

**American Lands Alliance\* Center for Native Ecosystems \* Center for Biological Diversity \* Defenders of Wildlife Endangered Species Coalition \* Earthjustice \* Forest Guardians \* Humane Society of the United States \* League of Conservation Voters Natural Resources Defense Council \* National Wildlife Federation \* Northwest Ecosystem Alliance  
Sierra Club \* U.S. Public Interest Research Group \* Xerces Society**

***“Sound Science for Endangered Species Act Planning Act of 2003”  
HR-1662 Bill Analysis***

This bill, like its immediate predecessor, H.R. 4840, is a Pandora’s box of weakening measures to the ESA. Some of details have been modified– but the box containing measures designed to undermine the ESA is still fundamentally the same. Again, like its predecessor, the titled purpose of H.R. 1662 is to ensure the use of “sound science” in decisions under the Endangered Species Act (ESA). The bill, however, seeks to substantially alter the existing, conservative balance in favor of species protection struck in the Act and followed since 1973, largely by attempting to dictate the use of specific kinds of scientific information in every situation and by adding procedures that would delay decisions under the Act to the detriment of species and people.

The ESA is a strong, effective, and flexible science-based conservation statute. It has served both people and species well for thirty years. The ESA already specifically requires use of the “best available scientific and commercial data” in decision-making and seeks to follow a precautionary approach to species protection, one that gives the benefit of the doubt to the species. H.R. 1662 seeks to subtly undercut this careful balance and effective use of the best science by defining in a narrow and inflexible way what will count as scientific evidence and by changing the standards for applying that evidence. In addition, in the guise of expanding scientific “peer review” of ESA decision-making, the bill would effectively delay actions that are supported by sound science and necessary to protect species facing extinction. In short, although the title of the bill attempts to make its provisions sound reasonable, the bill itself seeks to limit the use of sound science and would almost certainly harm species protection in both the short and long term.

As the Ecological Society of America has noted, “By enacting the Endangered Species Act of 1973, Congress established a national commitment to preserve the Nation’s biological resources for the benefit of the American public.”<sup>1</sup> In a world where many species hover on the brink of extinction and need immediate, scientifically-based action to ensure their survival and eventual recovery, and where delay in helping species or delay in approving projects that will not harm species already is a major problem, unfounded attempts to alter the basic balance of the ESA, limit the use of credible

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<sup>1</sup> In 1996, the Ecological Society of America, one of the nation’s largest science societies of ecologists, wrote a detailed white paper about “Strengthening the Use of Science in Achieving the Goals of the Endangered Species Act.” All Ecological Society of America quotes in this fact sheet are from this white paper. In addition, in 1995 the National Academy of Science’s National Research Council wrote an extensive report, “Science and the Endangered Species Act.” All National Research Council quotes in the fact sheet are from this report.

science, and increase delay will seriously undermine the goals of what has been heralded as one of the most visionary and effective conservation statutes ever enacted.<sup>2</sup>

Congress should reject H.R. 1662 -- just as it allowed its predecessor to expire – because the bill is a poorly thought out solution in search of a non-existent problem.

1. **Limiting or undermining the use of best available science**

a. **Skewing scientific methodology**

*“In any case in which the Secretary is required by this Act to use the best scientific and commercial data available, the Secretary, in evaluating comparable data, shall give greater weight to scientific or commercial data that is empirical or has been field-tested or peer-reviewed”*

§ 2(a).

*“The Secretary may not determine that a species is an endangered species or a threatened species unless the determination is supported by data obtained by observation of the species in the field”* § 2(b).

- These two provisions, the former aimed at making a sweeping change to the entire ESA<sup>3</sup> and the latter an attempt to be even more restrictive in listing determinations, seek to dictate a rigid scientific orthodoxy that has nothing to do with sound science, scientific credibility, or the best available scientific information. To the contrary, these provisions appear to reflect the anti-scientific perspective that unless you can see and touch something, it doesn't exist and should at least be heavily discounted.
- The simple fact of much of modern conservation biology is that its research and analyses are model-based. Agencies and others could construe – and indeed appear to be invited to construe – the above language as a blanket requirement for field observations that limits appropriate reliance on widely accepted scientific methodologies, such as population viability analysis (PVA), as well as evolving scientific methodologies that are credible, reliable, and scientifically accepted.
- In addition, the emphasis on “field data” and “observation of the species” is potentially at odds with listing factors currently in the Act that do not require field observation to conclude

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<sup>2</sup> The Endangered Species Act of 1973 is “the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.” *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978). A review of the Act’s “language, history, and structure” convinced the Supreme Court “beyond a doubt” that “Congress intended endangered species to be afforded the highest of priorities.” *Id.* at 174.

<sup>3</sup> The ESA requires use of the “best scientific and commercial data available” in several places in of the Act – including provisions related to listing, and interagency cooperation. In each and every place where this language appears, the quoted language from section 2(a) attempts to tilt and limit its application.

that a species warrants listing (such as a listing decision based on the inadequacy of existing regulatory protections or the presence of disease observed in the laboratory).

- For example, the marbled murrelet (a shy, robin-sized seabird found in the Pacific Northwest and Alaska) is extremely difficult to observe. For this reason, federal, state, and private biologists have developed a protocol for determining murrelet presence, and courts have held that this protocol is the best available science. These provisions might call into question exactly this type of reliable data.
- These provisions could be read by some as requiring the Secretary to give a preference to field data over other data regardless of whether that data actually is the best scientific data and regardless of whether that “field data” comes from sources which are unbiased or have scientific credibility. There is no magic to “field data.” It is just one of many kinds of information good scientists ordinarily use to make informed decisions.

Relevant excerpts from scientific community reports:

- “The Act is a powerful and sensible way to protect biological diversity. . . . If the valuable scientific knowledge that has accumulated over the past several decades of analytical ecological research is used to the fullest extent, the Act can become an even more powerful tool in achieving the societal goals for which it was enacted.” Ecological Society of America 3.
- “The more high quality science is used, the more effectively and more efficiently the Act can achieve the important goals society has asked it to accomplish.” Ecological Society of America 5.
- “[E]ach PVA should include an analysis of the best available information on the focal species. Most PVA analyses combine data from field studies with simulation modeling of the possible impacts of various extinction factors.” Ecological Society of America 7.

**b. Criteria for scientific data established by non-scientists**

*“Not later than 1 year after the date of enactment of this paragraph, the Secretary shall promulgate regulations that establish criteria that must be met for scientific and commercial data to be used as the basis of a determination under this section that a species is an endangered species or a threatened species” § 2(b).*

- We need to let scientists do the science. Like the provisions that attempt to dictate what counts as the best available scientific information, this provision attempts to put regulators in charge of defining good science. It raises the specter of a regulatory “Grand Inquisitor” defining orthodoxy and heresy for the scientific community. The provision all but invites regulators, perhaps influenced by the political motivations of the day, to dictate to the scientific community what sound science is, or what scientific information can and cannot be considered.

- Chemical and pesticide industry groups are already calling on EPA to refuse to use scientific evidence, even peer-reviewed studies, until new scientific models are fully developed and have stood the test of time. Industry has applied this reasoning to such obvious forms of harm as sub-lethal effects that impair wildlife functions at a fraction of the lethal dose. It disparages and contends that ESA protections cannot be based on what it calls "new methodologies" because they are more uncertain than the longer established laboratory tests for measuring lethal effects. This provision would further embolden those attempts to ignore certain studies and scientific methods.
- There is a danger that the Secretary would set a standard for scientific and commercial data that is unreasonably rigid or restrictive, or that could become quickly out-dated as scientific understanding evolves and changes, something that happens every day. The simple fact is that the best available science will take different forms in different settings and its identification should be the job of the scientists who do the science.
- The provision itself is unbalanced, for it calls for a static definition of science only for listing and protecting species, but not for delisting and removing protections for species. This creates a reverse "roach hotel" problem -- it's hard to get in but easy to get out.

Relevant excerpts from scientific community reports:

- "Biologists in the agencies responsible for implementing the Endangered Species Act generally try to use the best scientific information and methods available. Failure to use the best available information and methods is generally due to inadequate budgets and overworked staff." Ecological Society of America 10

### c. **Data from landowners**

*"The Secretary shall – (i) accept and acknowledge receipt of data regarding the status of a species that is collected by an owner of land, including data obtained through observation of the species on the land; and (ii) include the data in the rule-making record compiled for any determination that the species is an endangered species or a threatened species."* § 2(b).

- This provision could lead to required consideration of information that is not collected by persons trained in the scientific method and well-versed in rigorous and objective means of data collection, undermining the current ESA requirement for listing decisions to be based "solely on the basis of the best scientific and commercial data available." It is ironic that a bill that purports to raise the bar for science mandates that the Secretary consider data from a specific source regardless of its scientific validity.
- The ESA and its implementing regulations already require the Secretary of Interior to publish findings regarding listing of species in the Federal Register for public comment (Section 4(b)(5)(A)(i)) and invite applicants subject to the consultation requirements to participate early in that process, (50 CFR § 402.14). These existing provisions allow anyone to submit comments regarding listing and give project applicants a special role in consultations. The problem the bill seeks to address has already been addressed.

## 2. Additional Bureaucracy and Delay

### a. **Additional data required before recovery plans can be implemented**

*“The Secretary shall identify and publish in the Federal Register with the notice of a proposed regulation pursuant to paragraph (5)(A)(i) a description of additional scientific and commercial data that would assist in the preparation of a recovery plan and -- (i) invite any person to submit the data to the Secretary; and (ii) describe the steps that the Secretary plans to take for acquiring additional data. Data identified and obtained under [this provision] shall be considered by the recovery team and the Secretary in the preparation of the recovery plan in accordance with section 5” § 2(c).*

- While more information may be useful in the development of recovery plans, this provision should in no way be used to slow down or prevent the timely development of recovery plans. In fact, this provision points out the need in the ESA for deadlines for recovery plans, as we have in listing and designation of critical habitat. Delay in recovery planning places more risk on threatened and endangered species; it also increases the uncertainty for regulated entities because there is no overarching plan for assisting the species.
- In a different context, Congress has seen fit to protect vulnerable populations where risks are great, but specifics are unknown. The Food Quality Protection Act, passed unanimously in 1996, recognizes that children are subject to greater harm from toxics than adults because of their size and their active, growing metabolism. To afford needed protection for children, the Act includes a 10-fold greater protection level for exposure to children when the risks are unknown. Instead of using a lack of data to delay protections, as here, the Food Quality Protection Act sets forth a precautionary and protective scheme -- one that corresponds to the underlying purposes and goals of the ESA.

Relevant excerpts from scientific community reports:

- “For species deserving protection, delaying the decision to provide protection and recovery will bring most of these vulnerable species even closer to the brink of extinction, restrict the options available for achieving recovery, and increase the eventual cost of the recovery process.” Ecological Society of America 5.
- “When a species is listed, the Endangered Species Act requires that a recovery plan be developed. The ultimate goals of the recovery plan are to improve the status of the species in its natural habitat to such a degree that it can be delisted. However, by the time a species becomes eligible for listing, its habitat is often destroyed or badly degraded, the population is decimated, and its genetic diversity seriously eroded. Additional delays in developing and implementing recovery plans further imperil the species.” Ecological Society of America 4.

### b. **Peer review beyond existing requirements**

*“Before any [listing, delisting, recovery plan, jeopardy biological opinion, or reasonable and*

*prudent alternative to a jeopardy action] shall become final, the Secretary shall appoint randomly, from among the list prepared in accordance with this section, 3 qualified individuals who shall review and report to the Secretary on the scientific information and analyses on which the proposed action is based. The selection and activities of the referees selected pursuant to this section shall not be subject to the Federal Advisory Committee Act” § 3.*

- This provision defines an ESA “action” requiring peer review as listing, delisting, recovery and – significantly -- jeopardy opinions and reasonable and prudent alternatives (“RPAs), but not no-jeopardy opinions. This is not a balanced approach. Decisions not to protect species (no-jeopardy opinions) would get no review but decisions to protect species get extra scrutiny potentially reversing the ESA’s focus on giving the species the benefit of the doubt.
- Current FWS and NMFS regulations already require peer review for listing and recovery actions and in special circumstances (Federal Register, Vol. 59, July 1, 1994). In addition, the Act requires public comment periods for most major ESA actions.
- There probably would be significant problems with the availability of non-agency scientific experts to sit on these review panels for every major ESA determination regarding listing, recovery planning, or jeopardy opinions and RPAs. These potential problems could be particularly present for species about which little is known and/or for which there are few scientific experts.
- Applying a peer review process to every listing, delisting and jeopardy/RPA decision under the ESA would cause major delays, making it virtually impossible to comply with statutory deadlines in the ESA. These delays could affect adversely both species and proposed projects, *including projects that could go forward under existing law.*
- Many species need help from the ESA without delay. For example, there is, at times, a need for emergency listing or consultation about an action that is already detrimentally impacting the species. Delay in these and other situations could very well lead to the extinction of some species.

Relevant excerpts from scientific community reports:

- “The uncertainty that may result from sparse information is part of the risk that is evaluated during the listing process. Adding independent peer review of other administrative processes to the listing process would unnecessarily lengthen the time to make a listing decision without providing any substantial benefits. The major problem with the listing process has been its slowness, not inadequacy of the quality of the listing decisions.” Ecological Society of America 5.
- “If the burden of proof were to show that an action would not harm a species rather than to show that it would harm a species, increased protection would result. The importance of shifting the burden of proof this way has been widely recognized . . . and is known as the ‘precautionary principle.’ . . . This principle has already been endorsed in several international legal documents.” National Research Council 169.

**c. Peer reviewers selected by political appointees, not a neutral scientific body**

*“The term ‘qualified individual’ means an individual with expertise in the biological sciences-- (i) who through publication of peer-reviewed scientific literature or other means, has demonstrated scientific expertise on the species or a similar species or other scientific expertise relevant to the decision of the Secretary under subsection (a) or (f); (ii) who does not have, or represent any person with, a conflict of interest with respect to the determination that is the subject of the review; (iii) who is not a participant in any petition or proposed or final determination before the Secretary; and (iv) who has no direct financial interest, and is not employed by any person with a direct financial interest, in opposing the action under consideration. The Secretary shall solicit recommendations from the National Academy of Sciences and develop and maintain a list of qualified reviewers to participate in independent scientific review actions § 3.*

- The proposed language does not require an independent scientific review but the appearance of one that actually is controlled by political appointees who may have little or no scientific experience. Neither the qualifications of the scientists eligible to serve on the committees, nor the membership of the specific committees are established by scientists. All are set by the Secretary of Interior.

**d. Burdening the consultation process with significant additional paperwork**

*In conducting a consultation under subsection (a)(2), the Secretary shall provide any person who has sought authorization or funding from a Federal agency for an action that is the subject of the consultation, the opportunity to -- (i) before the development of a draft biological opinion, submit and discuss with the Secretary and the Federal agency information relevant to the effect of the proposed action on the species and the availability of reasonable and prudent alternatives (if a jeopardy opinion is to be issued) that the Federal agency and the person can take to avoid violation of subsection (a)(2); (ii) receive information, on request, subject to the exemptions specified in section 552(b) of title 5, United States Code, on the status of the species, threats to the species, and conservation measures, used by the Secretary to develop the draft biological opinion and the final biological opinion, including the associated incidental taking statements; and (iii) receive a copy of the draft biological opinion from the Federal agency and, before issuance of the final biological opinion, submit comments on the draft biological opinion and discuss with the Secretary and the Federal agency the basis for any finding in the draft biological opinion.*

*If reasonable and prudent alternatives are proposed by a person under clause (i) and the Secretary does not include the alternatives in the final biological opinion, the Secretary shall explain to the person why those alternatives were not included in the opinion.*

*Comments and other information submitted to, or received from, any person (pursuant to clause (i)) who seeks authorization or funding for an action shall be maintained in a file for that action by the Secretary and shall be made available to the public (subject to the exemptions specified in section 552(b) of title 5, United States Code).” § 4(b)*

- This requirement could be used to bog down a process that works effectively for species and landowners in the vast majority of situations as well as overburden an agency that does not have sufficient resources, delaying both actions to protect species, some of which are perilously close to extinction, and approval of projects that could go forward.
- Allowing applicants elevated and increased access to the consultation process is unfair and could bias the process. The Endangered Species Act already requires Federal Agencies to consult with the Secretary of Interior “in cooperation with, the perspective permit or license applicant” and regulations implementing the law specifically allow the applicant to participate in the consultation (50 CFR § 402.14), including reviewing draft biological opinions, proposing reasonable and prudent alternatives, and providing the agency any information the applicant considers relevant. Accordingly, the applicant is already part of the consultation process.
- This section, however, places the role of the applicant above all others by requiring the secretary to provide a written explanation of any disagreement with what the applicant seeks. The law already requires the Secretary to provide an adequate and rational explanation of a decision that responds to all relevant information. There is no reason to give the applicant “super status” in this process.

Relevant excerpt from a scientific community report:

- “The Section 7 prohibition of any federal action likely to jeopardize the continued existence of an endangered or threatened species or to destroy or adversely modify its critical habitat is the source of much of the act’s power.” [This is often referred to as the consultation requirement, since FWS or NMFS consult with federal agencies considering such an action.] National Research Council 20.

*This analysis was prepared by Earthjustice in January 2004. Please contact Susan Holmes at 202-667-4500*