenberg et al. 2019) and 30% of the plant pollination network has disappeared (Almond et al., 2020).

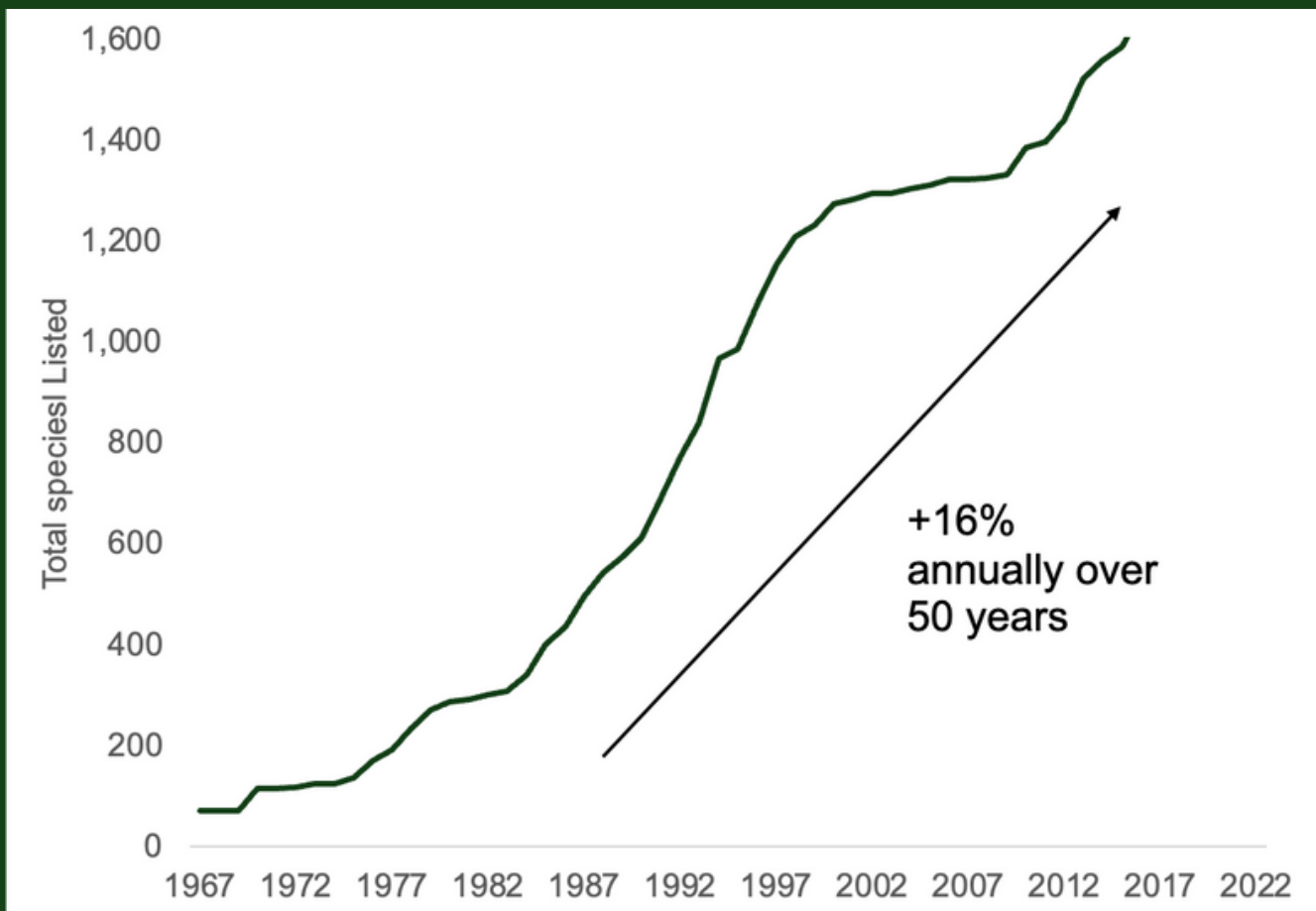
Extinction is marked by the death of the last individual of a species, however this is preceded by declines in populations. The rate of population decline is high amongst many types of vertebrates, even in common species that are not at imminent

risk of extinction. It is difficult to measure biodiversity because there is not one universal metric, but indicators such as declining population sizes, growing lists of endangered species, and reductions of population ranges all suggest that biodiversity is generally declining.

The loss of biodiversity threatens humanity since humans and nature are so intertwined. Ecosystem contributions to people are diverse and include the production of goods like food, medicine, and construction materials, services such as water regulation and pest control, and the provisioning of cultural values that instill a sense of identity (Brauman et al., 2020). Without pollinators, more than 35% of global food production, an estimated \$235-577 billion US dollars, would be lost annually (Potts et al., 2016). Ecosystem contributions are not just products of biophysical properties, but are co-produced by human-nature interactions (Brauman et al., 2020). Since biodiversity is essentially a signal of the planet's health, and

# THE BIODIVERSITY CRISIS

the planet's health is central to human health it is important to recognize the gravity of the problem and understand the impacts loss of biodiversity can have for the environment, public health, and agriculture. Preserving biodiversity is an investment in ecosystem services that will pay off today and will continue to pay off in the future.



Sources: U.S. Fish and Wildlife Service ECOS

Figure 1: Changes in numbers of endangered species within the United States from 1967 to 2022. The number of endangered species has steadily been increasing in the United States and will most likely continue to increase without proper intervention.

---

# RECOVERING AMERICA'S WILDLIFE ACT

The Recovering America's Wildlife Act of 2022 was introduced during the 117th Congress to address the global biodiversity crisis in the United States. The bill increases conservation funding by amending the Pittman-Robertson Act to create a Wildlife Conservation and Restoration Subaccount, which would receive \$850 million in the first year rising to \$1.3 billion over four years, where it would remain in perpetuity. The designated source of this funding would be fines collected from environmental violations.

The bill also provides \$97.5 million in annual funding to Native American Tribes to conduct conservation work and dedicates \$187.5 million yearly for 4 years to recover species under the Endangered Species Act.

This bill, if passed into law, would approximately double federal funding dedicated to conservation work in the U.S. A similar bill has passed the House of Representatives with bipartisan support, with 16 Republicans voting in support of the bill

The Wildlife Act's fate rests in the Senate, where the bill has also received bipartisan support but has not been scheduled for a debate or vote as of November 2022. If the bill is not passed before the end of the current Congress, it would need to be

reintroduced. The bill has the support of the Biden administration.

S.2372 was introduced in the U.S. Senate by Senators Martin Heinrich (D-NM) and Roy Blunt (R-MO). The bill has 42 sponsors: 16 Republicans, 1 Independent, and 25 Democrats. The companion House bill, H.R.2773, was introduced by Congresswoman Debbie Dingell (D-MI), the chair of the Congressional Sportsmen's Caucus, representing hunters and anglers. The bill passed the House on June 14, 2022 with 231 yeas, 16 of which were Republican votes.

The Act has progressed farther this legislative session than previous versions have. There is ambiguity, however, in what the authors meant by "environmental-related violations" with regard to funding for Title I. It states that the funding comes from "civil or criminal penalties, fines, sanctions, forfeitures, or other revenues resulting from natural resource or environmental-related violations or enforcement actions by any Federal agency," but details about these "environmental-related violations" are not specified. Without clearly identifying these funds, the ultimate sources and amount of funding is not clear. This seems to be one of the largest obstacles to passage in the Senate.



# PROGRAM DESIGN

This report develops an program and implementaion plan for Title I of the Recovering America's Wildlife Act. Title I is the focus because it has the largest budget as well as the largest number of avenues for potential program design.

The program proposed here provides a structure for distributing the funds allocated by the legislation (Figure 2). Three program areas are included in this design:

- **The Wildlife Conservation and Restoration Program:** This entity will be formed under the Wildlife and Sport Fish Restoration Program within the US Fish and Wildlife Service and will be responsible for distributing the funds to the states according to the criteria in the legislation (See Appendix A).
- **The Office of Innovation Grants:** This entity, also within the US Fish and Wildlife Service, will beresponsible for distributing the funds allocated towards funding innovative conservation projects. It will be led by a Review Committee whose structure has been established in the legislation.
- **The Oversight Committee:** This committee, to be formed under the Office of Management and Administration within the US Fish and Wildlife Service, will be responsible for reviewing grant recipients for compliance and effectiveness. It will also conduct internal reviews of program effectiveness.

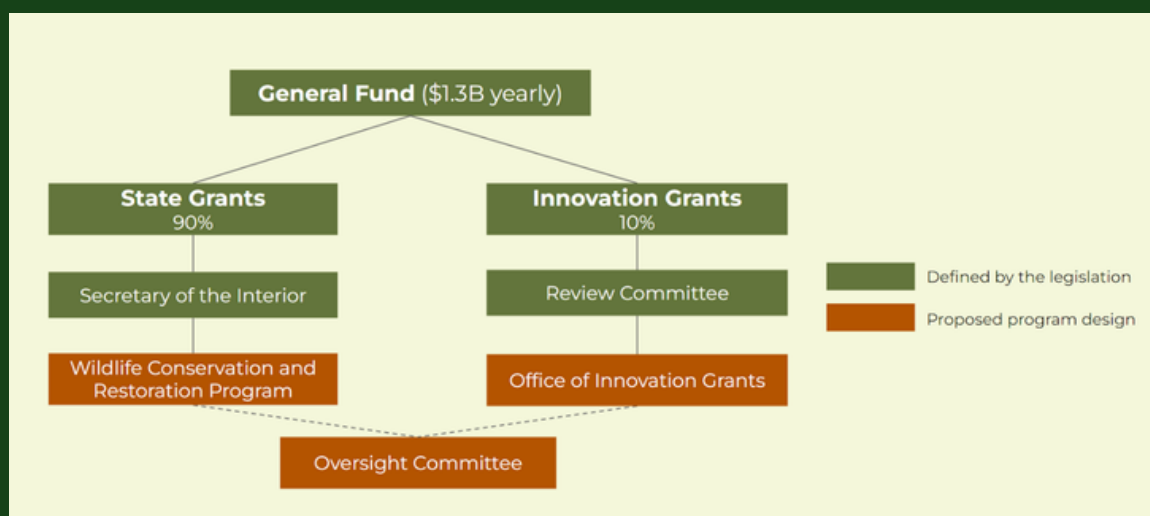


Figure 2  
The Structure of the Proposed Program Design

# OFFICE OF STATE GRANTS

## ROLES AND RESPONSIBILITIES

The Wildlife Conservation and Restoration Program (WCRP), under the Wildlife and Sport Fish Restoration Program at the US Fish and Wildlife Service, will have three key responsibilities:

1. Use recent information from state bodies to calculate the amount of funding to be received by each state. According to the legislation, the criteria that will be used to determine this amount are the population of that state, the land and water area of the state, and the number of endangered species that inhabit the state, on a 50%, 25%, 25% ratio.
2. Oversee the distribution of these funds to the states.
3. Review issues or concerns of state bodies regarding the distribution.

## PROPOSED STAFFING PLAN FOR STATE GRANT STRUCTURE

The state funding budget, which is 90% of the overall general fund, is divided into funds for administrative costs and funds directly allocated to the states. The Wildlife Conservation and Restoration Program (WCRP) distributes Title I funding to the states based on the allocation ratio defined in the Act, collecting information annually from state bodies, and overseeing compliance and audits. To support this program, we propose adding one Supervisor (GS 13-15) who will report to the Director of United States Fish and Wildlife Service (USFWS) and will approve funding and reports, five Grant Associates (GS 8-10) who will work on processing grant funding and writing reports, and one Administration Staff Member (GS 5-7) who will help with reports and other administrative work.

These staff members will be located in Washington, DC, headquarters of the US Fish and Wildlife Service.

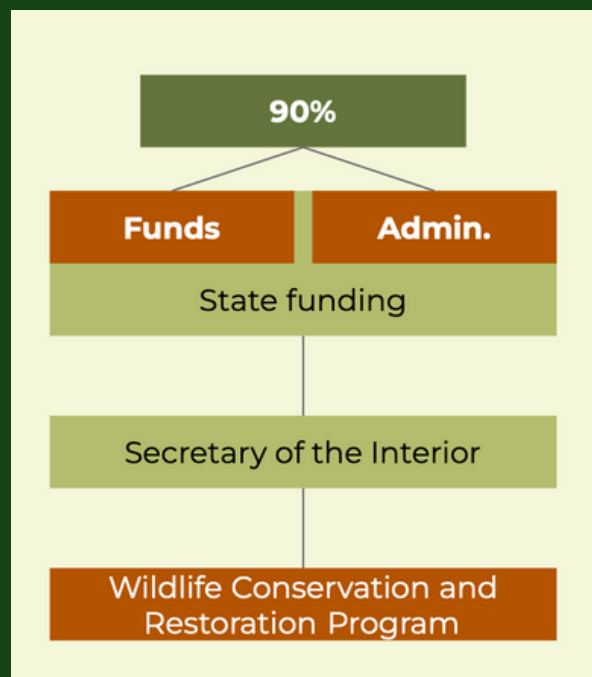


Figure 3  
The Staffing Structure of State Grant Office

---

# OFFICE OF STATE GRANTS

## BUDGET FOR STATE GRANT PROGRAM

Based on the staffing plan and the payscale of federal employees, we estimated the total staff salary to be \$550,000 and fringe benefits to be \$320,000 per year for the state grant program. Besides the salary and fringe, we also considered the cost associated with hiring. For rent calculations, we used Washington D.C. rates of 150 sq ft of office space per person/ \$50 per sq ft/month. We have a 10% indirect cost supporting human resources, information technology, and finance operations. The total cost is \$1,758,000 per year for the staff and associated costs for the state grant program. A line item budget is in Appendix B.

## STATE FUNDING REVIEW

A program review will focus on the following questions: Are state funds being allocated correctly in line with the formula? Are the states receiving and using the funds appropriately? The Oversight Committee described later in this report will be responsible for monitoring spending and reporting it to the lead Supervisor of the Wildlife Conservation and Restoration Program.



**Nēnē (*Branta sandvicensis*),  
Vulnerable**

---

# CASE STUDY FOR STATE GRANTS: THE FLORIDA PANTHER



Florida Panther, (*Puma concolor coryi*), Endangered



---

# CASE STUDY FOR STATE GRANTS: THE FLORIDA PANTHER

The case of the Florida Panther (*Puma concolor coryi*) is an example of how states can use the funds from this Act to recover endangered wildlife. In 1832, a bounty on panthers was created as people generally thought of them as a threat to farm and game animals, and humans (National Park Service, 2021). By 1995, the Florida panther population was reduced to only 20 to 30 cats (Johnson et al. 2010). Its population has struggled to recover despite modern-day hunting restrictions because of habitat loss, degradation, and fragmentation due to urban sprawl, industrial farming, and commercial development (Schwab et al, 2011). The panther population also struggled to recover because panthers were frequently hit by cars (Schwab et al, 2011).

As the population shrank, inbreeding and genetic abnormalities became more prevalent (Johnson et al. 2010). To counter this problem and improve genetic diversity, eight female Texas panthers were introduced to the Florida panther population in 1995 through a genetic restoration program (National Park Service, 2021). By 2007, the population had almost tripled to 100 cats (U.S. Fish and Wildlife Service, n.d.). The increased genetic diversity allowed for a more resilient and healthier population. Despite this improvement, the Florida panther remains endangered. By the IUCN's standards, success would be getting the population to be more than 250 adults occupying more than 500 square kilometers of land. Funding from the Act could support the path to full recovery.





---

# OFFICE OF INNOVATION GRANTS

## ROLES AND RESPONSIBILITIES

The goal of the Office of Innovation Grants is to utilize techniques, tools, strategies, or partnerships to accelerate, expand, or replicate effective efforts toward wildlife conservation. These efforts will target species of greatest conservation need and their habitats.

The Office will be led by a Review Committee of 14 members whose structure has been codified in the legislation. The committee will be comprised of:

- Eight directors from each regional association of fish and wildlife departments,
- Four representatives of non-profit organizations involved in conservation projects,
- One head of fish and wildlife management in a U.S. Territory, and
- One delegate of the US Fish and Wildlife Service.

The Office of Innovation Grants, led by the Review Committee, will have three primary functions: (1) evaluating proposals for grant funding, (2) selecting projects for funding while prioritizing species of greatest need, and (3) taking remedial actions when progress reports from grant recipients do not meet requirements.

## PROPOSED STAFFING AND BUDGETING PLAN FOR OFFICE OF INNOVATION GRANTS

The Innovation Fund makes up 10% of the Title I funds, and is divided into grant funds and administrative support. A new Office of Innovation Grants is proposed here after consultation with USFWS staff members. To support the Innovation Fund, we propose adding (1) one Head of the Office (GS 13-15) who will be responsible for coordinating the distribution of funds from the Treasury; (2) three data analysts and clerks (GS5-7) who will be responsible for gathering information on the states and

territories, doing research for the oversight committee, drafting rules and guidelines for the proposals, and coordinating contact with academic scientists who would provide independent recommendations; (3) one Communication Officer who will be responsible for distributing information; and (4) two Administrative Staff members for administrative support. These staff will be located in the US Fish and Wildlife Service headquarters in Washington, D.C.

# OFFICE OF INNOVATION GRANTS

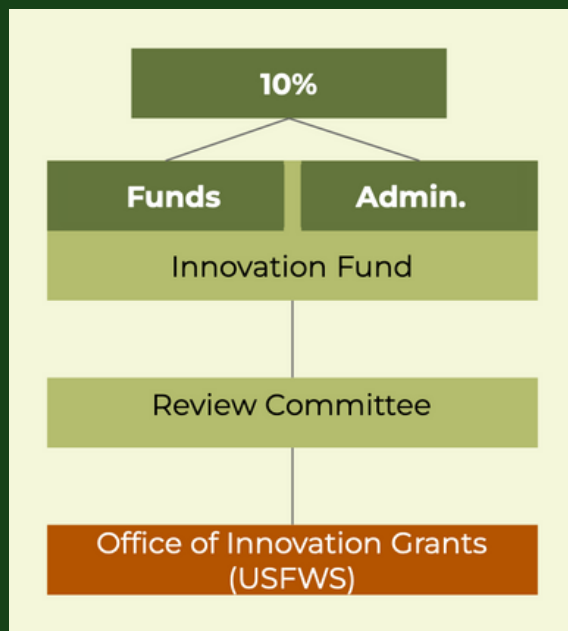


Figure 4  
Staffing structure for Office of  
Innovation Grants

## BUDGET FOR INNOVATION GRANT PROGRAM

Based on the staffing plan and the payscale of federal employees, we estimated the staff salary to be \$480,000 and fringe benefits to be \$300,000 per year for the Office of Innovation Grants. Besides the staff expenses, we also considered the costs associated with hiring. For rent calculations, we used Washington D.C. rates of 150 sq ft of office space per person/ \$50 per sq ft/month. Justification for travel was garnered from interviews with current employees to understand their roles, jurisdictions, and responsibilities.

We estimated \$3000 in equipment, \$1000 in supplies for printing, technology, and telecommunications per person. We also budgeted for a 10% indirect cost supporting HR, IT, and Finance. The total cost is \$2,659,000 per years for the staff and associated costs for the innovation grant program. A line item budget for this office is in Appendix B.

## INNOVATION GRANTS REVIEW

The Oversight Committee monitors how recipients – states, territories, universities, or other conservation organizations – use their funds by establishing compliance guidelines and auditing the recipients. This information is required to evaluate whether the overall program is compliant with funding guidelines and is giving the appropriate amount of funding to the recipients. The committee will submit a semi-annual report to the Head of Office for the Innovation Grant funds that includes the number of grants audited, number of grants that were compliant vs. noncompliant, and feedback for the state and innovation fund applicants.

The innovation grant program will be evaluated by the number of applications for funding that were started, number of applications that were completed, and an evaluation of the overall strength of the application pool.

---

# CASE STUDY FOR INNOVATION GRANTS: THE BLACK FOOTED FERRET



Black footed Ferret (*Mustela Nigripes*). Endangered

---

# CASE STUDY FOR INNOVATION GRANTS: THE BLACK FOOTED FERRET

Black footed Ferret (*Mustela nigripes*) is an endangered species that is native only to North America. There used to be about 5 million Black footed ferrets across North America, but they were feared to be extinct by the 1970s because of eradication measure, habitat loss and fragmentation and sylvatic plague (The Nature Conservancy, 2021). To save the black footed ferret, officials made the difficult decision in 1985 to capture all the remaining wild ferrets in hopes of starting a captive breeding program (Fritts, 2022).

Scientists took tissue samples from the surviving black footed ferrets and froze the samples in liquid nitrogen in 1987. The USFWS established a ferret breeding program in 1996. Most recently, the tissue that was frozen in 1987 was used to clone a ferret, reintroducing genetic diversity to the existing ferret population (Fritts, 2022). While the captive breeding and cloning program under the USFWS have been successful in introducing additional genetic

diversity to and help regenerate the black footed ferret population, it is also important to note that this program is expensive. For example, the experimental cloning program that USFWS developed for black footed ferrets cost \$40,000 to execute. Without obvious commercial applications, innovative solutions to biodiversity conservation need to be supported by grants.

The Office of Innovation Grants will provide exactly this kind of support. In the case of Black footed Ferret, research centers such as National Blackfooted Ferret Conservation Center in Colorado can apply for funding through the Innovation Grant Program. The center would submit a proposal for funding, the staff in the Innovation Grant Structure will review the proposal to either accept or reject the proposal (and offer suggestions for changes). After the grant period concludes, the grant will be reviewed by the Oversight Committee for improvements in efficiency and effectiveness.



# THE OVERSIGHT COMMITTEE

## ROLES AND RESPONSIBILITIES

The role of the Oversight Committee will be auditing and overseeing the compliance of both the State Grants and the Innovation Grants offices. The main tasks of the Oversight Committee are making sure both State and Innovation Grant offices adhere to the established compliance guidelines, auditing the distribution of State funds, and reviewing innovation grant recipients. The Oversight Committee will be a part of the USFWS Management and Administration program.

The Oversight Committee will have three primary responsibilities when the states and grant recipients are selected and receive funding:

- 1.Receiving progress reports from grant recipients.
- 2.Reporting and providing guidance to the Wildlife Conservation and Restoration Program and the Innovation Grants Review Committee.
- 3.Conducting independent audits of grantees.

## PROPOSED STAFFING AND BUDGETING PLAN FOR OFFICE OF INNOVATION GRANTS

In addition to adding staff to administer the State and Innovation Funds, we propose adding staff to the Financial Assistance and Oversight program within the Management and Administration program. The Oversight Committee will oversee compliance and audits of the recipients for Innovation Grants and state grants, meaning they will support the entirety of the general fund. The Oversight Committee will consist of two Supervisors (GS8-12) overseeing how recipients, such as states or territories, use their funds by establishing compliance guidelines and auditing the recipients. The Supervisors will be supported by six Support Staff, and will be located in the USFWS headquarters in Washington, D.C,

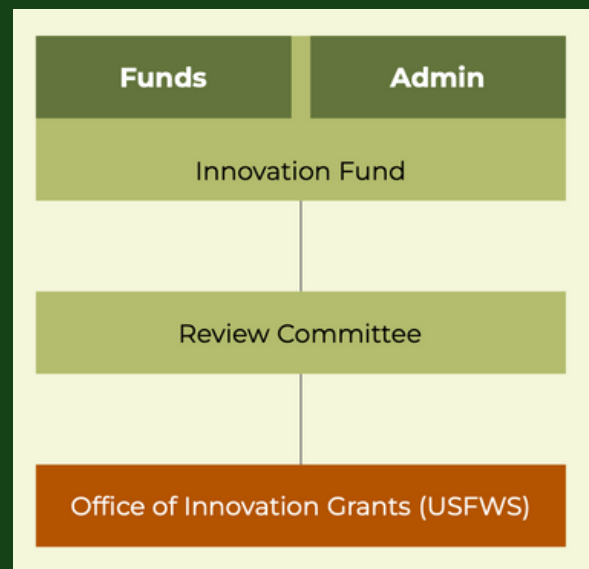


Figure 5  
Staffing structure for the Oversight Committee

---

Based on the staffing plan and the payscale of federal employees, we estimated the total staff salary to be \$460,000 and fringe benefits to be \$90,000 per year for the Oversight Committee. Besides the staff structure, we also considered the cost associated with hiring. For rent calculations, we used Washington D.C. rates of 150 sq ft of office space per person/ \$50 per sq ft/month. We budgeted a 10% indirect cost for HR, IT, and Finance. The total cost is \$1,583,000 per year for the staff and associated costs for the oversight program. A line item budget is in Appendix B.

## MEASURING SUCCESS

The scientific performance indicators of RAWA include monitoring the population size of managed species; the number of mature individuals; population growth rate; percentage change in population over time; spatial occupancy; area in which species inhabit or occupy; genetic diversity; genetic variation of individuals within species, among others. The performance indicators that will be discussed below will focus on the program from an administrative perspective.

Performance management and tangible benchmarks are key to motivating and directing both employees and overall programs. This program seeks to give money in a timely, precise, and effective manner to recover endangered and threatened species. The program overall will be evaluated by the Oversight Committee, and individual employees will be reviewed annually. The budget for administration in this program allows for additional hires if necessary. With performance management, we can assure that funds are directed toward conservation to prevent the further decline of biodiversity in the United States.



**Houston Toad, (*Bufo houstonensis*).**

**Endangered**

# MASTER CALENDAR

## MASTER CALENDAR FOR YEAR 1

| Task # | Task                            | Q1 | Q2 | Q3 | Q4 |
|--------|---------------------------------|----|----|----|----|
| 1      | State Grants                    |    |    |    |    |
| 1.1    | Hire Staff                      |    |    |    |    |
| 1.2    | Draw up Funding Allocation      |    |    |    |    |
| 1.3    | Funding Distribution            |    |    |    |    |
| 1.4    | Agency Rulemaking               |    |    |    |    |
| 1.5    | Preparation for Next Year       |    |    |    |    |
| 2      | Innovation Grants               |    |    |    |    |
| 2.1    | Hire Staff                      |    |    |    |    |
| 2.2    | Build Review Committee          |    |    |    |    |
| 2.3    | Create Grant Application System |    |    |    |    |
| 2.4    | Solicit Applications            |    |    |    |    |
| 2.5    | Select Grant Recipients         |    |    |    |    |
| 2.6    | Disburse Grants                 |    |    |    |    |
| 3      | Oversight Committee             |    |    |    |    |
| 3.1    | Hire Staff                      |    |    |    |    |
| 3.2    | Structuring the Organization    |    |    |    |    |
| 3.3    | Oversight Work                  |    |    |    |    |

Figure 6: Implementing a bill as large and detailed as the Recovering America's Wildlife act requires extensive planning. When the United States Fish and Wildlife service distributes funding from the bill following its passage, it will need to create entirely new teams and structures to handle the more than \$1 billion that will eventually be given to states, territories and NGOs through Title I of RAWA. This calendar was created in order to provide an overview of how those structures will be built over the course of the first year. (zoomed in view of tasks available in appendix)

## MASTER CALENDAR FOR STATE GRANT OFFICE

The implementation plan for the State Grants Program consists of five main sections which are hiring, allocating funding, distributing the funding, creating guidance on the appropriate expenditure of funds, working with the oversight committee, and preparing for year two (Figure 6).

The calendar year will begin with hiring the head of the office. The following task will be to hire up to five Grant Associates and an Administrative Officer followed by a plan to allocate funding. A three week period is envisioned for contacting the states and drawing up the allocations and sharing them with the Secretary of the Interior.

---

# MASTER CALENDAR

As soon as the funding plan is complete, the funding distribution will begin. Setting up accounts and transferring have some calendar overlap as transferring the funds will happen at different times for different states. At the same time as the transferring process, the Head of Office will be responsible for creating a set of guidelines to guide the states in how they may spend the grant money. In the final two and half months of the year, all the staff will be involved with preparing for the second year.

## **MASTER CALENDAR FOR INNOVATION GRANT OFFICE**

The Innovation Grant Program implementation is split into six sections: hiring, building the review committee, creating a grant application system, soliciting applications, selecting grant recipients, and disbursing grants (Figure 6). No activities occur in the first quarter of the year aside from the hiring of the team, which begins with a head of office selected via internal transfer, similar to the State Grant team. We plan to have at least one Grant Associate, one

Communications Officer, and one Administrative staff member on the team by the end of March, which will allow them to start on upcoming tasks. Two more Grant Associates and one Administrative Staff will be hired in the second quarter in order to fill out the team. Building the review committee is the first task for the Innovation Grant team. The review committee is a team of scientists contracted to review the merits of the applications, and works with the Grant Associates and heads of office to select grant recipients. In order to make sure that grants can be received before the end of the year, Grant Associates will build out guidelines for grant applications for the Review Committee.

The Communications Officer will solicit applications and may subcontract out certain work like developing advertisements or creating the digital infrastructure for the application form. Grant selection will be conducted by the review committee, managed and assisted by the Grant Associates. The Head of Office will sign off on all selected applications, and Administrative



---

# MASTER CALENDAR

Staff will notify recipients of their award in third and fourth quarters. The end of the year is devoted to disbursing the funds to selected grant recipients, starting with the notification to the Treasury of which grants will be disbursed, and then the distribution of funds to the selected recipients over the following eight weeks.

## MASTER CALENDAR FOR OVERSIGHT COMMITTEE

The Oversight Committee calendar is divided into three main parts: hiring staff, structuring the office, and oversight work which (Figure 6). During the hiring period, two supervisors will be hired via internal transfers, along with six supporting staff. In the hiring period the supervisors will create job descriptions for supporting staff. After all of the supporting staff are hired, the supervisors will begin training the new staff members. While the supervisors are hiring and training the new staff, they are also creating the structure of the organization, and establishing compliance guidelines. After the staff is fully hired and the internal structure is relatively complete,

oversight work will begin. First, a line of communication will be established between the Oversight Committee and State and Innovation Grant offices to prepare for audits. Towards the later half of the third quarter the supporting staff will audit the distribution of state funds for approximately six weeks. Afterwards, the supporting staff will review the Innovation Grant office application selections for approximately six weeks. Once the auditing for both the State and Innovation Grant offices are complete the supporting staff will create an end of year auditing report for the supervisors to review.



Garrett's mint flower (*Dicerandra christmanii*). Endangered

---

# CONCLUSION

The Recovering America's Wildlife Act will require robust teams to manage the additional billion dollars of annual funding, especially within Title I, and ensure that these programs are successful. Adding additional offices under the Wildlife & Sport Fish Restoration program and the Management and Administration program will provide sufficient support and structure. These new offices will require additional staff, so we propose adding 23 full-time employees to the US Fish and Wildlife Service. The new staff will consist of five Supervisors, eight Analysts, nine Administrative Staff, and one Communication Officer - most of which will be located in Washington, DC and will support the State Fund, Innovation Fund, and general administration.

In line with our staffing plan and administrative spending limits established in the bill, we devised a cost-effective and comprehensive budget plan. We expect changes year-on-year and have included additional budget plans for after the first year of implementation. Our final first-year budget plan spends 38% of the allowable administrative expenses. We also estimated the percentage after the first year of implementation to be 30% for CY 2024, 28% for CY 2025, and 26 % for CY 2026 and after. While we project that we will be able to meet the goals of this legislation with this staffing structure, by coming in under budget we are prepared for any needed expansion.

Performance management and tangible benchmarks are key to motivating employees and directing overall programs. This program seeks to distribute money in a timely, precise, and effective manner to recover endangered and threatened species across the US. The program overall will be evaluated by the Oversight Committee, and individual employees will be reviewed annually. The budget for administration in this program allows for additional hires if necessary. Effective performance management will increase the likelihood that funds are directed toward successful conservation efforts.

Even in an increasingly urban world, the value of the services provided by biodiversity is immense. The Recovering America's Wildlife Act of 2022, if passed by the Senate, has the potential to slow or even reverse the rapid decline of biodiversity across the United States. Early intervention in managing wildlife populations leads to better outcomes in preserving biodiversity. By allocating funds - through both the State and Innovation Grant Programs - to bridge the existing shortfall in funding for wildlife management, conservation, research, and education, the Act could prevent common or declining species from becoming endangered in the first place. By setting up a steady source of funding for the future, more comprehensive recovery planning and habitat management can be implemented, which will improve the prospects for the survival and recovery of more species.

---

# REFERENCES

Almond, R. E., Grooten, M., & Peterson, T. (2020). Living Planet Report 2020-Bending the curve of biodiversity loss. World Wildlife Fund.  
<https://www.livingplanetindex.org/home/index>

Almond, R.E.A., Grooten, M., Juffe Bignoli, D. & Petersen, T. (Eds). WWF, Gland, Switzerland. (2022). Living Planet Report 2022 – Building a nature positive society. [https://wwflpr.awsassets.panda.org/downloads/lpr\\_2022\\_full\\_report.pdf](https://wwflpr.awsassets.panda.org/downloads/lpr_2022_full_report.pdf)

Autumn Schwab, Paul Zandbergen. (2011). Vehicle-related mortality and road crossing behavior of the Florida panther. *Applied Geography*, 859-870. Vol 31, Issue 2.

Brauman, K. A., Garibaldi, L. A., Polasky, S., Zayas, C. N., Aumeeruddy, T. Y., Brancalion, Y., Declerck, F., Mastrangelo, M., Nkongolo, N., Palang, H., Shannon, L., Verma, M., & Shrestha, U. B. (2020). Chapter 2.3. Status and Trends -Nature's Contributions to People (NCP). Zenodo.  
<https://doi.org/10.5281/ZENODO.5519476>

Ceballos, G., Ehrlich, P. R., Barnosky, A. D., García, A., Pringle, R. M., & Palmer, T. M. (2015). Accelerated modern human-induced species losses: Entering the sixth mass extinction. *Science Advances*, 1(5), e1400253.  
<https://doi.org/10.1126/sciadv.1400253>

Congressional Record. (2022). Congressional Record Vol. 168, No. 101 [Legislation]. Retrieved September 18, 2022, from <http://www.congress.gov/>

Congressional Record. (2022). Congressional Record Vol. 168, No. 103 [Legislation]. Retrieved September 18, 2022, from <http://www.congress.gov/>

ECOS: Home. (n.d.). Retrieved November 14, 2022, from <https://ecos.fws.gov/ecp/>

Fritts, R. (2022). In a conservation first, a cloned ferret could help save her species. *Science.Org*. <https://www.science.org/content/article/conservation-first-cloned-ferret-could-help-save-her-species>

Gerber, L. R. (2016). Conservation triage or injurious neglect in endangered species recovery. *Proceedings of the National Academy of Sciences*, 113(13), 3563–3566. <https://doi.org/10.1073/pnas.1525085113>

Hoffmann, H. M., & Cliburn, A. (2021). Coming Home Again: Inherent Tribal Sovereignty, the Tribal Wildlife Grant Program, and their Potential for Endemic Wildlife Reintroduction (SSRN Scholarly Paper No. 3895078).  
<https://doi.org/10.2139/ssrn.3895078>

---

Homestead, M. A. 40001 S. R. 9336, & Us, F. 33034-6733 P. 305 242-7700 C. (n.d.). Florida Panther: Species Profile - Everglades National Park (U.S. National Park Service). Retrieved November 19, 2022, from <https://www.nps.gov/ever/learn/nature/floridapanther.htm>

IUCN. (2022). The IUCN Red List of Threatened Species [Registry]. IUCN Red List. <https://www.iucnredlist.org>

Johnson, Warren E., David P. Onorato, Melody E. Roelke, E. Darrell Land, Mark Cunningham, Robert C. Belden, Roy McBride, Deborah Jansen, Mark Lotz, David Shindle, JoGayle Howard, David E. Wildt, Linda M. Penfold, Jeffrey A. Hostetler,

Madan K. Oli, and Stephen J. O'Brien. 2010. "Genetic Restoration of the Florida Panther." *Science* 329(5999):1641–45. doi: 10.1126/science.1192891.

National Park Service. (n.d.). Florida Panther: Species Profile. These 3 animals are no longer endangered in the U.S. (2019, December 17). Animals. <https://www.nationalgeographic.com/animals/article/species-delisted-from-endangered-species-act-in-2019>

Potts, S. G., Imperatriz-Fonseca, V. L., Ngo, H. T., Dicks, L. V., & Viana, B. F. (2016). Summary for policymakers of the assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on pollinators, pollination and food production. IPBES. <https://ipbes.net/global-assessment>

Renkl, M. (2022, June 20). Opinion | Washington Might Be About to Do Something Right for America's Wildlife. *The New York Times*. <https://www.nytimes.com/2022/06/20/opinion/recovering-americas-wildlife-act.html>

Rosenberg, K., Dokter, A., Blancher, P., Sauer, J., Smith, A., Smith, P., Stanton, J., Panjabi, A., Helft, L., Parr, M., & Marra, P. (2019). Decline of the North American avifauna. *Science*, 366, eaaw1313. <https://doi.org/10.1126/science.aaw1313>

Schuster, R., Germain, R. R., Bennett, J. R., Reo, N. J., & Arcese, P. (2019). Vertebrate biodiversity on indigenous-managed lands in Australia, Brazil, and Canada equals that in protected areas. *Environmental Science & Policy*, 101, 1–6. <https://doi.org/10.1016/j.envsci.2019.07.002>

The Nature Conservancy. (n.d.). Black-footed Ferret. The Nature Conservancy. Retrieved December 2, 2022, from <https://www.nature.org/en-us/get-involved/how-to-help/animals-we-protect/black-footed-ferret/>

U.S. Fish and Wildlife Service. (n.d.). The Florida Panther. <https://www.fws.gov/story/2022-04/florida-panther>



---

US Fish and Wildlife Service. (n.d.). North American Model of Wildlife Conservation. <https://www.fws.gov/initiative/hunting/wildlife-conservation>

Washington, D. (2022). Executive Office Of The President Office Of Management and Budget. Statement of Administration Policy <https://www.whitehouse.gov/wp-content/uploads/2022/06/HR-2773-SAP.docx.pdf>

WWF. (2022 ).What is the sixth mass extinction and what can we do about it? . World Wildlife Fund. <https://www.worldwildlife.org/stories/what-is-the-sixth-mass-extinction-and-what-can-we-do-about-it>

## RESOURCES

Office of the Secretary Office of Human Resources. (2004). The Department of the Interior's Performance Appraisal Handbook. [https://www.doi.gov/sites/doi.gov/files/elips/documents/doi\\_performance\\_appraisal\\_handbook\\_10-2016.pdf](https://www.doi.gov/sites/doi.gov/files/elips/documents/doi_performance_appraisal_handbook_10-2016.pdf)

US Fish and Wildlife Service. (n.d.). Refuge Enhancement/Infrastructure Partnerships Initiative (p. 22). <https://apply07.grants.gov/apply/opportunities/instructions/PKG00272170-instructions.pdf>

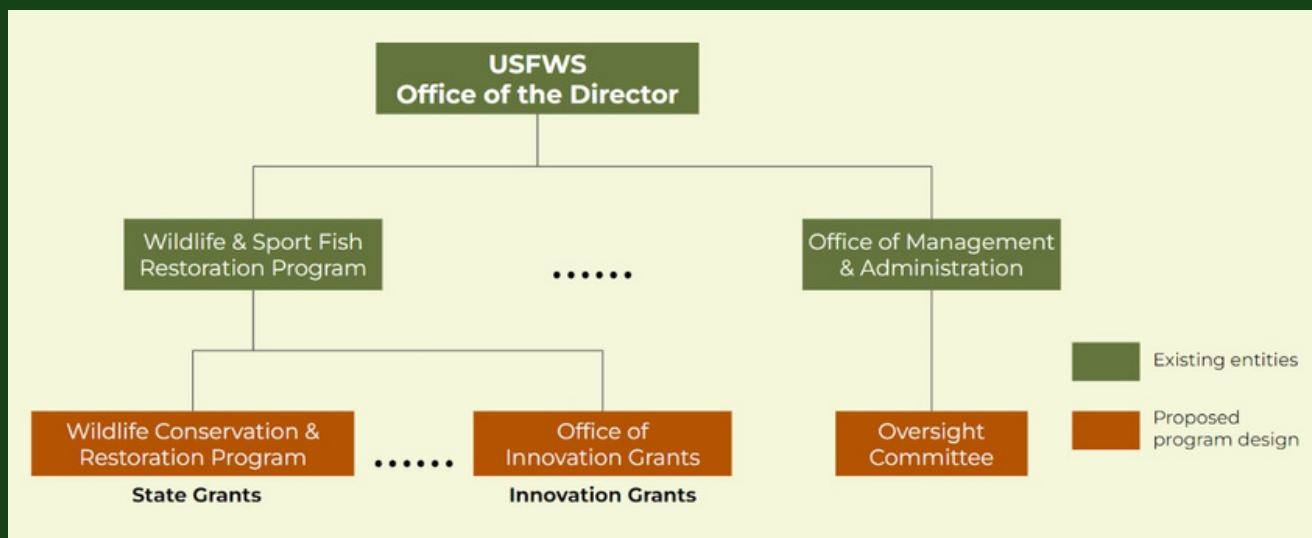
US Office of Personnel Management. (1997). 360- Degree Assessment. <https://www.opm.gov/policy-data-oversight/performance-management/performance-management-cycle/rating/360assessment.pdf>

World Wildlife Fund WWF. (n.d.). The US Endangered Species Act. <https://www.worldwildlife.org/pages/the-us-endangered-species-act>

---

# APPENDIX

# APPENDIX A - ORGANIZATION CHART



# APPENDIX B - LINE ITEM BUDGET

| Revenue                                        | State Structure | Innovation Grant Structure | Oversight Structure                   | Sum    |
|------------------------------------------------|-----------------|----------------------------|---------------------------------------|--------|
| Grants                                         | 13,175          | 2,498                      |                                       | 15,673 |
| Other                                          | 0               | 0                          |                                       | 0      |
| Total Revenue                                  | 13,175          | 2,498                      | 0                                     | 15,673 |
|                                                |                 |                            |                                       |        |
|                                                |                 |                            |                                       |        |
| Expenses                                       | State Structure | Innovation Grant Structure | Admin Structure (Oversight Committee) | Sum    |
| Staff salaries and wages                       | 550             | 480                        | 460                                   | 1,490  |
| Fringe benefits                                | 320             | 300                        | 90                                    | 710    |
| Occupancy and utilities                        | 630             | 1,260                      | 720                                   | 2,610  |
| Equipment                                      | 21              | 42                         | 24                                    | 87     |
| Supplies and materials                         | 7               | 14                         | 8                                     | 29     |
| Printing and copying                           | 7               | 14                         | 8                                     | 29     |
| Telecommunications                             | 7               | 14                         | 8                                     | 29     |
| Travel and meetings                            | 0               | 50                         | 50                                    | 100    |
| Marketing and advertising                      | 0               | 70                         | 0                                     | 70     |
| Staff and volunteer training                   | 32              | 63                         | 36                                    | 131    |
| Contract services                              | 10              | 10                         | 10                                    | 20     |
| Miscellaneous                                  | 25              | 100                        | 25                                    | 150    |
| Subtotal                                       | 1,599           | 2,417                      | 1,439                                 | 5,455  |
| Indirect Operating Cost (HR, IT, Finance, etc) | 160             | 242                        | 144                                   | 545    |
| Total Expenses                                 | 1,758           | 2,659                      | 1,583                                 | 6,000  |

---

# ZOOMED IN VIEW OF THE TASKS IN THE MASTER CALENDAR

| Task #   | Task                            |
|----------|---------------------------------|
| <b>1</b> | <b>State Grants</b>             |
| 1.1      | Hire Staff                      |
| 1.2      | Draw up Funding Allocation      |
| 1.3      | Funding Distribution            |
| 1.4      | Agency Rulemaking               |
| 1.5      | Preparation for Next Year       |
| <b>2</b> | <b>Innovation Grants</b>        |
| 2.1      | Hire Staff                      |
| 2.2      | Build Review Committee          |
| 2.3      | Create Grant Application System |
| 2.4      | Solicit Applications            |
| 2.5      | Select Grant Recipients         |
| 2.6      | Disburse Grants                 |
| <b>3</b> | <b>Oversight Committee</b>      |
| 3.1      | Hire Staff                      |
| 3.2      | Structuring the Organization    |
| 3.3      | Oversight Work                  |