

Testimony of

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on

CHALLENGES AND OPPORTUNITIES WITH IMPLEMENTING
THE ENDANGERED SPECIES ACT

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Chairman Ricketts, Ranking Member Schiff, and Members of the Subcommittee, thank you for inviting me to testify. I am Jake Li, the Vice President of Conservation Policy at Defenders of Wildlife, a national nonprofit organization that protects and restores America's wildlife at risk of extinction. The purpose of this hearing—to strengthen the role of the Endangered Species Act (ESA) in promoting species recovery, while enhancing transparency and accountability—aligns squarely with Defenders' work on the ESA. For over 75 years, we have conserved endangered species through on-the-ground projects; state and national policies; holding federal agencies accountable in the courts; and improving the transparency of ESA decisions.

I have spent my career on species recovery and related environmental issues. Before rejoining Defenders in 2025, I served as the Assistant Director of the U.S. Fish and Wildlife Service (FWS) Ecological Services program, which leads the agency's work on the ESA and environmental review of federal projects. I previously served in the Biden-Harris administration as a deputy assistant administrator in the Environmental Protection Agency's chemical safety office, where I focused on practical solutions to address pesticide impacts on endangered species. For nearly two decades, I have worked extensively on endangered species policy and am co-editor of *Endangered Species Act: Law, Policy, and Perspectives* (3rd ed, 2021).

I see two timely ways that Congress can help FWS and other federal agencies promote recovery in a manner that enhances transparency and accountability yet minimizes regulatory impacts on landowners. First, Congress can encourage agencies to identify new policies that improve how they implement the ESA. Because the ESA is flexible enough to accommodate these improvements, legislation is not required. Second, FWS unequivocally needs the capacity to do this work. None of the outcomes Congress wants to see—more species recoveries, faster review of infrastructure projects, and less conflict between land use and conservation—happens without agency staff to do the work.

Unfortunately, FWS's capacity is more diminished than ever to meet its mission, deadlines, and the ever-growing expectations of the agency. At an October 2025 meeting of Ecological Services leadership, "burnout" was the word I jotted in my notebook to capture my most salient impression from the meeting. I heard example after example of how staff were already juggling 20 balls at once, only to have more balls tossed at them.

Now imagine what happens when nearly one-quarter of those staff have left in the last year—an unimaginable loss of capacity, expertise, and relationships with landowners, states, businesses, and others. Among those departed include 9 of the 23 senior executive service leaders, many of their deputies, and hundreds of senior scientists, program managers, and other experts with unique knowledge of ESA implementation. Ecological Services alone has lost several centuries of institutional knowledge. To make matters worse, almost none of the departures benefited from the normal succession planning to transition knowledge and work to staff who stayed. Agency staff were left aghast and bewildered.

Having lost so much capacity, FWS will struggle to meet expectations for recovering species and its other mission work. If Congress wants more ESA successes, it needs to give FWS more capacity to do this work. With more resources, FWS could adopt new policies that advance recovery, transparency, and accountability and that would produce clear benefits in several years. Below, I describe three areas that FWS could focus on if it receives adequate funding: recovery process, landowner flexibility, and authorizing projects under ESA sections 7 and 10.

I. Recovery Process

My overall recommendation is for FWS to focus on getting more recovery actions implemented faster, and to track species progress toward recovery so Congress can see its return on investment. Although many ideas abound in this area, I will highlight three.

First is for Congress to dedicate funds to implement recovery actions: projects like restoring wetlands, eradicating invasive weeds, and reintroducing fish, birds, and plants into their former habitat. The need to fund recovery actions sounds obvious but rarely are significant funds available for this purpose because FWS's base funding is typically enough to barely cover salaries and operating costs. Not surprisingly, FWS's recovery database shows that nearly 30% of recovery actions are not being actively worked on.¹ This statistic underscores the need for more opportunities to prioritize recovery implementation. One starting point is that FWS has dedicated \$57.5M of Inflation Reduction Act dollars to implement recovery actions. These dollars likely represent the largest single amount for recovery actions in the ESA's history. If

¹ As of March 2026, the recovery actions database shows that among the 45,077 recovery actions, 20.6% are marked “not started,” 6% are marked “ongoing but not current,” and 1% are marked “planned.”

Congress were to periodically invest in recovery actions (on top of the base funding for FWS's recovery program) and FWS were to strategically prioritize how those funds are used, a sizable percentage of species would progress toward recovery over the next decade.

The second opportunity is for FWS to work with others to implement recovery actions much earlier in the recovery process. Often, this can be many years before a recovery plan is even finalized. Early action is possible because listing decisions over the last decade are supported by considerable analysis of threats to species. For example, the species status assessments that accompany these decisions offer much more information on species biology and threats than decisions from the 1990s and early 2000s. This trove of knowledge is almost always enough to begin identifying and implementing recovery actions soon after a listing, even if a recovery plan is a decade away. In many cases, a recovery outline—ideally published just months after a listing—is enough to begin guiding recovery investments. In rare cases where recovery was very straightforward, FWS has even delisted species without ever writing a recovery plan.²

The third opportunity is for FWS to improve how it reports on whether species are progressing toward recovery. For over a decade, I have worked with FWS to develop more useful metrics for reporting on the recovery status of all U.S. listed species as part of the agency's Biennial Recovery Report to Congress. These reports are supposed to provide Congress with the best update on recovery trends for listed species. But since 2011, the reports have indicated only whether FWS currently recommends a species for delisting, downlisting, uplisting, or no change in status. In every report since then, at least 92% of species have recommendations for no status change, because most species do not change *enough* in status over a few years to warrant reclassification.³ The problem with this coarse approach is that it overlooks many smaller but important gains in recovery. For example, if a species was declining but has now stabilized, that accomplishment will rarely trigger a reclassification. But having this refined status update for all species would allow Congress and the public to better understand the return-on-investment for recovery dollars and how additional investments can contribute to recovery.

Through a contract with the Department of Defense, I led a project with FWS to develop and test a straightforward metric that agency staff could use as part of their mandatory five-year status

² An example is the Hidden Lakes bluecurl, which FWS delisted in 2018 without objections.

³ <https://www.fws.gov/library/collections/recovery-reports-congress>

review for all species.⁴ Staff would spend no more than 30 minutes at the end of a review to record any changes in species status at a more granular scale than whether the species requires reclassification (*e.g.*, whether the species' abundance has increased, decreased, or remained the same). FWS could then summarize those records and report them in the Biennial Recovery Reports. Over time, everyone would have a much better sense of how many species are moving toward recovery and by how much. This information could then inform funding and conservation decisions, as I will discuss next.

II. Landowner Flexibility

Another approach to promoting recovery is to give landowners flexibility in how they conserve listed species. FWS has decades of experience with this approach such as through voluntary conservation agreements with private landowners. With additional capacity, FWS could bolster existing approaches and develop new ones. Here, I highlight one that FWS has rarely used but could extend to hundreds of species.

To date, regulatory incentives are often based on relief from ESA restrictions when a species is downlisted or delisted. As explained earlier, most species are ineligible for downlisting or delisting within the next decade. As a result, a landowner might invest considerable time and money to conserve a species but still need to wait many more years before benefiting from any regulatory flexibility tied to a downlisting or delisting.

Using existing regulations, FWS could offer regulatory flexibility to landowners who demonstrate meaningful *progress* toward recovery—even if the species is still years from downlisting or delisting. For example, if several populations of a wide-ranging species have achieved their recovery goals, FWS could offer landowners hosting those populations more ESA regulatory flexibility than landowners with populations in decline.

This approach would offer landowners a far timelier and stronger incentive to conserve listed species, because they would not need to wait decades for a delisting before benefiting from

⁴ Davis, O. N., Molano-Flores, B., Li, Y.-W., Allen, M. L., Davis, M. A., Parkos, J. J.III, McIntyre, S., Di Giovanni, A. J., McElrath, T. C., Carter, A., Evansen, M., Sheehan, C., & Gerber, L. R. (2024). A new metric for conducting 5-year reviews to evaluate recovery progress under the Endangered Species Act. *Conservation Science and Practice*, 6(8), e13158.

regulatory relief. This approach would also take pressure off the delisting/downlisting process as the main avenue for providing landowners with flexibility.

FWS has periodically implemented this approach but has never nationalized it. For example, over a decade ago, populations of red-cockaded woodpeckers at a Marine Corp installation had already exceeded recovery goals because the installation had implemented training restrictions, prescribed burns, and other recovery actions for the bird. FWS then expedited section 7(a)(2) consultations for military training on the installation and avoided new ESA restrictions, provided the installation maintained its “recovered” woodpecker population numbers.

Similarly, when I worked at FWS, we developed a biological opinion with Joint Base Lewis-McChord to provide it with ESA regulatory flexibility for military readiness activities while advancing species recovery.⁵ The opinion created three milestones on the path to recovery for the Roy Prairie pocket gopher, streaked horned lark, and other species. As the installation reaches each milestone, the ESA restrictions on military training decrease. The installation will see timely and tangible benefits to conserving these species, regardless of when or whether they are ever delisted. The installation has commended this approach as “provid[ing] JBLM with measurable targets to shoot for to achieve regulatory relief” and “strategic allocation of limited environmental conservation funding.”⁶

This approach of greater ESA flexibility in exchange for demonstrated recovery progress can apply to other federal, state, and private landowners too. FWS has multiple tools for increasing ESA flexibility in response to recovery progress (*e.g.*, species reaches minimum number of increasing populations) that the agency could articulate through recovery plans, five-year reviews, and other recovery documents:

- Section 7(a)(2) consultations that FWS expedites and approves with more flexible mitigation requirements when predetermined recovery benchmarks are exceeded, as we saw with the two Department of Defense examples;

⁵ Department of Defense and U.S. Fish and Wildlife Service presentation, *Recovering Species, Sustaining Our Mission through the Recovery and Sustainment Partnership Initiative (RASP)*, available at: https://serppas.org/media/0m4gxqvx/12_conservation-policy-pilots.pdf

⁶ *Id.*

- Section 10 habitat conservation plans (HCPs) that FWS approves more expeditiously and with more flexible mitigation measures when threats to a species are adequately addressed;
- Section 4(d) rules that relax section 9 restrictions based on exceeding recovery milestones for threatened species; and
- Prioritized funding and technical assistance.

In sum, many people have thought about ESA regulatory flexibility as a binary on-off switch at delisting. A better approach is to think about flexibility as a dimmer switch that adjusts as a species shows recovery progress—so long as monitoring shows that the species is actually benefitting from the recovery actions. Given that most listed species are nowhere close to delisting, this alternative approach creates far timely incentivizes for landowners to conserve species. This approach also provides a more predictable transition from listing to eventual state management, because it allows FWS to see how a species responds to more relaxed ESA protections until, eventually, those protections are unnecessary at delisting.

A second emerging example of landowner flexibility comes from a 2023 nationwide agreement to conserve listed and non-listed species on private working forests.⁷ Through the agreement, FWS provides enrolled landowners with assurances that they will not be penalized for allowing surveys of listed species on their property, research on how forest management impacts listed species, and other crucial actions for recovery. FWS used a section 7(a)(2) consultation as an efficient way to authorize incidental take for these conservation actions, so that enrollees do not need to individually seek section 10 permits. This nationwide agreement is already helping with research on bats, salamanders, pollinators, and the alligator snapping turtle, all with the goal of facilitating recovery or conserving non-listed species to the point where listing is unnecessary. With more capacity, FWS could extend this approach to other land uses that are compatible with species recovery.

⁷ U.S. Fish and Wildlife Service, *Service Signs Agreement to Advance Collaborative Conservation of At-Risk Species*, available at: <https://www.fws.gov/press-release/2023-03/service-signs-agreement-advance-collaborative-conservation-risk-species> (March 23, 2023).

III. Sections 7 and 10 Authorizations

One of Ecological Services' main responsibilities is to review proposed projects that impact listed species or their critical habitat. Annually, over 10,000 federal projects trigger section 7(a)(2) review. Given the reduced staffing within Ecological Services, the program more than ever needs resources to invest in more efficient processes for completing section 7(a)(2) consultations and section 10 conservation plans. Below, I highlight five opportunities for Congress to support this work.

First is funding FWS to invest in IPaC, the online tool that streamlines section 7(a)(2) consultations and has already saved the equivalent of 37 full-time salaries annually (to say nothing of the time and cost savings for permittees). One of IPaC's most popular functions is the generation of a list of listed species and critical habitat that overlap with a proposed project. In FY2023, IPaC generated over 121,000 such lists in response to user requests. If no species or critical habitat is present, no interaction with FWS staff is needed.

Another important IPaC function is that for certain types of projects, a user can obtain an automated analysis of whether a proposed project impacts a species to a degree that requires formal consultation. If not, IPaC will produce a letter that concludes the consultation. Since 2020, IPaC users have generated over 175,000 documents using this feature and obtained a final section 7 document in under 15 minutes. This feature holds great promise to expedite many other types of consultations. But for that to happen, FWS must first populate IPaC with information on more species and project types, which requires more staff.

A second opportunity is for FWS to work with states and others to develop standardized mitigation measures for more species, so that project reviews are more predictable, formulaic, and speedy. This includes not only avoidance and minimization of impacts, but also conservation banks and other means to offset unavoidable impacts, which will be crucial to authorizing the energy, transportation, and housing infrastructure that America expects to build over the coming years. FWS has already pursued this approach for species like the American burying beetle but can extend it to more species if adequately resourced.

Third, FWS could develop more flexible mitigation measures that also enhance recovery. For example, when I was at FWS, we finalized guidance that allows the use of mitigation for white

nose syndrome (WNS) to help offset fatalities to listed bats from wind turbine operations. Because WNS is the main reason these bats are listed, the measures to address WNS should go much farther to conserving the species than additional restrictions on turbine operations. For other species listed primarily because of disease or invasive species, a similar approach could promote recovery while providing permittees with more regulatory flexibility.

Fourth, given FWS's diminished capacity, the agency could find new opportunities for states and stakeholders to help with the sections 7 and 10 processes. One example comes from my time at EPA, where we worked with FWS, industry groups, and environmental groups to create detailed maps of where species occur, so that pesticide restrictions to protect species are targeted and do not unduly burden agriculture.⁸ EPA and FWS developed a protocol for stakeholders to generate draft maps for the agencies to review and finalize. This approach was unconventional because work of this nature is generally regarded as the responsibility of agencies. But even before the recent staff losses, agencies were never resourced to undertake such a significant workload on their own.

Finally, there will always remain a fraction of consultations that are extraordinarily complex and require far more time to complete. Examples include projects for large-scale energy production and transmission, national-level pesticide reviews, and surface coal mining and restoration. To ensure these consultations are not unduly delayed or divert staff away from other consultations, FWS needs more staff specialized in each of these project types. FWS has already assembled a modestly sized team on energy and on pesticides, and I could not imagine a functional section 7 program without this minimum investment. Still, I saw weekly how the workload far exceeded staff capacity on these issues. Even a modest increase to the Ecological Service's Planning and Consultation budget should result in faster and better consultations.

IV. Closing Thoughts

With Congressional support, FWS could pursue policies that enhance recovery, transparency, and accountability. But FWS first needs to rebuild its expertise and capacity to something closer to bare minimum levels. The current staffing crisis does not allow the agency to deliver on Congressional expectations for the ESA.

⁸ <https://www.epa.gov/endangered-species/process-epa-uses-develop-core-maps-pesticide-use-limitation-areas>

For most of the policy improvements I have described, states could play a larger role in complementing FWS's efforts, especially if they were adequately resourced to do so. There are countless examples of state-led actions that have recovered listed species or avoided the need to list at-risk species. Although states do not all have the same capacity, legal authorities, or expertise on imperiled species, many of them have enough to help fill the voids created by the recent loss of FWS staff. Some states like Texas, which has invested over \$10M in imperiled species research since 2013, contribute a sizeable percentage of dollars to conserving species that the federal government has been unable to fund. And when states work together, they can form powerful regional networks for landscape-level conservation, as evidenced through the Southeast Conservation Adaptation Strategy and the Midwest Landscape Initiative.

But for these partnerships to work, FWS needs to have enough staff to answer the door when someone knocks. I am deeply concerned that for the first time in FWS's history, no one is home to respond. Congressional leadership on this issue could not be more timely or important. Thank you for considering my testimony.