



**Testimony of Ya-Wei Li
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**Before the Subcommittee on Oversight and Investigations
U.S. House of Representatives**

**Legislative Hearing on
“ESA Consultation Impediments to Economic and Infrastructure Development”**

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Mister Chairman and Members of the Subcommittee:

Thank you for the invitation to testify today about section 7 of the Endangered Species Act (ESA). I am Ya-Wei Li, the Vice President of Endangered Species Conservation and the Director of the Center for Conservation Innovation at the Defenders of Wildlife, an organization dedicated to protecting and restoring imperiled animals and plants in their natural communities. For 70 years, Defenders has pursued this goal by working with partners in the field; securing and improving state, national, and international policies that conserve wildlife; and upholding legal safeguards for wildlife in the courts. We represent more than 1.2 million members and supporters.

I have worked on section 7 consultations from several vantage points. Before coming to Defenders, I was an attorney in private practice handling federal and state environmental matters, including under sections 7 and 10 of the ESA. At Defenders, I have continued working on section 7 issues by helping to ensure that consultations serve their conservation goal effectively and efficiently. In my experience, consultations have generally worked as they should. They have played a vital role in promoting the recovery of ESA-listed species by reducing and even offsetting the adverse effects of federal projects on those species and their habitats. Consultations are thus indispensable to fulfilling the ESA’s mandates of preventing extinction and achieving recovery. Further, there is no compelling evidence that these conservation gains have come at the expense of jobs or the economy at the national level. With rare exceptions, federal agencies have completed consultations in a reasonable timeframe by adopting conservation measures that are economically and technologically feasible to implement.

These conclusions are supported by a peer-reviewed study my colleague and I published just over a year ago in the *Proceedings of the National Academy of Sciences*.¹ That study is the most comprehensive ever conducted on U.S. Fish and Wildlife Service (FWS) consultations. We evaluated the results of all 88,290 consultations recorded by FWS from 2008 through April 2015, and found that no project was stopped because of FWS concluding that a project would “jeopardize” a species or “destroy or adversely modify” critical habitat—the two prohibitions of section 7. In fact, FWS worked with federal agencies to minimize impacts on species and to avoid finding jeopardy or destruction/adverse modification in all but two consultations (and even those projects were ultimately approved). Put differently, an astonishing 99.9977 percent of consultations ended with neither of these findings. Further, and as explained in detail later, nearly 93 percent of the projects required only “informal” consultation rather than the more extensive “formal” consultation reserved for projects that are likely to harm a species or its critical habitat. For most consultations, all the coordination, review, evaluation, negotiation, and document preparation was completed in a timely manner. We found that from the time a federal agency provided FWS with enough information to initiate a consultation, the median duration of informal consultations was 13 days and formal consultations was 62 days—both considerably less than the 135 days allowed by regulation without the agreement of the consulting agency.

Although there are always opportunities to improve how laws are implemented, any refinements to the consultation process can be accomplished solely through administrative reform made possible by fully funding the endangered species programs of FWS and the National Marine Fisheries Service (NMFS). There is no need for legislative change for section 7 to achieve its important purpose or avoid major economic impacts.

An Overview of the Consultation Process

Because of its intricacies, the consultation process is often misunderstood. At the heart of the process is the requirement that all federal agencies ensure that the actions they fund, authorize, or carry out are not likely to “jeopardize” a species or “destroy or adversely modify” critical habitat. Depending on the species involved, federal agencies consult with FWS or NMFS to fulfill this mandate. Consultations typically start as discussions between the Service and a federal agency if the agency has determined that its proposed action “may affect” a listed species or designated critical habitat. This informal consultation ends if the Service determines that the activity is “not likely to adversely affect” a species. Otherwise, formal consultation is required.

During formal consultation, the Service evaluates whether the proposed action will violate the prohibitions on jeopardy/adverse modification. If neither of these outcomes is likely but incidental “take” is expected, the Service will offer “reasonable and prudent measures” to minimize the harmful effects of the action. If jeopardy/adverse modification is likely, the Service must suggest “reasonable and prudent alternatives”—conservation measures that avoid jeopardy/adverse modification by reducing or partly offsetting the harm from the proposed action. In the rare instances where these alternatives are unavailable, section 7(g) allows a project proponent to ask a special Endangered Species Committee (also known as the “God Squad”) to exempt the project from complying with the jeopardy/adverse modification

¹ Malcom J, Li Y-W (2015) Data contradict common perceptions about a controversial provision of the US Endangered Species Act. *Proc Natl Acad Sci USA* 112(52):15844–15849.

prohibitions. Formal consultations end with a Service “biological opinion,” which must be finalized within 135 days after formal consultation begins, unless an extension is agreed on.

The Vital Role of Section 7 Consultations for Species Recovery

The goals of the ESA are to protect species from potential extinction, and to recover those species so that they no longer need the protections of the ESA. For many species, these goals are impossible to achieve without managing the human activities that threaten their survival. Section 7 is vital to this regulatory framework because it provides the legal backstop against federal activities that are likely to jeopardize species or destroy or adversely modify critical habitat. These protections are especially important for the hundreds of species found mostly on federal lands and for plants, which now make up 57 percent of all U.S. listed species and which are not protected by the “take” prohibition in section 9 of the ESA. Without section 7, most of these plants would receive very limited protections under the ESA.

The destruction or adverse modification prohibition deserves special recognition because it is the ESA’s only protection for critical habitat. The Services have designated thousands of square miles of critical habitat, and the prohibition transforms those polygons on a map into tools for recovery. Because habitat loss and fragmentation affect over 80 percent of U.S. listed animal species and over 70 percent of U.S. listed plant species, critical habitat can play a vital role at controlling this primary threat. And as climate change becomes a larger impediment to recovery, unoccupied habitat will become increasingly important to help species adapt to shifting ranges and habitat. The adverse modification prohibition is one of the few tools in the ESA that can protect unoccupied habitat. If properly implemented, section 7 can help preserve options for recovery decades from now.

The ESA is Flexible Enough to Avoid Irreconcilable Conflicts

There is no compelling argument that legislation is needed to resolve a specific conflict under section 7 or to make section 7 more effective for wildlife and people. There are three main reasons for this. First, the ESA is among our most concise and flexible environmental laws. The statute provides the Services with ample discretion to devise rules, policies, handbooks, and other tools to help federal agencies fulfill their mandates of preventing extinction and recovering species, while accommodating development consistent with those goals. Safe harbor agreements, candidate conservation agreements, and habitat conservation plans are all examples of innovations that arose from the ESA’s flexibility. Section 7 has similarly benefited from this flexibility. An example is the use of programmatic consultations, which enhances conservation by allowing the Services to evaluate the cumulative effects of all projects nested under a federal program. Programmatic consultations are also more efficient: in our study of FWS consultations, we found that project-level formal consultations covered by a programmatic consultation had a median length of 24 days compared to 62 days for all other formal consultations. Other examples of flexibility include the Services’ ability to define key concepts such as jeopardy, and key processes such as the standards for triggering informal consultations.

Another reason legislation is unnecessary is that the ESA administrative process provides ample opportunities to resolve conflicts. Section 7 is called “interagency cooperation” for a reason:

federal agencies are expected to work cooperatively with the Services to find mutual outcomes for species and project proponents. During informal consultations, for example, an agency is encouraged to work with FWS to develop measures to avoid, minimize, and offset the effects of its proposed project. In nearly 93 percent of FWS consultations, this process succeeded at averting the need for formal consultation. In the remaining seven percent of consultations where formal consultation was necessary, FWS was nearly always able to negotiate additional conservation measures to avoid jeopardy/adverse modification.

The administrative process offers the flexibility not only to forestall irreconcilable conflicts on individual consultations, but also to constantly improve the entire consultation program. One especially promising approach is to incentivize federal agencies to carry out their duty under section 7(a)(1) of the ESA to help conserve listed species. Some federal agencies have recently expressed interest in this approach, which would involve the agencies using section 7(a)(1) to implement conservation measures before they would need to consult with FWS under section 7(a)(2). The benefits from these early measures can reduce the need for subsequent formal consultation and even avoid jeopardy/adverse modification findings. An excellent example is the Army Corps of Engineer's 2013 Conservation Plan for the Lower Mississippi River. The document describes a host of conservation actions that the Corps could implement under section 7(a)(1) to avoid, minimize, and offset the adverse impacts of its flood management and ship navigation activities on three listed species. On its own, the Conservation Plan does not oblige the Corps to do anything. But five months after the plan was finalized, the Corps committed to implement the conservation measures as part of its section 7(a)(2) consultation on the same flood management and navigation activities. That consultation resulted in an expedited biological opinion, in which FWS treated the section 7(a)(1) conservation measures as a component of the section 7(a)(2) activities. Because of this direct connection between sections 7(a)(1) and 7(a)(2), FWS concluded no jeopardy/adverse modification. If other federal agencies follow this approach, they too could reduce or avoid conflicts during subsequent consultations while contributing to species recovery.

The third reason the administrative process is appropriate and adequate is that Congress has already created off-ramps within section 7 to avoid irreconcilable conflicts. As an initial matter, a federal activity that results in the "incidental take" of a species can proceed if it implements the reasonable and prudent measures described in the biological opinion. In those rare circumstances where the amount of take would jeopardize a species or adversely modify critical habitat, the Service develops reasonable and prudent alternatives that, if implemented, allow a project to proceed without violating the ESA. By regulation, those alternatives must be "economically and technically feasible" for the project proponent to implement. If alternatives are not available, the God Squad may exempt a project from complying with section 7. This exemption has existed for nearly 40 years, but the God Squad has convened only three times and granted an exemption twice. The rarity of exemptions suggests that federal agencies are almost always able to defuse conflicts using the normal consultation process.

Consultations in Practice

Ever since the Supreme Court in 1978 decided *TVA v. Hill*, which temporarily halted the completion of the Tellico Dam on the Little Tennessee River, section 7 has garnered a reputation

as a blunt hammer that has halted countless projects and upheaved local communities. But does this reputation reflect reality? Have anecdotal accounts, cherry-picked case studies, and outliers driven the public dialogue? My colleague and I have provided the most comprehensive answer to this question in our peer-reviewed paper analyzing the results of all 88,290 FWS consultations from 2008 through April 2015. We found that a staggering 92.3 percent of those projects were resolved through informal consultations; only 7.7 percent required the detailed analysis of formal consultations. That is, most projects required nothing more than a relatively cursory analysis by FWS to comply with section 7. Of those projects that required formal consultation, only two (0.0023%) resulted in jeopardy, one of which also resulted in destruction/adverse modification of critical habitat. That consultation involved a U.S. Forest Service proposal to apply fire retardants on national forests. After the project was revised, FWS concluded no jeopardy/adverse modification. The second consultation with a jeopardy conclusion focused on the effects to the delta smelt from a water management project in California's Central Valley. But even that project could proceed if the permittees adopted reasonable and prudent alternatives to minimize and partially offset the adverse effects of the project. Thus, no project was stopped because of FWS finding jeopardy/adverse modification during the nearly 7.5-year study period.

Our findings are similar to those from two earlier studies. The first evaluated all 73,560 FWS consultations from 1987 to 1991.² That study found only 2,000 projects requiring formal consultation and 350 jeopardy findings, 63 percent of which were attributable to two consultations. Of those 350 projects, only 18 were ultimately blocked, canceled, or terminated because of section 7. Most of the remaining jeopardy opinions applied to projects that complied with section 7 by adopting reasonable and prudent alternatives or other conservation measures. The second study analyzed 4,048 biological opinions for fish species from both Services between 2005 and 2009, and likewise found that jeopardy/adverse modification conclusions were rare (7.2% and 6.7% of formal consultations, respectively).³ These results help explain why no agency has invoked the God Squad since 1992.

Another debated issue is the duration of consultations. Some consultations do require years to complete, but they are often for highly complex projects and may involve hundreds of species. Time is needed to gather data about the species, negotiate conservation measures, and draft a comprehensive biological opinion that is scientifically sound and legally defensible. Often, an environmental impact statement under the National Environmental Policy Act is also required for the proposed project. The criticisms of consultations often focus on these types of projects because they are amenable to soundbites loaded with sweeping generalizations about the entire ESA. But our study found that those consultations are outliers. From the time a federal agency provides FWS with enough information to initiate a consultation, the median duration of informal consultations was 13 days and formal consultations was 62 days. Only 1,381 formal consultations (20 percent) exceeded the 135-day limit prescribed in Services regulations, and many of those had agreed upon extensions. Even programmatic consultations, which are extensive consultations on program-level projects or plans, had median durations of 13 days for informal consultations and 82 days for formal consultations. Although some consultations (probably appropriately) required far more time than others to complete, most were finalized in a

² Barry D, Harroun L, Halvorson C (1992) For conserving listed species, talk is cheaper than we think: The consultation process under the Endangered Species Act.

³ Owen D (2012) Critical habitat and the challenge of regulating small harms. *Fla L Rev* 64: 141–199.

reasonable timeframe. This is a remarkable accomplishment considering the inadequate funding for FWS's consultation program. In fact, on a per species basis after adjusting for inflation, Congressional funding for the program has declined since 2011 and was lower in 2015 than in 2001.⁴

The near absence of jeopardy/adverse modification findings discredits many of the claims about the onerous nature of consultations, but also raises some question about whether federal agencies are applying this tool rigorously enough to conserve listed species. To some extent, the low number of jeopardy/adverse modification findings is likely the result of federal agencies learning to plan and propose projects that minimize harm to listed species. Some agencies are indeed proposing projects with reduced impacts because they are coordinating more closely with FWS to shape the projects well before consultations begin, as I noted above. This approach is desirable because it can reduce conflicts without diluting conservation outcomes. But it is difficult to believe that this explanation applies to all consultations conducted over the seven-year period we studied, considering that some involve highly controversial projects proposed by organizations concerned primarily with achieving their project purposes. In those situations, I am concerned that FWS—in the face of persistent budget cuts, increasing workload, and mounting political pressure to minimize the economic impacts of endangered species conservation—may be approving projects that should have been further altered to comply with the conservation standards of the ESA. There may also be internal pressure within the agency to avoid jeopardy/adverse modification findings. But such concerns with agency practice can be addressed through proper management or administrative direction, and do not warrant legislative change.

Investing in Administrative Improvements to the Consultation Process

We know that endangered species recovery has been woefully underfunded and that funding is a critical component of ESA success.⁵ If Congress wants consultations to work better for wildlife and the regulated community, it needs to properly fund the Services to implement the ESA and carry out administrative reforms. In recent years, the agencies have already completed several key rulemakings. These include revisions to the rule on programmatic consultations. Increased funding will enable other improvements to expedite consultations and enhance their conservation effectiveness. Below are just four examples from dozens I could offer:

- Implement the two recommendations of the Government Accountability Office to improve FWS's institutional knowledge and understanding of the effects of section 7 projects on species: create databases to track all monitoring reports required from consultation and cumulative take for all species affected by formal consultations.⁶ Current technologies allow the agency to implement these recommendations at a significantly reduced cost and to make the information publicly available. Besides

⁴ : https://cci-dev.org/analysis/ESA_funding/#funding_trends

⁵ Gerber, LR. (2016) Conservation triage or injurious neglect in endangered species recovery. *Proc Natl Acad Sci USA* 113(13):3563-3566.

⁶ Governmental Accountability Office (2009) *The U.S. Fish and Wildlife Service Has Incomplete Information about Effects on Listed Species from Section 7 Consultations.*

improving FWS's knowledge, these databases can simplify planning and reporting by project proponents.

- Develop better maps of where species are likely to occur so that project proponents have enough information to decide whether and how to avoid and minimize impacts to species before they begin a consultation. This upfront planning will expedite consultations by giving proponents the option to propose projects with reduced impacts on species.
- Expand the use of programmatic consultations to expedite project-level consultations and to improve the Services' ability to assess the cumulative effects of those consultations. In our study of FWS consultations, we found that although program-level consultations take slightly longer than standard consultations (82 days vs. 62 days), subsequent formal consultations on project-level consultations require far less time than standard formal consultations (24 days vs. 62 days).
- Finish developing the FWS Information, Planning, and Consultation (IPaC) System, which will expedite informal consultations by automating certain aspects of the process. Given that over 90 percent of consultations are informal, a functional IPaC system could save the government vast resources in the long term and improve the consistency of informal consultations.

The Services do not need to carry the weight of these administrative reforms on their own. Many conservation organizations and other stakeholders are ready and able to help the agencies with this effort. At Defenders of Wildlife, for example, we recently created the Center for Conservation Innovation, which focuses on using technology, science, and interdisciplinary approaches to pioneer pragmatic, innovation solutions to endangered species conservation. Advances in data storage and management, satellite imagery, and other technologies can make most of these four recommendations cheaper and easier to implement than ever before. Rather than legislation, these and other promising approaches will make consultations more effective for wildlife and people.

A Role for Congress

Section 7 is often considered the most important component of the ESA because it prohibits federal agencies from threatening a species' existence while offering the built-in flexibility to resolve the overwhelming majority of potential conflicts with human activities. This combination has contributed to the increasing number of species achieving recovery without the need to stop infrastructure projects or convene the God Squad. Can Congress help improve section 7 implementation? Absolutely, but not by changing the ESA. Instead, Congress can fully fund the ESA, including the section 7 consultation program, so that this visionary law can realize its full potential.