



# Committee on Natural Resources U.S. House of Representatives

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Chairman Doc Hastings

## **UNDER THE MICROSCOPE:** *An examination of the questionable science and lack of independent peer review in Endangered Species Act listing decisions*

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Majority Staff Report  
Committee on Natural Resources  
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Chairman Doc Hastings  
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## EXECUTIVE SUMMARY

Throughout the 113<sup>th</sup> Congress, the Committee on Natural Resources (“Committee”) Majority oversight staff has been conducting oversight of the Obama Administration’s scientific integrity and information quality policies and its use of peer review in connection with the Endangered Species Act (“ESA”).

The ESA requires that decisions on whether to list a species as threatened or endangered must be based on the “best scientific and commercial data available.” As one of the chief agencies responsible for implementing the ESA, the U.S. Fish & Wildlife Service (“FWS”) has issued policies and guidance concerning the use of the best available science.

A review by the Committee’s Majority oversight staff of the FWS’ recent ESA listing decisions has found:

- The FWS’ peer review process, information quality policies, and guidance documents are used to justify the FWS’ listing decisions under the ESA. However, the policies are ambiguous as to what constitutes “independent” peer review. This has led to inconsistency in how FWS Regional offices conduct peer review.
- The FWS regularly recruits scientists to peer review its listing decisions who are well-known experts on the specific species at issue. In fact, the FWS routinely bases its listing decisions on science that has been developed by the same people who have been recruited by the FWS to serve as peer reviewers. Rather than providing a fresh perspective on how the science was conducted or whether the listing decision is supported by science, the peer reviewers are in effect being asked to review how the FWS has characterized their studies and research.
- The FWS does not have clear or consistent procedures in place across all FWS Regional offices to ensure that potential peer reviewers undergo a screening to identify possible conflicts of interest or impartiality. In many cases, those who have received grants or financial assistance from the Department of the Interior (“Department”) and its bureaus or other federal agencies to study the species at issue or who have known biases, positions, or affiliations with groups that have advocated for conservation of the species under the ESA are allowed to serve as peer reviewers.
- The FWS does not consistently disclose to the American public information about who serves as peer reviewers for ESA listing decisions, the instructions they are given, the substance of their comments, or how their comments are addressed by the FWS. Peer reviewer identities are often withheld, and their comments are not clearly identified or made publicly available in the course of the listing decisions.

## BACKGROUND

The Endangered Species Act (“ESA”) requires the FWS to use the “best scientific and commercial data available” when making a determination under the Act.<sup>1</sup> The FWS has adopted policies concerning the use of peer review, scientific integrity, and information quality that apply to the determinations being made under the ESA. Under the ESA, the FWS may make a listing decision based on its own policy priorities<sup>2</sup> or in response to a petition or lawsuit from the public.<sup>3</sup>

To determine whether a species merits a threatened or endangered listing, the ESA requires the FWS to consider the following factors: the present or threatened destruction, modification, or curtailment of its habitat or range; overutilization for commercial, recreational, scientific, or educational purposes; disease or predation; the inadequacy of existing regulatory mechanisms; or other natural or manmade factors affecting its survival.<sup>4</sup> Once the FWS has assessed the threats to a species and determined it may merit listing, the FWS will identify the species as a candidate and, depending on how dire the threat to the species is, will either delay or initiate the rulemaking process for the species’ listing decision.<sup>5</sup>

Under a 2011 closed-door, mega-settlement of more than 85 lawsuits and legal actions negotiated between the FWS and the Center for Biological Diversity and WildEarth Guardians, the FWS agreed to a schedule of arbitrary deadlines to make proposed and final listing determinations for over 250 species between 2013 and 2018. In fiscal year 2014, the FWS issued final listing determinations for 59 species, all of which were pursuant to the settlement. In the previous two years, the FWS made over 200 proposed or final listing determinations, with hundreds more expected in the next several years pursuant to the settlement. Additional multi-species listing petitions have been filed since the settlement, adding to the number of species for which the FWS must make a listing determination.

In the 112th and 113th Congresses, the Committee held 10 oversight hearings on the ESA, including several specifically on the use of science and peer review in connection with listing decisions.<sup>6</sup> This led to the U.S. House of Representatives passage of H.R. 4315

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<sup>1</sup> 16 U.S.C. § 1533(b).

<sup>2</sup> *See id.*

<sup>3</sup> 16 U.S.C. § 1533(b)(3).

<sup>4</sup> 16 U.S.C. § 1533(a)(1).

<sup>5</sup> U.S. Fish & Wildlife Service, *Listing a Species as Threatened or Endangered*, at 1-2 (2011), available at <http://www.fws.gov/endangered/esa-library/pdf/listing.pdf>.

<sup>6</sup> *See* December 6, 2011 Oversight Hearing on “The Endangered Species Act: How Litigation is Costing Jobs and Impeding True Recovery Efforts”; June 19, 2012 Oversight Hearing on “Taxpayer-Funded Litigation: Benefitting Lawyers and Harming Species, Jobs and Schools”; July 24, 2012 Oversight Hearing on “The Impact of Catastrophic Forest Fires and Litigation on People and Endangered Species: Time for Rational Management of our Nation’s Forests”; June 4, 2013 Oversight Hearing on “Defining Species Conservation Success: Tribal, State and Local Stewardship vs. Federal Courtroom Battles and Sue-and-Settle Practices”; August 1, 2013 Oversight Hearing on “Transparency and Sound Science Gone Extinct?: The Impacts of the Obama Administration’s Closed-Door Settlements on Endangered Species and People”; September 4, 2013 Oversight

on July 30, 2014. H.R. 4315 includes provisions to require more data transparency of federal ESA listing decisions and the inclusion of state, local and tribal data in listing decisions. The Department's scientific integrity officer and the FWS' Director of Endangered Species have also briefed Committee staff on the Department and FWS' scientific integrity policies and specific investigations into alleged violations within the FWS of these policies.

In the course of preparing this report, the Committee's Majority oversight staff has reviewed the proposed and final listing decisions made by the FWS since July 26, 2013, related *Federal Register* notices, peer reviewer comments, and other publicly available materials for approximately 35 rules covering nearly 70 species. All species examined by Committee Majority oversight staff were subject to the 2011 litigation mega-settlement.

This staff report examines the relevant peer review, information quality, and other scientific integrity policies that apply to ESA listing decisions and summarizes how those policies have been applied to actual listings decisions by the FWS in the past year.

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Hearings on "State and Local Efforts to Protect Species, Jobs, Property, and Multiple Use Amidst a New War on the West" (Part I-Casper, WY and Part II-Billings, MT); December 12, 2013 Oversight Hearing on "ESA Decisions by Closed-Door Settlement: Short-Changing Science, Transparency, Private Property, and State & Local Economies"; May 14, 2014 Oversight Field Hearing on "Protecting the Rights of Property Owners: Proposed Federal Critical Habitat Designations Gone Wild"; September 8, 2014 Oversight Field Hearing on "The Northern Long Eared Bat: The Federal Endangered Species Act and Impacts of a Listing on Pennsylvania and 37 Other States."

## PEER REVIEW POLICIES

In 1994, the FWS issued several joint policies with the National Oceanic and Atmospheric Administration (“NOAA”) concerning ESA listing and recovery actions. These policies “committed [the agencies] to use scientific peer review in recovery planning, to try to develop [recovery] plans within two and one-half years of final listing, and to involve a broader range of parties in developing and implementing [recovery] plans.”<sup>7</sup>

One of the agreements, the “Interagency Cooperative Policy for Peer Review” (“1994 Peer Review Policy”), directed NOAA and the FWS to solicit independent peer review on “listing recommendations and draft recovery plans to ensure the best biological and commercial information is being used in the decisionmaking process, as well as to ensure that reviews by recognized experts are incorporated into the review process of rulemakings and recovery plans developed in accordance with the requirements of the Act.”<sup>8</sup>

The 1994 Peer Review Policy outlines a basic process for the FWS and NOAA to follow when issuing rulemakings and recovery plans developed in accordance with the ESA. For listing decisions, the policy requires the FWS to “solicit the expert opinions of three appropriate and independent specialists” and to “[s]ummarize in the final decision document . . . the opinions of all independent peer reviewers . . . and include all such reports, opinions, and other data in the administrative record.”<sup>9</sup> For recovery plans, the FWS must “utilize the expertise of and actively solicit independent peer review to obtain all available scientific and commercial information from appropriate local, State and federal agencies . . . and any other party that may possess pertinent information,” “document and use . . . independent peer review to review pertinent scientific data,” and “summarize in the final recovery plan the opinions of all independent peer reviewers.”<sup>10</sup>

The 1994 Peer Review Policy does not define what constitutes “appropriate and independent” in the context of suitable peer reviewers. However, it states that peer reviewers “should be selected from the academic and scientific community, Tribal and other Native American groups, Federal and State agencies, and the private sector” and have “demonstrated expertise and specialized knowledge related to the scientific area under consideration.”<sup>11</sup>

### ***The Information Quality Act and Guidelines on Implementation***

The FWS’ ESA listing decisions must also conform to the Information Quality Act, passed by Congress, which directed the White House Office of Management and Budget

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<sup>7</sup> Donald C. Baur, *The Endangered Species Act: Law, Policy, and Perspectives*, at 75 (2002).

<sup>8</sup> 59 Fed. Reg. 34270 (July 1, 1994).

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

("OMB") and federal agencies to "issue guidelines . . . ensuring and maximizing the quality, objectivity, utility and integrity of information . . . disseminated by the agency."<sup>12</sup> In response, OMB issued final guidelines on February 22, 2002 for "Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Dissemination by Federal Agencies" ("2002 OMB Final Guidelines").<sup>13</sup>

The 2002 OMB Final Guidelines advised that "[a]gencies shall treat information quality as integral to every step of an agency's development of information, including creation, collection, maintenance, and dissemination."<sup>14</sup> Information is defined as "any communication or representation of knowledge such as facts or data, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual forms."<sup>15</sup> The 2002 OMB Final Guidelines define dissemination as "agency initiated or sponsored distribution of information to the public," but "does not include distribution limited to government employees or agency contractors or grantees; intra- or inter-agency use of sharing of government information; and responses to requests for agency records under the Freedom of Information Act, the Privacy Act, the Federal Advisory Committee Act or other similar law."<sup>16</sup>

Information disseminated by a federal agency must be of a basic standard of quality that is appropriate. Quality, the guidelines state, "is an encompassing term comprising utility, objectivity, and integrity."<sup>17</sup> The term "utility" "refers to the usefulness of the information to its intended users, including the public" while "integrity" is defined as the security of the information, and whether it was protected from unauthorized access or revision.<sup>18</sup> For "objectivity," the 2002 OMB Final Guidelines requires the information to be "presented in an accurate, clear, and unbiased manner" as well as generated and developed in an "accurate, reliable, and unbiased" manner.<sup>19</sup>

"If agency-sponsored peer review is employed to help satisfy the objectivity standard," the 2002 OMB Final Guidelines continue, "the review process employed shall meet the general criteria for competent and credible peer review . . . namely, 'that (a) peer reviewers be selected primarily on the basis of necessary technical expertise, (b) peer reviewers be expected to disclose to agencies prior technical/policy positions they may have taken on the issues at hand, (c) peer reviewers be expected to disclose to agencies their sources of personal and institutional funding . . . , and (d) peer reviews be conducted in an open and rigorous manner."<sup>20</sup>

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<sup>12</sup> Consolidated Appropriations Act, 2001, Pub. L. No. 106-554, 114 Stat. 2763A, at 2763A-154.

<sup>13</sup> 67 Fed. Reg. 8452 (Feb. 22, 2002).

<sup>14</sup> *Id.* at 8459.

<sup>15</sup> *Id.* at 8460.

<sup>16</sup> *Id.*

<sup>17</sup> *Id.* at 8459.

<sup>18</sup> *Id.* at 8459, 8460.

<sup>19</sup> *Id.* at 8459.

<sup>20</sup> *Id.* at 8459-8460.

Furthermore, for “influential” information, an agency “shall include a degree of transparency about data and methods to facilitate the reproducibility of such information by qualified third parties.”<sup>21</sup> The 2002 OMB Final Guidelines define “influential” as “scientific, financial, or statistical information . . . that the agency can reasonably determine that dissemination of the information will have or does have a clear and substantial impact on important public policies or important private sector decisions.”<sup>22</sup> However, each agency was “authorized to define influential in ways appropriate for it given the nature and multiplicity of issues for which the agency is responsible.”<sup>23</sup>

The Department issued information quality guidelines that mimicked the definitions of the 2002 OMB Final Guidelines. The Department’s Information Quality Guidelines provided context as to how the Department addresses challenges to the quality of disseminated information, and how the Department will “ensure that information disseminated will be developed from reliable methods and data sources and will otherwise ensure information quality at each stage of information development.”<sup>24</sup> The Department’s guidelines did not provide further elaboration upon how its offices and bureaus would define influential scientific information.<sup>25</sup>

### ***OMB Defines Government-Wide Peer Review Standards***

In December 2004, OMB issued additional guidance, “Final Information Quality Bulletin for Peer Review” (“OMB Bulletin”), aimed at “enhancing the practice of peer review of government science documents.”<sup>26</sup> In general, and to the extent permitted by law, the OMB Bulletin established government-wide standards concerning when peer review is required and what types of peer review processes are appropriate.<sup>27</sup>

The OMB Bulletin advised agencies to “conduct a peer review on all influential scientific information that the agency intends to disseminate.”<sup>28</sup> The OMB Bulletin maintains the same definition for influential scientific information that was provided in the 2002 OMB Final Guidelines.<sup>29</sup> However, the OMB Bulletin established a new level of scientific information that receives stricter scrutiny than influential scientific information – highly influential scientific assessments. Highly influential scientific assessments are those that “the agency or the [OMB Office of Information and Regulatory Affairs] Administrator

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<sup>21</sup> *Id.* at 8460.

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> U.S. Department of the Interior, *Information Quality Guidelines Pursuant to Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001*, at 1 (2002) available at <http://www.doi.gov/archive/ocio/guidelines/515Guides.pdf>.

<sup>25</sup> *Id.* at 10.

<sup>26</sup> U.S. Office of Management and Budget, *Final Information Quality Bulletin for Peer Review*, at 1 (2004) (hereinafter *OMB Bulletin*) available at <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/memoranda/fy2005/m05-03.pdf>.

<sup>27</sup> *Id.* at 7.

<sup>28</sup> *Id.* at 37.

<sup>29</sup> *See id.* at 11.



determines . . . could have a potential impact of more than \$500 million in any one year on either the public or private sector or that . . . is novel, controversial, or precedent-setting, or has significant interagency interest.”<sup>30</sup>

For peer reviews of influential scientific information, the OMB Bulletin instructs agencies to consider three factors when identifying peer reviewers: (1) expertise and balance, (2) conflicts, and (3) independence.<sup>31</sup> Consideration of expertise and balance requires peer reviewers to be selected “based on expertise, experience and skills, including specialists from multiple disciplines, as necessary.”<sup>32</sup>

According to the OMB Bulletin,<sup>33</sup> agencies should ensure that all federal employees selected as reviewers comply with applicable federal ethics requirements, and that all non-federal employees selected as reviewers be evaluated for potential conflicts based on criteria from the National Academy of Sciences’ (“NAS”) “Policy and Procedures on Committee Composition and Balance and the Conflicts of Interest for Committees Used in the Development of Reports” (“NAS Policy”).<sup>34</sup>

The NAS Policy states “that the work of committees that are used . . . in the development of reports not be compromised by issues of bias and lack of objectivity.”<sup>35</sup> These issues emerge due to “views stated or positions taken that are largely intellectually motivated or that arise from the close identification or association of an individual with a particular point of view or the positions or perspectives of a particular group.”<sup>36</sup> To filter out bias and lack of objectivity, the NAS Policy requires potential panel members to submit background information, including organizational affiliations, government-funded research support, and public statements or positions said member has had.<sup>37</sup>

The final factor under the OMB Bulletin, concerning peer reviewer independence, holds that “[p]eer reviewers shall not have participated in the development of the work product.”<sup>38</sup> When an agency subjects a highly influential scientific assessment to peer review, the agency has the additional requirements of avoiding repeated use of the same reviewer in multiple assessments, and barring participation of scientists employed by the sponsoring agency.<sup>39</sup>

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<sup>30</sup> *Id.* at 23.

<sup>31</sup> *Id.* at 37-38.

<sup>32</sup> *Id.* at 37.

<sup>33</sup> *Id.* at 37-38.

<sup>34</sup> U.S. National Academy of Sciences, *Policy on Committee Composition and Balance and Conflicts of Interest for Committees used in the Development of Reports* (2003) available at [http://www.nationalacademies.org/coi/bi-coi\\_form-0.pdf](http://www.nationalacademies.org/coi/bi-coi_form-0.pdf).

<sup>35</sup> *Id.* at 3.

<sup>36</sup> *Id.*

<sup>37</sup> See e.g., The National Academies, *Background Information and Confidential Conflict of Interest Disclosure: For Studies Related to Government Regulation*, available at [http://www.nationalacademies.org/coi/bi-coi\\_form-1.pdf](http://www.nationalacademies.org/coi/bi-coi_form-1.pdf).

<sup>38</sup> *OMB Bulletin*, supra note 26, at 38.

<sup>39</sup> *Id.* at 39-40.

Finally, the OMB Bulletin requires each agency to “post on its website, and update at least every six months, an agenda of peer review plans.”<sup>40</sup> These peer review plans are intended to inform the public on the peer review process, including information related to the subject and purpose of the peer review, whether it is a review of influential or highly influential information, the time frame of the peer review, how the agency will select peer reviewers and conduct the peer review, and the extent to which the public will be allowed to participate.<sup>41</sup>

Under the OMB Bulletin, all federal agencies are required to implement peer review policies to ensure that the quality of published information meets the standards of the scientific and technical community. Peer review, as envisioned by the OMB Bulletin, should be “characterized by both scientific integrity and process integrity.”<sup>42</sup> As such, a peer review panel should be defined by expertise, independence and balance, as well as transparency, openness and the avoidance of real or perceived conflicts of interest.

Accordingly, scientific agencies are expected to have approved peer review policies that seek to eliminate impartiality and conflicts of interest in the peer review process. For instance, NOAA requests its peer reviewers to submit a *curriculum vitae* as well as sign and fill out a “Confidential Conflict of Interest Disclosure” form.<sup>43</sup> Similarly, the Environmental Protection Agency (“EPA”) affirms that when selecting peer reviewers, the EPA and its peer review contractors should ensure “every effort to use peer reviewers who do not have any conflict of interest or an appearance of a lack of impartiality, and who are completely independent.”<sup>44</sup>

### ***The FWS’ Implementation of the Information Quality Act***

The FWS issued “Information Quality Guidelines and Peer Review” (“FWS IQ Guidelines”) in December 2006, with the most recent revision occurring in June 2012. The FWS IQ Guidelines outline how the FWS reviews, substantiates, and corrects the quality of information it disseminates to the public.<sup>45</sup> The document further provides how the FWS proceeds with independent peer review for information that is considered influential or highly influential.<sup>46</sup>

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<sup>40</sup> *Id.* at 41.

<sup>41</sup> *See id.* at 42.

<sup>42</sup> *OMB Bulletin*, *supra* note 26, at 13.

<sup>43</sup> *See e.g.*, NOAA Fishery Biologist Jason Rueter, Charge for the Peer Review of the Nassau Grouper Biological Assessment (2013), *available at* [http://www.cio.noaa.gov/services\\_programs/prplans/pdfs/ID250\\_Charge\\_Nassau\\_Grouper.pdf](http://www.cio.noaa.gov/services_programs/prplans/pdfs/ID250_Charge_Nassau_Grouper.pdf).

<sup>44</sup> EPA, Peer Review Handbook 3rd Edition, at 60 (2006), *available at* [http://www.epa.gov/peerreview/pdfs/peer\\_review\\_handbook\\_2012.pdf](http://www.epa.gov/peerreview/pdfs/peer_review_handbook_2012.pdf).

<sup>45</sup> U.S. Fish and Wildlife Service, *Information Quality Guidelines and Peer Review*, at 1 (2012) (*hereinafter FWS IQ Guidelines*), *available at* [http://www.fws.gov/informationquality/topics/InformationQualityGuidelinesrevised6\\_6\\_12.pdf](http://www.fws.gov/informationquality/topics/InformationQualityGuidelinesrevised6_6_12.pdf).

<sup>46</sup> *Id.*

The FWS IQ Guidelines defines influential information to be that which “will have or does have a clear and substantial impact on important public policy or private sector decisions, and thus, a decision or action to be taken by the Director” of the FWS.<sup>47</sup> “As a general rule,” the document notes, “FWS considers an impact clear and substantial when a specific piece of information or body of information is a principal basis for a FWS position.”<sup>48</sup>

The FWS IQ Guidelines set forth a structure for peer review for influential information consistent with the one envisioned in the OMB Bulletin.<sup>49</sup> The FWS IQ Guidelines advise that staff organizing such a peer review should work to identify and select “the best, most qualified reviewers with expertise in the subject areas where the review will be focused,” which entails developing “criteria for selecting reviewers and to avoid appearance of conflict of interest” consistent with the NAS Policy.<sup>50</sup>

Continuing with the theme of independence and transparency in the peer review of influential scientific information, the FWS IQ Guidelines explicitly provide that the FWS “will not conduct anonymous peer reviews of influential information.”<sup>51</sup> Indeed, it is specified that “[r]eviewers of influential information will be advised that their independent reviews, including their names and affiliations, and how the FWS responded to their comments will (1) be included in the official record for this review, and (2) once all the reviews are completed, will be available to the public.”<sup>52</sup>

Finally, the IQ Guidelines reinterpreted the 1994 Peer Review Policy, requiring the FWS to request and receive “at least 3 expert opinions regarding scientific and commercial information and underlying scientific assumptions related to species listings and preparation of species recovery plans.”<sup>53</sup>

### ***Peer Review for ESA Decisions Lacks Transparency, Consistency, and Objectivity***

Committee Majority oversight staff examined how the FWS conducts peer review in the course of it issuing specific ESA listing decisions under the 1994 Peer Review Policy, the FWS IQ Guidelines, and other policies. Although these policy documents establish when peer review is necessary and how the FWS is expected to conduct a peer review, the Committee staff have identified a lack of consistency and transparency across FWS Regional offices in how peer review is in fact conducted.

It appears, based on the review performed by Committee Majority oversight staff, that all ESA listing decisions issued by the FWS since July 2013 underwent a form of

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<sup>47</sup> *Id.* at 5.

<sup>48</sup> *Id.*

<sup>49</sup> *Id.* at 13.

<sup>50</sup> *Id.* at 11-12.

<sup>51</sup> *Id.* at 15.

<sup>52</sup> *Id.*

<sup>53</sup> *Id.* at 13.

external peer review that was managed by the relevant FWS Regional staff. In each of these situations, the Regional staff had the lead in soliciting three or more scientists from academia, other federal or state agencies, or private natural resource consulting firms to serve as peer reviewers. It is unclear what kind of screening the Regional offices employed to ensure that the peer reviewers are appropriate and independent, in accordance with the 1994 Peer Review Policy and other FWS policies.

The FWS IQ Guidelines discourage seeking peer review of the proposed listing decision “concurrent with the public comment period,” which “tends to limit the opportunity for early recognition of the need for corrective measures.”<sup>54</sup> Contrary to the guidelines, the FWS generally recruited scientists to review a proposed listing decision as part of the public comment process for the proposed rulemaking. In many cases the peer reviewers were provided written charge questions on the specific aspects on which comment was sought, e.g., the scientific justification for the proposal or summary of existing literature, along with an admonition not to comment on the listing decision itself. However, copies of the charge questions or letters sent to peer reviewers requesting comment are not consistently posted on the FWS’ website or included in the online public docket for the listing decision.

The Committee’s Majority oversight staff has also documented instances where FWS staff has engaged in additional communications with the scientists beyond the charge questions or has allowed the peer reviewers to submit comments beyond the deadline for public comments. For instance, the FWS’ solicitation letters to the peer reviewers of the White Bluffs bladderpod’s proposed rule were sent on July 2, 2012 and requested responses by July 16, 2012 – the day the public comment period closed for the proposed rule. However, the FWS’ Regional staff followed up with peer reviewers whose comments had not yet been received and allowed them to submit comments more than one month after the public deadline had closed.

An alternative method the FWS uses to conduct peer review involves contracting with external, private, specialized firms to recruit peer reviewers and manage the review process. Three firms – Environmental Management and Planning Solutions, Inc., AMEC, and Atkins – are currently under contract with the FWS to “support the objective of scientific integrity and peer review.”<sup>55</sup>

According to the underlying work statement for contracts with these firms, FWS offices can use these contractors for a range of endangered species activities, such as the preparation of an Environmental Impact Statement or assisting the FWS in preparing rulemaking determinations of listing status, and scientific peer review of key documents by

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<sup>54</sup> *Id.* at 12.

<sup>55</sup> U.S. Fish & Wildlife Service, *Contractors Available to Conduct Peer Review and Other Science Support*, <http://www.fws.gov/science/supportcontractorsavailable.html>.

use of an expert panel, among other services, as products that the these contractors can provide.<sup>56</sup>

Under this method, a regional contracting officer prepares a scope of work that includes specific instructions and questions a proposed peer review must address, and submits a request for proposals to the three contractors. Those contractors then have seven days to return a proposal. The proposal will include a timeline, the cost, and, in some instances, proposed peer reviewers and their resumes.<sup>57</sup> The contractors' proposals must comply with the NAS policy and OMB Bulletin and ensure that "any appearance of conflict of interest" is avoided.<sup>58</sup> Once a proposal and its accompanying peer reviewers have been selected by the FWS, the contractor will conduct a peer review. During and after the peer review, the FWS may have an opportunity to request further input from the peer reviewers. For example, the Performance Work Statement notes "key USFWS personnel may observe the entire scientific review panel process and any other meetings (as necessary), or operations/activities detailed in the task order."<sup>59</sup> Additionally, it appears that the FWS is allowed to comment on and review the draft peer review comments.<sup>60</sup>

As described in one peer review document, this external process is rarer and used to address "long-term conservation implications."<sup>61</sup> Indeed, the review by Committee Majority oversight staff revealed the use of the external contractors to be limited to down-listing and delisting decisions.

The ESA listing decisions reviewed by Committee Majority oversight staff are considered to be "influential" information under the Information Quality Act and OMB Bulletin and are expected to have corresponding peer review plans that are made available to the public. Yet, the FWS' Regional offices handling these decisions and peer reviews are inconsistent in how they develop and disseminate information about their use of peer review, as described through peer review plans for individual listing decisions and Federal Register notices. For example, not all FWS Regional offices have publicly posted peer review plans on their websites for each listing decision, and the specificity about the peer review process for each listing decision differs across the plans themselves.

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<sup>56</sup> U.S. Fish & Wildlife Service, *Performance Work Statement: Scientific, Technical and Advisory Services*, at 1 - 4, Nov. 17, 2011, available at [http://www.fws.gov/science/pdf/IDIQ\\_Performance\\_Work\\_Statement\\_17Nov2011.pdf](http://www.fws.gov/science/pdf/IDIQ_Performance_Work_Statement_17Nov2011.pdf).

<sup>57</sup> *Id.* at 5.

<sup>58</sup> *Id.*

<sup>59</sup> *Id.* at 6.

<sup>60</sup> See e.g., Atkins, *Peer Review of the Scientific Findings in the Proposed Rule to Delist the Valley Elderberry Longhorn Beetle*, at 3 (2013), available at [http://www.fws.gov/cno/science/Review%20PDFs/Atkins\\_2013\\_VELB%20Peer%20Review%20Doc%20of%20Proposed%20Rule%20to%20Delist.pdf](http://www.fws.gov/cno/science/Review%20PDFs/Atkins_2013_VELB%20Peer%20Review%20Doc%20of%20Proposed%20Rule%20to%20Delist.pdf).

<sup>61</sup> *Id.* at 1.

FWS Region 4, for instance, notes in its peer review plans that “peer review comments will be public documents”<sup>62</sup> and publishes the comments directly on its information quality website.<sup>63</sup> Conversely, most other regions only publish the “peer review plan,” and make no reference to making the peer review comments publicly available. FWS Region 6 did not consistently post its peer review plans to its publicly accessible website. Some Regions’ peer review plans identified the specific scientists who had been recruited to serve as peer reviewers, whereas others did not, simply repeating the language from the 1994 Peer Review Policy and noting that the FWS would seek comments from at least three appropriate and independent individuals.

The 1994 Peer Review Policy requires the FWS to “[s]ummarize in the final decision document . . . the opinions of all independent peer reviewers received on the species under consideration and include all such reports, opinions, and other data in the administrative record.”<sup>64</sup> The FWS IQ Guidelines goes further, stating: “Reviewers of influential information will be advised that their independent reviews, including their names and affiliations, and how the FWS responded to their comments will (1) be included in the official record for this review, and (2) once all the reviews are completed, will be available to the public.”<sup>65</sup>

However, in practice, there is a lack of transparency in who served as peer reviewers for many of the FWS’ listing determinations and what specific comments they provided.<sup>66</sup> This lack of transparency was confirmed by the Committee Majority staff’s review of Federal Register notices for the proposed and final ESA listing decisions, as well as the public comments posted online on the Regulations.gov website. The FWS does not consistently identify who served as peer reviewers or distinguish which of the public comments received were submitted by peer reviewers, as opposed to members of the general public.

The FWS has adopted national policies for peer review to be used throughout its eight regions, including the 1994 Peer Review Policy and the FWS IQ Guidelines. The FWS’ national policies require that peer reviewers be appropriate and independent and have “demonstrated expertise and specialized knowledge related to the scientific area under consideration.”<sup>67</sup> The IQ Guidelines also sought the development of criteria in accordance with the NAS’s policy on conflicts of interest.<sup>68</sup>

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<sup>62</sup> See e.g. U.S. Fish & Wildlife Service Region 4, *Proposed rule to list Trichomanes punctatum ssp. Floridaenum (Florida bristle fern) as endangered*, available at [http://www.fws.gov/southeast/informationquality/pdf/20141001\\_FBF\\_pL\\_Peer-Review-Plan.pdf](http://www.fws.gov/southeast/informationquality/pdf/20141001_FBF_pL_Peer-Review-Plan.pdf).

<sup>63</sup> Available at <http://www.fws.gov/southeast/informationquality/>.

<sup>64</sup> 59 Fed. Reg. 34270 (July 1, 1994)

<sup>65</sup> *FWS IQ Guidelines*, *supra* note 45, at 15.

<sup>66</sup> While a few peer reviews can be found searching through the public comments in a rulemaking’s docket on regulations.gov, rarely are all peer reviews identifiable through this process.

<sup>67</sup> 59 Fed. Reg. 34270 (July 1, 1994).

<sup>68</sup> *FWS IQ Guidelines*, *supra* note 45, at 12.



However, each FWS Region approaches peer review for ESA listing decisions in an individualized manner, seeking different qualities from peer reviewers and varying in the amount of peer review information made publicly available. There is no nationwide consistency in how each Regional office approaches the selection criteria for peer reviewers. This has led to the FWS' Regional offices developing their own seemingly subjective criteria. For



instance, FWS Region 2 selects peer reviewers based on five defined factors: (1) expertise, (2) independence, (3) objectivity, (4) advocacy, and (5) conflicts of interest;<sup>69</sup> whereas Region 4 examines four factors: (1) expertise, (2) balance, (3) independence, and (4) avoidance of conflict of interest.<sup>70</sup> On the other hand, Region 8 only identifies peer reviewers by examining a potential reviewer's "expertise with the subject matter and lack of any conflicts of interest as described in the Office of Management Peer Review Guidelines."<sup>71</sup>

At a September 10, 2014 Committee oversight hearing, FWS Director Dan Ashe testified that the FWS does not "look at [peer reviewers'] affiliations"<sup>72</sup> in screening out potential conflicts. It does not appear that the FWS regularly requires these external peer reviewers to submit financial disclosure forms or other information that would identify potential conflicts, although in some situations individual scientists have submitted copies of their *curriculum vitae* as part of their comments.

Indeed, as discussed in more detail in the section on "Species Summaries," the FWS regularly recruits scientists whom some identify as the leading experts on the species

<sup>69</sup> See e.g. U.S. Fish & Wildlife Service Region 2, *Peer Review Plan: Listing Decision for the Warton Cave meshweaver*, available at [http://www.fws.gov/southwest/es/Documents/R2ES/PeerReview/Warton\\_Cave\\_meshweaver\\_PeerReview\\_Plan\\_4Mar2014.pdf](http://www.fws.gov/southwest/es/Documents/R2ES/PeerReview/Warton_Cave_meshweaver_PeerReview_Plan_4Mar2014.pdf).

<sup>70</sup> See e.g. U.S. Fish & Wildlife Service Region 4, *Proposed rule to list Trichomanes punctatum ssp. Floridaanum (Florida bristle fern) as endangered*, available at [http://www.fws.gov/southeast/informationquality/pdf/20141001\\_FBF\\_pL\\_Peer-Review-Plan.pdf](http://www.fws.gov/southeast/informationquality/pdf/20141001_FBF_pL_Peer-Review-Plan.pdf).

<sup>71</sup> See e.g. U.S. Fish & Wildlife Service Region 8, *3 Sierra amphibians pL and pCH*, available at <http://www.fws.gov/cno/Science/Review%20PDFs/3%20Sierra%20amphibians%20Proposed%20Listing%20and%20Preoposed%20Critical%20Habitat%20Peer%20Review%20Plan.pdf>.

<sup>72</sup> "The Status of the Fish and Wildlife Service's Responses to Committee Subpoenas and the Continued Lack of Transparency about Its Implementation and Enforcement of American Wildlife Laws, and Oversight of the Department of the Interior's Solicitor's Office" Oversight Hearing Before the H. Comm. On Natural Resources, 113th Cong. (2014) (testimony of Director Daniel Ashe, U.S. Fish & Wildlife Service).

under consideration, and whose studies on the population surveys, taxonomic, and genetic work form the basis of the FWS decision they are peer reviewing. In other words, the scientists are being asked to comment on the adequacy and relevance of their own work. In other instances, scientists serving as peer reviewers have previously received grant money from the FWS or other federal agencies to study the species under consideration or have taken biased policy positions, either in their own statements or through their affiliations with advocacy groups in favor of listing the species.

In sum, the lack of consistency in how peer reviewers are vetted and the lack of transparency about who is serving as peer reviewers and the comments they are providing make it difficult to ensure that the peer reviewers are in fact “appropriate and independent” and that ESA listing decisions are being made on the best available scientific and commercial data as required under the law.



## SPECIES SUMMARIES

Committee Majority oversight staff reviewed approximately 35 ESA listing decisions FWS has made since July 2013, as well as relevant Federal Register notices and public comments. Below are summaries of 13 recent listing decisions that represent a mix of plant and animal species from across the FWS Regional offices that exemplify the lack of consistency, independence, and transparency surrounding the ESA peer review process.

Each of these species was subject to the arbitrary deadlines set by the 2011 multi-species, closed-door settlement between the FWS and the Center for Biological Diversity and WildEarth Guardians. In these examples, Committee staff identified instances where the FWS had recruited and utilized peer reviewers who were involved in developing the underlying science that the FWS used to justify the listing decision, received financial assistance and grants from the FWS or other federal agencies, and/or who had previously taken positions in support of listing the species.

Contrary to the guidance of the OMB Bulletin, the FWS IQ Guidelines, and the 1994 Peer Review Policy, the identities of the peer reviewers are often kept private, and their affiliations, substance of their comments, and qualifications are not readily accessible for review by the public.

### ***White Bluffs Bladderpod***

The White Bluffs bladderpod is a member of the mustard family found in the Hanford Reach area of Washington state along the banks of the Columbia River.<sup>73</sup> In 1994, as part of a survey of the Hanford area, the bladderpod was identified as a “rediscovered” unique species,<sup>74</sup> and was recognized as a candidate for ESA listing by the FWS in 1999.<sup>75</sup> The FWS issued a proposed rule for listing the bladderpod on May 15, 2012, and subsequently issued a peer review plan.<sup>76</sup>

In the peer review plan, the FWS stated it would identify potential peer reviewers “from specialists in the relevant areas of expertise” and that the FWS would “strive to strike a balance between reviewers on one side of the decision with those on the other side,” and would “avoid selecting peer reviewers who are likely to experience personal gain or loss as a result of the FWS’ decision.”<sup>77</sup> The plan also provided that FWS employees would not be selected for the peer review.<sup>78</sup>

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<sup>73</sup> 78 Fed. Reg. 23984 (Apr. 23, 2013).

<sup>74</sup> 77 Fed. Reg. 28704 at 28715 (May 15, 2012).

<sup>75</sup> 64 Fed. Reg. 57534 at 57542 (Oct. 25, 1999).

<sup>76</sup> See U.S. Fish & Wildlife Service, *Peer Review of Scientific Information: Proposed rule to List and Designate Critical for Eriogonum codium (Umtanum desert buckwheat) and Physaria douglasii ssp. tuplashensis (White Bluffs bladderpod)*, <http://www.fws.gov/pacific/informationquality/2012.03.Buckwheat.Bladderpod.html>.

<sup>77</sup> *Id.*

<sup>78</sup> *Id.*

The FWS solicited five peer reviewers, four of whom agreed to provide comments and who are identified on the FWS Region 1's website as part of the peer review plan for the bladderpod.<sup>79</sup> Although the FWS identified who the peer reviewers were, the copies of the comments the reviewers made were *not* publicly available on Regulations.gov. Rather, the FWS provides a link to a *summary* of the peer reviewers' comments and the FWS' responses.<sup>80</sup>



**White Bluffs Bladderpod**  
Source: FWS

Of the four peer reviewers who provided comments, three had invested significant time to the study of the White Bluffs bladderpod.

One peer reviewer, Joseph Arnett, is an employee with the Washington Department of Natural Resources. According to documents reviewed by the Committee Majority oversight staff, the FWS had contact with Mr. Arnett during the drafting of the proposed rule, and he was asked to provide comments on the draft of the proposed rule nine months before its publication.<sup>81</sup>

Another person FWS asked to serve as a peer reviewer, Dr. Kathryn Beck, identified herself in her comments as “one of the original discoverers of these amazing plants” and expressed her desire to “weigh in if possible.”<sup>82</sup> She, along with Dr. Peter Dunwiddie, the third peer reviewer, co-authored an unpublished study in 2006 entitled “Recognition of *P. Tuplashensis*,” which was used by the FWS in the final rule to justify the taxonomic uniqueness of the bladderpod.<sup>83</sup>

Although the FWS initially finalized the listing in April 2013, the FWS delayed the implementation of the rule and reopened the comment period only after being threatened by a lawsuit for the FWS' failing to provide adequate notice of the final rule to the affected local county and private landowners. One of the comments submitted during the reopened comment period included the first DNA study ever conducted on the White Bluffs

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<sup>79</sup> See *id.*

<sup>80</sup> Available at

<http://www.fws.gov/pacific/informationquality/docs/Buckwheat%20and%20Bladderpod%20peer%20review%20comments.pdf>

<sup>81</sup> August 2, 2011 email from Tim McCracken to Jodi Bush, copy to Ted Thomas, Jessica Gonzales, Joseph Arnett, Carrie Cordova, Heidi Newsome, subject: Re: Buckwheat package (“Hi all – here is a slightly drafty version of the proposed rule for buckwheat and bladder-pod without critical habitat. Please review for whatever part(s) you know about and comment at will. I’ll accept comments, edits, additions, or corrections in any form.”).

<sup>82</sup> July 23, 2012 email from Kathryn Beck to Tim McCracken, subject: “listing proposals.”

<sup>83</sup> 78 Fed. Reg. 23984 at 23987 (Apr. 23, 2013). See also U.S. Fish & Wildlife Service, *Literature Cited for Final Rule: FWS-R1-ES-2012-0017*, available at <http://www.regulations.gov/#!documentDetail;D=FWS-R1-ES-2012-0017-0007>.

bladderpod. The study concluded the bladderpod was not a unique subspecies and that the DNA was a 100 percent match with several other samples of bladderpods found in two other states. Upon receipt of the DNA study, the FWS initiated another peer review process of the DNA study. Ken Berg, then the manager at the FWS Washington state office for Region 1, told Committee staff in an interview that the DNA study was “dead on arrival” and a “red herring,” and therefore he “needed high powered people to say what was obvious.”<sup>84</sup>

Soon after, the FWS selected five individuals for the peer review of the DNA study. One of these peer reviewers, Dr. Steven O’Kane, was a named co-plaintiff in a 2005 lawsuit to list multiple species covered by the FWS’ 2005 Candidate Notice of Review, which included the White Bluffs bladderpod, that was later included in the multi-district litigation settlement.<sup>85</sup> Dr. O’Kane also co-authored one of the original reports classifying the bladderpod as a unique subspecies. When asked about Dr. O’Kane’s involvement, Mr. Berg of the FWS told Committee staff that he was unaware of Dr. O’Kane’s role in the underlying litigation but indicated that would not automatically preclude his involvement.<sup>86</sup>

### ***Oregon Spotted Frog***

The FWS issued a final rule to list the Oregon spotted frog as threatened on August 29, 2014. The spotted frog was classified as a unique species in 1996 and can be found in areas stretching from southern British Columbia to the Klamath Basin in Oregon.<sup>87</sup>

Prior to issuing the proposed listing decision, FWS Region 1 published a peer review plan that stated three to 10 reviewers would be solicited for the review.<sup>88</sup> The FWS wrote that it would select reviewers “from specialists in the relevant areas of expertise,” and that it would “strive to strike a balance between reviewers on one side of the decision with those on the other side and will avoid selecting peer reviewers who are likely to experience personal gain or loss as a result of the FWS’ decision.” The peer review plan specifically noted that FWS employees would not be used for the peer review.

In the end, the FWS solicited nine peer reviewers, of whom eight replied.<sup>89</sup> Copies of the charge letters sent to the peer reviewers have not been made publicly available. All

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<sup>84</sup> July 1, 2014 Interview with Ken Berg, Committee Majority oversight staff notes.

<sup>85</sup> See Third Amended Complaint at 4 and 19, Center for Biological Diversity, et al., v. Norton, No. 1:04-CV-02026 (D.D.C. Nov. 7, 2005) (identifying Dr. Steven O’Kane as a plaintiff and noting that “defendants are . . . in violation of their mandatory duty to ‘promptly publish’ listing proposals for . . . other species for which the Service has unlawfully invoked the warranted but precluded classification in its May 11, 2005 CNOR”). See also Stipulation of Dismissal and Order, Center for Biological Diversity v. Salazar, No. 1:04-CV-02026 (D.D.C. Sept. 19, 2011) (encouraging the Center for Biological Diversity to “secure the agreement of those Plaintiffs in this case who were not parties to the [mega-settlement]” including Steven O’Kane, to dismiss their claims).

<sup>86</sup> July 1, 2014 Interview with Ken Berg, Committee Majority oversight staff notes.

<sup>87</sup> 79 Fed. Reg. 51658 at 51659 (Aug. 29, 2014).

<sup>88</sup> U.S. Fish & Wildlife Service: Region 1, *Peer Review of Scientific Information: Proposed Rule to List Oregon Spotted Frog as Threatened and Proposed Rule to Designate Critical Habitat* (2013), available at <http://www.fws.gov/pacific/informationquality/docs/OSF%20Final%20Peer%20Review%20Plan.pdf>.

<sup>89</sup> 79 Fed. Reg. at 51695.

eight peer reviewers are identifiable, as the FWS publicly posted each reviewer's comment to Regulations.gov.

One of the peer reviewers, Dr. Kelly McAllister, was at the time an employee with the Washington Department of Fish and Wildlife. The final rule cites her studies or the FWS staff personal communications with her 41 times. She has over 20 years of experience with the spotted frog. The petition to list the spotted frog that was submitted by the Center for Biological Diversity cites personal communications with Dr. McAllister as justification for the distribution of the frog and potential threats to the frog.<sup>90</sup>



**Oregon Spotted Frog**  
Source: FWS

Another peer reviewer, Charlotte Corkran, a wildlife consultant with the Northwest Ecological Research Institute, acknowledged in her comments that her “experience with Oregon spotted frogs has spanned almost 25 years.”<sup>91</sup> In her peer review, she advocates for increased critical habitat in an area that she first “identified the species . . . in 1993.”<sup>92</sup> Two of the peer reviewers, Dr. Michael J. Adams and Dr. Deanna H. Olson, were supervisory research ecologists for the United States Geological Survey and the United States Forest Service, respectively. Dr. Adams’ studies were cited 10 times in the final rule. An Oregon Department of Fish and Wildlife conservation biologist, Simon Wray, also participated in the peer review. Personal communications he had with the FWS were cited once in the final rule.

Dr. Geoff Hammerson, an additional peer reviewer, is cited once in the final rule. However, he has served as a research zoologist for the Nature Conservancy and NatureServe for more than 25 years. At NatureServe, he has had extensive involvement in the development of the ranking methodology for the conservation status of species and is the coordinator for NatureServe’s conservation status assessments for fishes, amphibians, reptiles, birds, and mammals.<sup>93</sup> NatureServe is frequently used by litigious groups to justify petitioning for a species listing,<sup>94</sup> even though NatureServe’s legitimacy as a valid source has been questioned.<sup>95</sup>

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<sup>90</sup> Center for Biological Diversity, Candidate Petition Project: REPTILES & AMPHIBIANS, at 85, 90, available at <http://www.biologicaldiversity.org/species/amphibians/herps.pdf>.

<sup>91</sup> Charlotte Corkran, Peer Review of FWS-R1-ES-2013-0013, available at <http://www.regulations.gov/#!documentDetail;D=FWS-R1-ES-2013-0013-0086>.

<sup>92</sup> *Id.*

<sup>93</sup> U.S. Department of Agriculture, Hammerson Bios Doc, available at [http://www.fsa.usda.gov/Internet/FSA\\_File/hammerson\\_bios\\_0813.doc](http://www.fsa.usda.gov/Internet/FSA_File/hammerson_bios_0813.doc).

<sup>94</sup> See e.g., 76 Fed. Reg. 59835, at 59837 (Sept. 27, 2011).

<sup>95</sup> *Taxpayer-Funded Litigation: Benefitting Lawyers and Harming Species, Jobs and Schools: Oversight Hearing Before the H. Comm. On Natural Resources*, 112th Cong. (2012) (testimony of Kent Holsinger, Holsinger Law, LLC, at 26).



The final two peer reviewers, Dr. Blake Murden and Dr. Christine Bishop, have worked as members of the Washington Oregon Spotted Frog Working Group and the Canadian Oregon Spotted Frog Recovery Team, respectively. Christine Bishop was cited twice in the final rule for studies she co-authored concerning contaminated water's effects on amphibians.<sup>96</sup>

### ***Gierisch Mallow***

The Gierisch mallow is a perennial flowering plant with orange flowers found in the Arizona Strip – an area of land located in southern Utah and northern Arizona – in areas with gypsum mining. It was “named as a unique, distinct species in 2002,” by Dr. Duane Atwood, a former U.S. Bureau of Land Management employee, and is “closely related” to several other species found in the region.<sup>97</sup>

The FWS proposed to list the species on August 17, 2012, and issued a peer review plan. The peer review plan stated the FWS would solicit comments from “three or more independent peer reviewers.”<sup>98</sup> The peer reviewers would be selected based on their expertise in Gierisch mallow ecology, their independence from the FWS and absence of conflicts of interest, their lack of advocacy regarding the protection of the mallow under the ESA, and whether they could be viewed as objective.<sup>99</sup> According to the final rule, four potential reviewers were solicited for the peer review, and three responded.<sup>100</sup> The FWS has not made the charge letters that were sent to the peer reviewers publicly available.



***Gierisch Mallow***  
Source: FWS

On August 13, 2013, the FWS finalized an endangered listing for the mallow. The FWS remarked in the final rule designating critical habitat for the mallow that the “peer reviewers generally concurred with our methods and conclusions” in the final rule to designate critical habitat.<sup>101</sup> However, the FWS’ statement could not be verified by Committee Majority oversight staff’s review of the published comments on the mallow. Indeed, of the 23 public comments received by the FWS, only two comments could be clearly identified as peer reviews, and one of those was anonymous.<sup>102</sup>

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<sup>96</sup> 79 Fed. Reg. at 51688-51690.

<sup>97</sup> 78 Fed. Reg. 49149, at 49150 (Aug. 13, 2013).

<sup>98</sup> U.S. Fish & Wildlife Service: Region 2, *Peer Review Plan: Listing Decision for the Gierisch Mallow* (2012), available at [http://www.fws.gov/southwest/science/PDFs/Gierisch\\_Mallow\\_Peer\\_Review\\_Plan.pdf](http://www.fws.gov/southwest/science/PDFs/Gierisch_Mallow_Peer_Review_Plan.pdf).

<sup>99</sup> *Id.*

<sup>100</sup> 78 Fed. Reg. at 49152.

<sup>101</sup> 78 Fed. Reg. 49165, at 49166 (Aug. 13, 2013).

<sup>102</sup> See Anonymous Peer Review of FWS-R2-ES-2012-0049, Oct. 19, 2012, available at <http://www.regulations.gov/#!documentDetail;D=FWS-R2-ES-2012-0049-0022>.

The only clearly identifiable peer reviewer was Lee Hughes, a former ecologist with the U.S. Bureau of Land Management. Dr. Hughes' work was cited 20 times in the proposed rule, and 29 times in the final rule. Primarily, the FWS relied upon unpublished studies Dr. Hughes had conducted from 2005 to 2012, which surveyed the plants in the Arizona Strip,<sup>103</sup> to justify the range of the Gierisch mallow and to establish critical habitat boundaries.

In his peer review comments, Dr. Hughes critically concluded the rule was premature, stating that the "rule has been precipitated by a lawsuit and not a well thought out observation over a lot of years of the plant and man's operation in its habitat, which this kind of action requires."<sup>104</sup> He further noted that "man induced threats just have not materialized for the listed plant populations on the [Arizona] Strip" and that "a lot of misspent effort is put in to preventing imaginary threats, and the real threats are discovered later."<sup>105</sup> The FWS did not address Dr. Hughes' statements about the timeliness of the rule, or his concerns about the FWS' identified threats, in its final rule.

It is difficult to ascertain who the other peer reviewers were and what their specific comments were or how the FWS addressed them, because the FWS did not identify the peer reviewers in the final rule, and none of the other public comments posted on Regulations.gov were identified as coming from peer reviewers.

#### **4 Texas Salamanders**

On August 20, 2013, the FWS published a rule listing the Austin blind salamander and the Jollyville Plateau salamander as endangered and threatened, respectively.<sup>106</sup>

On February 24, 2014, the FWS listed the Georgetown salamander and the Salado salamander as threatened.<sup>107</sup> These four salamander species had been identified as candidate species in 2001 and 2002. On May 11, 2004, the Center for Biological Diversity submitted to FWS a petition to list 225 species, including the Georgetown salamander, the Salado salamander, and the Austin blind salamander. Save Our Springs



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**Salado Salamander**  
Source: FWS

<sup>103</sup> See U.S. Fish & Wildlife Service, Final Rule for Gierisch Mallow: Literature Cited, available at <http://www.regulations.gov/#!documentDetail;D=FWS-R2-ES-2012-0049-0030>.

<sup>104</sup> Lee Hughes, Peer Review of FWS-R2-ES-2012-0049, available at <http://www.regulations.gov/#!documentDetail;D=FWS-R2-ES-2012-0049-0008>.

<sup>105</sup> *Id.*

<sup>106</sup> 78 Fed. Reg. 51278 (Aug. 20, 2013).

<sup>107</sup> 79 Fed. Reg. 10236 (Feb. 24, 2014).

Alliance submitted a petition to list the Jollyville Plateau salamander on June 13, 2005. The proposed rule to list all four Texas salamanders as endangered was published on August 22, 2012.<sup>108</sup>

FWS initiated its peer review process for the listing decision in July 2012.<sup>109</sup> As part of this process, FWS first solicited peer reviews “of the portion of the listing decision that includes a discussion of the scientific information reviewed and our analysis (but not our conclusion regarding the status of the species or critical habitat boundaries).”<sup>110</sup> According to the peer review plan, FWS planned to send requests for peer reviews to three “independent scientific reviewers with expertise in invertebrate ecology, conservation biology, and/or desert spring ecology.”<sup>111</sup>

In the final rule, the FWS stated it had actually sought peer reviews from “22 knowledgeable individuals with scientific expertise concerning the hydrology, taxonomy, and ecology that is important to these salamander species.”<sup>112</sup> Thirteen of the individuals FWS contacted provided a response.<sup>113</sup> Several of the individuals were taxonomists whose focus was to evaluate the FWS’ proposal in light of an unpublished study questioning whether the salamanders were actually unique species.<sup>114</sup>

Because FWS received contradictory public comments and “found new information relative to the listing determination,” FWS solicited a second round of peer review.<sup>115</sup> During the second round, FWS contacted 20 peer reviewers who were asked to evaluate only two issues: (1) salamander demographics and (2) urban development and stream habitat.<sup>116</sup> Eight peer reviewers provided responses.<sup>117</sup>

While the 13 first round responses and eight second round responses were posted to the online docket for this rulemaking on Regulations.gov, the peer reviewers’ names and identifying information were redacted. The redactions undermine the public’s ability to hold FWS accountable for ensuring that the peer reviewers were independent. It also makes it impossible to discern whether the 20 peer reviewers FWS solicited for the second round represent a subset of the 22 peer reviewers solicited for the first round, and if so, why two of the original peer reviewers were later excluded.

It also appears that FWS explicitly asked the second round peer reviewers to focus on comments that disagreed with the FWS’ position. One anonymous second-round peer

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<sup>108</sup> 77 Fed. Reg. 50768 (Aug. 22, 2012).

<sup>109</sup> U.S. Fish and Wildlife Service, *Listing Decision for Four Central Texas Salamanders: Peer Review Plan*, (2012), available at [http://www.fws.gov/southwest/science/PDFs/4\\_TX\\_Salamanders\\_Peer\\_Review\\_Plan.pdf](http://www.fws.gov/southwest/science/PDFs/4_TX_Salamanders_Peer_Review_Plan.pdf).

<sup>110</sup> *Id.*

<sup>111</sup> *Id.*

<sup>112</sup> 79 Fed. Reg. 10236, at 10240.

<sup>113</sup> *Id.*

<sup>114</sup> *Id.*

<sup>115</sup> *Id.* In all, over 400 public comments are available in the online Docket Folder.

<sup>116</sup> *Id.*

<sup>117</sup> *Id.*

reviewer wrote: “As per your email, my review is focused on ‘significant public comments that disagree with the link we are making between watershed urbanization and salamander habitat degradation.’” It is unclear why the FWS would undergo a second round of peer review specifically focused on countering public comments that disagreed with FWS’ opinion.

In the final rule listing the species, FWS acknowledged that one reviewer believed the evidence supporting the uniqueness of one of the salamander species was “weak but suggestive” and admitted “that the understanding of the taxonomy of these salamander species can be strengthened by further research.”<sup>118</sup>

### ***New Mexico Jumping Mouse***

The FWS listed the New Mexico meadow jumping mouse as an endangered species on June 10, 2014.<sup>119</sup> The jumping mouse, which was made a candidate for listing under the ESA on December 6, 2007, is found in New Mexico, Arizona, and Colorado. The FWS received a petition to list the jumping mouse in 2008.

Prior to issuing the final listing decision, FWS solicited peer reviews from four individuals. According to the peer review plan, the peer reviewers were selected based on their relevant expertise (i.e., jumping mouse ecology), independence from the FWS, objectivity, affiliation with an advocacy position, and absence of conflicts of interest.<sup>120</sup> Out of the four individuals FWS contacted, three submitted peer reviews of the proposed rule.<sup>121</sup>



***New Mexico Jumping Mouse***  
Source: FWS (credit to Jennifer Frey)

FWS posted 26 public comments to the online docket for this listing, of which two are identifiable as peer review comments. These two peer reviewers – Dr. Jennifer Frey and Dr. Jason Malaney – also appeared numerous times in the literature cited for the proposed rule. In all, over 30 individual documents were attributed to Dr. Frey, while Dr. Frey and Dr. Malaney were also cited jointly as co-authors in several instances.

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<sup>118</sup> 79 Fed. Reg. 10236, at 10240-41.

<sup>119</sup> 79 Fed. Reg. 33119 (June 10, 2014).

<sup>120</sup> U.S. Fish & Wildlife Service, *Peer Review Plan: Listing Decision for the New Mexico meadow jumping mouse*, (2013) available at [https://www.fws.gov/southwest/es/Documents/R2ES/PeerReview/NM\\_meadow\\_jumping\\_mouse\\_Peer\\_Review\\_Plan.pdf](https://www.fws.gov/southwest/es/Documents/R2ES/PeerReview/NM_meadow_jumping_mouse_Peer_Review_Plan.pdf).

<sup>121</sup> 79 Fed. Reg. 33119, at 33122.



In addition to the small pool of peer reviewers, who also apparently conducted research together, the FWS' species assessment document upon which its listing decision was based expresses significant doubts as to the certainty of the data and acknowledged the limitations of the available information:

It is important to recognize that there are substantial areas of uncertainty associated with this assessment. The main areas of uncertainty include the amount of suitable habitat needed to support resilient populations and the number of redundant populations needed to provide for adequate redundancy and representation. There is also uncertainty in some of the natural history information such as the location of hibernation sites relative to riparian areas and population sizes of localities found since 2005. We base our assumptions in these areas on the best available information, which is admittedly limited in these areas of science.<sup>122</sup>

According to the *curriculum vitae* for Dr. Frey posted on the New Mexico State University website, Dr. Frey has received several grants and contracts from federal agencies to study the meadow jumping mouse, including \$10,412 from the Bureau of Land Management in 2013 and \$128,948 from the FWS and Bureau of Reclamation between 2011 and 2013.<sup>123</sup> Furthermore, she identifies her “extensive research on [the New Mexico meadows jumping mouse]” as the basis for the “recent elevat[ion]” of the species status to endangered in New Mexico, and its “potential candidacy listing on the ESA.”<sup>124</sup>

### ***Jemez Mountains Salamander***

The FWS listed the Jemez Mountains salamander as an endangered species on September 10, 2013.<sup>125</sup> The salamander, which is found in New Mexico, had been considered for listing under the ESA as early as 1982.<sup>126</sup> After receiving a petition to list the species in 1990, the FWS published a 90-day finding and announced the salamander had a “declining” status.<sup>127</sup> However, after signing a Memorandum of Agreement with the U.S. Forest Service and the New Mexico Department of Game and Fish to protect the species and its habitat, FWS removed the Jemez Mountains salamander from ESA consideration.<sup>128</sup> A later conservation agreement superseded this Memorandum of Agreement.<sup>129</sup>

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<sup>122</sup> U.S. Fish & Wildlife Service: Listing Review Team, *Species Status Assessment Report: New Mexico meadow jumping mouse*, at 6 (May 27, 2014), available at <http://www.regulations.gov/#!documentDetail;D=FWS-R2-ES-2013-0023-0031>.

<sup>123</sup> Jennifer K. Frey, *Curriculum Vitae* (2013) available at <http://aces.nmsu.edu/academics/fws/frey/documents/frey-cv-oct-2013.pdf>.

<sup>124</sup> New Mexico State University, *Dr. Frey's Research*, <http://aces.nmsu.edu/academics/fws/frey/research.html>.

<sup>125</sup> 78 Fed. Reg. 55600 (Sept. 10, 2013).

<sup>126</sup> 77 Fed. Reg. 56482, at 56483 (Sept. 12, 2012).

<sup>127</sup> *Id.*

<sup>128</sup> *Id.*

<sup>129</sup> *Id.* at 56484.

On October 9, 2008, WildEarth Guardians petitioned the FWS to list the Jemez Mountains salamander, and a year later the FWS published a 90-day finding that initiated a status review of the species.<sup>130</sup> Following a lawsuit brought by WildEarth Guardians, FWS published a 12-month finding pursuant to the litigation settlement. The proposed rule to list the Jemez Mountains salamander under the ESA was published on September 12, 2012.<sup>131</sup>



**Jemez Mountain Salamander**  
Source: National Park Service

According to the peer review plan for the Jemez Mountains salamander listing decision, the FWS initiated its peer review process in August 2012.<sup>132</sup> During that process, the FWS indicated it intended to solicit comments from “independent scientific reviewers with expertise in amphibian ecology, conservation biology, and/or Plethodontid ecology.”<sup>133</sup> The FWS solicited peer reviews from seven individuals and received three responses.<sup>134</sup>

The names of all three of the peer reviewers who provided responses appeared in the literature cited for the listing proposal. FWS cited the master’s thesis of the first peer reviewer, Cindy Ramotnik, who is a museum specialist with the U.S. Geological Survey, along with a report she had previously prepared for the FWS. The FWS also cited email correspondence with the second peer reviewer, Charles W. Painter, a natural history consultant. The third peer reviewer, Dr. Deanna Olson, an ecologist with the U.S. Forest Service, was also cited. Dr. Olson also served as a peer reviewer for the listing decision of the Oregon spotted frog, described above.

Dr. Olson and Charles Painter both previously received awards from the group Partners in Amphibian and Reptile Conservancy (“PARC”), whose mission is to “to conserve amphibians, reptiles and their habitats as integral parts of our ecosystem and culture through proactive and coordinated public/private partnerships.”<sup>135</sup>

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<sup>130</sup> *Id.*

<sup>131</sup> *Id.*

<sup>132</sup> U.S. Fish & Wildlife Service, *Peer Review Plan – Listing Decision for the Jemez Mountains Salamander*, (2012) available at

[http://www.fws.gov/southwest/science/PDFs/Jemez\\_Mountains\\_Salamander\\_Peer\\_Review\\_Plan.pdf](http://www.fws.gov/southwest/science/PDFs/Jemez_Mountains_Salamander_Peer_Review_Plan.pdf).

<sup>133</sup> *Id.*

<sup>134</sup> 78 Fed. Reg. 55600, at 55604 (Sept. 10, 2013).

<sup>135</sup> Partners in Amphibian and Reptile Conservation, *Mission*, <http://www.parcplace.org/parcplace/about-parc/mission.html>. See also, Partners in Amphibian and Reptile Conservation, *Haskell Award*, <http://www.parcplace.org/parcplace/news-a-events/haskell-award.html>.

## ***Northern Mexican Gartersnake and Narrow-Headed Gartersnake***

On July 8, 2014 the FWS finalized a rule to list two species of gartersnakes found in New Mexico and Arizona, the northern Mexican gartersnake and the narrow-headed gartersnake. Prior to the release of the proposed rule, the FWS issued a peer review plan for these species in which it stated it would seek peer reviewers with expertise in the species' ecologies, who were independent from the FWS, were "recognized by their peers as being objective, open-minded, and thoughtful," had no known or recognized advocacy position for the protection of these species, and had no conflicts of interest that could impair their objectivity.<sup>136</sup>



***Northern Mexican Gartersnake***

Source: FWS

Eight peer reviewers were solicited by the FWS, of whom five responded.<sup>137</sup> A copy of the charge letter sent to each peer reviewer is not available on the FWS Region 2's peer review website, nor is a list of the people who were solicited to serve as peer reviewers.

While the final rule mentions five peer reviews, only two of the 35 publicly available comments on Regulations.gov can be identified as peer reviews. One of the two peer reviewers, Valerie Boyarski, is the amphibian and reptile conservation planner at the Arizona Game and Fish Department who has spent "nearly 7 years with narrow-headed and northern Mexican Gartersnakes."<sup>138</sup> Her work was cited 18 times in the final rule. Additionally, conversations she had with the FWS via phone and email were listed as literature used in the final rule.

The other identifiable peer reviewer, Lyndsay Hellekson, is a current employee for the FWS in Oregon. She, along with studies she co-authored, is cited 30 times in the final rule. Personal communications she had with the FWS comprise the majority of citations. At the time her peer review was submitted, she wrote that her "role as a peer reviewer related to six years working for Gila National Forest (2006-2012) in various wildlife

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<sup>136</sup> U.S. Fish & Wildlife Service: Region 2, *Peer Review Plan: Listing Decision for the Northern Mexican Gartersnake and Narrow-headed Gartersnake* (2013), available at [https://www.fws.gov/southwest/es/Documents/R2ES/PeerReview/AZ\\_Gartersnakes\\_Peer\\_Review\\_Plan\\_Feb\\_2013.pdf](https://www.fws.gov/southwest/es/Documents/R2ES/PeerReview/AZ_Gartersnakes_Peer_Review_Plan_Feb_2013.pdf).

<sup>137</sup> 79 Fed. Reg. 38678 at 38723 (July 8, 2014).

<sup>138</sup> Valerie Boyarski, Peer Review of FWS-R2-ES-2013-0071, available at <http://www.regulations.gov/contentStreamer?objectId=09000064813e49ee&disposition=attachment&contentType=pdf>.

biology positions and a thesis [she was] working on through the University of Arizona on the community ecology of Narrowheaded garter snakes.”<sup>139</sup>

### ***Dakota Skipper and Poweshiek Skipperling***

The FWS issued a final rule on October 24, 2014 listing the Dakota skipper as threatened and the Poweshiek skipperling as endangered.<sup>140</sup> As part of a July 2011 settlement agreement with the Center for Biological Diversity, FWS agreed to decide whether to list the Dakota Skipper by September 30, 2013.<sup>141</sup> The Poweshiek skipperling had been a candidate species since October 2011. Both species are butterflies found in the upper Midwest in the United States and in Canada.

In its peer review plan for the Dakota skipper and Poweshiek skipperling, FWS laid out the following criteria for peer reviewers:

We will solicit reviews from objective and, preferably, well known and widely respected experts who are willing to commit to providing an objective review within the needed time frame. Reviewers will be selected from specialists in the relevant taxonomic group as well as experts in conservation or population biology and threats to the species. We will try to avoid using individuals who have already expressed strong support or opposition to the action, individuals who have been previously paid by the FWS and individuals who are likely to experience personal gain or loss (financial, prestige, etc.) as a result of the FWS’ decision. We will avoid using FWS employees except in cases where an employee possesses unique expertise that is key to the review.<sup>142</sup>

In the same document, the FWS stated that all peer review responses would be public documents.<sup>143</sup> However, peer reviewers could request that the FWS withhold their names.<sup>144</sup> The FWS solicited peer reviews from 10 individuals, and seven responded.<sup>145</sup> However, only four comments publicly posted to the docket on Regulations.gov are clearly identifiable as peer review comments. Approximately 58 other documents are listed as public comments in the online docket for this listing.<sup>146</sup>

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<sup>139</sup> Lyndsay Hellekson, Peer Review of FWS-R2-ES-2013-0071, *available at* <http://www.regulations.gov/contentStreamer?objectId=09000064813ea125&disposition=attachment&contentType=pdf>.

<sup>140</sup> 79 Fed. Reg. 63672 (Oct. 24, 2014).

<sup>141</sup> 78 Fed. Reg. 63574, at 63576 (Oct. 24, 2013).

<sup>142</sup> U.S. Fish & Wildlife Service, *Peer Review Plan for 2012 and 2013*, (2012) *available at* <http://www.fws.gov/midwest/Science/pdf/R3PeerReviewPlanTE2012to2013.pdf>.

<sup>143</sup> *Id.*

<sup>144</sup> *Id.*

<sup>145</sup> 79 Fed. Reg. 63672, at 63694.

<sup>146</sup> *Available at* <http://www.regulations.gov/#!docketBrowser:rpp=25;po=0;dct=PS;D=FWS-R3-ES-2013-0043>.

Of the four peer reviewers FWS identified, three were cited heavily by the FWS: Dr. Erik Runquist, a conservation biologist at the Minnesota Zoo; Gerald Selby, an ecological consultant who has previously performed work for FWS; and Ann B. Swengel, an independent scientist. More than 1 in 10 of the citations was attributable to those three peer reviewers alone. Additionally, Mr. Selby and Ms. Swengel have both co-authored articles with Frank Olsen and Dennis Schlicht, who are also both cited in the literature for the proposed rule. If the identities of the other three peer reviewers were known, it would be possible to determine whether even more of the peer reviewers were selected from among those who the FWS had already cited.



*Dakota Skipper*

Source: FWS

In the literature supporting the proposed rule, FWS also cited personal communications with Dr. Runquist, Mr. Selby, as well as one of Mr. Selby and Ms. Swengel's colleagues and Ms. Swengel's husband.<sup>147</sup>

Despite the FWS' peer review plan, which stated its intent to avoid soliciting peer reviews from those who had been paid by FWS previously, at least two of the peer reviewers had previously done work for or conducted research funded by FWS. Mr. Selby performed contract work for the FWS in 2005 and 2010. His Status Assessments and Conservation Guidelines for the Poweshiek skipperling are still available on the FWS' website.<sup>148</sup> The FWS had also previously funded Dr. Emily Saarinen's work with the Poweshiek skipperling.<sup>149</sup>

### ***Florida Bonneted Bat***

The Florida Bonneted Bat is a large, free-tailed bat found throughout the southern half of the Florida peninsula.<sup>150</sup> It was first identified by the FWS as a candidate species in 1985, but the FWS determined in 1996 that its further consideration for listing was

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<sup>147</sup> U.S. Fish & Wildlife Service, Literature Cited in Dakota skipper and Poweshiek skipperling proposed listing: FWS-R3-ES-2013-0002, available at <http://www.regulations.gov/#!/documentDetail;D=FWS-R3-ES-2013-0043-0002>.

<sup>148</sup> Available at [http://www.fws.gov/midwest/angered/insects/posk/pdf/posk\\_sa\\_updateNov2010pdf.pdf](http://www.fws.gov/midwest/angered/insects/posk/pdf/posk_sa_updateNov2010pdf.pdf) and [http://www.fws.gov/midwest/es/soc/insects/posk\\_sa.pdf](http://www.fws.gov/midwest/es/soc/insects/posk_sa.pdf).

<sup>149</sup> See e.g. University of Michigan-Dearborn: Conservation Genetics Lab, Dr. Emily Saarinen: Research, <http://www-personal.umd.umich.edu/~esaarin/?page=research>.

<sup>150</sup> 77 Fed. Reg. 60750 at 60757 (Oct. 4, 2012).



unnecessary “because the taxon was deemed to be more abundant or widespread than previously believe or not subject to any identifiable threat.”<sup>151</sup>

Although it is genetically indistinguishable from a similar bat species found in Cuba, the FWS has justified its taxonomic uniqueness based on morphological distinctions that were first identified in 2004 by Dr. Robert Timm, a conservation biologist.<sup>152</sup>

On November 9, 2009, the FWS again recognized the bat as a candidate species. The FWS proposed the listing of the bat on October 4, 2012, and simultaneously released a peer review plan.<sup>153</sup> The peer review plan stated the FWS would solicit comments from “10 independent scientific reviewers,” who would be considered based on four key factors: (1) expertise, (2) balance, (3) independence, and (4) avoidance of conflict of interest.<sup>154</sup>

In accordance with the plan, the FWS stated in the final rule that it had solicited “10 individuals with recognized expertise on bats, particularly molossids, as well as general expertise on bat ecology and conservation” to be peer reviewers of whom six responded.<sup>155</sup> Although the FWS does not identify who the peer review



**Florida Bonneted Bat**

Source: FWS

participants were on the Regional website or in the final rule, the Committee Majority

oversight staff has identified who the six reviewers were by examining the 41 comments received and posted on Regulations.gov. The four individuals that were solicited for peer review but who did not respond are unidentifiable.

Four of the six responding peer reviewers had professional experiences or previous stated policy positions that call into question their suitability to serve as independent peer reviewers. One peer reviewer, Katie Gillies, is an imperiled species coordinator with Bat Conservation International, an organization that has supported petitions to list bat species.<sup>156</sup> Another reviewer, Dr. Holly Ober, had previously coauthored a March 31, 2011 biological status report on the bat under the direction of the Florida Fish and Wildlife

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<sup>151</sup> *Id.* at 60751.

<sup>152</sup> *Id.* at 60752.

<sup>153</sup> U.S. Fish & Wildlife Service: Region 4, *Peer Review of Scientific Information: Proposed Rule to list the Florida bonneted bat (Eumops floridanus) as endangered*, available at <http://www.fws.gov/southeast/informationquality/pdf/FL-bonnetedBatPeerRevPlan.pdf>.

<sup>154</sup> *Id.*

<sup>155</sup> 78 Fed. Reg. 61004 at 61014 (Oct. 2, 2013).

<sup>156</sup> See e.g. *Status Review of the Little Brown Myotis (Myotis Lucifugus) and Determination that Immediate listing under the Endangered Species Act is Scientifically and Legally Warranted*, available at <http://www.bu.edu/cecb/files/2010/12/Final-Status-Review.pdf>.

Conservation Commission. That report recommended that Florida list the species as threatened under the Florida Endangered and Threatened Species Act – a position the state subsequently adopted.<sup>157</sup>

The other two peer reviewers, Dr. Molly McDonough and Dr. Timm, authored studies that the FWS used to justify the taxonomic status of the bat as a unique species. In his peer review comment, Dr. Timm self-identified as “one of the researchers who first recognized that this unique morphological and genetic population of bonneted bats in southern and southwestern Florida merited recognition as a full species rather than the status of a subspecies.” His 2004 study, which the FWS used as the basis for the Florida Bonneted Bat’s taxonomic status, was published in a journal of which he was an officer.<sup>158</sup>

In the final rule, the FWS copied nearly word-for-word the third paragraph of Dr. Timm’s peer review comments,<sup>159</sup> which addresses his experience with the bat, stating “[o]ne peer reviewer, who first recognized the unique morphological and genetic population of bonneted bats in southern and southwestern Florida merited recognition as a full species rather than a subspecies, reconfirmed the information summarized in the proposed rule as it related to taxonomy and stated that the Florida bonneted bat is clearly a ‘distinctive’ species.”<sup>160</sup> The FWS cites Dr. Timm’s studies and personal communications 115 times in the proposed and final rules.

Dr. McDonough’s study found that the Florida bonneted bat was genetically identical to those found on Cuba and Jamaica, but that the bat’s morphological traits – that had been identified in Dr. Timm’s study – qualified it as unique.<sup>161</sup> Dr. McDonough’s study was coauthored by Dr. Timm and published in the same journal as Dr. Timm’s, who was then the president of the journal. She is cited 39 times in the proposed and final rules.

### ***Kentucky Glade Cress***

The Kentucky glade cress, a mustard plant found in Kentucky, was listed under the ESA as a threatened species on May 6, 2014.<sup>162</sup> While the plant had been under consideration for protection since 1975, it was first identified as a candidate species on November 9, 2009.<sup>163</sup> The proposed listing was published on May 24, 2013.<sup>164</sup>

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<sup>157</sup> Jeff Gore, Cyndi Marks and Holly Ober, *Florida Bonneted Bat Biological Status Review Report*, at 2 (2011), available at <http://myfwc.com/media/2273295/Florida-Bonneted-Bat-BSR.pdf>.

<sup>158</sup> See American Society of Mammalogists, *Past ASM Officers*, <http://www.mammalsociety.org/past-asm-officers>.

<sup>159</sup> See Robert Timm, Peer Review of FWS-R4-ES-2012-0078, available at <http://www.regulations.gov/#!documentDetail:D=FWS-R4-ES-2012-0078-0025>.

<sup>160</sup> 78 Fed. Reg. at 61015.

<sup>161</sup> Molly McDonough, *Speciation within Bonneted Bats (Genus Eumops): The Complexity of Morphological, Mitochondrial, and Nuclear Data Sets in Systematics*, at 7-8 (2008).

<sup>162</sup> 79 Fed. Reg. 25683 (May 6, 2014).

<sup>163</sup> 78 Fed. Reg. 31498, at 31500 (May 24, 2013).

<sup>164</sup> 78 Fed. Reg. 31498.

Prior to issuing the final listing decision, the FWS sought peer reviews from seven individuals.<sup>165</sup> However, only three peer reviewers provided responses.<sup>166</sup> Of the three peer review responses FWS received, only Dr. Carol Baskin's response was posted to the online docket on Regulations.gov for this listing and identified as coming from a peer reviewer.



**Kentucky Glade Cress**  
Source: FWS

The "Peer Reviewer Comments" section of the final rule incorporates only three comments – all of which come from Dr. Baskin's response. The contents of the other two peer reviews, the identities of the reviewers, and how the FWS incorporated the comments into the final rule remain unknown. Dr. Baskin was also cited frequently in the FWS' supporting documentation for the listing.

### ***Diamond Darter***

The FWS made a determination of endangered species status for the diamond darter on July 26, 2013.<sup>167</sup> The diamond darter is a fish species found in West Virginia and had been under consideration for listing since 2009.<sup>168</sup>



**Diamond Darter**  
Source: FWS

While FWS developed a peer review plan for the diamond darter listing decision, the plan does not set forth any criteria used to select peer reviewers.<sup>169</sup> Rather, the plan

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<sup>165</sup> 79 Fed. Reg. 25683, at 25685. There is no peer review plan available on FWS' website for the Kentucky glade cress.

<sup>166</sup> *Id.*

<sup>167</sup> 78 Fed. Reg. 45074 (July 26, 2013).

<sup>168</sup> 77 Fed. Reg. 43906, 43907 (July 26, 2012).



merely indicates that “the FWS will solicit external peer review on the listing determination through letters to three independent scientific reviewers with expertise in diamond darter ecology, conservation biology, or freshwater fish ecology.”<sup>170</sup>

The FWS solicited peer reviews from five individuals; three individuals provided a response, and one individual “incorporated [his response] into comments submitted by his employer,” which were ultimately addressed in the Comments from States section.<sup>171</sup> The final rule identified the West Virginia Division of Natural Resources as the peer reviewer’s employer, but it is unclear if Curtis Taylor, the Chief of the Wildlife Resources Section who submitted comments on behalf of the Division of Natural Resources, is one of the peer reviewers.

The online docket for the Diamond Darter listing includes 27 public comments; however, none of the comments are clearly identifiable in the online docket on the Regulations.gov website as from peer reviewers,<sup>172</sup> and the peer reviewers themselves remain anonymous.

### ***Gunnison Sage-Grouse***

The Gunnison sage-grouse is a large, ground-dwelling bird known for its “elaborate mating ritual where males congregate on strutting ground called leks and ‘dance’ to attract a mate.”<sup>173</sup>

“For many years, sage-grouse were considered a single species,” yet, in 2000, the Gunnison sage-grouse was accepted by the American Ornithologist’s Union as a unique, distinct species, after several studies identified the bird as being morphologically, genetically, and behaviorally distinct.<sup>174</sup> However, a 2013 U.S. Geological Survey report on the Greater sage-grouse states the “[FWS] no longer considers listing consideration at the subspecies level based on the multiple lines of evidence that do not support the eastern and western subspecies delineation in sage-grouse.”<sup>175</sup>

The FWS issued a proposed rule to list the sage-grouse as endangered on January 11, 2013.<sup>176</sup> Concurrent with the proposed rule, Region 6 of the FWS issued a peer review

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<sup>169</sup> U.S. Fish & Wildlife Service, *Endangered Species Act (ESA) Listing Decision for Diamond Darter: Peer Review Plan*, (2012)

[http://www.fws.gov/northeast/science/pdf/20121023\\_DiamondDarterListingDeterminationPeerReviewPlan.pdf](http://www.fws.gov/northeast/science/pdf/20121023_DiamondDarterListingDeterminationPeerReviewPlan.pdf)

<sup>170</sup> *Id.*

<sup>171</sup> 78 Fed. Reg. 45074, at 45076.

<sup>172</sup> Available at <http://www.regulations.gov/#!docketBrowser:rpp=25;po=0;dct=PS;D=FWS-R5-ES-2012-0045>.

<sup>173</sup> 75 Fed. Reg. 59804, at 59805 (Sept. 28, 2010).

<sup>174</sup> *Id.*

<sup>175</sup> U.S. Geological Survey, *Summary of Science, Activities, Programs, and Policies that Influence the Rangewide Conservation of Greater Sage-Grouse*, at 10 (2013).

<sup>176</sup> 78 Fed. Reg. 2486 (Jan. 11, 2013).

plan for the listing of the sage-grouse.<sup>177</sup> To identify and nominate peer reviewers, the FWS, “in cooperation with Colorado Parks and Wildlife and the Utah Division of Wildlife Resources,” sought at least “three qualified experts” who exhibited the following four criteria: (1) expertise with the Gunnison sage-grouse or similar species biology; (2) independence from the FWS; (3) “recognition by his or her peers as being objective, open-minded, and thoughtful” and; (4) absence of any financial or other interest that would create a conflict of interest, an impairment of objectivity, or an unfair competitive advantage.<sup>178</sup> The peer review plan also specified the questions the reviewers would be asked, and that the reviewers’ comments would be due by the end of the open comment period.<sup>179</sup>



**Gunnison Sage-Grouse**  
Source: FWS

According to the final rule, which was published November 11, 2014, five peer reviewers were solicited, all of whom responded.<sup>180</sup> However, only four of the peer reviewers’ comments could be identified as such out of an assessed total of 36,171 public comments.<sup>181</sup> Contrary to other peer reviews conducted by Region 6, the FWS did not post the names of the peer reviewers for its Gunnison sage-grouse decision to its Region 6 website.<sup>182</sup>

The faculty biography for one of the scientists who served as a peer reviewer, Dr. Jessica Young, provides that she has “document[ed] [the Gunnison Sage-grouse’s] imperiled habitat and status.”<sup>183</sup> Indeed, Dr. Young’s peer review states she had “studied the biology and participated in conservation discussions about the Gunnison Sage-grouse . . . for over 20 years,” and that her “Ph.D. dissertation and resulting publications assisted in the grouse being recognized as a new species in 2000.”<sup>184</sup> Her work on the grouse is recognized by the FWS, which cites her studies nearly 100 in the proposed and final rules to support claims

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<sup>177</sup> U.S. Fish & Wildlife Service: Region 6, *Peer Review Plan: Proposed Rule to list the Gunnison sage-grouse (Centrocercus minimus) as Endangered and Proposed Designation of Critical Habitat* (2013), available at <http://www.fws.gov/mountain-prairie/science/PeerReviewDocs/Proposed%20Listing%20and%20Habitat%20Designation%20for%20Gunnison%20sagegrouse.pdf>.

<sup>178</sup> *Id.*

<sup>179</sup> *Id.*

<sup>180</sup> U.S. Fish & Wildlife Service, *Endangered and Threatened Wildlife and Plants; Threatened Status for Gunnison Sage-grouse*, at 29 (2014), available at [http://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/GUSGFinalListingRule\\_11122014.pdf](http://www.fws.gov/mountain-prairie/species/birds/gunnisonsagegrouse/GUSGFinalListingRule_11122014.pdf).

<sup>181</sup> Available at <http://www.regulations.gov/#!documentDetail;D=FWS-R6-ES-2012-0108-0536>.

<sup>182</sup> See [http://www.fws.gov/mountain-prairie/science/peer\\_review.cfm](http://www.fws.gov/mountain-prairie/science/peer_review.cfm).

<sup>183</sup> Western State Colorado University, *Dr. Jessica Young*, <http://www.western.edu/people/dr-jessica-young>.

<sup>184</sup> Jessica Young, Peer Review of FWS-R6-ES-2012-0108, available at <http://www.regulations.gov/#!documentDetail;D=FWS-R6-ES-2012-0108-0536>.

concerning the species' taxonomy, behavior, and potential threats. Furthermore, Dr. Young's *curriculum vitae*<sup>185</sup> notes that she currently serves as an international grouse specialist for the International Union for Conservation of Nature ("IUCN"), which publishes the IUCN Red List – a list that is frequently used by the FWS to evaluate the conservation status of plant and animal species.

Another peer reviewer, Dr. Matt Holloran, has studied various aspects of sage-grouses in Wyoming since 1996.<sup>186</sup> His studies were approximately 60 times by the FWS in support of the proposed and final rules. In his peer review, Dr. Holloran states that "additional information is required" to support the "conclusion that [Gunnison sage-grouse] should be listed as endangered."<sup>187</sup>

The two other identified peer reviewers, Dr. Michael Phillips and Dr. Terry Messmer, were minimally cited (less than 10 times each) throughout the proposed and final rules for studies or research they had conducted or published. Dr. Phillips, an avian researcher with Colorado Parks and Wildlife, was cited only twice concerning an email exchange he held with the FWS regarding movement distance of sage-grouse in the Gunnison Basin. The FWS did not cite Dr. Messmer. In his peer review, Dr. Phillips was highly critical of the proposed rule stating "concern[] about the frequent use of speculation and commentaries as empirical evidence."<sup>188</sup> "Given the flaws in this review," he concluded, "[the FWS] do[es] not present a convincing argument that [the Gunnison sage-grouse] should be listed as endangered."<sup>189</sup> Similarly, Dr. Messmer, a professor at Utah State University and a scientific advisor to the Utah Governor's Greater Sage-grouse Task Force, expressed concern about the proposed rules' "discussion of the biology and habitat used by Gunnison sage-grouse [being] based largely on greater sage-grouse literature rather than studies conducted in . . . Colorado and Utah."<sup>190</sup>

### ***Valley Elderberry Longhorn Beetle***

The Valley Elderberry Longhorn Beetle ("VELB") is a beetle found in the central valley of California.<sup>191</sup> In 1980, the FWS listed the beetle as a threatened species. In 2006, the FWS conducted a 5-year review of the species and determined that it had recovered and therefore warranted delisting.

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<sup>185</sup> Available at <http://www.western.edu/sites/default/files/page/docs/Young%20CV%202013.pdf>.

<sup>186</sup> See Wyoming Wildlife Consultants, LLC, Staff, <http://www.wyowildlife.com/Staff.aspx>.

<sup>187</sup> Matt Holloran, Peer Review of FWS-R6-ES-2012-0108, available at <http://www.regulations.gov/#!documentDetail;D=FWS-R6-ES-2012-0108-0536>.

<sup>188</sup> Michael Phillips, Peer Review of FWS-R6-ES-2012-0108, available at <http://www.regulations.gov/#!documentDetail;D=FWS-R6-ES-2012-0108-0536>.

<sup>189</sup> *Id.*

<sup>190</sup> Terry Messmer, Peer Review of FWS-R6-ES-2012-0108, available at <http://www.regulations.gov/#!documentDetail;D=FWS-R6-ES-2012-0108-0536>.

<sup>191</sup> 43 Fed. Reg. 35636 at 35637 (Aug. 10, 1978).

Unlike other peer reviews, the FWS posted a peer review plan for the delisting of the VELB after the peer review process had already been completed.<sup>192</sup> For the peer review of the delisting decision, the FWS sought peer review proposals from one of the pre-approved contractors and selected Atkins as the firm that would conduct the peer review of the proposed delisting rule.<sup>193</sup>



**Valley Elderberry Longhorn Beetle**

Source: FWS

Prior to the selection of its proposal, Atkins submitted the names and resumes of the four peer reviewers it had identified to the FWS. By selecting Atkins as the peer review contractor, the FWS confirmed and approved these four reviewers.<sup>194</sup> If one of the purposes of having a contractor manage the peer review process is to have an independent, arms-length relationship between the FWS and the peer reviewers, that did not occur here.

Atkins combined the peer reviews into a single peer review document. The peer review found the delisting was premature and that there were “strong concerns about the scientific foundation of the proposed rule.”<sup>195</sup> As such, the FWS withdrew the proposed rule to delist the VELB on September 17, 2014.<sup>196</sup>

One of the reviewers, Dr. Marcel Holyoak, received about \$800,000 in grant money for studies relating to the VELB, including \$35,000 from the FWS, over \$140,000 from Sacramento County, approximately \$435,000 from the California Department of Transportation, and \$190,000 from the National Fish and Wildlife Foundation.<sup>197</sup> Dr. Holyoak’s studies were cited more than 60 times in the final decision to withdraw the delisting of the VELB.

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<sup>192</sup> U.S. Fish & Wildlife Service, *Peer Review Reporting Checklist for the Valley Elderberry Longhorn Beetle 12-Month finding/proposed delisting rule*, available at <http://www.fws.gov/cno/Science/Review%20PDFs/Peer%20Review%20Reporting%20Checklist%20for%20VELB-20131001.pdf>.

<sup>193</sup> In a similar process, the Service sought the National Center for Ecological Analysis and Synthesis for a peer review on the proposed rule to delist the gray wolf. Dr. Steven Courtney, who oversaw the process for the delisting of the VELB, organized and managed the peer review process for the delisting of the gray wolf. See U.S. Fish & Wildlife Service, *Peer Review Statement of Work*, at 2 (2013), available at [http://www.fws.gov/science/pdf/Gray\\_Wolf\\_Proposed\\_Delisting\\_SOW\\_Peer\\_Review\\_12-13-2013\\_Final.pdf](http://www.fws.gov/science/pdf/Gray_Wolf_Proposed_Delisting_SOW_Peer_Review_12-13-2013_Final.pdf).

<sup>194</sup> See Atkins, *Peer Review of the Scientific Findings in the Proposed Rule to Delist the Valley Elderberry Longhorn Beetle*, at 3 (2013), available at [http://www.fws.gov/cno/Science/Review%20PDFs/Atkins\\_2013\\_VELB%20Peer%20Review%20Doc%20of%20Proposed%20Rule%20to%20Delist.pdf](http://www.fws.gov/cno/Science/Review%20PDFs/Atkins_2013_VELB%20Peer%20Review%20Doc%20of%20Proposed%20Rule%20to%20Delist.pdf).

<sup>195</sup> *Id.* at 4.

<sup>196</sup> See 79 Fed. Reg. 55874 (Sept. 17, 2014).

<sup>197</sup> See Atkins, *Peer Review of the Scientific Findings in the Proposed Rule to Delist the Valley Elderberry Longhorn Beetle: Marcel Holyoak’s Curriculum Vitae*, at 2 (2013).

Another reviewer, Dr. Richard Arnold, was similarly cited 22 times in the withdrawal, including personal communications he had with the FWS in preparation of the rule. Furthermore Dr. Arnold is a current member, and former board member, of the Xerces Society, which frequently petitions the FWS to list invertebrates.<sup>198</sup>

A third reviewer, Dr. Gary Huxel, was cited six times in the withdrawal decision, and had worked with Dr. Holyoak on several VELB publications.<sup>199</sup>

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<sup>198</sup> See The Xerces Society, *Petitions*, <http://www.xerces.org/petitions/>.

<sup>199</sup> See Atkins, *Peer Review of the Scientific Findings in the Proposed Rule to Delist the Valley Elderberry Longhorn Beetle: Gary Huxel's Curriculum Vitae*, at 2 (2013).

## CONCLUSION

Under the Endangered Species Act, the U.S. Fish & Wildlife Service must make listing determinations for species based solely on the best scientific and commercial data available. The FWS claims that the science used to justify ESA listing decisions is the best available science in large part because it has undergone peer review.

Committee Majority oversight staff found numerous documented examples that call into question the independence, transparency, and accountability of the FWS' peer review process in recent ESA listing decisions. These findings include:

- The FWS does not have clear or consistent policies and procedures in place across all Regions to ensure that peer reviewers with potential conflicts of interest are identified and screened;
- The FWS generally seeks peer review of its proposed listing decisions at the same time they are made available for public comment, rather than earlier in the process when the peer reviewers may have more meaningful input;
- The FWS regularly recruits the same scientists on whose work a listing decision is based to serve as peer reviewers, rather than truly independent scientists without any obvious connection to the species under review;
- The FWS uses scientists as peer reviewers who have received grants or other financial assistance from the Department of the Interior and its bureaus and other agencies and who have known policy positions or affiliations with advocacy groups that support the listing decision; and
- The FWS routinely withholds from the public the identities of peer reviewers, qualifications of peer reviewers, instructions, and details about their comments.

Notwithstanding the myriad policies and guidance documents that the FWS has in place, the inconsistency across FWS Regions and overall lack of transparency about the FWS' peer review process make it difficult for the public to assess the independence of those serving as peer reviewers and the merits of their comments or the FWS' responses. Rather, the peer review process as currently employed by the FWS relies on a network of scientists who, if nothing else, have a professional and academic interest in the outcome of the ESA listing decisions they are being asked to review.

In recruiting peer reviewers, the FWS appears to favor scientists whose views on a species are already well known rather than more independent scientists in other academic or professional fields who would be able to bring a fresh perspective to the science the FWS is citing to support its ESA listing decisions.

Whether this approach to peer review is a result of the time and resource pressures the FWS itself has created because of the multi-species litigation deadlines settlements it has entered into with environmental groups, or other reasons, is murky, much like the details of the individual peer reviews being conducted by the FWS.