Welcome to the summer 2014 issue of the Endangered Species Committee Newsletter. We enjoyed assembling and editing this issue, which contains four articles covering a variety of current issues in Endangered Species Act (ESA) law, policy, and practice.

First, Linus Chen, an attorney with the Solicitor’s Office of the U.S. Department of the Interior, discusses the potential to use the ESA’s consultation and take prohibition provisions to address climate change by targeting mercury emission effects on wildlife. In *Loony Possibility: Addressing Climate Change with the ESA as the Mercury Rises*, Chen discusses the lethal and sublethal effects of mercury toxicity on the yellow-billed loon, a candidate species and argues that establishing causation for take may be easier in the context of mercury emissions than in the context of carbon dioxide emissions.

In *The Settlement to End All Settlements? The Fallout of the Comprehensive Deal to Reduce Listing Deadline Litigation Under the Endangered Species Act*, Benjamin C. Jesup, also an attorney with the Solicitor’s Office, analyzes the implications of the 2011 multidistrict litigation settlement agreements concerning listing deadline claims under section 4 of the ESA. Jesup discusses successes of the settlements to date, explores their future impacts on ESA implementation, and concludes that the settlements are likely to have far-reaching consequences for the ESA.

In *The Expanding Reach of the Endangered Species Act*, David M. Moore, a partner with Smith, Gambrell & Russell, LLP, explores the increasing realm of actions and activities requiring ESA consultation. Moore analyzes the conflict between the ESA’s strict deadlines and the scientific bases required for listing determinations. He argues that additional resources are necessary to ensure the scientific integrity of decisions made under the ESA.

Finally, law student Rose Monahan discusses the ESA’s potential to limit mountaintop removal coal mining in *Can the Endangered Species Act Curb Mountaintop Removal Mining?* Monahan discusses the relationship between the ESA and surface mining, traces regulatory exemptions that have prevented the ESA’s use in this manner to date, and counters that the ESA can and should be employed more fully to protect communities near mountaintop removal sites.

We hope you find the articles and topics addressed in this issue informative, useful, and thought provoking.
In this issue:

Message from the Newsletter Vice Chairs
Stacey Simone Garfinkle and Tyler Sniff ....................................................... 1

A Loon-y Possibility: Addressing Climate Change with the ESA as the Mercury Rises
Linus Chen ............................................................................................................ 3

The Settlement to End All Settlements? The Fallout of the Comprehensive Deal to Reduce Listing Deadline Litigation Under the Endangered Species Act
Benjamin Jesup .................................................................................................... 7

The Expanding Reach of the Endangered Species Act
David Montgomery Moore .................................................................................. 11

Can the Endangered Species Act Curb Mountaintop Removal Mining?
Rose Monahan ...................................................................................................... 15
A LOON-Y POSSIBILITY: ADDRESSING CLIMATE CHANGE WITH THE ESA AS THE MERCURY RISES
Linus Chen

When the George W. Bush administration listed the polar bear as a threatened species due to climate change (the second time a species was listed for climate change after elkhorn and staghorn coral), there were concerns that various activities—such as construction and operation of coal-fired power plants—from outside of the bears’ habitat, could be hampered under the Endangered Species Act (ESA). To address this concern, concurrent with the listing of the polar bear, the U.S. Fish and Wildlife Service (FWS) promulgated a special rule under ESA section 4(d) specifying that incidental take caused by activities within the United States, but outside of the bears’ range, is not subject to the ESA’s section 9 take prohibition. If a federal nexus exists, however, the ESA’s section 7 consultation requirement may still apply. However, an opinion of the Solicitor of the U.S. Department of the Interior, see M-37017 (Oct. 3, 2008), available at http://www.doi.gov/solicitor/opinions/M-37017.pdf, concluded that “a proposed action that will involve the emission of [greenhouse gases] cannot pass the ‘may affect’ test, and is not subject to consultation under the ESA and its implementing regulations” due to difficulty of linking specific carbon dioxide emissions to effects on a species. The Solicitor’s opinion agreed with FWS guidance. See Memorandum from H. Dale Hall, Dir., FWS, to FWS Reg’l Dirs. (May 14, 2008), available at http://www.fws.gov/policy/m0331.pdf.

The polar bear listing created the potential of using a very blunt tool—the ESA—to address climate change, but the special rule appeared to neutralize use of the tool. While there is the possibility that this tool could be available again, currently there appears to be the realization that using the take prohibition to stop carbon dioxide-producing activities in the contiguous United States would be very difficult, if not impossible, given the current state of science. At the beginning of the first Obama administration, Congress provided the administration the opportunity to rescind the special rule, but the administration declined to do so. In addition, except for the National Environmental Policy Act challenge, the special rule withstood challenge from the environmental community, which argued for an “endangered” finding that would have precluded adopting the special rule under section 4(d), which applies only to threatened species.

As ice recedes in the Arctic, another possible ESA-listed species from the Arctic may provide a new tool for addressing climate change. Although addressing carbon dioxide emissions via the ESA may not be currently feasible, mercury emissions are traceable to fewer activities, such as the burning of coal from power plants (which also emits large quantities of greenhouse gases), and the same mercury emissions may affect potentially ESA-listed species.

Coal-Burning Emissions and ESA Causation Difficulties

Coal burning, for either electric power or heat, accounts for approximately two-thirds of global anthropogenic mercury emissions. Other major sources of human-created mercury emissions to the environment are gold production and industrial refining processes such as making steel (volcanoes are the major source of natural mercury emissions). Analyzed by global region, Asian countries contributed about 54 percent of global mercury emissions from anthropogenic sources in 2000, followed by Africa (18 percent) and Europe (11 percent, including the European part of Russia). In 1995, North America contributed approximately 11 percent of total global anthropogenic mercury emissions.

Though it appears that the United States is not responsible for a majority of mercury emissions, it is still involved in much of the global emissions. The United States exports much of the coal mined domestically to other countries, particularly to Asia. In 2011, coal exports topped 107 million tons, valued at nearly $16 billion, the highest level since 1991, and more than double the export volume from 2006. See Matthew Brown, Coal Exports Surge to Highest Levels Since 1991, Associated Press (Apr. 10, 2012). With demand for coal expected to continue to increase, areas in the
United States currently mining coal will likely continue to do so, and to use controversial methods such as “mountaintop removal mining.” New areas may be mined, especially those near ports for ease of export.

As burning coal also creates carbon dioxide, a greenhouse gas, limiting its emissions would help control climate change. In 2011, coal supplied approximately 42 percent of total energy requirements for electricity generation in the United States, and accounted for 95 percent of all coal consumed. See EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2011, at 12 (2013). However, efforts to control carbon emissions have been very difficult due to the myriad of other carbon dioxide sources (such as vehicles, deforestation, and even human respiration). In addition, carbon dioxide can stay in the atmosphere for decades, so emissions from previous generations continue to affect the environment today. Furthermore, there is the difficulty in linking the emission of carbon dioxide to particular environmental effects, whether rising temperature or the melting of a polar bear’s ice habitat that causes an individual bear’s death.

Some authors have discussed the difficulty of proving causation, specifically the linking of a particular emission of carbon dioxide to a particular harm. One author suggests considering two seminal tort cases for insight on this issue: Borel v. Fibreboard, 493 F.2d 1076 (5th Cir. 1974), an asbestos case that recognized exceptions to the general individual causation requirement and Sindell v. Abbott Labs, 607 P.2d 924 (Cal. 1980), a case involving a pregnancy drug that caused physical birth defects that first applied the doctrine of market share liability. See Matthew Gerhart, Climate Change and the ESA: The Difficulty of Proving Causation, 36 Ecology L.Q. 167, 189–95 (2009). However, the author finds both cases of limited value in the ESA context. In Borel, the number of defendants was relatively small and each engaged in tortious conduct by creating a dangerous product. In contrast, the potential number of carbon dioxide-emitting defendants is exponentially higher, and emitting carbon dioxide is not generally considered a tortious activity. The doctrine of market share liability, which relies on each defendant’s share, is similarly of limited applicability because, as the commenter notes, greenhouse gases have different residence times, complicating the amount of each defendant’s contribution.

Coal burning also emits mercury. Specifically, a coal-burning power plant releases mercury with a distinct isotopic signature based on where the coal originates. See Sherman et al., Investigation of Local Mercury Deposition from a Coal-Fired Power Plant Using Mercury Isotopes, 46 Envtl. Sci. & Tech. 382–90 (2012). As such, it is possible to “fingerprint” from rainfall samples mercury coming from, for example, a Florida coal-fired plant or other sources across the Gulf of Mexico. See Tracing the Source of Mercury Pollution, Euro. Virtual Inst. for Speciation Analysis (Dec. 21, 2011), http://www.speciation.net/News/Tracing-the-source-of-mercury-pollution-~/2011/12/21/5968.html. Except for occasional volcanic eruptions, emissions of mercury are not natural and generally have some industrial aspect. Actors that emit mercury are more limited than for carbon dioxide or other greenhouse gases (although there are likely more actors than in Borel). In addition, mercury generally has a shorter atmospheric residence time, 100 days to 1 year, compared to carbon dioxide, which can range from 30 to 95 years. Last, while burning coal is not per se tortious, releasing mercury into the environment is more hazardous than carbon dioxide (and voluntary “release” of mercury into the environment is regulated by the U.S. Environmental Protection Agency and other government agencies). While proving causation of harm from mercury is still demanding, it appears to be easier than for some other greenhouse gases. Thus, reducing coal use would reduce mercury emissions and reduce carbon dioxide emissions at the same time.

**Mercury’s Impact on Wildlife**

Generally, the conservation concern with mercury relates to its sublethal effects. As top predators, both polar bears and humans can bioaccumulate mercury through the food they eat. Slowly over time, the mercury may cause neurological damage to adults or neurological defects to offspring if mercury is passed through nursing mothers. However, at least for polar bears, FWS did not identify mercury poisoning as a
specific threat to the species, noting that “only two polar bear populations have concentrations of mercury close to the biological threshold levels of 60 micrograms,” and, in fact, “most marine mammals appear to have evolved effective biochemical mechanisms to tolerate high concentrations of mercury.” See 73 Fed. Reg. 28,291 (May 15, 2008).

Mercury exposure has similar detrimental impacts on various other animals, but unfortunately, for some birds, namely loons, the result can be relatively short-term lethal effects. Sublethal levels of methylmercury cause loons to lay smaller eggs and to decrease nest incubation, foraging, and chick feeding. One analysis found that at levels of three parts per million of mercury in loon blood, the number of young fledged drops by 41 percent. See Rebecca Kessler, Mercury’s Silent Toll on the World’s Wildlife, YALE ENV’T 360 (Jan. 31, 2013), http://e360.yale.edu/feature/mercurys_silent_toll_on_the_worlds_wildlife/2617/.

While the common loon (Gavia immer) is not in danger of becoming a federally listed species, its relative, the yellow-billed loon (Gavia adamsii), is currently a “candidate species” for listing under the ESA (although, as discussed below, mercury poisoning is not currently identified as a threat). Furthermore, under a settlement agreement, FWS must decide whether to propose to list the yellow-billed loon under the ESA by 2014 and must make a final listing decision by 2015. See Listing Workplan, FWS.gov (last accessed June 18, 2014), http://www.fws.gov/endangered/improving_ESA/listing_workplan.html; FWS, ESA Listing Workplan: Fiscal Year 2013–18 MDL Packages and Other Court Settlement Agreements, at 9 (last accessed June 18, 2014), available at http://www.fws.gov/endangered/improving_ESA/FY13-18_ESA_Listing_workplan.pdf (reference to yellow-billed loon). ESA-related documents for the loon, however, do not mention mercury risks at all. See 74 Fed. Reg. 12,932 (Mar. 25, 2009); 77 Fed. Reg. 70,013-14 (Nov. 21, 2012); see also EPA, EPA-452/R-97-009, Mercury Study Report to Congress, Vol. VII: Characterization of Human Health and Wildlife Risks from Mercury Exposure in the United States 2–17 (1997), http://www.epa.gov/ttn/caaa/t3/reports/volume7.pdf (suggesting that the safe threshold concentration in humans is 0.1 ppm of mercury, while the safe threshold for loons and other animals that consume fish is 0.077 ppm). If mercury is a threat to the yellow-billed loon in a manner comparable to its common cousin, and this species gains federal protection under the ESA, then the federal government is obligated under the ESA to protect it from mercury poisoning.

ESA protections for species include a prohibition on “take” of endangered (and certain threatened) species and a requirement for the federal government to consult to ensure that its actions do not “jeopardize” listed species. Wherever there is a federal nexus for a discretionary action, the ESA imposes the duty to consult, although there is a question whether this duty extends to activities in foreign countries. See Lujan v. Defenders of Wildlife, 504 U.S. 555, 581 (1992) (Stevens, J., concurring). If the ability exists to identify (through isotopic signatures) mercury emitted from U.S. coal-fired power plant(s) in dead yellow-billed loons that have toxic levels of mercury, then, theoretically, an environmental group can request an injunction to stop such power plant(s) (of course, the federal government can take similar action). Furthermore, under the duty to consult, environmental organizations could challenge permits issued by EPA to coal power plants under the theory that EPA failed to consult with FWS on impacts to yellow-billed loons, or if there was such consultation, whether FWS sufficiently considered whether these coal power plants would jeopardize the species. Another avenue for environmental organizations to sue would be for agencies failing to consult or consider the impacts to loons related to coal production, transporting coal on land and water to foreign nations, and perhaps financial aid to foreign nations related to coal-fired power plants.

The current listing priority number for the candidate yellow-billed loon is 8, which means FWS considers the threat magnitude of the species to be “moderate to low,” but with threats to be “imminent.” From the last candidate notice of review for the loon, FWS indicated that subsistence hunting was the primary imminent threat, but that loons are “also subject to several
Endangered Species Committee, August 2014

stressors, including oil and gas exploration and development, marine pollution, the effects of climate change, the inadequacy of existing regulations, and fishing by-catch.” 77 Fed. Reg. at 70,014. FWS probably would not list the species as endangered rather than threatened. There is a possibility, however, that FWS would decide not to list the species, which environmental organizations would likely challenge, as candidate species warrant being listed, but are precluded from being listed only due to other higher priority listing-related actions. If listed as threatened, it would not be surprising for FWS, as for the polar bear, to issue a special ESA section 4(d) rule to limit considering impacts of climate change and, specifically for the loon, mercury impacts from emissions outside of Alaska. As with the polar bear, the environmental community would likely challenge the decision to list the species as threatened, rather than endangered, and the merits of the special rule. With the polar bear, the court determined that the special rule was an unreviewable discretionary action. There would likely be a similar result for the loon’s special rule. However, as the court found that the likelihood that the polar bear would be endangered in 50 years justified the threatened status, for the loon the threat of mercury poisoning may be immediate, besides other threats, which could justify an endangered finding and thus preclude a special rule for the loon.

So, if the loon is found endangered, rather than threatened, can the threat of mercury to the loons force the reduction of coal use, which would also reduce carbon dioxide emissions? Can the threat of “taking” loons under the ESA provide additional impetus on a mercury rule and expedite closing coal-fired power plants, thereby reducing greenhouse gas emissions? Can potential case law on mercury-related “take” of loons, either from domestic or international coal use, provide precedence for future takings cases involving effects of greenhouse gas emissions on species such as the polar bear (and loon)? Or will new EPA regulations for carbon pollution on existing coal plants, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,830 (June 18, 2014), and proposed regulations for new coal plants, see 79 Fed. Reg. 1430 (Jan. 8, 2014), moot the threat of mercury’s impacts on wildlife altogether? The next couple of years may well lead to discovery of the limits of ESA take from greenhouse gases and mercury emissions.

Linus Chen is an attorney with the Office of the Solicitor at the U.S. Department of the Interior. The views expressed in this article are solely those of the author and do not purport to reflect the views of the Office of the Solicitor, the U.S. Department of the Interior, or the United States.

Linus Chen

is an attorney with the Office of the Solicitor at the U.S. Department of the Interior. The views expressed in this article are solely those of the author and do not purport to reflect the views of the Office of the Solicitor, the U.S. Department of the Interior, or the United States.

So, if the loon is found endangered, rather than threatened, can the threat of mercury to the loons force the reduction of coal use, which would also reduce carbon dioxide emissions? Can the threat of “taking” loons under the ESA provide additional impetus on a mercury rule and expedite closing coal-fired power plants, thereby reducing greenhouse gas emissions? Can potential case law on mercury-related “take” of loons, either from domestic or international coal use, provide precedence for future takings cases involving effects of greenhouse gas emissions on species such as the polar bear (and loon)? Or will new EPA regulations for carbon pollution on existing coal plants, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,830 (June 18, 2014), and proposed regulations for new coal plants, see 79 Fed. Reg. 1430 (Jan. 8, 2014), moot the threat of mercury’s impacts on wildlife altogether? The next couple of years may well lead to discovery of the limits of ESA take from greenhouse gases and mercury emissions.

Linus Chen is an attorney with the Office of the Solicitor at the U.S. Department of the Interior. The views expressed in this article are solely those of the author and do not purport to reflect the views of the Office of the Solicitor, the U.S. Department of the Interior, or the United States.
On September 9, 2011, Judge Emmett G. Sullivan of the U.S. District Court for the District of Columbia approved two settlement agreements in a multidistrict litigation regarding missed-deadline claims under section 4 of the Endangered Species Act (ESA), 16 U.S.C. § 1533. That action set into motion events with the potential for enormous impact on species conservation and implementation of the ESA. The period covered by the settlement extends several more years into the future, and the cascade of consequences continues to unfold. It is, therefore, too early to judge the ultimate results of the settlements—but it is not too early to remark on what has changed, and to hazard guesses where the current trajectory is heading. The short answer: much less deadline litigation, more listing determinations completed, increased conservation efforts for species now on a defined queue for those determinations, and quite a bit of attention from certain quarters of Congress.

A Little History

Section 4 of the ESA governs the listing and delisting of threatened and endangered species and the designation of critical habitat for listed species. It requires that the U.S. Fish and Wildlife Service (FWS) make these decisions through rulemaking. Moreover, the public may petition FWS to consider listing species, triggering an administrative process replete with strict deadlines. The ESA provides one statutory safe harbor for FWS from a potential onslaught of competing deadlines: FWS may determine that listing a species is warranted, but immediate action is precluded by higher priorities. 16 U.S.C. § 1533(b)(3)(B)(iii). This is known as a “warranted-but-precluded finding.” The species is then put on the “candidate list” (with species FWS itself identifies as needing listing), where it waits until resources become available to begin the rulemaking process or FWS determines that listing is no longer warranted. In the meantime, FWS must make annual findings reaffirming its warranted-but-precluded status.

FWS has struggled with the workload required by section 4 since the first days of the ESA. With limited resources (including a congressionally mandated moratorium on listings in the mid-1990s), effectively unlimited workload, and strict statutory deadlines, each management or litigation strategy that FWS used to address this conundrum ultimately failed. By the late 1990s, court orders and settlement agreements had swamped the listing program and FWS lost any ability to prioritize its efforts and get the most bang for the buck in protecting imperiled species. This race-to-the-courthouse environment decreased the program’s efficiency and further limited the number of species actually listed and protected by the ESA.¹ By 2010, there were 251 species waiting on the candidate list.

The MDL Settlements

In 2010, the U.S. Department of Justice (DOJ) got 20 petition-deadline cases in seven districts centralized in a multidistrict litigation (MDL) proceeding, which was assigned to Judge Sullivan. The petitions were submitted by WildEarth Guardians (Guardians) and the Center for Biological Diversity (CBD), and covered 121 species. The parties entered into settlement negotiations, which eventually led to Judge Sullivan approving two separate settlement agreements. See In re ESA Section 4 Deadline Litig., No. 10-377, MDL No. 2165 (D.D.C. Sept. 9, 2011), ECF Nos. 55, 56. Safari Club International sought to intervene, but Judge Sullivan denied intervention, which the D.C. Circuit upheld. See In re ESA Section 4 Deadline Litig., 704 F.3d 972, 974 (D.C. Cir. 2013).

The MDL settlements address all of the deadlines for the petitions at issue in the centralized cases. But more importantly, the settlements also address the candidate list. One of the settlements requires FWS to remove each of the 251 species on the candidate list as of

¹ The author has already had the temerity to cast himself in the role of Thucydides (the author of History of the Peloponnesian War) with respect to what some refer to as the “Listing Wars.” In an article published last year, see 14 VT. J. ENVT'L. L. 327, the author used the metaphor of warfare to describe the history of deadline litigation under the ESA, why that history led to the settlements at issue, and the results thus far. In contrast, this article provides only the briefest overview of that history, and skips to an updated version of the fun stuff.
November 2010 by the end of fiscal year (FY) 2016, by either determining that listing is not warranted, or by issuing a proposed rule to list. In other words, FWS agreed to cease making warranted-but-precluded findings for those species by 2016. In addition, the settlements require that FWS address certain candidates in earlier fiscal years (e.g., greater sage grouse by the end of FY 2015). In return, Guardians agreed to cease all deadline litigation and to limit new petitions; CBD agreed to provisions designed to make it unlikely for CBD to file more than a handful of deadline lawsuits each year; and both plaintiffs agreed to dismiss ongoing challenges to warranted-but-precluded petition findings.

The settlements were possible in large part because all of the parties shared some basic common interests. First, all three parties wanted FWS to implement section 4. In particular, they all wanted FWS to be able to resolve the conservation status of the candidate species. Second, the parties recognized (albeit to varying degrees) that litigation, although sometimes providing useful torque to the gears of the listing program, had an even greater potential to act as sand in those same gears. The more resources FWS had to spend on litigation support, the less it could spend on implementing section 4, even if FWS ultimately prevailed. And when FWS did not prevail, it was often forced to rejuggle its resources to comply with court orders, further reducing the overall efficiency of the listing program.

So What?

What has happened in the almost three years since the settlements were signed, and why should anyone care? First, the settlements have stuck. Legal challenges to the settlements have failed, no party to the settlements has sought to have them terminated, and, most importantly, FWS has been able to comply with only minor adjustments, despite severe budgetary challenges, including the sequester and government shutdown. As of April 29, 2014, FWS removed 145 of the 251 species at issue from the candidate list. Of these 145 species, FWS proposed 123 for listing, and of the 123, FWS has already listed 97 species that had waited years or decades for final action. Absent the settlements, many or most of these species would still be waiting for ESA protection. It is perhaps fair to assert that the listing program, albeit not perfect, is no longer broken.

Of course, the prospect of the listing program being repaired has not been greeted with universal acclaim. In addition to the congressional reaction discussed below, a number of parties that prefer that species not be listed have filed legal challenges to the settlements. As mentioned above, Safari Club’s attempt to intervene in the MDL case itself to oppose the settlements—presumably to prevent the listing of certain game species—was unavailing. Undaunted, the National Association of Home Builders (NAHB) filed a collateral challenge to the settlements. Like Safari Club, NAHB’s primary argument was that FWS had illegally agreed not to make warranted-but-precluded findings. Interestingly, NAHB chose to file its suit in the U.S. District Court for the District of Columbia; the case was assigned to Judge Sullivan, who recently, and not surprisingly, disposed of the case as he did Safari Club’s motion to intervene in the MDL litigation. Nat’l Ass’n of Home Builders v. FWS, 2014 U.S. Dist. LEXIS 42946 (D.D.C. Mar. 31, 2014). But shortly before he did so, on March 17, 2014, another collateral challenge was filed, this time by the state of Oklahoma, joined initially by the Domestic Energy Producers Alliance, and subsequently by the states of Kansas and North Dakota and the Oklahoma Farm Bureau. See Am. Compl., Oklahoma v. Dep’t of the Interior, No. 14-00123, 2014 WL 1650914 (N.D. Okla. Apr. 1, 2014). The complaint in this case also centers on FWS’s agreement not to make warranted-but-precluded findings, but includes additional claims. Although Oklahoma did not file in the D.C. district court, the government is attempting to have the case transferred there. On April 23, 2014, the clerk of the U.S. Judicial Panel on MDL entered a conditional transfer order transferring the case to the existing MDL before Judge Sullivan, which the parties are currently litigating.

Second, to maximize the settlements’ chances of continuing to deliver what it has promised, FWS must redouble its efforts to make the listing program as efficient and effective as possible. Besides the efficiency gains that directly resulted from reduction in litigation caused by the MDL settlements, improving the effectiveness of the listing program will require investing considerable effort in streamlining the decision-making process. It may also require
developing substantive policies that will take some of the uncertainty, and therefore legal risk, out of the decisions made by FWS. These sorts of investments, however necessary, were hard to justify when the listing program was in a state of perpetual budget crisis, with FWS focusing all of its available resources on trying to avoid contempt of court. Thus, the listing wars had the effect of substantially stunting policy development under section 4 for 15 years. In the last couple of years, however, FWS has made progress on this front: FWS and the U.S. National Marine Fisheries Service (NMFS) have amended two provisions in the ESA implementing regulations governing critical habitat designation—the first revisions to the listing and critical habitat regulations since 1984. First, the agencies changed how critical habitat is delineated, see 77 Fed. Reg. 25,611 (May 1, 2012) (amending 50 C.F.R. § 424.12(c)), which has the potential of saving hundreds of thousands of dollars per year in Federal Register and Code of Federal Regulations publication costs. Second, the agencies clarified how they will handle impact analyses for critical habitat designations, which should reduce uncertainty (and attendant litigation) regarding how FWS and NMFS consider the economic impacts of designation. 78 Fed. Reg. 53,058 (Aug. 28, 2013) (amending 50 C.F.R. § 424.19). Several other policy initiatives are also in the works.

Third, the settlements appear to be having conservation benefits beyond the potential speeding up of listing determinations (and therefore applying the ESA’s regulatory protections to some species more quickly). Perhaps when interested parties could assume that candidate species would remain unlisted for many years or decades, the benefits of engaging in conservation actions (avoiding listing, or making the effects of listing less onerous) seemed too attenuated to be an effective incentive. By providing concrete deadlines for listing determinations for all 251 candidates—but deadlines are mostly distant enough to allow conservation action to be taken before a final determination is made—the settlements have encouraged federal, state, and private actors to take conservation measures in the interim.

The most obvious example of this dynamic has been the attention paid to the greater sage-grouse. Because of its wide range and vulnerability to a number of land uses, its listing has the potential to affect many states, industries, and federal agencies. Since the MDL settlements set a deadline of FY 2015 for action by FWS, there have been numerous announcements about new initiatives to conserve the greater sage-grouse that have cited the impending deadline. It is, of course, much too early to tell whether the efforts in this interim period will vitiate the need to list the sage grouse, but even if it is listed, these efforts are likely to accelerate the recovery of the bird, making its listing less costly and disruptive, and leading to an earlier delisting.

Fourth, the MDL settlements made it possible for FWS to successfully defend warranted-but-precluded findings at issue in other lawsuits and thereby allowed time for designing and implementing conservation initiatives for the greater sage grouse. As mentioned above, the settlements required Guardians and CBD to either move to dismiss or withdraw from the existing challenges to warranted-but-precluded cases. One case, before Judge B. Lynn Winmill in the U.S. District Court for the District of Idaho, involved the greater sage grouse. See W. Watersheds Project v. FWS, 2012 U.S. Dist. Lexis 13771 (D. Idaho Feb. 2, 2012). The others were promptly dismissed, but in the greater sage grouse case, a co-plaintiff opposed dismissal. CBD withdrew, the government and Guardians moved to dismiss the case as prudentially moot, and the government and the remaining plaintiff Guardians moved to dismiss the case as prudentially moot, and the government and the remaining plaintiff cross-moved for summary judgment. Judge Winmill, who had vacated FWS’s last 12-month finding for the greater sage grouse in a strongly worded opinion, ruled for FWS by the narrowest of margins. He declined to find FWS’s warranted-but-precluded finding arbitrary and capricious, but only because of FWS’s commitment in the MDL settlements to issue a proposed rule or make a not-warranted finding for the sage grouse by FY 2015. Id. at *7; see also Wildwest Inst. v. Ashe, 2014 WL 1648170, *13 (D. Mont. Apr. 25, 2014) (in upholding a warranted-but-precluded finding made shortly before Judge Sullivan approved the settlements, the court described FWS’s commitments under the settlement with Guardians to be “a considerable and aggressive task, which in the opinion of this Court demonstrates the Service’s general level of commitment to its listing activities”).

Fifth, deadline litigation has decreased. Of course, the Guardians settlement prohibits that group from filing deadline litigation during the period of the settlement...
agreement, so it has filed no such cases. CBD has continued to file deadline litigation, but at a much reduced rate. More importantly, no other group has stepped forward to fill this void: other organizations have filed only a few other new deadline suits. A reduction in litigation, particularly deadline litigation, may also have the indirect benefit of improving the listing program by improving the morale of FWS personnel. These good folks trained for years because they want to do conservation-biology work; they do not want to be glorified paralegals providing litigation support while being pilloried from all sides for trying to do their jobs in challenging circumstances. Thus, a reduction in litigation may help the listing program attract and retain the most talented staff.

Sixth, some members of Congress have complained about the settlements as a part of a larger criticism of the ESA. The House Committee on Natural Resources has held several oversight hearings on ESA litigation since FWS signed the MDL settlements. More recently, ESA critics appear to be operating from a new set of talking points, stating emphatically that the settlements resulted from an allegedly inappropriate “closed-door” process. A bill was even introduced in the Senate in 2013 to amend the ESA to require detailed public process prior to filing a settlement, and to give states and counties a veto over possible settlements. See S. 19, 113th Cong. (2013). The MDL settlements were also a primary target of a report released by a House of Representatives working group in February 2014. Among other things, the report recommends: (1) requiring all details of settlement negotiations to be made public; (2) making the National Environmental Policy Act applicable to settlements; (3) severely limiting the fee-shifting provisions of the ESA; and (4) requiring settlements to be approved by local, tribal, and state governments. ESA CONG. WORKING GROUP, Report, Findings, and Recommendations (Feb. 4, 2014), available at http://esaworkinggroup.hastings.house.gov/uploadedfiles/finalreportandrecommendations-113.pdf. These criticisms ignore the reality that settlement discussions of any sort are almost always conducted behind closed doors, and those discussions are generally confidential, as are the agreements themselves until filed in court. Of course, as a practical matter, this sort of ESA reform would have the effect of rendering settlement impossible.

More broadly, the critics of the MDL settlements appear to share the view that the settlements represent some kind of collusion between FWS and the environmental organizations to give FWS cover for taking listing actions that are somehow inappropriate. This is simply incorrect. As a factual matter, FWS’s relationship with CBD and Guardians has been strongly adversarial since the organizations formed, through Democratic and Republican administrations alike. As a legal matter, the settlements require nothing more than implementation of the existing law.

For all of these reasons, the MDL settlements were a pivotal event in the history of the Endangered Species Act. This is reflected in the title of this article, “The Settlement to End All Settlements?” First, in continuance of the theme of the longer article in the Vermont Journal of Environmental Law, the title is a reference to World War I (“the War to End All Wars”—which, of course, it wasn’t). Second, the purpose of the MDL settlements was to allow FWS to concentrate on implementing the current law rather than litigation, which, to use a different metaphor, has at times seemed like rearranging deck chairs on the Titanic (rather than trying to turn the ship, slow it down, repair it, lower the lifeboats, etc.). And in fact, the MDL settlements have been successful in greatly reducing the need for additional settlements in deadline litigation, thereby resulting in an end to settlements, of sorts. Third, if congressional backlash caused by the settlements leads to legislative changes to the ESA, either in the form of mandating an unworkable settlement process, or eliminating the legal basis for deadline litigation, there will also be an end to settlements. Stay tuned.

Benjamin Jesup is an attorney with the Office of the Solicitor at the U.S. Department of the Interior. He was the lead attorney on the MDL case for the U.S. Department of the Interior, and since 1997 he has been the Solicitor’s Office nationwide coordinator for ESA section 4 litigation. The views expressed in this article are solely those of the author and do not purport to reflect the views of the Office of the Solicitor, the U.S. Department of the Interior, or the United States.
The Endangered Species Act (ESA), 16 U.S.C. § 1531 et seq., has been called the “pit bull” of environmental laws. This article contends that increases in ESA litigation and consultation obligations have expanded the ESA’s scope and effect. Specifically, the reach of the ESA has expanded because of a dramatic rise in listing petitions that are likely to increase the number of species subject to the ESA’s protections and because of an increase in consultation obligations triggered by recent rulemaking, water supply disputes, and novel consultation contexts. The U.S. Environmental Protection Agency’s (EPA) recent final rule addressing impingement and entrainment of fish and other aquatic organisms at cooling water intakes is an example of a new paradigm in ESA consultation for regulatory actions. See EPA, Pre-Publication Final Rule, Final Regs. to Establish Requirements for Cooling Water Intake Structures at Existing Facilities and Amend Requirements at Phase I Facilities (May 19, 2014), available at http://water.epa.gov/lawsregs/lawsguidance/cwa/316b/ (hereinafter Pre-publication Final Rule). The ESA also features prominently in major water supply disputes throughout the United States. ESA consultation requirements are becoming more complex and broadening to include contracts, land use, and government programs such as flood insurance programs.

Budget constraints limit the ability of federal agencies to respond to the ESA’s expanding scope. The federal agencies tasked with administering the ESA, the U.S. Fish and Wildlife Service (FWS), and National Marine Fisheries Service (NMFS), have long been budget constrained. In fiscal year (FY) 1998, and for each fiscal year since then, Congress has placed a statutory cap on funds that may be expended for the listing program. Congress designed this spending cap to prevent the listing function from depleting funds needed for other functions under the ESA (for example, recovery functions, such as delisting), or for other Services programs. See H. Rep. 105-163, 105th Cong., 1st Sess. (1997). In addition, since FY 2002, the FWS budget has included a critical habitat sub-cap to ensure that some funds are available for completing listing program actions other than critical habitat designations. The ESA requires expert biological science, but it is constrained by sometimes unrealistic deadlines inconsistent with scientific methods. The increasing scope of ESA decisions and impacts on day-to-day policy require greater attention to ESA issues.

Listing Petitions Likely to Dramatically Increase the Number of Protected Species

The ESA’s expanding reach follows in part from an anticipated dramatic increase in species subject to ESA protections. Section 4(a)(1) of the ESA requires FWS and NMFS (the Services) to list, based upon best scientific and commercial data available, all species determined to be threatened or endangered. Under section 4, listing can be initiated by the Services, or by petition from “interested” citizens. Once listed, species receive protections afforded by the remaining provisions of the ESA. Because of a major settlement agreement arising from citizen listing petition litigation, the Services agreed to make decisions regarding listing of over 700 species by the end of FY 2016. See Settlement Agreements with WildEarth Guardians (Guardians) filed on May 10, 2011, and Center for Biological Diversity (CBD), filed on July 12, 2011 (Settlement Agreements), In re ESA Section 4 Deadline Litig., No. 10-377 (D.D.C.), ECF Nos. 55, 56. Under the settlement agreement with Guardians, the Services agreed to complete initial petition findings for over 600 species and to either issue proposed listing rules or not-warranted findings for all 251 candidate species on the 2010 candidate list by the end of FY 2016—a “considerable and aggressive task.” Wildwest Inst. v. Ashe, No. 13-06-M-DLC, 2014 WL 1648170 (D. Mont. Apr. 25, 2014).

The conservation benefits of an expansion in listed species remains in dispute. While environmental organizations have expressed frustration at the pace of ESA listings, some members of Congress have raised concern that the ESA’s citizen petition provisions have promoted lawsuits at the expense of species recovery. See Hearing on Implementation of the ESA in the Southwest, H. Comm. on Natural Resources, 105th Cong., 2d Sess. (July 15, 1998), http://www.gpo.gov/
Increase in Scope of Actions Requiring ESA Consideration and Consultation

Recent ESA consultation determinations point out another area of the extensive potential reach of the ESA. EPA’s cooling water intake rule, recent water supply disputes, and several novel consultation contexts illustrate an expanding scope of ESA consultation. The implications cry out for greater science at early stages such as ESA listings and initial project development.

EPA’s Cooling Water Intake Final Rule

While the requirement to consider and protect listed species in the context of permitting has become commonplace, EPA’s May 18, 2014, cooling water intake rule under § 316(b) of the Clean Water Act (CWA), 33 U.S.C. § 1326(b), creates a new process that may serve as a model for future permit actions. Under the new rule—the result of EPA consultation with the Services—many applicants will be required to undertake multiyear entrainment studies involving consultation with the Services and state wildlife agencies. Pre-publication Final Rule at 284. Many permit applications will require development of biological information and a Source Water Baseline Biological Characterization Data report to be submitted to the permitting agency. Besides the expected complexity of the ESA due to its inherent focus on biological populations, ESA effects must be measured against a “baseline,” which can be evasive and a source of regulatory and legal debate. FWS, Programmatic Biological Opinion (BiOp) on EPA’s Issuance and Implementation of the Final Regulations § 316(b) of CWA (May 19, 2014). Facilities are also required to submit annual certifications that cooling water structures and processes have not changed.

The § 316(b) pre-publication rule is perhaps the most extensive generally applicable CWA National Pollutant Discharge Elimination System (NPDES) permit process directed at implementing ESA provisions. While EPA regulations at 40 C.F.R. § 124.10(c)(1)(iii) & (e) generally provide for notice of EPA-issued permits to be sent to the Services, the § 316(b) pre-publication rule carves out specific pre-permit notice “mini-consultation” with the Services. The § 316(b) pre-publication rule provides for a “General Process of Information Exchange and Technical Assistance Between Directors and the Services,” requiring permit applications for all applicable cooling water intakes to be sent to the Services for review and presumably a mini-consultation. If this step is not taken or recommendations of the Services not accepted, the Services BiOp would deem the situation a § 316(b) violation with potential implications for take of species, prohibited by section 9 of the ESA. The BiOp provides that EPA would use its permit oversight authority, presumably to veto a permit that does not follow the procedures or otherwise fails to include recommendations by the Services. Id. at 69–74.

In the realm of biological sciences, disputes regarding specific recommendations are likely. Such disputes in other federal actions such as hydropower licensing have lasted for many years. Note that NPDES permits are limited in duration to five years, raising the potential likelihood that a dispute regarding ESA-based conditions could consume much of the typical NPDES permit five-year effective period. NPDES permits can be administratively continued under 40 C.F.R. § 122.6; however, EPA and state agencies have strived to minimize administratively continued NPDES permits, which were more commonplace during the early years of the CWA.

EPA regularly consults regarding environmental programs such as CWA water quality standards, see, e.g., 64 Fed. Reg. 2,742 (Feb. 22, 2001), and development of ambient air quality standards under the Clean Air Act. The process for § 316(b) differs, however, in that it establishes a mini-consultation regarding a highly technical site-specific biological determination for permits that are largely administered by state-authorized programs.
Delta Smelt Water Contract Renewals

ESA implementing regulations provide that section 7 consultation applies only to actions “in which there is discretionary Federal involvement or control.” 50 C.F.R. § 402.03. There is no duty to consult for actions “that an agency is required by statute to undertake once certain specified triggering events have occurred.” Nat’l Ass’n of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 669 (2007).

In the more recent delta smelt saga, the Bureau of Reclamation (Bureau) is required to consult regarding renewal of water contracts for the Central Valley Project in the California River Delta. Natural Res. Def. Council v. Jewell, No. 09-17661, 2014 WL 1465695 (9th Cir. Apr. 16, 2014). In the 1960s, the Bureau entered into several long-term contracts pertaining to the Central Valley Project providing for 40-year terms addressing water rights at the Central Valley Project. When two groups of contracts expired, the Bureau claimed that renewal did not require ESA consultation because under the terms of the 1960s contracts, the same volume of water and allocation were required in a renewal contract. See NRDC v. Kempthorne, No. 05-1207, 2009 WL 2424569 (E.D. Cal. Aug. 6, 2009). In April, the Ninth Circuit, on rehearing the case en banc, reversed, holding that the Bureau had discretion regarding whether to renew the contracts in the first instance. NRDC v. Jewell, 749 F.3d 776 (9th Cir. 2014) (en banc). This discretion triggered the duty to consult under section 7.

Other Examples of Consultation and the ESA


ESA consultation requirements can find their way into land use. The familiar sage grouse, found in 11 states and throughout U.S. Bureau of Land Management (BLM) and U.S. Forest Service (USFS) lands, was not listed but was found “warranted but precluded” by other listing priorities and is now a candidate species. Nevertheless, analysis of sage grouse impacts of federal actions is required under National Environmental Policy Act mitigation provisions. W. Watersheds Project v. BLM, No. 10-02896-KJM, 2014 WL 119189 (E.D. Cal. Jan. 9, 2014) (Bureau failed to provide citations in the Environmental Assessment (EA) to the studies upon which it relied in its analysis of the impacts of the grazing decisions on the sage grouse and pygmy rabbit); see also Ore. Natural Desert Ass’n v. Jewell, 3:12-CV-00596-MO, 2013 WL 5101338 (D. Or. Sept. 11, 2013).

Expansion of the ESA Beyond Listings and Consultations

The sage grouse debate has focused primarily on federal lands managed by the BLM and USFS. However, because “take” of species is prohibited under ESA section 9 even on private lands, and the ESA can apply almost anywhere given the definition of take includes habitat modification, the scope of the ESA can extend to such private properties. The proposed Habitat Conservation Plan for Imperiled Aquatic Species of the Etowah River Basin (Etowah HCP) proposed implementation of local land use ordinances for 20 local governments in the Atlanta metropolitan area, including land acquisition, expanded buffers, and development controls. 74 Fed. Reg. 31,304 (June 30, 2009); see also DOI, Press Release, Sec’y Norton Announces More than $70 million in Grants to Support Land Acquisition and Conservation Planning for Endangered Species, 2004 WL 2112061 (Sept. 23, 2004). The Etowah HCP is unique because it proposed restrictions for private lands, which is less common for private lands than for federal lands. The Etowah HCP was not finally approved.

Other examples of ESA implications on private lands or state actions include citizen challenges to state game and wildlife laws and ordinances involving critical habitat areas. Animal Welfare Inst. v. Martin, 623 F.3d 19 (1st Cir. 2010) (citizens could challenge Maine’s authorization of foothold traps that harmed lynx); Strahan v. Coxe, 127 F.3d 155 (1st Cir. 1997) (challenging Massachusetts’ licensing of gill-net and
lobster pot fishing as harming northern right whale); *Loggerhead Turtle v. Cnty. Council of Volusia Cnty.*, 148 F.3d 1231 (11th Cir. 1998) (ESA applies to citizen’s challenge of county’s refusal to ban beach driving during sea turtle nesting season). Further, applying the principle of *Home Builders*, courts have found that the Federal Emergency Management Agency may be enjoined from issuing flood insurance for private properties for failing to consult. *Fla. Key Deer v. Paulison*, 522 F.3d 1133, 1147 (11th Cir. 2008). Moreover, the ESA includes a form of “vicarious” liability under which indirect effects of what might otherwise be normal societal actions can give rise to potential civil or criminal liability. See Devon L. Damiano, *Licensed to Kill: A Defense of Vicarious Liability Under the ESA*, 63 DUKE L.J. 1543, 1544 (2014).

ESA issues are also at the forefront of the well-publicized interstate water disputes between Georgia, Florida, and Alabama (involving the purple bankclimber, gulf sturgeon, and fat three-ridge mussel). Like the delta smelt litigation, ESA consultation and direct action may find its way into numerous aspects of reservoir and water system management. Richard Hamann, *Can the ESA Save the Apalachicola?*, 29 GA. ST. U. L. REV. (2013). Last year, the Texas Commission on Environmental Quality was enjoined from approving or granting new water permits affecting the Guadalupe or San Antonio Rivers until the state of Texas provides reasonable assurances to the court that such permits will not take whooping cranes in violation of the ESA. *Aransas Project v. Shaw*, 930 F. Supp. 2d 716, 789 (S.D. Tex. 2013), rev’d 2014 WL 2932514 (5th Cir. June 30, 2014).

**Threats to ESA Scientific Decision Making**

The Services resources are seriously constrained. FWS estimates that, based upon section 4 petitions for listing, FWS listing decisions would dramatically increase and exceed the totality of decisions for the first 20 years of the ESA. See FWS, *ESA Listing Workplan*, available at https://www.fws.gov/endangered/improving_ESA/listing_workplan FY13-18.html. Some in Congress have expressed concern regarding citizen suits over listing petitions and the effect on species recovery. Concerns have been expressed regarding the ability of the Services to comply with stringent ESA deadlines while maintaining fidelity to the scientific core of the statute. See *Compl., Nat ’l Ass ’n of Homebuilders v. Salazar*, No. 12-02013-EGS (D.D.C. filed on Dec. 17, 2012) (alleging that the Settlement Agreements with Guardians and CBD improperly permitted the two groups to set listing priorities and that the resulting listings will potentially be the result of incomplete science), dismissed, 2014 WL 1278630 (Mar. 31, 2014) (lack of standing).

The increased scope of the ESA threatens the scientific basis for ESA decision making. The Services and most biologists readily accept that scientific evaluation requires time and field resources. For example, under FWS guidance, proper assessment of species population requires evaluation of temporal changes and distribution, likely requiring multiple sampling sessions over different time periods and thus periodic reports. FWS, *How to Develop Survey Protocols: A Handbook* (2013), available at http://www.fws.gov/policy/SurveyProtocolsHB.pdf. The rigor and duration of biologically necessary assessments differ greatly from the standard NPDES permit application process, land use development, and contract negotiation, not to mention tight 90-day and 12-month listing deadlines under the ESA.

With its expanding scope and reach, the ESA’s effect on day-to-day life is increasing. The Services will require greater support from a resource and public input standpoint to achieve effective scientific and policy decisions in accordance with the protections of the ESA. Additional public and private resources will be necessary to provide the Services and regulatory and regulated entities with the information and support to meet the challenges of the expanding scope of the ESA.

David M. Moore is a partner with Smith, Gambrell & Russell, LLC, in Atlanta. David graduated cum laude from the environmental law program at Pace University School of Law, and has a B.S. in biology from the University of South Florida. He represented the largest water rights entities in the Southeast regarding endangered species issues, addressed the International Joint Commission regarding international water rights issues in the Great Lakes, and negotiated endangered species protection provisions in interstate compacts. He also teaches water law as an adjunct professor at Emory School of Law.
CAN THE ENDANGERED SPECIES ACT CURB MOUNTAINTOP REMOVAL MINING?
Rose Monahan

In the 1990s, coal companies began a surface mining practice in the Appalachian Mountains known as mountaintop removal mining (MTR). See Michael G. Crotty, Bragg v. West Virginia Mining Association: The Eleventh Amendment Challenge to Mountaintop Coal Mining, 13 VILL. ENVTL. L.J. 287, 287 (2002). As the name implies, mountaintop removal involves blasting off mountaintops to obtain the coal that lies beneath. See Mid-Atlantic Mountaintop Mining, U.S. EPA (June 24, 2013), http://www.epa.gov/region03/mntntop/.

Although mining companies are required to “reclaim” the mining area, 30 U.S.C. § 1258 (2012), it is impossible to return land affected by MTR to a pre-mining state. What were once rolling mountaintops are now forever plateaus. The “overburden,” the rock and soil that cannot be returned to the mountaintop because of instability that could lead to landslides, is deposited into adjacent valleys, where it buries and pollutes an estimated 2000 miles of headwater streams. See Press Release, EPA Makes Announcement on Two Proposed West Virginia Mountaintop Coal Mines (Jan. 5, 2010), available at http://yosemite.epa.gov/opa/admpress.nsf/0/84636183A97CED24852576A20069961A. MTR is distinctive from other forms of surface mining, such as strip mining and open-pit mining, because the overburden is not and cannot be returned to its original location, resulting in unprecedented alteration of the earth.

Surface mining, particularly MTR, also has negative impacts upon communities. Research shows that mining communities are some of the poorest in the Appalachian region. See Michael Hendryx & Melissa M. Ahern, Mortality in Appalachian Coal Mining Regions: The Value of Statistical Life Lost, 124 PUBLIC HEALTH REP. 541 (2009), available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2693168/. Research also demonstrates that children born in MTR communities have a higher risk of birth defects compared to communities without mining and communities with regular surface mining, even when controlling for a mother’s health and poverty level. Melissa Ahern et al., The Association Between Mountaintop Mining and Birth Defects Among Live Births in Central Appalachia, 1996–2003, 111 ENV’T RES. 838 (2011), available at http://www.ncbi.nlm.nih.gov/pubmed/21689813. Further, some states spend more funds on coal education and environmental protection resulting from mining operations than the coal companies bring into the state’s economy. For instance, although Kentucky brought in $528 million in coal-related revenue in 2009, the state spent $643 million in environmental protection, research and development for the coal industry, coal education, state services for coal industry employees, and mining-related infrastructure maintenance. See David C. Holzman, Mountaintop Removal Mining: Digging into Community Health Concerns, 119 ENVTL. HEALTH PERSPECTIVES A476, A482 (2011).

MTR poses particular concerns in Appalachia. The Appalachian region is one of the most biologically diverse regions in the world. Ecological Impacts of Mountaintop Removal, APPALACHIAN VOICES, http://appvoices.org/end-mountaintop-removal/ecology/. MTR not only alters scenic views but also destroys the region’s diverse habitats. According to the U.S. Environmental Protection Agency (EPA), “when headwater streams are buried, habitats that had supported abundant and diverse types of aquatic organisms indigenous to the area are lost.” Aquatic Ecosystems and Mountaintop Mining: Studying the Connections, U.S. EPA, http://www.epa.gov/sciencematters/ecosystem/mining.html. Numerous endangered and threatened species have been identified in areas affected by MTR, including several species of mussels, the Indiana bat, and the Virginia Northern flying squirrel in Appalachia. See U.S. EPA, EPA-9-03-R-00013, MOUNTAINTOP MINING/VALLEY FILLS IN APPALACHIA: DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (2003). Despite MTR’s potential impact on endangered and threatened species, under current Fish and Wildlife Service (FWS) policy, the Office of Surface Mining Reclamation and Enforcement (OSM) is not required...
to engage in formal consultation with FWS prior to approving mining permits.

With these types of consequences, it is obvious why environmental organizations and the Obama administration are interested in curbing MTR in the Appalachians. So far, the Clean Water Act has been the primary statutory vehicle to challenge the practice, with environmental advocates pointing to the thousands of polluted headwater streams and contaminated private wells as the bases for their claims. Although the Clean Water Act is a useful tool in combating MTR, it is not the only tool available. This article discusses the relationship between the Endangered Species Act (ESA) and surface mining, particularly MTR, and argues that the ESA could be more fully utilized to protect the Appalachian Mountains from the most destructive of mining practices.

**Interplay Between the Endangered Species Act and the Surface Mining Control and Reclamation Act**

The ESA, which prohibits any person from taking endangered (and certain threatened) species, has been referred to the “pit bull” of environmental statutes for both its breadth and strength. Sandi B. Zellmer, *Indian Lands as Critical Habitat for Indian Nations and Endangered Species: Tribal Survival and Sovereignty Come First*, 43 S.D. L. REV. 381, 394 (1998). The ESA defines “take” to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to do so. 16 U.S.C. § 1532(19) (2012). In addition to the takings prohibition, the ESA also requires federal agencies to ensure that “agency action”—“any action authorized, funded, or carried out by any [Federal] agency”—will not likely jeopardize listed species or adversely modify habitats by consulting with either FWS or the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NMFS), generally depending on whether the species concerned live on land or in the sea. *Id.* at § 1536(a)(2). Whenever FWS or NMFS concludes with a “jeopardy” opinion, the agency must also prepare a “biological opinion” specifying “reasonable prudent alternatives” to protect listed species. *Id.* at § 1536(b)(3)(A). However, formal consultation may be avoided when a “preliminary biological opinion,” which may cover numerous but similar agency actions, is confirmed as the final biological opinion for the proposed action or actions. 50 C.F.R. § 402.14(b)(2) (2013).

All mining operations must obtain a permit from either OSM or the state regulatory authority when the state has achieved the primary regulatory responsibility, or “primacy.” See 30 U.S.C. § 1253. Thus, when OSM issues a mining permit, formal consultation with FWS on the impact to endangered and threatened species would normally be required. However, in 1996, FWS issued a biological opinion (1996 Surface Mining BiOp) rendering formal consultation unnecessary for surface coal mining and reclamation operations conducted in accordance with federal and state programs under the Surface Mining Control and Reclamation Act (SMCRA). See Memorandum from Ass’t Dir. of Ecological Servs. to the Acting Dir., Office of Surface Mining Reclamation and Enforcement (Sept. 24, 1996). SMCRA’s implementing regulations require that coal-mining permits provide a description of any endangered or threatened species within the proposed mining area and that exploration and reclamation not jeopardize the continued existence of those species. See 30 C.F.R. § 772.12. Further, regulations prohibit the taking of any endangered or threatened species and prohibit the continuance of mining operations that jeopardize an endangered or threatened species. See *id.* at §§ 816.97, 817.97. As a result, FWS concluded that coal mining operations in compliance with SMCRA were not likely to jeopardize listed species or adversely modify critical habitats. Therefore, FWS does not require formal consultation with OSM for OSM surface mining permit determinations.

**Impacts of the 1996 Surface Mining BiOp**

The 1996 Surface Mining BiOp applies to all present and future federally listed and proposed species and critical habitats that may be impacted by surface mining. Rather than initiating formal consultation between FWS and OSM, mining companies have independent consultations with government-approved contractors to satisfy SMCRA’s regulatory requirements. See Patrick Reis, *Enviro Groups Tread*
Both the federal government and the coal industry maintain that informal consultation is sufficient to protect listed species. *Id.* However, other organizations argue that informal consultation provides little assurance that the mining industry is complying with SMCRA. *Id.* An environmental impact statement jointly prepared by EPA, the Army Corps of Engineers, OSM, FWS, and the West Virginia Department of Environmental Protection acknowledged that “[t]he conclusions reached by the FWS in the 1996 [Biological Opinion] were based, in part, on assumed compliance with the regulatory requirements of SMCRA.” U.S. EPA, MOUNTAINTOP MINING/VALLEY FILLS IN APPALACHIA (emphasis added).


Despite the drastic impact of coal mining and the uncertainty of compliance with SMCRA, FWS has declined to engage in formal consultations with OSM regarding coal mining permits.

**Challenges to the 1996 Surface Mining BiOp**

Although the Obama administration has noted disapproval of MTR, strategies to curb the practice remain focused almost solely on the Clean Water Act. In 2009, EPA, the Army Corps of Engineers, and the Department of the Interior issued a joint memorandum of understanding outlining the agencies’ intent to combat MTR by more vigorously enforcing Clean Water Act requirements. *See Memorandum of Understanding Among the U.S. Dep’t of the Army, U.S. Dep’t of the Interior, and U.S. EPA, Implementing the Interagency Action Plan on Appalachian Surface Coal Mining* (June 11, 2009).

Separately, environmental organizations have challenged MTR in the courtroom. However, as of yet, no court has ruled on the validity of the 1996 Surface Mining BiOp. On February 20, 2014, the D.C. district court struck down the 2008 stream buffer rule (2008 rule), which concerns mining operations near and through streams, in an action challenging both the 2008 rule and the 1996 Surface Mining BiOp. *Nat’l Parks Conservation Ass’n v. Jewell*, No. 09-00115-BJR, at *1 (D.D.C. Feb. 20, 2014). The 2008 rule had modified the previous 1983 stream buffer rule by altering when mining operations could deposit overburden into streams. *Id.* at *6-7. The district court ruled OSM’s failure to formally consult with FWS prior to adoption of the 2008 rule was arbitrary and capricious and thus violated the ESA. The plaintiffs additionally argued, and the district court agreed, that OSM’s reliance on the 1996 Surface Mining BiOp to avoid formal consultation with FWS on the 2008 rule was arbitrary and capricious. *Id.* at *8. In striking down the 2008 rule, the court noted that “[t]he conclusions reached by the FWS in the 1996 [Biological Opinion] were based, in part, on assumed compliance with the regulatory requirements of SMCRA.” U.S. EPA, MOUNTAINTOP MINING/VALLEY FILLS IN APPALACHIA (emphasis added).

Despite the drastic impact of coal mining and the uncertainty of compliance with SMCRA, FWS has declined to engage in formal consultations with OSM regarding coal mining permits.

*Endangered Species Committee, August 2014*
Cumberland darter, two listed species. The plaintiffs requested that the court vacate the 1996 Surface Mining BiOp as well as the issued mining permit. Currently, the case is moving through the court system and has not been decided on the merits, but if Nat’l Parks Conservation Ass’n is any indication, the district court is likely to find the 1996 Surface Mining BiOp issue moot after deciding whether to uphold or vacate the mining permit.

Moving Forward

As demonstrated by Nat’l Parks Conservation Ass’n and Defenders of Wildlife, plaintiffs are likely to challenge the 1996 Surface Mining BiOp by arguing that agency reliance on the opinion to justify subsequent action is arbitrary and capricious. This argument is not a direct challenge, but a challenge to its applicability in a particular situation. As a result, courts are unlikely to vacate the 1996 Surface Mining BiOp, as the issue of whether it is valid on its face is not before the court.

If a suit is brought directly challenging the 1996 Surface Mining BiOp, plaintiffs will need to demonstrate that the opinion itself is arbitrary and capricious—a high hurdle to jump. See 5 U.S.C. § 706(2)(A). Under the arbitrary and capricious standard of review, the agency’s decision must be reasonable but need not be the only reasonable interpretation. Courts may not substitute their judgment for that of the agency. See Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 416 (1971). While § 1536(a)(2) of the ESA requires agencies to base decisions on “the best scientific and commercial data available,” this standard creates greater deference for agency decisions because it requires technical expertise. The Supreme Court has held that when reviewing agency action that requires technical expertise, “a reviewing court must generally be at its most deferential.” Baltimore Gas & Elec. Co. v. Nat’l Resources Def. Council, Inc., 462 U.S. 87, 103 (1983). As a result, courts are, in general, highly deferential to biological opinions.

Therefore, it is more likely that FWS will unilaterally revoke or alter the 1996 Surface Mining BiOp before plaintiffs find a court that is willing to do so. Because the arbitrary and capricious standard allows for all reasonable agency decisions, it is flexible enough to allow agencies to change their position on particular issues. If the Obama administration is serious about curbing MTR, FWS should reconsider the applicability of the 1996 Surface Mining BiOp to mountaintop mining. MTR has disproportionate impacts upon endangered and threatened species compared to other mining operations because MTR requires that mountaintops be clear-cut, that the mountaintop be permanently removed, and that the overburden be deposited into adjacent valleys. See Mid-Atlantic Mountaintop Mining, U.S. EPA (June 24, 2013), http://www.epa.gov/region03/mtnstop/. Accordingly, the practice impacts listed species both on land and in aquatic environments. FWS could conceivably revoke the 1996 Surface Mining BiOp as applied only to MTR permits, while allowing all other mining permits to continue with the streamlined process. In this way, FWS could provide greater scrutiny over MTR permits, and thereby not only limit the number of MTR permits granted but also encourage coal companies to use other mining practices in order to utilize the 1996 Surface Mining BiOp’s relaxed standard.

While the devastating consequences of MTR are continually being more fully appreciated and actions have been undertaken to curb the practice, more can and should be done. Revoking or rescinding the 1996 Surface Mining BiOp, at least with regard to MTR permits, would more fully employ the ESA to protect not only endangered and threatened species but also the communities near MTR sites.

Rose Monahan is a third-year student at American University, Washington College of Law, where she is focusing on environmental law. She is originally from southwest Pennsylvania, at the juncture of steel, coal, and natural gas country.