

Testimony of Dr. Steven P. Courtney

Before the

U.S. House of Representatives

COMMITTEE ON NATURAL RESOURCES

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Legislative Hearing on:

H.R. 4315, (Hastings), "21st Century Endangered Species Transparency Act,"

H.R. 4316, (Lummis), "Endangered Species Recovery Transparency Act,"

H.R. 4317, (Neugebauer), "State, Tribal, and Local Species Transparency and Recovery Act,"

and H.R. 4318, (Huizenga), "Endangered Species Litigation Reasonableness Act."

I am Steven Courtney, Principal Scientist at Western EcoSystems Technology, Inc. (WEST) and Associate at the National Center for Ecological Analysis and Synthesis (NCEAS). For the past 40 years, I have been a biologist, with 22 years of working with the Endangered Species Act. This experience has included work on behalf of private, Tribal, state, and federal clients, on many different species and ecosystems. My particular expertise is in designing and implementing peer review, fact-finding, and other processes to enhance understanding of science and related issues within the context of difficult or controversial situations. A sampling of this work includes:

- Leading a synthesis of Spotted Owl biology that identified current threats to that species;
- The science process that helped resolve and defuse the Headwaters controversy in northern California;
- Reviews of water management on the Missouri, Columbia, and Rio Grande Rivers, and in the Everglades and the Edwards Aquifer;
- Investigations of allegations of scientific malpractice against federal scientists in the Sacramento delta and the Klamath Basin; and
- Most recently, leading a review of the use of science by the US Fish and Wildlife Service (USFWS) regarding de-listing the wolf.

Currently, most of my work concerns range management and conservation of sage-grouse, advising private and state clients, as well as the USFWS.

I have been privileged to work on many systems. Without being an expert on any one species or region, I have, instead, been engaged first hand on a wide variety of the issues faced around the country regarding management of wildlife and natural resources. I have strived to help those looking for efficient and science-based solutions under the Endangered Species Act (ESA), in particular, by designing transparent processes aimed at determining the 'best available science'. My comments on the four bills before you are focused on those two issues: what is the role and value of transparency; and how can we ensure that the decisions of federal agencies are based on the best science?

Transparency

Science depends on the clear and fair evaluation of information. In the context of the ESA, decisions made by regulatory agencies, (USFWS and NOAA-Fisheries), as well as other parallel decisions taken by action agencies (such as the US Army Corps of Engineers (USACE), the US Forest Service (USDA-FS), and the bureaus within the Department of the Interior) depend critically on the quality of the scientific evaluations they carry out. Increasing the transparency of such scientific assessments has the potential to increase their quality. Transparency encourages the consideration of new or alternative ideas, and it increases the likelihood that mistakes will be corrected. Of course, one of the key advantages of increasing transparency is that stakeholders can see the basis for agency decisions.

On the face of it, transparency would appear to be straightforward and a positive attribute. However, my experience with diverse systems suggests a need for caution and careful application and design of transparent disclosure of information. In particular, it is useful to distinguish between scientific information itself, and the use of that information in a deliberative process. Attempts to improve ESA decision-making through increased transparency need to be targeted and carefully designed in order to avoid negative effects on commercial activity and on conservation.

When setting up an evaluation process to understand the status of the Spotted Owl, I was careful, given the history of that controversy, to be as transparent as possible. The science group met in public, and stakeholders were invited to attend these meetings and to present information. All meetings were recorded, and the technical deliberations among the scientists became part of the administrative record. In this way, we ensured that any party could understand our reasoning, and see how we reached our conclusions. Ultimately, that process led to a change in federal management of northwest forests, as our work showed that loss of

habitat to invasive Barred Owls and to wildfire were major threats comparable to the impacts of timber harvest.

Essentially the same process has been followed in many other situations. For reviews on the Everglades, the Missouri, or wolf-delisting, there is no secrecy regarding the process. Reviewers are not anonymous, and there is a record of how information is weighed and evaluated, and then participants provide a record of how decisions are reached. We make an effort to ensure that stakeholders understand the evaluation process, and how to contribute to these processes, and, likewise, we explain our reasoning and the rationale for final assessments. This openness has proven to be both popular and effective. When science-based decisions are discussed openly and fairly, there is greater engagement by all sectors; enhanced cooperation; less impetus for litigation; and (I believe) better decision-making.

By contrast, a lack of clarity can cause problems. In 2011, I was asked to evaluate allegations of scientific misconduct against Interior employees on the Sacramento Delta. While the investigative panel found no evidence of misconduct (and found that the employees had followed good scientific procedure), we did determine that they had not explained clearly the rationale for their decisions. That lack of an open explanation and of how they reached their evaluations led to significant misunderstandings and frustrations.

In short, transparency of process is important, and fair and open explanations of decisions can be valuable. I commend the interest in transparency by this Committee. However, in some situations, complete transparency can be detrimental. Many landowners, for instance, regard information about wildlife on their lands to be proprietary. Full and transparent disclosure of such information could have significant financial impacts. For instance, information on the presence of Spotted Owls and of the quality of their forest habitat can readily be used by outsiders to predict a company's timber inventory and the likelihood of the company being able to harvest that resource. Similarly, a company with significant populations of a listed species might be unable to access mineral resources. If such detailed information on a species' distribution were to be made generally available, it could impact the company significantly, creating an advantage to competitors, potentially decreasing shareholder confidence, and so on. In short, release of such proprietary information is often opposed by such landowners, for good reason. Requiring full transparency in such situations can also deter landowners from participating in constructive conservation agreements with the USFWS or other agencies.

The possibility of complete transparency of data is a potential threat to conservation planning. Many landowners may be unwilling to even enter into discussion with USFWS regarding Conservation Banks, or Conservation Credit systems, if there is a belief that all information will become public. The innovative conservation exchange system for the Lesser Prairie Chicken acknowledges this wariness on the part of landowners and allows habitat evaluations to be

carried out by independent third parties, precisely to assure landowners that their private information will remain private. Many species listed under the ESA, and many others that may be considered for listing, occur predominantly on private lands. For such species, the goodwill of landowners is imperative, and their concerns for privacy of information cannot be ignored.

Two of the bills before this Committee, HR 4315, and 4317, discuss the importance of transparency. I recommend that the Committee consider how to ensure that transparency is encouraged in those areas where it would be helpful. This is primarily in two realms – firstly, in ensuring that the process used in scientific assessments is as open, fair, and clear as possible; secondly, in encouraging decision-makers clearly to set forth the rationale for their decisions, including the information on which the decision was based and why that information is relevant and deemed to be the best available information.

Best Available Science

Let me now turn to the matter of best available science. HR 4317 specifically addresses one of the lynchpins of ESA—that actions by NOAA-Fisheries and USFWS must be based on the ‘best scientific and commercial data available.’ Many existing policies and management programs of the two regulatory agencies are aimed at ensuring that the statute is followed and that ‘best available science’ is identified and used. Hence, internal and external reviews, consultations with affected parties (including Tribal Nations, states, and other federal agencies), collaborative conservation efforts, and other policies all aim to improve the use by USFWS and NOAA-Fisheries of good science. Specific tools and programs, such as peer review and Structured Decision Making, are similarly designed to identify and use best science.

To the extent that HR 4317 would codify consultation with States and Tribes, it appears duplicative of existing programs and efforts; however, if HR 4317 results in the data from States and Tribes being defined as either the ‘best available’ or equal in quality to other ‘best available’ information, it would undermine the existing intent under ESA that science (whatever its source) be fairly evaluated in an impartial manner, and only then that the ‘best available science’ be employed in decision-making.

Generally, federal agencies receive judicial deference on scientific and technical issues. This deference reflects the expertise of the agencies on such matters. Nevertheless, federal scientists are not infallible; there exist numerous programs to take corrective actions, or to use ‘adaptive management’ to improve the quality and use of science. While stakeholders (including States and Tribes) may be dissatisfied with individual agency actions, there are already mechanisms available for review and consultation and techniques and tools by which the decisions of federal agencies can be examined and amended by the agency concerned. Encouraging the wider use of such cooperative and engaged approaches would likely meet the

objectives of stakeholders and enhance both transparency and the application of best available science.

In 2000, I led a program designed to address a seemingly intractable debate – whether deepening the shipping channel of the Columbia River would harm endangered fish. The opinions of three regulatory agencies (NOAA, USFWS, and EPA), of the action agency (USACE), and of numerous stakeholders (including states and Tribes) were in conflict. The parties agreed to a neutral and impartial process, in an attempt to resolve their differences over interpretation of the science. Over the course of seven months, the parties met and debated the science in public, with the guidance of a team of nine eminent scientists. New science was commissioned. At the end of the process, there was an unequivocal result and finding: deepening of the channel would not harm the fish. In this case, entrenched positions were abandoned, a cooperative program was adopted, and federal scientists were willing to change their opinions.

Late last year, I helped carry out an independent peer review of some of the science underlying the USFWS's proposal to de-list the Gray Wolf under the ESA. A panel of independent scientists was convened by NCEAS at the request of the USFWS. In the course of their review, the panelists unanimously concluded that the USFWS's position on the taxonomy and genetics of wolves was not rooted in the 'best available science'. Note that the USFWS has not yet made a final determination on its proposal, and, thus, it is not yet clear how this scientific finding will be used. Nevertheless, the fact that the USFWS sought and received truly independent review, which did then not concur with the agency's position, is indicative that we already have processes in place that can identify situations when corrective action may be warranted.

There are many other examples where stakeholder input can help improve decision-making by federal agencies. To name just one, the wind energy/ wildlife guidelines, developed with the aid of a Federal Advisory Committee, are widely acknowledged to be a good, scientifically-based program.

Legislation that re-defines what constitutes 'best available science' cannot be effective in swaying the minds of scientists themselves, who will continue to evaluate science based upon tried and trusted criteria such as logical consistency, replicability and the weight of evidence. Efforts to improve federal decision-making under ESA may instead be best served by programs that provide opportunity and resources for increased consultation and collaborative assessments. The Columbia River program in 2000 cost some \$500,000; the recent wolf peer review, much less. There are many options for improving the availability of programs to improve scientific evaluations, scaling from standing FACA committees, to once-off public meetings, to small scale document reviews. All of these may have value when used appropriately, and all are currently available to the agencies concerned.

Literature

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