WILDLIFE LAW CALL

LEGAL ISSUES IN ENERGY DEVELOPMENT AND WILDLIFE SPRING 2017

ASSOCIATION of FISH & WILDLIFE AGENCIES

EDITOR'S NOTE

The multiple-use missions of land management are perhaps best reflected in the life cycle of energy development projects. From fossil fuel and uranium extraction to wind turbine siting and bird take mitigation, agencies, courts, and stakeholders face an always-changing set of facts that shape the laws and practices of natural resource use.

This issue of the Wildlife Law Call provides an update on some of the latest developments in upstream fossil fuel energy development, as well as renewable projects. We aim to explore the nexus between state fish and wildlife protections and the administrative procedure and case law of utility-scale energy development — a thematic connection whose relevance grows every day.

We hope that this issue is useful both to practitioners and students of conservation and energy law.

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ASSOCIATION of FISH & WILDLIFE AGENCIES

I. ESA, MMPA, AND NEPA

a. A brief introduction to the ESA

Christina Micakovic

"Nothing is more priceless and more worthy of preservation than the rich array of animal life with which our country has been blessed. It is a many faceted treasure, of value to scholars, scientists, and nature lovers alike, and it forms a vital part of the heritage we shall all share as Americans."

President Richard Nixon, signing the Endangered Species Act, December 28, 1973[1]

One of the most controversial, yet commonly invoked, environmental statutes in recent history has been the Endangered Species Act (ESA) of 1973. Based implicitly upon the principles of the North American Model of Wildlife Conservation addressed in the previous issue of the *Wildlife Law Call*—(1) the Public Trust doctrine, (2) prohibition on commerce in dead wildlife, (3) democratic rule of law, (4) hunting opportunity for all, (5) non-frivolous use, (6) wildlife as an international resource, and (7) scientific management)—the ESA has been the foundation of countless environmental appeals resulting both in heightened protections and declarations of overreach in protecting these creatures.[2]

The ESA is meant to ensure the protection of not only the nation's fish, wildlife, and plants that are in immediate danger of extinction or in danger of extinction "within the foreseeable future," but also the protection of the "critical habitats" which these creatures may rely upon.[3] The ESA formally creates only two categories of species: those that are "endangered" and those that are "threatened". However, species considered for listing under the Act may also be referred to by other designations including candidate species, experimental populations, and look-alike Species.[4] "Endangered" species include all those species that are "in danger of extinction throughout all or a significant portion of its range" and "threatened" species include "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."[5] "Candidate" species are defined as:

> [P]lants and animals for which the U.S. Fish and Wildlife Service (FWS) has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities.[6]

"Experimental populations" are endangered or threatened species released outside their natural ranges if the Secretary of Interior "determines that such release may further the conservation of such species".[7] Before such release can be authorized, the Secretary must by regulation "identify the population and determine, on the basis of the best available information, whether or not such population is essential to the continued existence of an endangered species or a threatened species."[8] Experimental populations are designated by statute as "threatened" species.[9]

Listing these creatures may also require designation of critical habitats under §1532(5)(A) defined as both:

> (i) the specific areas within the geographical area occupied by the species, at the time it is listed . . . on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed . . . upon a determination by the Secretary that such areas are essential for the conservation of the species.[10]

Habitat designation is the basis for the first of five factors which allow a species to be listed as endangered or threatened. These factors include "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 continued existence."[11] These determinations are supposed to be based:

> [S]olely on the basis of the best scientific and commercial data available to [the Secretary] after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species, whether by predator control, protection of habitat and food supply, or other conservation practices, within any area under its jurisdiction, or on the high seas."[12]

Sections 4 and 7 require the Secretary of the Interior and the heads of all other Federal departments and agencies to collaborate so as to ensure the conservation of all listed species under the protection of the Act.[13] Section 9 prohibits any action by any person within the jurisdiction of the United States which causes a listed species to be imported, exported, or transported in any way, domestically or internationally, to be commercially viable in any manner or simply to be "taken."[14] "Take" under section 9 is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct."[15]

Case brief: *Red Wolf Coalition v. FWS*

Christina Micakovic

One of the many suits to recently invoke these aspects of the ESA, as well as the National Environmental Policy Act (NEPA), is *Red Wolf Coalition v. United States Fish & Wildlife Service*, 2016 WL 5720660 (E.D.N.C. 2016). The red wolf, which can only be found in the Alligator River National Wildlife Refuge in North Carolina, is managed by the U.S. Fish and Wildlife Service (FWS) as a non-essential experimental population (NEP).[16] Plaintiffs' challenge raised claims under ESA sections 4, 7, and 9.[17]

Prior to this suit, in 2014 the North Carolina Wildlife Commission and other landowners sought for the red wolf to be declared extinct in the wild and end the red wolf recovery program.[18] FWS reacted in June 2015 by announcing that it would terminate the reintroduction of red wolves into the red wolf recovery area, as well as the adaptive management program in which it sterilized red wolf hybrids and coyotes to prevent the erosion of the red wolf gene pool.[19] FWS's processes for coyotes and red wolves differed because the coyote was not extinct and thus was subject to take permits in five counties in North Carolina within red wolf territory.[20] This caused many red wolves to effectively get "taken" since coyotes were also look-alike species to the red wolf and FWS did not adapt its permit system for this discovery.[21]

The red wolf recovery program ran subject to §10(j) rules, which defined the circumstances under which the red wolf could be taken and, from 1999 to 2014, only allowed for the taking of "wolves…demonstrated to be a threat to pets or livestock or which were exhibiting inappropriate behavior that indicated they may become a more serious problem."[22] Beginning in 2014, FWS was also reported to have authorized the taking of red wolves—even some female wolves nursing pups—for reasons inimical to the 10(j) rules.[23] This expansion led to a sharp decrease in the red wolf population from a peak of about 130 in 2006, and 100 in November 2013, to only 50-75 in 2015, and only 40-60 in March 2016.[24]

The Court determined that these facts should be analyzed under the Administrative Procedure Act (APA)

standard of review and allow discovery, and only partly granted FWS's motion to limit the scope of review to administrative records.[25] The Court then granted the Red Wolf Coalition's motion for a preliminary injunction against the taking of red wolves.[26]

Red Wolf Coalition v. U.S. Fish & Wildlife Serv., 2016 WL 5720660 (E.D.N.C. 2016).

b. A brief introduction to the MMPA

Kaitlyn Huber

The Marine Mammal Protection Act (MMPA) was passed by Congress in 1972 in reaction to 100,000s of dolphin deaths each year due to tuna fisheries, seal hunting for fur, and commercial harvest of whales.[27] The Act's prohibits the hunting, killing, and harassment of marine mammals. The National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) manages the majority of marine mammals, including whales, dolphins, porpoises, seals, and sea lions.[28] The U.S. Department of the Interior's (DOI) U.S. Fish and Wildlife Service (USFWS), manages polar bears, walruses, sea otters, manatees, and dugongs.[29]

The Act prohibits the taking or importation of marine mammals and marine mammal products. Exemptions include: taking for public display purposes, enhancement of the species, research, and Native Alaskan sustenance and clothing use.[30] Additionally, authorizations can be obtained for unintentional and incidental takings of small numbers of marine mammals if such takings have a negligible impact on the species. The biggest human threat to marine mammals is accidental capture or entanglement in fishing gear. [31] These mammals often drowning when they are prevented from surfacing for air.[32] Destruction or degradation of their natural habitats is another cause of decline in marine mammals. Some other causes of marine mammal mortality include: ship traffic, the introduction of new diseases, ecosystem changes, and indirect effects of climate change.[33]

Pollution indirectly harms marine life and increases mortality by impairing specimens' health. Pollutants such as chemicals in fertilizers, pesticides, and pharmaceuticals accumulate in the tissues of marine mammals. Entanglement in plastic trash is consequence of pollution deserving of our attention. Finally, sounds in the ocean derive from a variety of sources, both natural and anthropogenic. Many marine mammals use sound to communicate, navigate, feed, and sense their surroundings.[34]

Noise pollution (whether from shipping, oil and gas exploration, drilling, naval operations, or oceanographic research) interferes with and disturbs these natural behaviors.[35] It is difficult to assess exactly how much anthropogenic noise affects biological, psychological, and behavioral changes in marine mammals, as little is known about marine mammal physiology and hearing. More extensive research is needed to further understand sound interactions and reduce the negative impacts of human-generated noise.[36]

Case brief: *NRDC v. Pritzker*

Kaitlyn Huber

The National Marine Fisheries Service (NMFS) approved incidental take permits (ITPs) for military readiness activities,[37] namely the Navy's use of Low Frequency Active (LFA) sonar in training, testing, and routine operations. Here, the incidental take of marine mammals using LFA sonar would have a negligible impact. The only issue was whether NMFS's mitigation measures satisfied MMPA's "least practicable adverse impact" standard.

NMFS may authorize the take of a small number of marine mammals incidental to a specified activity, for up to five years,[38] if 1) the total number of takes will have a negligible impact on the species, and 2) NMFS sets forth permissible methods of taking pursuant to an activity, as well as achieving the least practicable adverse impact on the species and its habitat.[39]

Marine mammals rely on underwater sound for catching prey, navigation, and communication. The U.S. Navy uses LFA sonar vessels around the world to detect quiet foreign submarines. LFA sonar produces low frequency sound pulses at 215 decibels in 60-second sequences.[40] The pulses can harm many marine species with low-frequency hearing.[41] Physical injury can also occur at levels greater than 180 decibels. Exposures below 180 decibels can cause short-term disruption of natural behavioral patterns, causing marine mammals to stop communicating with each other, avoid an area, cease foraging for food, separate from calves, and cease mating. Stress responses can manifest, as well as delayed migration, delayed reproduction, and reduction in growth.[42]

The MMPA categorizes harassment as Level A or Level B. Military readiness activities, like LFA sonar, involve Level A harassment—acts that injure or have the significant potential to injure a marine mammal with sound pulses of 180+ decibels. Level B harassment is less severe, at sound levels below 180 decibels; these acts disturb or are likely to disturb marine mammals, disrupting their natural behavioral patterns such as "migration, surfacing, nursing, breeding, feeding, and sheltering" where these behavioral patterns are abandoned or altered.[43]

Under a 2012 rule regulating incidental takes for LFA sonar, each vessel may perform active sonar operations up to 240 days a year, allowing the Navy to incidentally take, through Level A harassment, up to six baleen whales, 25 toothless whales, and 25 pinnipeds per year. The Navy may also take, through Level B harassment, up to 12 percent of the entire stock of every affected marine mammal species each year.[44] The Rule designates three mitigation measures: 1) the Navy must shut down or delay LFA sonar use if a marine mammal is near a vessel; 2) the Navy may not create LFA sonar pulses of 180+ decibels within coastal exclusion zones extending 22 km from any coastline; and 3) the Navy may not create LFA sonar pulses of 180+ decibels within one kilometer of several offshore biologically important areas (OBIAs). OBIAs are marine protected areas that provide marine mammals with relatively low-use environments.[45]

The "least practicable adverse impact" standard demands that, even if population levels are not significantly threatened, mitigation measures are still necessary to the greatest extent practicable in light of military readiness needs.[46] Compliance with the negligible-impact requirement does not necessarily cause the least practicable adverse impact.[47] Also, a mitigation measure that is practicable in reducing the impact of military readiness activities must not unduly interfere with the government's legitimate need for military readiness.[48]

NMFS failed to prove that its proposed mitigation reduced LFA effects to the least practicable adverse impact.[49] An internal NMFS white paper recommended a precautionary approach toward OBIA designation—a central piece of compliance with the Final Rule. The white paper's authors were clear that NMFS faced a choice between 1) protecting areas of likely biological importance based on proven ecological principles, or 2) minimizing the chance of nominating sites of marginal importance with the risk of overlooking biologically important areas.

NMFS chose the latter, but the Ninth Circuit held that the agency should have considered the precautionary approach, pursuant to its experts' recommendations. The agency's decision—a choice not to protect areas composing large areas for which little scientific data exists—conflicted with its statutory mandate of least practicable adverse impact.[50]

While NMFS planned to engage in "adaptive management" in response to the problem of data-poor oceanic regions, the Court held that "[NMFS's] duty to adopt in advance…measures to ensure the least practicable adverse impact…cannot be met simply by deferring to potential unknown future measures."[51] Therefore, NMFS conflated the least practicable adverse impact with

negligible impact. To authorize an incidental take, both standards must be met separately, including by designation of OBIAs.[52]

Nat. Res. Def. Council v. Pritzker, No. 14-16375, 2016 WL 3854207 (9th Cir. July 15, 2016).

c. A brief introduction to NEPA

Kyle Simon

National Environmental Policy Act (NEPA) requirements come into play when airports, office buildings, military complexes, highways, parkland purchases, timber harvests, grazing permits, energy development, and other activities are proposed by Federal agencies or otherwise require federal funding or approval. To secure approval of a permit or funding, federal agencies must publish Environmental Assessments (EAs), and sometimes Environmental Impact Statements (EISs), containing formal evaluations of the likelihood of impacts from alternative courses of action.

An EA is a public document serving three defined functions: (1) It must provide sufficient evidence and analysis for determining whether to prepare an EIS; (2) It aids an agency's compliance with NEPA when no EIS is necessary by identifying better alternatives and mitigation measures; and (3) It facilitates the EIS process if required.

If an EIS is required, the agency must publish a Notice of Intent (NOI) in the Federal Register. The NOI informs the public of the upcoming EA and describes how the public can become involved in the EIS preparation and commenting process. The EIS process ends with the issuance of the Record of Decision (ROD). The ROD serves the following purpose: (1) it explains the agency's decision, (2) it describes the alternatives the agency considered, and (3) it discusses the agency's plans for mitigation and monitoring, if necessary. From 2003-2012 EISs ranged in costs from $250,000 to $2 million.[53]

However, if an agency decides an EIS is not necessary, it will publish a Finding of No Significant Impact (FONSI). The FONSI explains the reasons why an action will not have a significant effect on the human environment and, therefore, why an EIS will not be prepared. The finding itself need not be highly detailed or technical, but must succinctly state the reasons for deciding that the action will have no significant environmental effects, and, if relevant, must show which factors were weighted most heavily in the determination. In addition to this statement, the FONSI must include, summarize, or attach and incorporate by reference, the EA.

Failure to comply with NEPA can lead to a variety of consequences: namely, lawsuits brought by private citizens and organizations, project delay from review agency interventions, public oppositions, etc., and most commonly, denial of funding. Moreover, an inadequate EA, EIS, or FONSI can result in a federal action being overturned in court, requiring the agency to return to the drawing board and delaying the project in question.

Case brief: *Union Neighbors United v. Jewell*

David Sheaffer

Buckeye Wind, LLC (Buckeye) sought to develop a wind farm of up to 100 turbines in Ohio.[54] The project could adversely impact the habitat of the Indiana bat, a federally listed endangered species.[55] Accordingly, Buckeye compiled a habitat conservation plan (HCP) and applied for an incidental take permit (ITP) as required by § 10 of the Endangered Species Act (ESA).[56] The HCP provided that Buckeye would site turbines away from known habitats, adjust the turbines' operating times and speeds, and protect additional habitat.[57] The project was expected to take up to 5.2 bats a year.[58] The U.S. Fish and Wildlife Service (FWS) issued the permit.[59]

Shortly thereafter, Union Neighbors United, Inc. (Union Neighbors) challenged the issuing of the permit, claiming that FWS failed to comply with its obligations

under the National Environmental Procedures Act (NEPA) and failed to make required findings under the ESA.[60]

The NEPA Challenge: Under NEPA, FWS must rigorously explore and objectively evaluate all reasonable alternatives to a development plan, which is subject to federal approval, if such approval or development will significantly affect the quality of the human environment.[61] Buckeye submitted, and FWS considered, several alternative development options in its HCP.[62] The Court found that FWS only considered one alternative option that would result in fewer than 5.2 bat deaths—the Max Alternative—which would have required the turbines to be shut down at night, but was economically infeasible. However, FWS failed to consider any feasible alternatives between the proposal and the Max Alternative. Because the notice-and-comment record showed that FWS was aware of other potentially feasible options within this range but failed to consider such options, the Court held that FWS's issuance of the ITP was in violation of its NEPA obligations.[63]

THE ESA Challenge: Union Neighbors also argued that FWS failed to meet the ITP requirements in three ways: (1) failing to ensure that Buckeye would, to the maximum extent practicable, minimize the number of bat takes, (2) applying the wrong standard to determine what constitutes the "maximum extent practicable," and (3) failing to formally find that a reduced-impact alternative was impracticable.[64] The Court disagreed.

The first challenge failed because FWS made official findings that Buckeye would minimize and mitigate take to the maximum extent practicable. FWS noted that Buckeye used a number of appropriate minimization techniques, including strategic siting of turbines, strict operation protocols, and cut-speed reductions based on habitat quality.[65] Overall, these efforts were predicted to reduce takes by 68.3%.[66] Buckeye funded the permanent preservation of swarming and hibernation habitat, which would offset all remaining takes and outlast the permit term.[67] The Court deferred to FWS's conclusions on these findings.

To determine compliance with the "maximum extent practicable" standard, the Court deferred to FWS's reasonable interpretation of the statute. The Court refused to apply *Chevron* deference to FWS's interpretation of the ITP Handbook.[68] However, pursuant to the *Skidmore* standard, FWS's past interpretations, present reasoning, specific findings, and responses to public comments were sufficiently robust to warrant deference.[69] Therefore, the Court upheld FWS's conclusion that, because minimization and mitigation efforts would fully offset impacts of the takings, Buckeye was required to do no more under the statute, even if more was practicable.[70]

The Court rejected Union Neighbors' third challenge on the basis that Union Neighbors ignored FWS's analysis of the Max Alternative. While resulting in no takes, the Max Alternative would result in a 22.7% reduction in clean energy, fewer cut emissions, $8.65 million in lost annual revenue, and over $200 million in lost revenue over the permit's term.[71] The Court further noted that such an alternative would likely result in the project being abandoned. Such findings were a sufficient basis for the Service to reject the Max Alternative as a practicable option.

Union Neighbors United, Inc. v. Jewell, 831 F.3d 564 (D.C. Cir. 2016).

Case brief: *Or. Nat. Desert Ass'n v. Jewell*

David Sheaffer

Columbia Energy (Columbia) sought to construct an electric transmission line that would connect a proposed wind farm to the grid. The proposed project crossed federal lands that provided potential wintering habitat for

the Greater Sage Grouse (GSG). The Bureau of Land Management (BLM) issued a Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) approving the project. Oregon Natural Desert Association (ONDA) sued BLM for violating its NEPA obligations because its FEIS did not adequately address the potential of wintering habitat for the GSG and assumed that GSG would not be present based on extrapolations from data gathered on neighboring parcels. Columbia intervened. The District Court granted summary judgment for BLM and ONDA appealed.[72]

The Ninth Circuit found the FEIS inadequate to meet NEPA standards because it was based on faulty data and BLM's extrapolations were illogical given this data.[73]

ONDA first argued that BLM erred by failing to establish a baseline level of annual use by GSG of the parcel. The Court rejected this argument but noted that, for this species and in these circumstances, BLM must assess, in some reasonable way, the actual baseline of the target parcel in the FEIS.[74] Despite this, the FEIS "did not report on *any* observations" of actual target site.[75] Rather, it relied on observations from neighboring sites at a lower altitude, and assumed that because no GSG were observed on these parcels after December, it was unlikely that the species used the target parcel.[76] However, the record reveals that this was an error or a lie. GSG were observed on these parcels after December, suggesting that it was more likely that the target parcel was also wintering habitat.[77] The Ninth Circuit ruled that BLM's error was arbitrary and capricious because the inaccurate information and unsupported assumption materially impeded informed decision-making and public participation by undermining all comments and conclusions drawn.[78] If the information was reported accurately, the parcel in question would have had a different habitat designation.[79] Moreover, the public may have tailored its comments differently had the habitat designation or records of GSG use been different.[80]

Next, ONDA argued that BLM erred by failing to individually analyze the impacts of the project on genetic connectivity.[81] But when the Court read ONDA's comments and the record in whole, it was clear that "genetic connectively" was only mentioned once in opaque terms.[82] There was no evidence that ONDA properly articulated its concerns about genetic connectivity apart from other concerns about brood rearing.[83] If ONDA wanted this issue to be fully analyzed in the FEIS, then it should have fully articulated the issue, as it did others.[84] Thus, because this issue was not properly plead, the court refused to rule on the merits of the ordeal.[85] ONDA thus failed to exhaust their genetic connectivity argument during notice and comment.

Oregon Natural Desert Ass'n v. Jewell, 840 F.3d 562 (9th Cir. 2016).

II. FOSSIL FUELS

a. Pipelines

Wildlife habitat and the Atlantic Coast Pipeline

Clark Ramsey

The dominant force for energy transmission in Virginia is Dominion Resources, Inc. Dominion intends to expand its Atlantic Coast Pipeline (ACP) from West Virginia through central and eastern Virginia and onto North Carolina's northeastern coast.[86] Unfortunately, this project has faced multiple delays brought on by environmental groups.

> Many game species require edge habitat, which the ACP would provide.

Constitutional issues of eminent domain usually beset pipeline projects. However, a wide variety of other issues are delaying progress. An amphibian called the Cow Knob salamander is currently halting progress of the pipeline.[87] The salamander inhabits the mature forests of the George Washington National Forest in Virginia's Blue Ridge Mountains.[88] Interestingly, the proposed pipeline's path is not going to run directly over the salamander's habitat, but underneath it by drilling through the mountain in question.[89] Nevertheless, opponents of the ACP have pushed forward by claiming that this route poses a danger to the salamander. Construction efforts for the ACP are set to resume this year, as Dominion jumps through the final administrative hoops, a process whose costs consumers will bear.[90]

Pipeline opponents argue that the ACP will destroy the habitats of obscure species like the Cow Knob salamander, James spiny mussel, Indiana bat, northern long-eared bat, and Virginia big-eared bat.[91] The particular concern is that the pipeline will cause a break in contiguous mature forest.[92] However, diversity of species in itself is not in all cases the worthiest goal.

Many game species require edge habitat, which construction of the ACP would provide. Deer and turkey in particular have long been declining in George Washington National Forest because the old growth forests have crowded out viable food sources and cover needed to avoid predators.[93] The ACP's installment would bring about the edge habitat these big game animals require.

Ruffed grouse are another important game species that would benefit. Grouse are in a constant state of decline because of habitat loss.[94] They require progressively diverse stages of forest growth[95] and narrow open strips of land.[96] Interestingly, the ACP would be a step in the right direction for improving the habitat of these game species.

Rather than use the adjudicative process to halt a project of tremendous economic benefit, wildlife advocates ought to focus on the economic value of benefiting and protecting certain species. It is difficult to find the economic value in protecting a small swath of habitat for obscure creatures that most people have never heard of or seen. However, there is no mystery to the economic value of promoting game species. Hunters spend just under $2,000 per year per capita.[97] As a group they contribute nearly $25 billion per year to the national economy.[98] Through license fees, equipment purchases, food, hotels, land leases, and patronizing rural small businesses, hunters provide a lesson in advocacy for wildlife. Where wildlife has economic value because of the money people spend pursuing it, there is a strong economic reason to preserve and protect it.

HUNTERS SPEND JUST UNDER $2,000 PER YEAR PER CAPITA. AS A GROUP THEY CONTRIBUTE NEARLY $25 BILLION PER YEAR TO THE NATIONAL ECONOMY.

Progress and industry are not always a death sentence for wildlife. The ACP provides a great example of industrial progress that will benefit certain wildlife—and amplify the economic benefit that hunters' dollars offer to struggling rural towns.

A Case for Keystone XL

Garett Koger

Over 2.6 million miles of pipeline carry natural gas and crude oil through the United States.[99] Economic realities make the immediate and mainstream transition to "renewable" energy sources unviable for the foreseeable future. Without government subsidies, renewable alternatives to oil, gas, and coal would not proliferate at current rates in the current market. Pipelines are the most efficient way to transport oil and gas throughout the United States.

First, a spill or catastrophe is less likely to occur via pipeline transportation rather than using trucks or trains to transport the resources. Second, pipelines reduce utilization of fossil fuels because trucks and trains are not required to be fueled in order to carry the resources throughout the entire nation. Third, pipelines drastically reduce the price of production and consumers benefit from the reduced costs. It is only government intervention and imposed taxes that artificially inflate the price of oil and gas. For example, Californians pay roughly 63.8 cents per gallon of gas in taxes alone, which is 15 cents per gallon higher than the national average.[100] In an economy where tangible goods are transported via oil or coal energy, it is easy to see how such taxes raise the cost of living—in California, for example—and stifle the economy.

The Keystone Pipeline has been a political spear and, thus, a controversial topic for years. TransCanada

Corporation began construction on the Keystone Pipeline in 2008.[101] It is a four-phase project. Phase One began transporting crude oil from Alberta, Canada, to Wood River and Patoka, Illinois, across 2,147 miles of international terrain in 2010.[102] Phase Two travels 291 miles from Steele City, Nebraska, to Cushing, Oklahoma—the central oil hub for the southern United States.[103] Phase Three extends 435 miles from Cushing to Nederland, Texas, and it is a portion of the highly controversial "XL" phase of the pipeline network. Phase Four has been the focus of much of the controversy with regard to the United States' recent political shift toward renewable energy.

The Keystone XL Pipeline proposes to add an additional 1200 miles of pipeline to the roughly 2.6 million miles of existing network.[104] It will transport crude oil form Alberta to Steele City, Nebraska; in the process it will incorporate American crude oil reserves located in Baker, Montana.[105] The potential addition to the existing pipeline network has caused political hysteria. It became a major source of controversy for both the Obama and Trump administrations because its approval has to come from the State Department due to the proposed addition's crossing the U.S./Canadian border. On March 24, 2017, the Keystone XL phase was authorized by President Trump after President Obama's State Department denied the requisite permit.[106] Challenges to President Trump's decision to authorize Keystone XL are likely to fail, but that reality will not likely deter activists from theatrical protests.[107]

One of the key tools of Keystone's opponents is the Endangered Species Act (ESA). For example, some activists assert that Keystone XL should be stopped because species such as the whooping crane, northern swift fox, woodland caribou—to name a few—might be negatively impacted.[108] Apparently, the primary concern for the whooping crane is that the addition of power lines in its habitat might increase midair collisions that could result in injury or death to the bird. The pipeline itself is buried about four feet underground.[109] After construction, most of the area is anticipated to be restored to its natural state. Activists' primary concerns seem to be predicated on the *potential* for the worst possible scenario, rather than what is probable.[110] According to the Pipeline and Hazardous Material Safety Administration (PHMSA), the 2.6 million miles of pipeline that carry oil and gas on a daily basis throughout the entire United States operate with a consistent level of safety, [111] so it is highly unlikely that Keystone XL's 1,200 miles will result in irreparable damage.

Pipelines such as Keystone will continue to be prevalent until viable alternatives to oil, coal, and gas—such as nuclear energy—are fully embraced. Nuclear energy has experienced a similar stigma as those that have surrounded oil, gas, and coal. No viable renewable energy source exists as of this writing that can fully replace fossil fuels, and understanding the reality of nuclear energy and fossil fuels is the only way to acknowledge their necessity for society as we know it. Contrary to popular belief, the sky is not falling.

b. Coal

Case brief: *Murray Energy Corp. v. McCarthy*

Giacomo Mattioli

Murray Energy Corp. and affiliates ("Murray") sued the U.S. Environmental Protection Agency (EPA), claiming that its enforcement of the Clean Air Act (CAA) was causing irreparable harm to Murray due to EPA's failure to evaluate the impact of enforcement on the coal industry.[112] The Federal government filed for summary judgment.[113] The CAA states that one of its primary goals is to promote governmental action on all levels to prevent air pollution and thereby curtail the negative impacts of pollution on the environment—and, by extension, its impacts on humans and wildlife.[114]

The EPA sought to dismiss Murray's action for three reasons.[115]

First, the EPA argued that CAA §321(a) creates a discretionary duty, not a mandatory duty; therefore, the Court lacked subject matter jurisdiction to hear the case because Murray had not stated a statutory waiver of the government's sovereign immunity. [116] Section 321(a) states that the EPA shall:

> [C]onduct continuing evaluations of potential loss or shifts of employment which may result from the administration or enforcement of the provision of [the Clean Air Act] and applicable implementation plans, including where appropriate, investigating threatened plant closures or

> reductions in employment allegedly resulting from such administration or enforcement.[117]

The Court held that § 321(a) indeed described a mandatory duty. Therefore, there was no issue with subject matter jurisdiction in this case. [118]

Second, EPA claimed that Murray lacked standing.[119] Murray argued that EPA's failure to comply with the requirements of 42 U.S.C. §7621 reduced the market for coal and threatened Murray's economic viability. [120] The Court found this harm sufficient for standing.[121]

Finally, the EPA contended that certain evaluations should suffice to comply with statutory requirements, despite not being explicitly conducted under § 7621.[122] The Court held that EPA's actions did not comply with the requirements of § 321(a).[123] Therefore, the Court denied the motion for summary judgment. [124] Based on the litany of motions filed by both parties during the course of the trial proceedings, the Court held that EPA must fully comply with §321(a) and EPA's refusal to do so would amount to abuse of discretion.[125] The Court ordered EPA to create a plan and a schedule for compliance with §321(a) within fourteen days of the order.[126]

Murray Energy Corp. v. McCarthy, 2016 U.S. Dist. LEXIS 143404 (N.D. W. Va. 2016).

Environmental clean-up: Tracking Expenditures of *Deepwater Horizon* Settlement Funds

In April 2016, a federal judge granted final approval for a $20 billion civil settlement between the states impacted by the 2010 *Deepwater Horizon* oil spill, the federal government, and BP.[127] This settlement, combined with $4 billion in criminal settlements, adds up to a whopping $25 billion.[128] The civil settlement includes payments to be allocated for natural resource damages, Clean Water Act (CWA) civil penalties (which are subject to the RESTORE Act of 2012), and implementation of a Gulf-wide environmental data management system.[129] Over half of the $4 billion criminal settlement is to be used by the U.S. Fish and Wildlife Service (FWS) for restoring the Gulf of Mexico and compensating affected states. Up to $15.3 billion may be tax-deducible, and only the $5.5 billion CWA penalty is explicitly labeled as non-tax-deductible.[130]

In the year since this settlement was approved, politicians, representatives, and community leaders have struggled with how to properly allocate these funds. Initially, the National Wildlife Federation (NWF) estimated that as much as $16 billion would be made available for ecological restoration.[131] However, many environmental groups have argued that, in practice, this money has not been used to make the Gulf whole again after the spill.[132]

For example, the Gulf Coast Ecosystem Restoration Council is responsible for distributing the $2 billion in RESTORE Act funds.[133] These funds were apportioned among the states, using a complex formula to determine their share of the devastated coastline.[134] Environmental groups angrily point out that this money has instead been used to repair leaking oil wells, and to finish a pre-existing conservation project in Houston.[135] These expenditures have ignored the concerns of those most harmed by the spill, like the shrimpers worried that their livelihood is threatened by the Gulf "dead zone."[136] In Mississippi the money has been used on a patchwork of projects such as a baseball stadium, repairs to an old gubernatorial mansion, and decreasing the budget deficit.[137] Mississippi also faced criticism when a federal judge blocked payment to restore an ocean-side resort, which had been destroyed by Hurricane Ivan long before the oil spill.[138]

In Florida, the 2016 appropriation bill allocated $41 million of the state's initial $150 million to projects such as the expansion of a community college and a bicentennial celebration.[139] In a comprehensive breakdown of Pinellas County's spending, *Tampa Bay Times* reported use of funds on electric bus charging stations, community art installations, parking lots, development of athletic fields,

SINCE THE BP SETTLEMENT WAS APPROVED, STAKEHOLDERS HAVE STRUGGLED WITH HOW TO PROPERLY ALLOCATE $25 BILLION IN FUNDS.

street lights, an HIV/AIDS prevention center, and veterans' services.[140]

Joni Tuck, grants administrator of the Greater Lafourche Port Commission, blames the states' scattered spending on lack of focus and indulgence of various lawmakers and interest groups' pet projects.[141]

Fortunately, the Gulf has not been completely lost in the shuffle. Much of Louisiana's funding has been used to rebuild its already dying coast[142] in what is reportedly the largest coastal restoration project in state history.[143] In the Florida House of Representatives, a bill has been advanced to ensure that 75% of the BP funds go directly to Triumph Gulf Coast, Inc., which represents eight of the most affected counties in the state.[144] Pinellas County spent a portion of its funds by acquiring lands for conservation. Conservationists in Texas are encouraging lawmakers to do the same with their funds.[145]

The money from the *Deepwater Horizon* settlements will be trickling to the states for over a decade. It is important that the states prepare for this continuous influx of funds, and create comprehensive and sustainable plans as to divide this money among the parties that were actually affected by the horrific accident. The states should avoid sending any of this money to greedy parties simply hoping for a piece of the pie. This will take cooperation among lawmakers, ecological experts, and communities.

III. WOOD BURNING / LUMBER

Case brief: *Helping Hand Tools v. EPA*

Shreya Patel

The Clean Air Act (CAA) requires new emitting facilities to obtain a prevention of significant deterioration (PSD) permit in order to regulate air quality.[146]

In this case, Sierra Pacific Industries was granted a (PSD) permit in order to construct a biomass-burning plant.[147] Sierra Pacific wanted to create this facility in order to burn excess biomass fuels from its existing lumber plant to produce steam that could turn turbine blades and produce electricity.[148]

To obtain a PSD permit, the U.S. Environmental Protection Agency (EPA) must ensure that the applicant is utilizing the best available control technology (BACT).[149] EPA makes this determination in a five-step process.[150] First, the applicant lists all available control technologies.[151] Second, the applicant eliminates any infeasible options.[152] Third, the applicant ranks the remaining options against each other.[153] Fourth, the applicant evaluates each control option to consider the energy, environmental, and economic impacts.[154] Fifth, the most effective option is chosen as the BACT.[155]

This case is unique because in 2011, EPA supplemented its five-step approach for only biomass-burning plants.[156] The agency sought a distinct analysis for biomass fuels because these fuels function differently than others in the carbon cycle.[157] In its supplemental analysis, EPA stated that, if utilization of biomass is the primary purpose of the project—as is the case here, then the agency may rely on that purpose to determine that another fuel would "redefine [or change] the project," and therefore be infeasible.[158]

Helping Hand Tools—a California non-profit organization—and Center for Biological Diversity (CBD) asked the EPA Environmental Appeals Board (Board), and subsequently the Court, to review EPA's grant of the permit on the ground that EPA did not consider all alternative, cleaner options.[159]

This case is important because it is the first time that the Court has addressed EPA's "redefining the source" guidance, and it is the first time that it discusses how to analyze BACT for facilities burning biomass fuels.[160]

Appellants first claimed that EPA failed to utilize BACT because it did not consider cleaner fuel sources such as solar power.[161] The Board had disagreed, stating that a PSD permit applicant need not consider alternatives that were not readily available because it is unrealistic and creates a substantial burden for the applicants.[162]

Appellants' second claim was that EPA should have required Sierra Pacific to change the ratio of biomass fuel (90%) and natural gas fuel (10%).[163] The Board had rejected this argument, stating that the entire purpose of the plant was to burn excess biomass from the lumber mill.[164] The 10% of natural gas use was merely for start-up and shutdown. Requiring Sierra Pacific to change that ratio would "redefine the source," by changing the initial purpose of the plant.[165]

The Court gave the Board substantial deference due to its expertise in the area, and deferred to EPA's grant of a PSD permit to Sierra Pacific, rejecting the arguments from Helping Hand Tools and CBD.[166]

CBD argued that these new standards would have an adverse impact on air quality and wildlife.[167] Critics argue that, because new biomass-burning facilities may invoke the redefinition exception, corporations may be dissuaded from pursuing cleaner energy.[168] Such a result may elevate the amount of pollutants in the air, contributing to birth defects and disease in many animals.[169]

On the other hand, this case may be praised for its deference towards EPA guidance. EPA regulates air quality standards in a highly technical manner, requiring input from people with the greatest expertise in the area. Given EPA's specialized background and extensive knowledge, deference is practical. It also accords with *Chevron* doctrine, which requires courts to defer to administrative agencies unless they act in an arbitrary or capricious manner.[170]

Helping Hand Tools v. U.S. Envtl. Prot. Agency, No. 14-72553, 2015 WL 7570564 (9th Cir. Dec. 23, 2016).

IV. NUCLEAR POWER

a. Nuclear power, wildlife risks, and Yucca Mountain

Brandon Lanyon

In 2016, nuclear energy provided nearly 20% of total U.S. electricity generation.[171] While nuclear energy still suffers from reputational problems, it provides a relatively safe and stable source of energy. Environmental and wildlife concerns surrounding nuclear energy often tend to focus on the rare catastrophic failure of a nuclear power plant and the radiological contamination that follows suit. While these concerns are valid, the odds of a catastrophic failure remain very slim.

In fact, the daily operation of a nuclear plant entails far more immediate environmental risks than a nuclear meltdown. These risks revolve around the water coolant process necessary to operate the plant. To keep reactors from overheating, nuclear plants require a large amount of water to be pumped in to cool the reactors. This water is pumped in from a nearby water source, typically a lake or river. As the plant takes in water, the suction can trap aquatic wildlife against the intake pipe grate or suck the wildlife into the intake pipe. In addition, when the plant discharges the warm water resulting from the cooling process, the resulting elevated temperatures can fatally harm aquatic wildlife. It is important for plants to consider these potential effects, and properly mitigate to the best of their ability.

Another environmental risk stemming from the operation of nuclear power plants is the disposal of nuclear waste—high-level radioactive byproducts in the form of spent fuel and other materials that have become radioactive after being used within the plant. It is imperative that these materials be disposed of properly, as the effects of radiation on the environment and wildlife are catastrophic and often fatal. In response to the need for a proper nuclear waste disposal site, Congress amended the Nuclear Waste Policy Act in 1987 to require the study and advancement of Yucca Mountain as a national nuclear waste repository.

The daily operation of a nuclear plant entails far more immediate environmental risks to wildlife than a nuclear meltdown.

Yucca Mountain was chosen as the site for the repository for various reasons, the most important being that the land was already owned by the federal government and located in a remote part of the desert. In addition, tunnels could be dug deep and long enough into the mountain to store the radioactive waste in a relatively safe manner without fear of effecting the environment or wildlife. While Congress officially approved of the project in 2002, federal funding for the site ended in 2011, leaving nuclear plants without a safe option to store nuclear waste.[172] Without Yucca Mountain, nuclear plants have resorted to on-site dry cask storage of waste in steel and concrete casks. It is estimated that roughly 70,000 metric tons of nuclear waste are sitting in dry cask storage at nuclear plants across the country.[173] While these casks are effective temporary solutions, they are not a safe long-term solution to storing nuclear waste. The longer the waste is left to sit in temporary storage, the higher the chance of an accident with catastrophic effects on the surrounding environment and wildlife. The federal government has begun to store

its nuclear waste at its New Mexico Waste Isolation Pilot Plant (WIPP). However, a nuclear accident in 2014 at WIPP, in which a waste container released radioactive material, raised doubts that this facility is a viable alternative to the Yucca Mountain facility.[174]

What happens now? The Yucca Mountain repository was defunded under the Obama administration for reasons that vary depending on who is asked. When the decision to defund the facility was made, Republicans in Washington, D.C. raised concerns about closing the facility and argued for its survival. Until recently, there has been little reason to believe that the facility would be revived. However, the 2016 election fundamentally changed political circumstances. President Trump announced that he intends to reopen the facility, and has requested $120 million in the upcoming budget to restart licensing activities for the facility.[175] Whether Congress supports this proposal is yet to be seen. However, the odds have risen in favor of the Yucca Mountain repository seeing the light of day.

Case brief: *New York v. NRC*

Nicholas Bennett

From 1984 to 2010, the Nuclear Regulatory Commission (NRC) relied on a "Waste Confidence Decision" to assess the risk of on-site storage of spent nuclear fuel. However, in 2010, the D.C. Circuit vacated NRC's 2010 update to the Decision and its Temporary Storage Rule regulating the storage of spent nuclear fuel. In response to the 2010 court decision, NRC prepared a Generic Environmental Impact Statement (GEIS) and proposed a Continued Storage Rule to codify its analysis of the effects of continued on-site storage of spent nuclear fuel.

A group of states, environmental organizations, and a Native American community challenged the GEIS and the new Rule for failing to comply with the National Environmental Policy Act (NEPA).

The Court found that NRC appropriately characterized its rule and considered alternatives and mitigation measures, and the GEIS sufficiently analyzed the impacts of continued storage of spent nuclear fuel by thoroughly considering common risks to reactor sites and evaluating the probability of failure to site a repository. The Court also found that the GEIS assessed the cumulative impacts of continued storage, and that NRC did not ignore short-term, high-volume leaks or site-specific impacts.

Because the court found that NRC complied with NEPA, the court denied further review.

State v. U.S. Nuclear Regulatory Commission, No. 14-1210 (D.C. Cir. June 3, 2016).

V. WIND FARMS

a. Refining the science of wind farm siting

Karen Nelson

Tall white turbines tower over fields in Michigan, Wyoming, Colorado, and most states in between. They move slowly from a distance, like strange flowers with rotating petals. But these towers are not at all natural, and the natural world does not always interact well with the spinning blades. Though public interest has risen in utilizing renewable energy resources like wind, development has not been adequately conscious of the impact of wind energy facilities, also known as wind farms, on avian wildlife. According to the U.S. Fish and Wildlife Service (FWS), 134,000-327,000 birds are killed by wind turbines each year.[176]

The desire for clean energy and concerns for avian wildlife have led engineers and wind farm operators to consider ways to make turbines more wildlife-friendly.[177] New strategies include changes to the design of wind turbines, implementing radar sensitive enough to detect nearby birds and program turbines to react to them, creating wildlife refuges in the sky, and analyzing data to find ideal sites for wind farms.[178]

When it comes to design, the tall turbine with three blades is not the only option. Farzad Safaei, an electrical engineer at the University of Wallongon in Australia, developed a wind turbine that would fit between two buildings and resemble window blinds.[179] Its blades turn laterally at a slower pace, creating less disturbance in the air, and possibly making them more visible to birds—all of which, Safaei believes, make his design more bird-friendly.[180] However, no studies have been conducted to bear this out.[181]

On the other hand, a study by the National Renewable Energy Laboratory (NREL) in Colorado used falcons and

GPS tracking systems to determine whether a wind farm's radar system could be used to save birds.[182] These radar systems are already in place to detect nearby aircraft and trigger the turbines to light up and become visible to pilots.[183] The lights are not kept on all the time, to avoid being a nuisance to nearby residents.[184] Researchers are studying the system's ability to detect falcons and other large birds, and whether turbines may be programmed to sense incoming raptors so as to prevent bird deaths.[185]

Recently, a proposal in *Science* recommended setting aside areas from hosting tall structures.[186] These areas would be, in essence, wildlife preserves in the sky, with no airplanes, helicopters, drones, wind turbines, electrical lines, or skyscrapers.[187] These sky-ranges would be reserved for winged creatures only, and therefore limit uses of the ground below.

Lastly, a new methodology proposed by Jason Tack (Colorado State University) and Bradley Fedy (University of Waterloo, Ontario) would help wind farm developers site their wind farms to reduce the number of protected birds killed by the turbines. Tack and Fedy offer a planning tool that would help wind farm developers and land-use planners accommodate predatory bird species habiting areas near proposed wind farms.[188] Improving planning, and the environmental assessment methods underlying planning, is particularly important for raptors, whose long lives and low birth rates amplify the impact of wind turbine collisions on their populations.[189]

Environmental assessments of impact on raptors use the local abundance method,[190] which takes a snapshot of where raptors are observed as the studies are conducted.[191] Tack and Fedy suggest that this method is too simplistic, and fails to consider factors such as nesting locations during breeding seasons, nesting preferences of breeding pairs and solitary juveniles, species behavior, and locations of prey abundance.[192] Instead, they propose a large-scale-landscape habitat use model which considers multiple variables, as well as historic data of golden eagle nesting habits.[193] Their study focused on golden eagles in the Wyoming basin, and their data came from studies conducted previously by State and Federal agencies, non-governmental organizations, and private organizations.[194] Though Tack and Fedy used data collected by others in their area of interest, they recommend that data be collected specifically for the particular wind farm being proposed to ensure the most reliable results.[195] After the ecological data is collected for the large-scale area of interest, a map is generated with a displayed spectrum of animal habitat preference and ideal wind energy conditions.[196] The model is designed to estimate the risk posed to eagles by various siting locations.[197] Thus, according to Tack and Fedy, a wind farm using this model in its planning phase would have a "scientifically defensible" method for choosing a particular location that would also lead to fewer eagle deaths each year.[198] The only drawback to their method is that the data collection would be expensive and time-consuming. These costs can be mitigated, however, by using preexisting studies, though results may not be as statistically reliable as when data is collected for a particular landscape.

THE DESIRE FOR CLEAN ENERGY AND CONCERNS FOR AVIAN WILDLIFE HAVE LED ENGINEERS AND WIND FARM OPERATORS TO CONSIDER WAYS TO MAKE TURBINES MORE WILDLIFE-FRIENDLY.

While the idea of pristine sky reserve for winged wildlife generates a romantic image, it does not seem like a politically or economically strong solution. However, the comprehensive model proposed by Tack and Fedy, when applied in the planning phase of a wind farm project, could reduce bird deaths by wind turbines. It could prove to be a very valuable tool in the coming years.

Case brief: *Garden Peninsula Foundation v. Heritage Sustainable Energy*

Karen Nelson

Heritage Sustainable Energy, LLC (Heritage Sustainable), operates a wind farm with 14 turbines on the Garden Peninsula of Michigan's Upper Peninsula.[199] Heritage Sustainable was formed in 2004 and is based in Michigan.[200] The current Heritage Sustainable wind farm is on property leased by Heritage Sustainable from private parties—a site known as the Garden I Wind Farm.[201] Heritage Sustainable is interested in developing an additional wind farm on the Garden Peninsula as well as

one in Schoolcraft County.[202] Plaintiffs in this action argue that these wind farms stand in the migratory path of Kirtland Warblers—one of Michigan's endangered birds—and other protected birds and bats of Michigan, posing a substantial risk to the recovery of those species.[203] Plaintiffs seek damages, injunctive relief against the current and proposed wind farms, and declaratory relief stating that the U.S. Fish and Wildlife Service (FWS) violated the Administrative Procedure Act (APA), National Environmental Policy Act (NEPA), and Bald and Golden Eagle Protection Act (BGEPA).

The Heritage Sustainable wind farm is located just three miles from an area of Great Lakes shoreline, despite advisory notices from FWS to Heritage Sustainable that no wind turbines should be so close to a Great Lakes shoreline.[204] Plaintiffs complain that the operation of a wind farm on the Garden Peninsula poses a very high risk to endangered and threatened species, listing specifically bald and golden eagles, the Kirtland Warbler, and the Piping Plover.[205] Prior to development, FWS had recommended that Heritage Sustainable not construct the wind farm on the Garden Peninsula, because of the large risk it would pose to migratory birds.[206] Heritage Sustainable conducted a Comprehensive Avian Risk Assessment and submitted it to FWS in a report meant to illustrate how Heritage Sustainable planned to minimize, to the extent feasible, the impact of the wind farm on protected species.[207] According to FWS, 828 raptors were recorded in the Garden Peninsula area during the study period, which would be considered a "substantial" amount for the area around a wind project.[208] To account for this risk, Heritage Sustainable promised to install no more than 14 turbines and to apply for an Eagle Take Permit.[209]

This case would have presented a good opportunity for implementation of Tack and Fedy's large-scale-landscape habitat use model, discussed in the previous article. The study would have shown where the migratory paths run, where the nesting and hunting sites are typically chosen, and areas where the turbines would cause the most damage. Had Heritage Sustainable employed such a comprehensive siting model early on in their planning phase, they may have been able to avoid this litigation with the "scientifically defensible" reasoning behind the proposed wind farm location. Alternatively, Heritage Sustainable could have quickly prevailed in the lawsuit because of their "scientifically defensible" decision making process, as Tack and Fedy called it.

Michigan wind energy development exemplifies the intersection between the public trust doctrine and federal-state conflict.

Either way, this case and others like it will be interesting to follow as they progress to see what steps Heritage Sustainable and other wind developers take to reduce their wildlife impacts.

Compl., *Garden Peninsula Found. v. Heritage Sustainable Energy, LLC*, No. 2:15-cv-00008-RAED (W.D. Mich. Jan. 16, 2015).

b. Wind energy and the public trust doctrine: A contest of federal and state regulatory control

Megan Enter, condensed for publication by Gabrielle Fournier

Under the public trust doctrine, publicly owned wildlife resources are entrusted to the government as trustee to be managed for the benefit of the public.[210] This doctrine is premised on the idea that wildlife resources exist for the benefit of the public and that the government should be held accountable to the public for the proper care of these resources.[211] However, the federal government's growing involvement in renewable energy regulation as well as wildlife management could threaten the public trust doctrine, depending on how these agencies manage public trust resources.[212]

Some believe that federal regulations can impede a state's ability to manage its resources for the benefit of the public while encouraging sustainable development. If, when making these development decisions, a state or locality fails to live up to the obligations promulgated by a federal agency—while attempting to do what is best for the public trust—the state could find itself in violation of federal law even if the state purports to be honoring the public trust doctrine. As a result, the state's control over management of its own resources deteriorate at the hands of the federal regulatory system.

Federal regulatory systems can be difficult to apply in the vast array of local environments and social climates

under federal regulatory control. The federal government cannot possibly regulate wildlife resources across the fifty states in a uniform manner. To do so would fail to take into account local expertise and concerns. However, the law requires consistency in the implementation of regulatory actions for predictable, just results. Thus, uniform regulations and the needs of the local environments can be in tension.

Where federal agencies fail to properly consider the needs of local stakeholders, states may be blocked from doing so as well. For example, if federal prerogatives for land use offer more benefit to the public trust than conflicting state regulations, then any resulting preemption would adhere to public trust mandates. However, if state regulations offer more benefit to the local public trust than the federal scheme, preemption would harm the public trust, and the state would be unable to implement its directives. In the latter case, both federal and state governments fail to do what is in the best interest of the public it is meant to serve.

Michigan wind energy development exemplifies the intersection between the public trust doctrine and federal-state conflict. An inherent tension forms between the potential statewide benefits of wind energy projects and the governments' wildlife management duties as trustee. Michigan's wind energy initiatives are heavily subject to federal regulations pertaining to renewable energy and land use. As a result, Michigan's power to regulate could be hamstrung by Supremacy Clause and Commerce Clause challenges. The Supremacy Clause could underlie challenges of preemption, while wind energy's position in interstate commerce, through the instrumentalities of transportation necessary to develop, maintain, and sell energy from wind projects, makes any Michigan regulation vulnerable to a Commerce Clause challenge.

States still have a duty to preserve and promote local wildlife while promoting sustainable development. Michigan, or any state for that matter, might be hard-pressed to identify a valid state regulation that could satisfy the state's duties under the public trust doctrine, while still substantially complying with a federal mandate or filling a gap where Congress has not spoken on the matter. Going forward, it is important that federal, state, and local governments work together to create a flexible regulatory scheme that allows for important local considerations.

Case brief: *PEER v. Hopper*

Morgan Pitz

The Cape Wind Energy Project is an offshore wind farm project proposed in Nantucket Sound for the purpose of achieving Massachusetts's statutory renewable energy requirements.[213] After the project received regulatory approval from the Bureau of Ocean Energy Management (BOEM), plaintiff environmental groups claimed violations of several federal statutes.[214] Most claims resulted in summary judgment in favor of the government, but plaintiffs appealed their National Environmental Policy Act (NEPA) and Endangered Species Act (ESA) claims.[215]

Challenging the NEPA approval, plaintiffs claimed that BOEM relied on inadequate geophysical and geotechnical surveys.[216] The Court agreed, recognizing that, under NEPA, a permitting agency must "consider every significant aspect of the environmental impact of a proposed action"—described as a "hard look."[217] Plaintiffs claimed that the Environmental Impact Statement (EIS) relied on an inadequate survey as agency e-mails gave "no indication that Cape Wind has adequate data to address" certain geological hazards and "don't seem to conform (even loosely)" to certain offshore renewable energy project guidelines.[218] The Court held that BOEM did not fulfill its duty to take a hard look as required by NEPA, vacated the EIS, and required a new EIS including additional geological surveys; however, the Court let the lease and other regulatory approvals stand.[219]

Plaintiffs, earlier in the course of litigation, also argued that the U.S. Fish and Wildlife Service (FWS) violated ESA by issuing an arbitrary and capricious incidental take statement (ITS), having ignored important mitigation measures and failing to use the best available science.[220] FWS estimated the turbines would kill 80-100 endangered and threatened birds over the project's lifetime.[221] One way to mitigate this problem is to employ a technique known as "feathering" where the turbines are turned off during periods of low visibility. FWS rejected this recommendation in its ITS, heeding objections by BOEM and Cape Wind that feathering would shut down the turbines too long and produce too high of an economic cost.[222] The district court agreed with plaintiffs that FWS had impermissibly delegated its duty to "independently evaluate and recommend mitigation measures."[223] Here the parties disputed whether remand would re-open the

record to allow for plaintiffs' submitted reports to be considered in the decision.[224] The Court held that FWS had re-opened the record by considering a report by its economist that was communicated to it in response to the district court's order.[225] The Court held that FWS's decision to exclude plaintiffs' submissions was arbitrary and capricious, vacating the ITS as well.[226]

Pub. Emps. for Envtl. Responsibility v. Hopper, 827 F.3d 1077 (D.C. Cir. 2016).

VI. HYDROPOWER

a. Balancing the wildlife impacts of tidal power

Morgan Pitz

Tidal energy has been in use for hundreds of years, dating back to 787 A.D. when waterwheels milled grain on the coasts of Europe.[227] Modern technology has allowed humans to harness the power of the tides in other ways, producing electricity by way of semi-permeable barrages (dams) or harnessing offshore tidal streams.[228] While tidal energy provides a source of renewable energy with no greenhouse gas emissions, it can have other potentially damaging environmental impacts. For example, building barrages in estuaries with high-tidal ranges—the ideal location—may damage aquatic and shoreline ecosystems.[229] Placing these barrages changes the water level in the tidal lagoon, lowers salinity, and impedes travel of other aquatic life into and out of the lagoons.[230] Additionally, wildlife can be caught in the turbines, causing lethal takes and affecting the migratory patterns of birds that would otherwise feed on them.[231]

Tidal energy's effects on native wildlife and ecosystems is exemplified by the tidal power plant at the Rance River estuary in Brittany, France. During its three-year construction, marine flora and fauna disappeared due to salinity fluctuation, heavy sedimentation, and accumulation of organic matter.[232] However, by 1976, biodiversity in the estuary had recovered, even if the ecosystem substantially changed with construction.[233]

To develop a tidal energy project—often classified as a type of hydrokinetic project—one must first obtain a preliminary permit (effective for up to three years) to study a proposed site.[234] Then a developer must navigate the licensing process, which can be *integrated*, *traditional*, or *alternative*. The type of licensing process determines several factors, including when environmental assessments (EAs) and environmental impact statements (EISs) must be filed.[235] Because the process requires federal permits, all proposed projects must comply with study, assessment, and regulatory requirements under federal statutes, including the Endangered Species Act (ESA), National Environmental Policy Act (NEPA), Clean Water Act (CWA), Magnuson-Stevens Fishery Conservation and Management Act, Coastal Zone Management Act (CZMA), National Historic Preservation Act (NHPA), Wild and Scenic Rivers and Wilderness Act, and Marine Mammal Protection Act (MMPA).[236]

Under the Marine Protection, Research and Sanctuaries Act of 1972 (MPRSA), areas designated as National Marine Sanctuaries are afforded special protection. Balancing commitments to preserving marine ecosystems with goals to decrease use of nonrenewable energy require a delicate balancing act where alternative energy projects are not generally allowed in marine sanctuaries.[237] However, NOAA's Office of National Marine Sanctuaries may permit small-scale, temporary, non-commercial research projects as long as they are compatible with the goals and objectives of the sanctuaries.[238]

Case brief: *NWF v. NMFS*

Sarah Jenkins

On May 4, 2016, the District Court of Oregon once again rejected the Federal government's plan to protect threatened and endangered Snake River salmon from the harmful impacts of dams on the Snake River.[239] Over two

decades, five of the National Marine Fisheries Service's (NMFS) plans to protect Snake River salmon have been rejected, and the most recent plan proved no different.[240] The Court ordered NMFS to devise a new plan, and ordered the agency to consider recommendations to breach one or more of four outdated Snake River dams.[241]

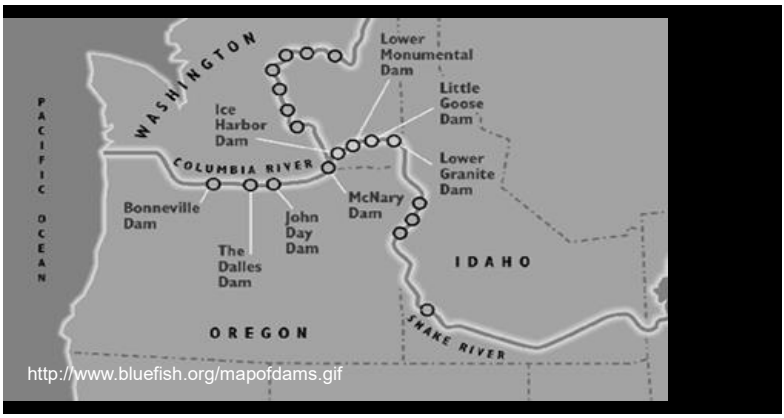
The Snake River, which runs through the Rocky Mountains to the Pacific Ocean, is a breeding and hatching ground for a variety of salmon species.[242] To reach these grounds, salmon must first make their way through the Federal Columbia River Power System (FCRPS), made up of multiple dams, powerhouses, and reservoirs.[243] At issue here were the Ice Harbor Dam, the Lower Monumental Dam, the Little Goose Dam, and the Lower Granite Dam, all of which are located on the Snake River within the FCRPS.[244]

These four dams significantly hinder salmon access to breeding and spawning grounds, create high water temperatures that salmon will not enter, and degrade water quality, which can lead to increases in fish parasites and pathogens.[245] Since the installation of the FCRPS, eleven native salmon species have been listed as threatened and two as endangered under the Endangered Species Act (ESA).[246] Since the installation of dams on the Snake River specifically, the Snake River sockeye has been listed as endangered and the Snake River fall chinook has been listed as threatened.[247]

The ESA requires federal agencies to ensure that their proposed actions will not jeopardize any endangered or threatened species.[248] To do this, NMFS is required to consult with the U.S. Army Corps of Engineers (Corps) and Bureau of Reclamation (BOR) before preparing a biological opinion (BiOp) to "evaluate[] the effects of the proposed action on the survival and recovery of [the] listed species . . . ."[249] Additionally, the National Environmental Policy Act (NEPA) requires federal agencies to complete an environmental impact statement (EIS) in connection with reports for major proposed federal actions, while also considering all reasonable alternatives to the proposed federal action.[250]

The National Wildlife Federation (NWF) raised two issues here: (1) Did NMFS "act arbitrary and capriciously when it issued its [2014] biological opinion . . . concluding that the operations of the [FCRPS] do not violate the [ESA]," and (2) did the "[Corps] and [BOR] violate [NEPA] . . . by failing to prepare an [EIS]" in connection with the 2014 biological opinion?"[251]

NWF was successful both in their challenge to the 2014 BiOp and failure to prepare an EIS.[252] The Court held that the 2014 BiOp was inadequate and incomplete, and ordered NMFS to prepare a new BiOp by March 1, 2018.[253] The Court stated that the BiOp failed to apply the best available science, focused on uncertain habitat improvement benefits, and failed to account for the effects of climate change.[254] Additionally, the Court ordered the Corps and BOR to prepare a comprehensive EIS in order to fully evaluate all possible alternatives, including dam removal.[255] The Court stated that the Corps' and BOR's reliance on old EISs, rather than an up to date EISs, was arbitrary and capricious because the EISs were too outdated to address current environmental issues.[256]



Overall, the Court held that NMFS's BiOp violated both ESA and NEPA.[257] The Court reasoned that by ordering NMFS to prepare a new BiOp and a new EIS, the agency would be forced to consider different alternatives to the issue, such as dam removal, which could offer more protection for the Snake River salmon.[258]

Almost a year after this decision, the District Court ordered dam operators to increase the flow of water over eight dams in the FCRPS by spring 2018.[259] The Court's decision was based on scientific evidence showing that increasing spill over these dams would significantly increase the survival rates for salmon migrating to the ocean.[260] Consequently, the Court reasoned that increasing spill would protect the endangered and threatened salmon species within the FCRPS as they await further protection.[261]

Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 184 F. Supp. 3d 861 (D. Or. 2016).

a. Underwater power cables and marine wildlife

Sarah Jenkins

Rising energy costs and continuing climate change concerns have recently sparked interest in the development of offshore renewable energy in the United States.[262] Offshore wind, wave, and tidal energy is typically harvested off the coast and brought to shore through submarine power cables.[263] However, increased use of submarine power cables could be detrimental to marine ecosystems, especially since offshore renewable energy is expected to be a major source of energy for the United States in the coming years.[264]

Installation of submarine power cables for offshore renewable energy has faced opposition from environmental groups and local industry for years. In 2010, the Sierra Club unsuccessfully opposed the installation of a submarine power cable buried in the Hudson River.[265] The Sierra Club claimed that the proposed submarine power cable would wreak havoc on the Hudson, polluting the water and destroying spawning areas for fish.[266] Commercial fishermen have also opposed submarine power cables, claiming that they disrupt crab movement and alter relied-upon fish migration patterns.[267] On the other hand, major environmental groups such as Greenpeace and the Natural Resource Defense Council have backed the use of submarine power cables for offshore wind farm energy, in an attempt to promote the use of clean energy.[268]

Increased use of submarine power cables could be detrimental to marine ecosystems, especially since offshore renewable energy is expected to be a major source of energy for the United States.

As a result of sustained opposition to submarine power cables, researchers have begun to focus more on the impact of power cables on the marine ecosystem.[269] In 2016, researchers from the University of California-Santa Barbara, together with the Bureau of Ocean Energy Management (BOEM), released findings from their study of submarine power cables off the coast of California.[270] The focus of this study was to determine whether submarine power cables that emit an electromagnetic field harm marine ecosystems.[271] Scuba divers observed the number of fish, invertebrates, and marine plants on both energized and un-energized submarine power cables coming from the Heritage, Harmony, and Hondo offshore oil platforms in California.[272] The researchers compared energized cables, which generate electromagnetic fields, with un-energized cables, which do not generate EM fields, in order to determine the possible impact of the electromagnetic field.[273]

After observing 9,675 fishes and 30,523 invertebrates, the researchers found "no evidence that any species of fish or invertebrate was either preferentially attracted to, or repelled by, the [electromagnetic field] emitted by the cables."[274] This led the researchers to conclude that any effect on the marine ecosystem from energized submarine power cables was undetectable.[275] In addition, the researchers discovered that the total number of fish and invertebrate species, such as spot prawns and sand stars, were "significantly higher around the cables than over the natural habitat."[276] They explained this finding by noting that submarine power cables actually create a more habitable environment for marine species than the muddy sea floor.[277]

In fact, researchers in California have discovered that other manmade structures used in the offshore energy industry have helped create flourishing marine ecosystems.[278] For example, researchers have found that oil platforms in California have served as giant reefs for marine organisms, creating the most productive spawning habitat in the world.[279] Overall, the researchers concluded that energized submarine power cables have no detectable negative impact on the marine ecosystem.[280] In addition, further studies have shown that submarine power cables do not impact crab movement or salmon migration patterns.[281]

While widespread concern remains that submarine power cables from offshore renewable energy resources will harm the marine ecosystem, current research often tells us otherwise.[282] Furthermore, past litigation failures, combined with the support of major environmental

groups, suggest that the benefits from submarine power cables may outweigh their minimal environmental impact.

While more research is needed to understand the environmental impact of installing these cables, it is likely that they will continue to be used to bring renewable energy ashore.

Case brief: *Columbia Riverkeeper v. USBR + Alliance for the Wild Rockies v. USACE*

Brandon Lanyon

Hydroelectric power is the second largest renewable source of energy in the United States[283], and is responsible for roughly six percent of U.S. electricity generation.[284] As with other forms of energy production, hydroelectric power entails potential harms to wildlife and the environment. While dam operators often implement mitigation measures, environmental interest groups and local parties raise additional concerns.

A recent legal fight over dams occurred when the Alliance for the Wild Rockies sued the U.S. Army Corps of Engineers (Corps), the U.S. Bureau of Reclamation (USBR), and the Bonneville Power Administration (BPA) for allegedly violating the Endangered Species Act (ESA).[285] The case revolved around 23 dams operated or maintained by defendants, and their effect on bull trout—a species listed as threatened in the lower 48 states in 1998.[286] In addition, in 2010 the U.S. Fish and Wildlife Service (FWS) designated critical habitat on land in the four states where the dams operated.[287] As a result, the agencies were required to consult with FWS to manage the dams for conservation of bull trout.

The Alliance contended that defendants had violated ESA by failing to (1) conduct biological assessments for the dams, (2) consult with FWS, and (3) prevent adverse modification of rivers and streams designated as bull trout critical habitat. The suit asked the Court to force defendants to complete these assessments and consultations so that actions could be taken to protect the bull trout. Before the matter could go to trial, defendants began consulting with FWS as requested by the Alliance, and the case was subsequently dismissed.[288]

In a similar case involving a hydroelectric dam, an environmental group sued USBR over oil leakages and spills resulting from one of its dams.[289] The group claims that the Bureau violated the Clean Water Act (CWA) by polluting the water surrounding the dam with oil leaking from the dam's operation.[290] The contamination from these leaks could have significant impacts on the wildlife surrounding the dam, including salmon. The Bureau settled the case and agreed to (1) obtain a pollution permit to cover discharges from the dam, (2) look into replacing machinery components with parts that don't require lubricant, and (3) look into switching to a more environmentally friendly machinery lubricant.[291]

The most recent litigation in this area shows a strong tendency toward settling cases. Plaintiffs often accomplish some, if not all, of the goals that they were pursuing. The downside, however, is that there is very little recent precedent to follow as a result, leaving everyone to battle over the same legal issue time and time again.

VII. SOLAR POWER

a. Introduction to solar-wildlife conflicts

Andrea Fogelsinger

The impact of clean energy solutions on wildlife is a common concern across all types of renewable energy sources. Solar farms are a major means of generating carbon-free energy in the United States.[292] Solar energy is considered "one of the most abundant and cleanest renewable energy sources available."[293] However, in the United States, solar energy makes up less than one percent of all electricity generated.[294] A significant environmental issue in solar energy is the disruption of wildlife habitat.[295] Wildlife habitats are heavily disturbed and often destroyed during the construction of solar farms. For example, habitats are destroyed when a field is graded in preparation for construction of a solar farm.[296] Additionally, solar farms take up a significant amount of land, which results in permanent loss of wildlife habitat. However, sometimes these adverse impacts are unavoidable if it is impossible to place a solar farm in an area that will affect less wildlife. After all, for a solar farm to function efficiently, it must be built in an area that will allow the farm to collect sunlight as effectively as possible.[297]

Solar siting and construction sometimes runs afoul of the Endangered Species Act (ESA).[298] But renewable energy production and the ESA need not be directly at odds. Rather, the necessities of conservation and power generation must both be considered when developing and

implementing new forms of renewable energy. To comply with the National Environmental Policy Act (NEPA), the Department of Interior (DOI) has made efforts to identify lands for solar farms that would present minimal conflicts with wildlife and even other natural resources.[299] Additionally, state governments can contribute their knowledge of land and wildlife patterns in their states when decisions are made in siting solar farms and other renewable projects. Thus, greater cooperation between the federal government and states in making such assessments and decisions could greatly benefit wildlife that may be impacted by large solar farms.

Case brief: *Defenders of Wildlife v. FWS*

Giacomo Mattioli

Panoche Valley Solar, LLC (PVS) proposed to create a solar energy project in the ecologically sensitive Panoche Valley in San Benito County.[300] The proposed area is home to many Endangered Species Act (ESA)-listed species, including the blunt-nosed leopard lizard, the San Joaquin kit fox, and the giant kangaroo rat.[301] PVS's proposal included avoidance and conservation measures, including avoiding areas with high density of listed species.[302] In addition, PVS intended to hire a U.S. Fish and Wildlife Service (FWS)-approved biologist to oversee construction work and to require all project personnel to learn how to identify protected listed species.[303] Finally, PVS purchased over 25,000 acres of existing habitat and committed to permanent protection.[304]

On March 8, 2016, FWS provided a biological opinion (BiOp) concluding that the proposed project "is not likely to jeopardize the survival and recover of [relevant protected species]."[305] On May 17, 2016, the U.S. Army Corps of Engineers (Corps) filed a revised Clean Water Act (CWA) section 404 permit "to expressly assume responsibility for ensuring PVS's compliance with all requirements of the BiOp, for the entire project area, during the estimated 30-year duration of the project."[306]

On April 15, 2016, Defenders of Wildlife (Defenders) filed suit alleging four complaints. Amongst the complaints, Defenders alleged that FWS violated the ESA when creating the 2016 BiOp, that the Corps violated CWA by relying on the faulty BiOp, and that the Corps failed to consider practicable alternatives to the project site.[307] Defenders moved for preliminary injunctive relief as to the first three causes of action.[308]

First, The Court found that Defenders did not establish a likelihood of success on the merits of their claim that the Corps violated CWA by arbitrarily and capriciously incorporating the terms and conditions of the BiOp into PVS's revised permit.[309] The Court found that the revised permit cured defects with the original permit, and that Defenders did not show that the Corps lacked jurisdiction to incorporate the terms and conditions of the BiOp and enforce the terms.[310]

Second, the Court found that Defenders failed to show that FWS violated ESA because Defenders failed to show that FWS should have known that the conservation measures in the BiOp were not certain to occur because the Corps either would not or could not enforce them.[311]

Finally, The Court found that Defenders failed to demonstrate that FWS did not consider the best available scientific data when drafting the BiOp. Therefore, Defenders failed to demonstrate that the Corps violated CWA by relying on the BiOp.[312]

For these reasons, the Court denied Defenders' motion for preliminary injunction.

Defenders of Wildlife v. U.S. Fish & Wildlife Serv., 2016 U.S. Dist. LEXIS 109509 (N.D. Cal. Aug. 17, 2016).

VIII. PROCEDURAL ISSUES

Case brief: *Karr v. Va. DEQ*

Evan Keimach

In 2009, the Virginia Department of Environmental Quality (DEQ) was given statutory authority to develop a permit if the agency found that permits were necessary for renewable energy projects, and was required to develop the permit for wind energy as soon as practicable.[313] Appellants challenged the established permit and over four years later the circuit court ruled in DEQ's favor.[314]

Appellants took issue with the findings of the court below, including that: (1) DEQ complied with statutory authority, because it is not required to analyze impacts of proposed wind energy projects to wildlife, (2) DEQ

lawfully predetermined significant adverse impacts without collecting site-specific information mandated by statute, (3) the term "wildlife" is ambiguous and DEQ's interpretation carries special weight, (4) DEQ complied with its statutory authority because the regulation upsets the existing system of statutory provisions regulating impacts to threatened and endangered species.[315]

The Court discussed the ambiguity of Virginia statute's definition of "wildlife." The court below found that Virginia's legislature died not clearly define the term "wildlife" in the permitting statute, leaving it ambiguous and giving weight to DEQ's interpretation of regulation; that court also found that DEQ's interpretation of **"**wildlife**"** was reasonable.[316] The appellate court found that DEQ's and Game and Inland Fisheries' (GIF) definition of **"**wildlife" was essentially the dictionary definition pertaining to mammals, birds, and fish; therefore the term was unambiguous and the plain language of the statute controlled. The trial court therefore erred in finding it ambiguous and giving DEQ's interpretation of its regulation special weight.[317]

The Court then looked at the statute on data collection at the site and found that DEQ's interpretation was grammatically correct, i.e., that the data collection provision was generally applicable. The trial court did not err in finding that DEQ complied with the statute to analyze information on the behavior of wildlife.[318] DEQ found that threatened and endangered wildlife would be harmed by the development projects and set forth a regulation that protected certain bats living within the zone that appellants would develop. The Court found that it was clearly within DEQ's authority to mitigate harm to wildlife and create mitigation plans.[319] The court ruled in favor of DEQ because the legislature had given it broad authority to determine both harm to wildlife and the appropriate trigger to create a mitigation plan.[320]

Karr v. Va. Dep't of Envtl. Quality, 66 Va. App. 507, 513 (2016).

Case brief: *U.S. Army Corps of Engineers v. Hawkes Co., Inc.*

Kyle Simon

Hawkes Co., Inc., which collects and processes peat for golf course greens., seeks to expand its current operations in Minnesota.[321] However, all naturally occurring peat is formed in wetlands.[322] While Minnesota regulates wetlands within its jurisdiction, the wetlands property at issue here may also have been subject to federal regulation under the Clean Water Act (CWA).[323]

The U.S. Army Corps of Engineers (Corps) attempted to persuade Hawkes Co. to abandon its expansion plans, emphasizing the onerous and expensive permitting process that might take years to complete, cost hundreds of thousands of dollars, and ultimately fall short.[324]

The Corps concluded that the land was a "water of the United States" because it had a "significant nexus" to the Red River of the North, 120 miles away from the proposed expansion site.[325] Therefore, the Corps argued, the wetlands that Hawkes Co. sought to mine were CWA-protected and subject to federal regulation. Hawkes Co. challenged the finding for lack of evidence. In response, the Corps made a final jurisdictional determination, limiting Hawkes Co. to the options of: (1) enduring a lengthy and expensive permitting process, (2) risking criminal sanctions and punitive fines by continuing the project without a permit, or (3) discontinuing their planned peat-mining operations.[326]

In 2016 the Supreme Court granted certiorari. The Court held that the agency's action was reviewable under the Administrative Procedures Act (APA) because Hawkes Co. was provided no adequate alternatives by the Corps.[327] Therefore, although the Corps made a final determination that the wetlands were within its federal jurisdiction, Hawkes Co. successfully argued for review and the determination may yet be overturned.

U.S. Army Corps of Engineers v. Hawkes Co., Inc., No. 15-290 (May 31, 2016).

Case brief: *Carpenters Industrial Council v. Zinke*

Evan Keimach

This case involves standing as it relates to the U.S. Fish and Wildlife Service's (FWS) designation of critical habitat under the Endangered Species Act (ESA).

In 2012, FWS designated 9.5 million acres as critical habitat for the northern spotted owl. To illustrate the sheer magnitude of such a rule, the Court of Appeals for the D.C. Circuit explains that this area is about twice the size of New Jersey.[328] Many lumber companies affected by this ruling,

as members of the American Forest Resource Council, sued the Service to challenge the legality of the designation.[329] The D.C. Circuit considered whether the Council has standing to challenge the designation on behalf of its members.

The reason for such a large impact is that an estimated third of the critical habitat is considered matrix lands: areas set aside by statute to provide timber to the lumber-based economy. The Bureau of Land Management (BLM) administers timber sales in the matrix lands, and would have to consult the Service to ensure that any action would not result in adverse modification of the habitat. Logging affects habitats adversely for numerous reasons, and FWS itself acknowledged that the critical habitat designation would limit logging on designated lands.[330]

Notable in this case is that there was no challenge to standing from the Service. The D.C. Circuit, while this case was pending below, decided in a similar case that a challenge to BLM's failure to sell certain amounts of timber as required by statute did not establish standing for lumber industry plaintiffs because they failed to show the possibility of economic injury.[331] The district court, after that decision, ordered the Council to prove it had standing. The Council cited two cases including that case and argued that the economic injuries to its members sufficed.[332] The Service then amended its arguments to say that the case should be dismissed for lack of standing. The district court rejected the Council's claim for standing, determining that the Council's harm was virtually the same as the claim in that recently decided case.[333]

On appeal, the D.C. Circuit looked for the traditional elements of injury-in-fact, causation, and redressability. For the Council to show injury it had to prove (1) a substantial probability that the challenged government action would lower the supply of raw material from a particular source; (2) a substantial probability that the plaintiff obtained raw material from that source; and (3) a substantial probability that the plaintiff would suffer economic harm as a result of the decrease in supply from that source.[334]

The size of the critical habitat, and the fact that much of what could be harvested was now substantially off-limits, contributed to the Council's successful showing of economic harm. The Council's standing was thus confirmed, and the case was remanded.

Carpenters Industrial Council v. Zinke, 2017 WL 1323530 (D.C. Cir. Apr. 11, 2017).

IX. THE BAD ACTORS (CRIMINAL CASE BRIEFS)

Nicholas Bennett

a. *Farmer v. Colorado Parks & Wildlife Commission* (CO)

Bobby R. Farmer (Farmer), a big game hunter and guide, let his Colorado outfitter's license expire in 2006. In 2008, the Colorado Department of Natural Resources' Division of Wildlife (DOW) received complaints that Farmer was providing hunts in Colorado without a valid license. DOW investigated Farmer for three years through undercover operations and witness interviews. In late 2011, Farmer was charged with six counts of providing mountain lion hunts without a proper license under Colorado law. Farmer pled guilty to one of the charges, and in exchange for the guilty plea, Farmer received a two-year, unsupervised deferred judgment on the single count and the other counts were dismissed. As a condition of the deferred judgment, Farmer was prohibited from engaging in hunting activities for two years.

Due to his guilty plea, an administrative hearing was held to determine whether Farmer's wildlife license privileges should be suspended. After reviewing DOW's 300-page investigation report, which detailed the facts of the all charges originally brought against Farmer, and allowing Farmer to present mitigating evidence of the charge to which he pled guilty, the hearing officer determined that Farmer's wildlife license should be suspended for twenty years. Farmer appealed the hearing officer's determination to the Commission, but the Commission upheld the hearing officer's determination. In doing so, the Commission considered all charges brought against Farmer and the underlying facts, and disputed that the hearing officer considered any conduct involving the dismissed charges. Farmer sought review in court, but the district court upheld the Commission's determination. Farmer appealed the district court's decision.

The appellate court found the Commission's determination arbitrary and capricious. The court pointed out that Colorado statute provided no standards to guide the Commission's determination, so the court looked to the Commission's rules and regulations. However, there

were no rules or regulations in place. Since there were no standards, rules, or regulations in place to show the court how the Commission and its agents were to determine the proper length of a suspension, the court vacated the suspension.

Farmer v. Colo. Parks & Wildlife Comm'n, 382 P.3d 1263 (Colo. App. 2016).

b. *Umberger v. Dep't of Land & Natural Resources* (HI)

Rene Umberger, environmental protection groups, and others (Umberger) claimed that Hawaii's Department of Land and Natural Resources (DLNR) violated the Hawaii Environmental Policy Act (HEPA) by failing to require aquarium fish permit applicants to prepare environmental assessments (EAs) and engage in related processes of consultation, information gathering, and public review and comment. DLNR responded that EAs and related processes were not required for this purpose.

DLNR was granted summary judgment by the trial court because the trial court viewed the gathering of aquatic life for aquarium purposes as neither a program nor a project that triggered HEPA. Umberger appealed.

The court viewed this case as one of statutory interpretation, and agreed with the trial court that HEPA actions requiring EAs and related processes are specifically identifiable programs and projects—not just any activity. Aquarium fish collection does not fall under the identifiable programs and projects because, for example, a parent may be collecting a fish or two for a child's aquarium. Requiring that parent to undergo an EA and related processes would constitute unprecedented application of HEPA. The court further pointed out that there are other regulations in place to protect Hawaii's aquatic life, including bag limits, restrictions on nets, and other licensees' requirements. The court held that applying HEPA's EA requirement and other related processes to aquarium fish collecting—while sport fishing, commercial fishing, and other related activities are regulated under their own standards—would create unreasonable, impractical, and absurd results. Therefore, the court affirmed the trial court's decision.

On December 20, 2016, the Supreme Court of Hawaii granted certiorari.

Umberger v. Dep't of Land & Nat. Res., 382 P.3d 320 (Haw. Ct. App. 2016), cert. granted (Haw. Dec. 20, 2016).

c. *State v. Thompson* (LA)

In 1996, Walter Dan Thompson (Thompson) and other individuals were arrested in Louisiana and charged with violations of commercial fishing regulations. Louisiana's Department of Wildlife and Fisheries (LDWF) seized four vessels: the *Queen Melissa*, the *Elizabeth R.*, the *White Dove*, and the *Donna Sue*; fishing equipment; two large fishing nets; and the fish caught. Thompson made several attempts to get the property back, but was unsuccessful because it was being held as the evidence for prosecution. The other individuals pled guilty and, in accordance to their plea agreement, forfeited the *White Dove*, *Queen Melissa*, and two large fishing nets. However, LDWF returned the *Elizabeth R.*

In 2000, Thompson pled guilty and paid fines for his violations. The trial court ordered Thompson's property to be returned to LDWF and authorized the agency to destroy the property. Thompson filed a motion to set aside this order. The trial court denied the motion, but was reversed on appeal because the plea agreement did not show that forfeiture of property was part of the punishment. In 2004, the trial court ordered that Thompson's property to be returned to him without specifically identifying the property. In 2010, after some miscommunication, Thompson retrieved his vessel, the *Donna Sue*.

In June 2014, Thompson filed a motion alleging that not all of his property was returned to him. He sought to hold the State in contempt for failing to follow the 2004 order. He also sought damages from the State's failure to comply with the 2004 order. Thompson alleged that the State failed to return the other three vessels, the equipment of those three vessels, the equipment of the *Donna Sue*, and the value of the entire catch that was seized. He valued the property not returned to him at $652,663.50. The trial court denied the motion.

On December 2014, Thompson filed another motion to return the property that was not returned. In January 2015, LDWF responded and argued that Thompson was not entitled to the property owned by other individuals, or to the fish seized. In October 2015, the trial court granted Thompson's motion as it related to the vessel *Donna Sue*, the equipment on the *Donna Sue*, and the fish on the *Donna Sue*. The trial court dismissed his claims to the

other properties because Thompson was not their legal owner. LDWF appealed the trial court's decision.

The court viewed the trial court's 2004 order to return Thompson's property as an issue of interpretation. From the 2004 order, it was unclear as to what constituted Thompson's property. The court held that the 2004 order required the return of property that belonged to Thompson. Because Thompson failed to show that he owned the other three vessels, he was not entitled to have them, or their equipment, or the value of the fish from those three vessels.

The court also held that the trial court erred in granting Thompson's motion as it related to the equipment of the *Donna Sue*. When Thompson retrieved his vessel, any equipment that he saw damaged or missing created a new cause of action for conversion. Under Louisiana law, Thompson had one year to file the conversion claim, but since he failed to file that claim within the year, any claim to the equipment of the *Donna Sue* was barred.

The court also held that the trial court erred in granting Thompson's motion as it related to the fish that were seized. First, Thompson failed to show the quantity of the fish seized from the *Donna Sue*. When he claimed to be entitled to the fish, he claimed the whole catch that was seized from the four vessels. Second, Thompson was precluded under Louisiana law from claiming the value of the fish. Thompson could claim the net proceeds of the fish (proceeds minus the expenses). However, a claim to the net proceeds must come within two years of the sale. The sale occurred in 1996 after the seizure of the fish; therefore, the time to make a claim for the net proceeds had passed.

As a result, the court affirmed in part and reversed in part the trial court's decision.

State v. Thompson, 204 So.3d 1019 (La. Ct. App. 2016).

d. *State v. Garcia* (TX)

Andres Garcia (Garcia) was charged with eleven counts of illegal trapping and transporting white-tailed deer. Garcia entered into a plea agreement on each count, and the trial court ordered a pre-sentencing report. After the pre-sentence report was conducted, the trial court sentenced Garcia to six months of deferred probation and imposed a fine of $500 on one count. The trial court also ordered Garcia to pay $2, 461.63 in restitution to the Texas Parks and Wildlife Department and to forfeit two buck deer heads. Dissatisfied with the pre-sentence report, the trial judge dismissed the other ten counts.

The State appealed and argued that a trial court could not dismiss the other ten counts without the prosecutor's consent.

The court agreed with the State and held that a trial court lacks general authority to dismiss a case without the consent of the prosecutor. However, the court pointed out that there are a few exceptions to this general rule: when a defendant was denied a speedy trial, when there is a defect in the charging instrument, when a defendant was detained and no charging instrument properly presented, or when a defendant was denied his constitutional rights. In this case, none of the exceptions were applicable, nor were they raised by Garcia at trial or on appeal.

The court reversed the trial court's dismissal and remanded the case back to the trial court.

State v. Garcia, 2016 WL 6242837 (Tex. App. 2016).

e. *O'Brien v. State* (TX)

Christopher O'Brien, along with his brother and two friends, went on a successful hunting trip in Terrell County, Texas and returned home with two aoudad sheep heads. However, the property on which the hunting party killed the two sheep belonged to Nathan Pickett, who bought the property in 2011 from Joan Winkler, the mother of one of the friends in the hunting party.

Pickett protected his property with fencing, a locked gate, and "no trespassing" signs with "Pickett" written on them, and installed a game camera. He also placed boulders and tire spikes to prevent people from driving around the front gate. When Pickett went to visit his property, he noticed that the lock on the front gate had been shot, and the boulders and the tire spikes had been moved. He also noticed tire tracks leading to the cabin located on the property. When he got to the cabin, he discovered empty drink bottles and food cans. He also discovered that the patio furniture had been moved around, his firewood had been used, and the retractable sun awning had been cut with a knife. He also found spent shell casings from a 30.06 rifle and a .45 caliber automatic colt pistol—guns he did not own.

Pickett checked the game camera and found two pictures of four individuals he did not know. He showed the pictures to Winkler, who identified her son as one of the individuals in the pictures. She informed Pickett that her son knew that the property had been sold. Pickett turned the pictures over to Texas Parks and Wildlife Game Warden Arnold Pinales and informed him that the individuals in the pictures did not have his permission to be hunting on the property. Warden Pinales also found a Facebook account for O'Brien with pictures of O'Brien and Winkler's son posing with the aoudad sheep heads at Pickett's cabin. The Facebook images matched those of the game camera: both showed the distinctive tattoos on O'Brien's arms, as well as O'Brien wearing a white shirt bearing the phrase "Follow the Leader." Warden Pinales was also provided with other pictures from an anonymous source that showed the aoudad sheep heads and O'Brien holding one of the aoudad sheep heads.

At trial, O'Brien admitted he had hunted and killed an aoudad sheep on Pickett's property without Pickett's consent and leaving trash at the cabin. However, O'Brien testified that his group did not use the front gate to get into the property, but instead went through the southeast side gate. Pickett testified that the cabin could not be reached through the southeast side gate because a 200-foot canyon separated the gate and the cabin. O'Brien also testified that they left by driving towards the front gate and over the boulders without moving them. O'Brien also testified that he was led to believe that the Winkler's owned the property due to the claims made to him by Winkler's son.

The jury found O'Brien guilty of hunting an exotic animal on Pickett's land without his express consent, criminal trespass, and criminal trespass while carrying a deadly weapon. The trial court sentenced O'Brien to 180 days in jail, imposed a $1,000 fine, and ordered $2,000 restitution.

O'Brien appealed and argued: (1) the two game camera photographs should not have been let in as evidence at trial because they were not properly authenticated, (2) the photograph's admission was a violation of his Sixth Amendment right to confrontation, and (3) there was insufficient evidence to support the jury's verdict. The court pointed out that, under Texas law, all that is required to provide proper authentication is testimony that the photograph accurately represents the person, object, or scene depicted in the photograph. The court held that, when O'Brien testified that the pictures were true representations, he provided the necessary evidence to authenticate the pictures. The court also held that O'Brien failed to object at trial to any violation of his Sixth Amendment right to confrontation and thus declined to review that argument on appeal.

The court also held that there was sufficient evidence to support the jury's verdict. The court affirmed the trial court's judgment.

O'Brien v. State, 2017 WL 360692 (Tex. App. 2017).

f. State v. Burns (WV)

On August 23, 2013, West Virginia's Division of Natural Resources (DNR) received information from a confidential informant of a possible bear-baiting site in Hardy County. The property belonged to Randall Buckley. DNR officers investigated the site and found a pile of logs, rocks and downed trees with pastries and donuts underneath. The debris was placed in a manner that only a large animal such as bear would have been able to move the debris to get to the bait. Bear droppings were also found near the site. The officers placed hidden cameras.

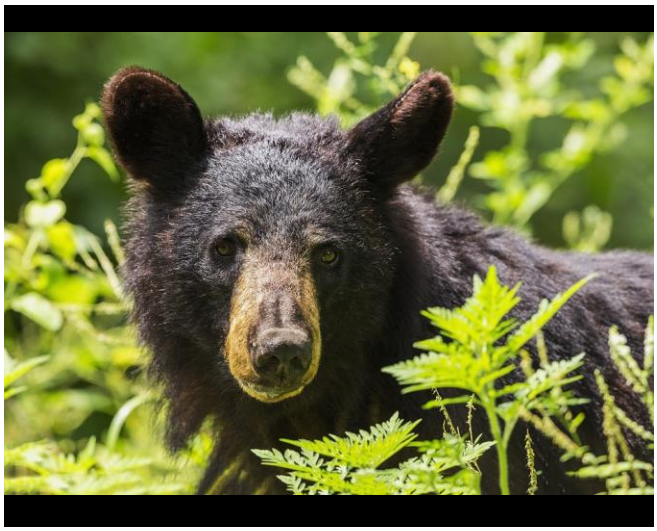
DNR officers returned to the site on September 20, 2013 and found that the site had been freshly baited and a game camera had been installed over the site. DNR officers returned to the site the next morning around 5:00a.m. Around 6:15a.m., two trucks drove past the site and stopped about sixty yards away. Some dogs were released. Buckley then stepped out of one of the trucks and proceeded to the bait site with a flashlight. More dogs were released, and then Jesse Allan Burns, Richard Kuykendall, and Joseph Kidwell came out of the trucks.

The DNR officers approached the men, and Buckley explained that the site was intended to bait coyote. Burns, Kuykendall, Kidwell, and Buckley were cited for (1) hunting bear by the use of bait, (2) hunting bear before legal hunting hours, (3) conspiring to violate Chapter 20 of West Virginia State Code, which provides a comprehensive program for exploration, conservation, development, protection, enjoyment and use of the natural resources of West Virginia, (4) feeding bear, and (5) feeding wildlife in a chronic wasting disease (CWD) containment area.

Burns, Kuykendall, Kidwell, and Buckley were tried together before a jury. The State's case included photographs of the baiting area and testimony from DNR

officers that the bait site and other evidence were consistent with bear baiting. The men were acquitted of the charge of hunting before legal hunting hours. The jury found Burns, Kuykendall, and Kidwell guilty of conspiracy to violate Chapter 20. The jury found Buckley guilty of feeding bear and feeding wildlife in a containment area. All men were found not guilty of hunting bear by the use of bait. Burns, Kuykendall, and Kidwell were each fined $300. Buckley was fined $300 for feeding bear and was sentenced to ten days in jail to be served over weekends for feeding wildlife in a containment area. The men appealed their convictions, but the convictions were affirmed. They appealed again.

Burns, Kuykendall, and Kidwell argued that their conspiracy convictions should be reversed because the State failed to secure a conviction on the charge of hunting bear by the use of bait—the underlying offense of the conspiracy. The court held that a conspiracy to violate State law is a charge in of itself that does not need to be proved by showing that the underlying offense to which the parties conspired to commit was proved at trial. All that is needed to prove a conspiracy is evidence of an agreement between individuals and some overt action by one of the individuals.



Burns, Kuykendall, and Kidwell also argued that there was insufficient evidence to prove the conspiracy. However, at trial, the jury was shown evidence that two trucks had pulled up to the bait site, dogs were released from the trucks, and the men exited those two trucks. DNR officers also testified that the bait site was baited with pastries and on top of the pastries were logs, rocks, and downed trees that could only be moved by a large animal, such as a bear. Photographs of the bait site were also introduced at trial. Because the men arrived at a bait site, had dogs with them, and the other evidence suggested that the site was used for bear baiting, the court held that this evidence was enough to prove a conspiracy to violate Chapter 20.

Burns, Kuykendall, and Kidwell also argued that their conviction of conspiracy to violate Chapter 20 should be reversed due to impossibility because they were not charged with violating any specific provision of Chapter 20. Burns, Kuykendall, and Kidwell pointed out that they were charged for violating 58 C.S.R. § 47-3.6 which prohibits the catching, capturing, taking, or killing, or attempting to do so by bait of any bear. However, the court pointed out that Chapter 20 gives the DNR Director the power to make rules and regulations which have the force of law. Since 58 C.S.R. § 47-3.6 was promulgated by the DNR Director under Chapter 20, the court held that a conspiracy to violate 58 C.S.R. § 47-3.6 was a conspiracy to violate Chapter 20.

Buckley argued that the State failed to prove he was feeding a bear and failed to prove he was feeding wildlife in a containment area. Buckley claimed that he was baiting coyote; however, the court pointed out that DNR officers testified that the logs, rocks, and downed trees created a structure that prevented smaller animals from accessing the bait. DNR officers also testified that the bait typically used for coyotes would be meat and not pastries. The court held that there was sufficient evidence introduced at trial of feeding a bear and feeding of wildlife a containment area.

Buckley also argued that his sentence of ten days in jail was disproportionate to the offense of feeding wildlife in a containment area; therefore, it was constitutionally impermissible. Buckley claimed that others in the state that have been convicted of this violation have never served jail time, and other more serious offenses, such as driving under the influence, have been punished with a fine. The court held that the jail sentence imposed on Buckley was the minimum allowed under the statute; therefore, the trial court acted within its authority in handing down the sentence.

Burns, Kuykendall, Kidwell, and Buckley also argued that DNR Officer R.W. Nelson should not have been allowed to testify about pictures of a bear found on the game cameras set out by DNR officers because the photographs were never given to the defense during discovery. Officer Nelson explained that the photographs

no longer existed because the photographs were not saved nor printed and the bear had knocked over and chewed up the cameras. Officer Nelson also explained that the purpose of the game cameras was to identify the individual(s) responsible for setting up the bait site, and not for determining whether bears actually came to the site. Since the convictions did not require proving that a bear actually went the site, the court held that it was not important that there were photographs of a bear on the game cameras. The court also held that Burns, Kuykendall, Kidwell, and Buckley did not show that DNR officers acted negligently or in bad faith in not preserving the photographs, and the other evidence produced at trial was sufficient to uphold the various convictions.

Burns, Kuykendall, Kidwell, and Buckley also argued that the trial judge should have been disqualified. They pointed out that one of the investigating DNR officers is married to the assistant of the trial judge, and the trial judge should have been disqualified to avoid any appearance of impropriety. The court held that Burns, Kuykendall, Kidwell, and Buckley showed no evidence of any actual bias or prejudice. Defendants also provided no evidence that the trial judge was not otherwise neutral and detached.

The court affirmed the convictions.

State v. Burns, 2016 WL 2970134 (W. Va. 2016).

X. ABOUT THE *WILDLIFE LAW CALL*

Carol Bambery assigned these case summaries and articles to her Spring 2017 Legal Issues with Energy Development and Wildlife course at Michigan State University College of Law. The students chose recent fish- and wildlife-related decisions and emerging issues to summarize for this newsletter. **The *Wildlife Law Call* does not report every recent case,** but we hope that you will find the included summaries and articles interesting and informative.

Carol is general counsel for the Association of Fish & Wildlife Agencies (AFWA) in Washington, D.C. AFWA is a professional organization whose members are the fish and wildlife agencies of the 50 U.S. states as well as territories, several Canadian provinces and Mexican states, as well as some U.S. federal agencies.

AFWA attorney Lane Kisonak assisted with the production of the *Wildlife Law Call*.

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