



COURT USES CLIMATE CHANGE TO SHARPEN ESA'S CLAWS

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On April 4, 2016, the United States District Court for the District of Montana issued an order that could expand the Endangered Species Act's (ESA) reach. In *Defenders of Wildlife v. Jewell*, No. CV-14-246-M-DLC, 2016 WL 1363865 (D. Mont.), the court vacated the United States Fish and Wildlife Service's (FWS) decision to withdraw its proposed rule to list a population of wolverines as a threatened species. The key conclusions in the proposed rule related to *projected* impacts of climate change on wolverine habitat. FWS reversed course and withdrew its proposal after finding that climate-change effects were not likely to place the wolverine population in danger of extinction in the foreseeable future. The court held FWS's withdrawal of the proposed rule was arbitrary and capricious because it ignored potential climate change-related threats to the wolverine.

The case raises several interesting issues. First, FWS based the proposed rule on modeling that suggests climate change will reduce snow cover, which wolverines use for denning. Despite this potential future threat, the wolverine population is currently *expanding* and likely does not face a short-term threat from climate change. Second, the court's opinion contained sweeping language regarding FWS's obligation to take immediate action based on long-term threats from climate change, which could dramatically increase the number of listed species. Third, FWS's decision to withdraw the proposed rule was supported by several state wildlife agencies and some of the peer reviewers who analyzed the proposal.

In February 2013, FWS issued a proposed rule to list the North American wolverines located in the contiguous United States as threatened. 78 Fed. Reg. 7864 (Feb. 4, 2013). According to FWS, "[w]olverines require habitats with near-arctic conditions," and wolverines in the contiguous United States are "restricted to high-elevation areas in [the] West." *Id.* at 7886. They require persistent spring snow cover for successful reproduction. *Id.* at 7867.

FWS's proposal to list the wolverine as threatened rested almost entirely on projected impacts of climate change on wolverine-denning habitat. These projections were based on studies by Copeland and McKelvey.¹ Copeland relied on spring snow cover data to identify suitable denning habitat and predicted that climate change would reduce available habitat and connectivity between habitat. McKelvey then used climate models to predict 33% habitat loss by 2045 and 63% by 2085. FWS described the McKelvey study as the "best available science for projecting the future impacts of climate change on wolverine habitat." 78 Fed. Reg. at 7876.

The proposed rule sparked significant debate and generated 118,000 comments. Most western state wildlife agencies submitted comments that opposed the proposed listing or questioned the underlying science. Some of the criticisms included (1) observed increases in wolverine populations, (2) use of unvalidated climate models, and (3) the uncertain nature of threats. FWS withdrew the proposed rule 18 months later based on the uncertainty associated with climate-change impacts on the wolverine. 79 Fed. Reg. 47,522 (Aug. 13, 2014).

¹ J.P. Copeland *et al.*, *The Bioclimatic Envelope of the Wolverine (Gulo gulo): Do Climatic Constraints Limit its Geographic Distribution?*, 88 CANADIAN J. ZOOLOGY 233 (2010); Kevin S. McKelvey *et al.*, *Climate Change Predicted to Shift Wolverine Distributions, Connectivity, and Dispersal Corridors*, 21 ECOLOGICAL APPLICATIONS, no. 8, 2882 (2011).

Twenty-four conservation and wildlife groups sued to vacate the proposed rule's withdrawal. The court granted summary judgment to the plaintiffs on three issues. Most relevant here, the court held "[t]he Service erred when it determined ... that climate change and projected spring snow cover would not impact the wolverine at the reproductive denning scale in the foreseeable future." *Defenders*, 2016 WL 1363865, at *29.

The court found that FWS's decision to ignore the potential climate-change-related threats was arbitrary and capricious. The court criticized FWS for ignoring the best available science and relying on "nothing more than an unpublished, unreviewed, personal opinion" to support withdrawal of the proposed rule. *Id.* at *21. The court also criticized FWS for allowing its decision to be influenced by comments from state wildlife agencies, which the court characterized as lacking scientific evidence to rebut McKelvey's conclusions. It further criticized FWS for relying on uncertainty to discount the potential threats described in the McKelvey study:

Quite simply, the Service cannot demand a greater level of scientific certainty than has been achieved in the field to date—the "'best science scientific data available' ... standard does not require that the [Service] act only when it can justify its decision with absolute confidence," and "the ESA accepts agency decisions in the face of uncertainty."

Id. at *22 (alterations in original) (quoting *Ariz. Cattle Growers' Ass'n v. Salazar*, 606 F.3d 1160, 1164 (9th Cir. 2010)). In other words, according to the district court, the fact that there remains some uncertainty as to the effect of climate change on wolverine habitat cannot justify dismissing the best available science.

Three issues presented in this case will likely resurface in numerous listing decisions:

1. *Projected Versus Observed Threats.* The court seemed willing to dismiss concerns regarding the uncertainty of threats. The court opined that "[n]o greater level of certainty is needed to see the writing on the wall for this snow-dependent species standing squarely in the path of global climate change." *Id.* at *29. In the court's view, the ESA requires FWS "to take action at the earliest possible, defensible point in time to protect against the loss of biodiversity within our reach as a nation." *Ibid.* But at what point is a listing defensible? In the wolverine context, despite projected threats, the population has been expanding. Here, the opinion suggests FWS was obligated to rely on the projections and ignore current population trends.

2. *Immediate Action.* The court's sweeping language could be used to justify the immediate listing of any species whose habitat is modeled to significantly contract due to climate change. The key question is how much certainty does a listing require? The court's opinion suggests that a single, un rebutted study suffices. But the opinion does not address timing. If the modeled impacts are unlikely to occur for decades, must FWS take immediate action? Courts will soon be forced to grapple with this issue. However, unique characteristics of the wolverine may limit the reach of this decision. First, wolverines have never been documented denning anywhere but in snow, which might evince an inability to adapt to decreased snowpack. Second, the wolverine is a difficult species to observe, which arguably justifies greater reliance on modeling.

3. *Limited Deference.* The court gave little deference to FWS. The court suspected that the withdrawal of the proposed rule was largely the result of "immense political pressure." *Id.* at *19. However, FWS's decision was not without support. Two out of seven peer reviewers criticized FWS's reliance on Copeland and McKelvey. Although a minority of the reviewers, courts generally defer to agencies in sorting through conflicting scientific opinions. Moreover, several state wildlife agencies urged FWS not to base its listing decision on the two studies. The court appeared unwilling to defer because FWS itself described the studies as the best available science.

Defenders introduces new challenges into a regulatory process that is already highly contentious and complicated. Under the court's rationale, FWS would have to consider future climate change, based on computer models, and list a species *now* if those models predict habitat loss even if current populations are stable or increasing and even though the projected threats may not materialize for many decades, if at all.