

# Trends March/April 2014

## Table of Contents

### Features

EPA greenhouse gas rules at stake in U.S. Supreme Court..... 2  
*Ann Carlson and Megan Herzog*

How climate change could change the gatekeeper provisions of the Endangered Species Act ..... 6  
*J. B. Ruhl*

State policy and technological innovation in hydraulic fracturing water management ..... 10  
*Carlos R. Romo and Molly Cagle*

EPA enforcement: A heightened emphasis on mitigation relief.....13  
*David Markell*

ESI in environmental enforcement: Less is more?.....17  
*Justin Savage and Emily Kimball*

Consent decree cannot circumvent the statutory public review process to change federal management plans.....21  
*Scott W. Horngren and Shay S. Scott*

In Brief ..... 24  
*Theodore L. Garrett*

### Section News

Views from the Chair: Section continues tradition of high-quality educational programs ..... 26  
*William L. Penny*

Please join us for the 32nd Annual Water Law Conference .....29  
*Rodney Smith and Robin Kundis Craig*

## **EPA greenhouse gas rules at stake in U.S. Supreme Court**

**Ann Carlson and Megan Herzog**

*Ann Carlson is the Shirley Shapiro Professor of Environmental Law and the co-faculty director of the Emmett Center on Climate Change and the Environment at UCLA School of Law. Megan Herzog is the Emmett/Frankel Fellow in Environmental Law and Policy at UCLA School of Law. The authors served as counsel for amici curiae South Coast Air Quality Management District and the Emmett Center on Climate Change and the Environment in support of respondents in the subject case, Utility Air Regulatory Group v. EPA.*

The U.S. Supreme Court is considering an important challenge to the Environmental Protection Agency's (EPA's) greenhouse gas (GHG) air permitting rules under the Clean Air Act (CAA). At stake in *Utility Air Regulatory Group v. EPA* (one of six related cases on which the Court granted certiorari) is the validity of EPA's rules for stationary sources of GHG emissions under the Prevention of Significant Deterioration (PSD) provisions of the CAA. The petitions challenged the D.C. Circuit's unanimous decision upholding the rules in *Coalition for Responsible Regulation v. EPA*, 684 F.3d 102 (D.C. Cir. 2012).

The Supreme Court let stand some very important portions of the D.C. Circuit's opinion, including EPA's so-called "Endangerment Finding" and standards for GHG emissions from automobiles. The Court granted cert on just one issue: "Whether EPA permissibly determined that its regulation of greenhouse gas emissions from new motor vehicles triggered permitting requirements under the Clean Air Act for stationary sources that emit greenhouse gases." 134 S. Ct. 418 (Oct. 15, 2013). The case involves a complicated question of statutory interpretation that will begin to answer just how extensively the CAA should be applied to GHGs.

### **A brief history of federal greenhouse gas regulation**

*Utility Air* is the culmination of a protracted and complex legal struggle regarding federal regulation of GHGs. In *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Supreme Court found that GHGs are air pollutants subject to regulation under the CAA and ordered EPA to determine whether the pollutants may reasonably be anticipated to endanger public health and welfare. EPA subsequently made an Endangerment Finding and also found that anthropogenic emissions of GHGs—including motor vehicle emissions—significantly contribute to global climate change. The Court will not review the Endangerment Finding, which the court of appeals upheld.

Following the Endangerment Finding, EPA established GHG emissions standards for new cars and light trucks (the “Tailpipe Rule”). The Court has also declined to review the Tailpipe Rule.

Under EPA’s historical interpretation of the CAA, regulation of vehicular GHGs automatically triggers regulation of stationary sources of GHGs under two other sections of the CAA. First, the PSD permitting program requires preconstruction permits for “major” new and modified stationary sources in certain areas. PSD permits require sources to install the best available control technology to reduce emissions of regulated pollutants. The CAA classifies as “major” any source that annually emits, or has the potential to emit, 250 tons or more of any air pollutant, with a lower 100-tons per year threshold for certain industrial source categories. (Similarly, Title V of the CAA requires operating permits for sources that emit, or have the potential to emit, 100 tons per year or more of any air pollutant, but Title V permits do not impose independent pollution control requirements.) EPA has interpreted “any air pollutant” to mean any pollutant regulated under the CAA. Because EPA regulated GHGs through the Tailpipe Rule, GHGs therefore constituted a pollutant under the CAA, and EPA accordingly determined that the PSD program applies to GHGs.

EPA faced a quandary about the application of the PSD definition of “major source” to GHG emissions. The statutory emissions thresholds are not problematic in the context of pollutants such as lead or hydrogen sulfide, as only fairly large industrial emitters meet the thresholds. If applied to GHGs, however, millions of small sources like apartment buildings, schools, and small businesses could be subject for the first time to the CAA’s permitting requirements. EPA determined that immediately regulating millions of additional stationary sources prior to streamlining the permitting programs would be extremely expensive and administratively burdensome. Consequently, EPA issued the “Tailoring Rule” to phase in the statutory thresholds for permitting over time, beginning with the largest emitters (e.g., power plants and large industrial sources). Under the Tailoring Rule, only sources with annual emissions of 75,000 or 100,000 tons or more, depending on the circumstances, are subject to PSD and Title V.

In *Coalition for Responsible Regulation*, the court of appeals dismissed challenges to the Tailoring Rule for lack of standing. The Court has now granted review of EPA’s determination that regulation of vehicle GHG emissions triggers the application of PSD and Title V permitting programs to stationary sources.

### **The question before the Court: Do the CAA’s permitting programs apply to stationary sources of GHGs?**

The main source of controversy between petitioners and EPA is the scope of the PSD program. The CAA states that PSD applies to major new and modified sources of “any air pollutant.” See 42 U.S.C. § 7479(1). EPA historically has interpreted “any air pollutant” to mean that PSD applies to sources of any air pollutant regulated under any section of the CAA. Because GHGs are regulated under the Tailpipe Rule, EPA concluded that PSD applies to GHGs. EPA argues that this interpretation is compelled by the plain language of the statute and thus, under the familiar canon of statutory interpretation defined in *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984), *Chevron Step One* applies.

Petitioners argue for several alternative—and conflicting—Chevron Step One interpretations of the CAA. One group of petitioners, Utility Air Regulatory Group, Energy-Intensive Manufacturers, Southeastern Legal Foundation, the State of Texas, and the Chamber of Commerce, argues for interpretations that would completely gut EPA’s rule. The other interpretation, from the American Chemistry Council, would still subject the vast majority of stationary sources to the PSD permitting requirements for GHGs.

The first set of arguments contends that the structure of the PSD program and the unique features of GHGs demonstrate that PSD cannot sensibly be applied to GHGs. Coalition for Responsible Regulation (Coalition) claims that PSD applies only to the subset of pollutants regulated as “criteria pollutants” under sections 108 and 109 of the CAA. Greenhouse gases are a regulated pollutant, but EPA has not classified them as a criteria pollutant. EPA must set National Ambient Air Quality Standards (NAAQS) for criteria pollutants, and states must develop State Implementation Plans to achieve or remain in compliance (“attainment”) with the NAAQS. The PSD provisions require new and modified stationary sources in attainment areas to obtain permits; the Coalition argues that the purpose of PSD permitting is to ensure that states do not authorize the construction of new emissions sources that would cause the state to exceed the NAAQS. Because PSD is linked to the NAAQS, and EPA develops NAAQS for criteria pollutants only, the Coalition contends that it does not make sense to apply PSD to pollutants like GHGs that are not criteria pollutants. Utility Air Regulatory Group, Chamber of Commerce, Energy-Intensive Manufacturers, and Southeastern Legal Foundation argue that it would be absurd to apply the PSD program to GHGs because GHGs do not concentrate locally or produce exposure-related harms. Many petitioners further argue that GHG sources should not be regulated under the PSD program because EPA determined that “absurd results” would occur if PSD and Title V were implemented immediately at the statutory thresholds.

As a related argument, Texas and several other petitioners rely on *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000), to suggest that Congress implicitly exempted GHG emissions from the PSD and Title V permitting programs. In *Brown & Williamson*, the Court held that the overall structure of the Federal Food, Drug, and Cosmetic Act, coupled with subsequent tobacco-specific legislation, evidenced Congress’s intent not to regulate tobacco products. Petitioners claim that *Brown & Williamson* should lead the Court to similarly reject “onerous” GHG regulation under the CAA.

The American Chemistry Council’s alternative Chevron Step One argument is that only those facilities already required to have PSD permits because they emit threshold amounts of criteria pollutants are required to install best available control technology for GHGs. The vast majority of GHG emissions EPA seeks to regulate would be covered under this interpretation, but new sources that emit only GHGs and not criteria pollutants would be exempt.

Given the CAA’s use of the expansive term “any air pollutant,” the petitioner groups may face an uphill battle. EPA’s interpretation of the term is further supported by the fact that other provisions of the PSD program impose requirements for non-criteria pollutants. For example, under 42 U.S.C. § 7475(a)(4), permitted sources must install “the best available control technology for each pollutant

subject to regulation under [the CAA]”). Since GHGs are subject to regulation under the mobile source provisions, § 7475(a)(4) appears to apply. See also 42 U.S.C. § 7475(a)(3)(C) (subjecting permittees to requirements related to “any other applicable emission standard” under the CAA).

But at least four justices voted to grant cert in the case, evidence that they may not agree with EPA. It is also possible that the Court could reject all of the “plain meaning” interpretations set forth above and find, instead, that the PSD provision is ambiguous. Chevron Step Two would then kick in, requiring petitioners to show that EPA’s interpretation of the statute is unreasonable. Fundamentally, petitioners’ Step Two argument is that applying the PSD provisions to GHGs will lead to absurd results because Congress clearly never contemplated applying PSD permitting provisions to very small sources of GHGs like apartment buildings and small facilities. Notably, however, if the Court were to reach Chevron Step Two, EPA’s longstanding regulations extending PSD to non-criteria pollutants should receive deference and present a significant hurdle for petitioners.

### **The potential impact of the decision**

Although the Supreme Court granted cert only on the single question specified above, it seems possible that, if the Court rules that PSD applies to GHG sources, it may then move on to the question of whether industry or state petitioners have standing to challenge EPA’s implementing rule. The Court has focused significant attention over the last two decades on the threshold jurisdictional question of standing. The court of appeals below held that industry and state petitioners could not establish that they had been injured in fact, as required by standing doctrine. The lower court reasoned that petitioners were helped rather than injured by EPA’s initial application of permitting programs only to very large sources, which had the effect of lessening the regulatory and administrative burdens both on implementing states and small businesses.

The dismissal on standing grounds allowed the lower court to avoid ruling on the merits of the Tailoring Rule. If the Supreme Court reversed the court of appeals’ ruling denying standing, presumably it would remand the case to the court of appeals to determine the validity of the rule. The central legal question about the Tailoring Rule is whether EPA can lawfully phase in the applicability of PSD and Title V over time, even though the CAA explicitly states that sources that emit or have the potential to emit 100/250 tons per year or more of a pollutant are subject to the permitting programs.

Ironically, a win for petitioners on either the question of whether the PSD provisions apply to GHGs or whether, if remanded, the Tailoring Rule is valid would not necessarily mean an overall reduction in federal regulation of GHGs. For example, if the Court reasoned that PSD applies only to criteria pollutants as some petitioners have argued, such a ruling might embolden environmentalists to push EPA to define GHGs as criteria pollutants. Environmental groups petitioned EPA in 2009 to ask the agency to do precisely that but have not pressed EPA to rule on the petition pending resolution of challenges to EPA’s other GHG regulations. Yet, section 108 of the CAA states that the EPA Administrator “shall” categorize an air pollutant as a criteria pollutant if its emissions “cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare . . .” and “result[] from numerous or diverse mobile or stationary sources.” EPA has already determined in its Endangerment Finding that GHGs from numerous sources endanger public health and welfare. Listing GHGs as criteria

pollutants would trigger a far more stringent regulatory program, requiring EPA to set a national pollution standard (in the form of a NAAQS) for GHGs, and requiring each state to implement a program to control a broad range of GHG sources.

The bottom line, then, is that the Supreme Court's decision will be an important next step in defining how far EPA can extend the CAA to regulate GHGs. The decision will by no means, however, be the final word.

## **How climate change could change the gatekeeper provisions of the Endangered Species Act**

**J. B. Ruhl**

*J. B. Ruhl is the David Daniels Allen Distinguished Chair in Law at Vanderbilt University Law School in Nashville. He is a past publications officer of the Section and has served as the Endangered Species Committee vice chair responsible for the committee's contribution to Environment, Energy, and Resources Law: The Year in Review since 1996.*

When butterflies migrate, it is for breeding and survival, not for fun. And mounting evidence shows that butterflies and many other species around the world are migrating to areas outside their current ranges as an adaptive response to climate change. See I. Chen, et al., Rapid Range Shifts of Species Associated with High Levels of Climate Warming, 333 *Science* 1024 (2011). Good for them, we might cheer. But there are problems. One is that not all species can migrate so easily and quickly. Another is that when species do succeed in adaptive migration, they wind up where they used to not belong. Projecting the adaptive migration story into the future thus does not produce a pretty picture—it leads to what ecologists call the no-analog future, a future in which today's familiar communities of species have been torn apart and transformed, with some losses along the way, into new ecological groupings. See D. Fox, Back to the No-Analog Future?, 316 *Science* 823 (2007).

As hard as it is to envision what the new ecological assemblies might look like, it's not hard to imagine that many species will have a rough time of it trying to make the transition. How can we help species that are in trouble? Usually when we ask that question, one iconic environmental law rises at the top of the list—the Endangered Species Act (ESA). For four decades, the ESA has served as the “emergency room” statute for imperiled species, lowering the boom on everything from dams to highways to anything else humans propose to do that could push a species closer to the brink. So, one obvious response to the stresses climate change poses to species is to pull out the ESA and put it to work. But one signif-

icant issue arises: the impacts on species of global ecological transformation induced by climate change are unlike anything the ESA has ever been used to manage. In short, it is going to be as much of a no-analog future for the ESA as it will be for the species it is designed to protect. This article examines what that means for the gatekeeper provision of the ESA: Section 4, which governs the identification of endangered and threatened species and designation of their critical habitat. All ESA regulatory and administrative programs flow from these two core functions. Both of these functions will inevitably confront new and difficult legal questions in response to the landscape created by climate change.

Section 4 directs the agencies charged with administering the ESA—the U.S. Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NMFS)—to consider five threats to species: (1) the present or threatened destruction, modification, or curtailment of the species’ habitat or range; (2) overutilization of the species for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; and (5) other natural or manmade factors. 16 U.S.C. § 1533(a)(1)(A)–(E). Climate change unquestionably will trigger one or more of these factors for many species. It can modify habitat, increase disease or predation, or lead to other natural or manmade factors threatening a species. Existing regulatory mechanisms may be inadequate to address such threats. But connecting the ESA to climate change at that general level isn’t hard. What is difficult is figuring out how to implement the statute from there. The news and litigation surrounding the listing and critical habitat designation for the polar bear brought attention in that respect to section 4, but that represents only the beginning.

### **Listing species**

The listing function of section 4 is one area of concern. Section 4(a) requires FWS and NMFS to “determine whether any species is an endangered species or threatened species” based on existing threats. 16 U.S.C. § 1533(a)(1). A species is “endangered” if it is “in danger of extinction throughout all or a significant portion of its range,” and it is “threatened” if it is “likely to become and endangered species within the foreseeable future throughout all or a significant portion of its range.” 16 U.S.C. §§ 1532(6), (20). Neither of these concepts is defined further in the statute. Given that climate change is forcing species to migrate into a no-analog future, how do terms like “foreseeable future” and “significant portion of [the species’] range” apply?

The extensive uncertainties surrounding the trajectory of climate change under various emission scenarios and climate response models have already made the concept of foreseeable future a touchstone of controversy. The law of “foreseeable future” in the ESA context was quite sparse prior to 2009, with only two cases addressing the issue, neither of which involved climate change. Moreover, no agency rules or guidance were in place. In January 2009, however, the Department of the Interior (DOI) Solicitor issued an opinion concerning the meaning of “foreseeable future.” It concluded that the concept called for a species-specific determination rooted in the best available science allowing reliable predictions into the future. See Opinion M-37021 (Jan. 16, 2009). Although one can speculate that the prospect of climate change may have motivated the issuance of the opinion, climate change is never mentioned. Since the opinion’s issuance, several cases have upheld the agencies’ determinations concerning how far into the future the effects of climate change on species can be reliably projected. For

example, one court concluded that NMFS reasonably limited the analysis to 2050 based on its assessment of the unreliability of scientific models post-2050. See *Center for Biological Diversity v. Lubchenco*, 758 F. Supp. 2d 945 (N.D. Cal. 2010) (analyzing NMFS's decision not to list ice-reliant ribbon seal).

Climate change presents some new difficulties in analyzing a species' range as well. In an effort to replace DOI's prior "significant portion of range" policy, which had been successfully challenged in litigation and later withdrawn, in December 2011 FWS and NMFS issued a new draft policy on the interpretation of that phrase. 76 Fed. Reg. 76,987 (Dec. 9, 2011). Under this new approach, the agencies will list a species if it is endangered or threatened throughout all of its range or throughout a significant portion of its range. In either case, the species will be listed throughout all of its range. Also, adhering to prior policy, the agencies explained that "range" for purposes of the analysis includes only "the general geographical area within which the species can be found at the time FWS or NMFS makes any particular status determination." Many environmental protection interest groups had argued that range should include lost historical range. FWS and NMFS explained they would consider lost historical range as part of the species status review, not as part of the range analysis. Notably, however, the agencies did not address questions such as how to account for the possibility that a species' range might be shifting over time and what significance to attach to the species' migratory departure from its prior occupied range. Presumably, the agencies could take the "snapshot" approach to determine the species' current range at any time and account for the shifting of the range in determining the species' status. In sum, it remains to be seen how the agencies and courts will deal with ranges that shift due to adaptive migration.

Species migration will also make defining what constitutes a "species" more complicated. This concept has also been the subject of some controversy even without climate change. For example, the ESA defines species to include not just the entire species or a subspecies, but also "any distinct population segment of any species of vertebrate fish or wildlife." 16 U.S.C. § 1532(16). A 1996 policy on such "distinct population segments" or "DPSs" last addressed the issue, but it does not mention climate change. See 61 Fed. Reg. 4722 (Feb. 7, 1996). One question left open is how to treat a listed DPS if its adaptive migration unites it with another listed or unlisted population of the species. Are the two previously DPSs merged into one population? If so, is the "new" now-merged population listed or not? Similarly, neither the statute nor any currently effective agency promulgation addresses the status of hybrids resulting from the interbreeding involving one or two listed species. Hybrids and hybrid populations are both likely to become more common as species migrate. Yet their status remains somewhat unclear.

### **Critical habitat designation**

When listing a species as endangered or threatened, FWS and NMFS must also "to the maximum extent prudent and determinable . . . designate any habitat of such species which is then considered to be critical habitat." 16 U.S.C. § 1533(a)(3)(A). Critical habitat is defined in the statute to mean areas "within the geographical area occupied by the species . . . on which are found those physical or biological features (I) which are essential to the conservation of the species and (II) which may require special management considerations or protection." *Id.* § 1532(5)(A)(i). It can also include areas outside the



occupied area if such areas are “essential for the conservation of the species.” Id. § 1532(5)(A)(ii). In either case, areas that otherwise would qualify as critical habitat may be excluded for such designation if the agency concludes that “the benefits of such exclusion outweigh the benefits of specifying such areas as part of the critical habitat” and excluding the area will not result in extinction of the species. Id. § 1533(b)(2).

Climate change presents a host of issues for this cluster of critical-habitat-related subsections, yet uncertainties remain. In some cases, FWS has mentioned climate change as a factor that could require “special management,” but it has not explained what that would entail. See 78 Fed. Reg. at 62,530 (Oct. 22, 2013) (proposed plant critical habitat). Broader questions also arise. For example, if it is known that an area a species currently occupies meets the criteria for critical habitat but that area is degrading, can that prospect justify a finding that designation of the area as critical habitat is not prudent? Current agency regulations define “not prudent” as a “designation of critical habitat [that] would not be beneficial to the species,” 50 C.F.R. § 424.12(a)(1)(ii). Designating habitat that is likely to become degraded would arguably not benefit the species. Or, could such conditions be taken into account when weighing whether to exclude a particular parcel if the benefits are seen as diminishing substantially over time? See Opinion M-37016 (Oct. 3, 2008) (not discussing the issue).

Conversely, if it is known that an area not currently occupied by the species is likely as a result of climate change to transition into habitat meeting the criteria of critical habitat, can that prospect make the future habitat area “essential for the conservation of the species” and thus eligible for designation? On the one hand, current agency regulations state that one element of critical habitat is “space for individual and population growth,” 50 C.F.R. § 424.12(b)(1). On the other hand, areas outside the geographical area presently occupied by a species may be designated “only when a designation limited to its present range would be inadequate to ensure the conservation of the species.” Id. § 424.12(e). Although that seems restrictive, it might be satisfied in cases where a species is likely to migrate. The agencies have come close to this approach. In one instance, FWS designated unoccupied habitat as critical habitat for a coastal bird species in order to offset loss of the species’ habitat to climate change. The stated rationale, however, was that the unoccupied habitat once was occupied and would need to be restored manually. 77 Fed. Reg. 36,728 (June 19, 2012). There have been several other proposed or final designations taking these offset approaches. In no case, however, has FWS or NMFS taken the “future habitat” offset approach. Its legality is therefore an open question.

In sum, although climate change could change the way many provisions of the ESA operate, the section 4 listing and critical habitat provisions are perhaps the most important to consider in this respect. As this article demonstrates, many potential legal issues lurk on the horizon for section 4 as a result of climate change. It behooves all ESA practitioners to begin considering how best to implement the statute to make it resilient over the course of our entry into the no-analog future.

## **State policy and technological innovation in hydraulic fracturing water management**

**Carlos R. Romo and Molly Cagle**

*Carlos R. Romo and Molly Cagle practice natural resources law in Baker Botts L.L.P.'s Austin, Texas, office.*

Between Hollywood and the headlines, most Americans are now familiar with the shale gas revolution that has emerged in the United States over the last decade. Certainly environmental lawyers are particularly aware of legislative and regulatory initiatives targeting unconventional drilling. From local zoning ordinances and state drilling rules to new federal Clean Air Act requirements implemented by the U.S. Environmental Protection Agency (EPA), companies developing shale gas face a meteor shower of local, state, and federal environmental regulations. However, water management associated with hydraulic fracturing is emerging as a new significant issue to monitor.

The hydraulic fracturing process used in shale gas production is relatively water-intensive. Over 99.5 percent of the fluid that is injected in these oil and gas production operations is water. Significant portions of this fluid, in addition to water produced along with oil and gas from the formation, return to the surface. As a result, water management has always been, and will continue to be, a key business and environmental concern for shale gas producers and operators. Drought and increasing competition for water have only heightened the need for effective water management strategies.

A new legal trend is regulation of water associated with hydraulic fracturing. In particular, some states are beginning to actively encourage recycling technologies and reuse of water in shale gas production through regulatory incentives. Many of these developments are backed by a diverse group of stakeholders, including venture capitalists investing in emerging water technologies, oil and gas operators, and environmental groups. But even as states appear to be encouraging technological innovation in the management of water used in hydraulic fracturing through creative and flexible efforts, these policies could be threatened by future federal regulation.

### **Traditional federal and state regulation**

Water supply and oil and gas regulation are traditionally seen as state law issues. Thus, requirements related to securing water supplies for oil and gas operations are generally within the traditional scope of state regulatory authority. Not surprisingly, states manage water resources used with oil and gas in a variety of ways. Texas, which has a long history of oil and gas development, encourages use of groundwater in oil and gas exploration by exempting withdrawals used with drilling rigs from groundwater

permitting requirements generally applicable to other users. In some states such as Colorado, supreme court decisions govern how water use in oil and gas should be treated within the state water law framework.

States have taken the lead in regulation of water reuse with hydraulic fracturing in part due to current aspects of federal environmental laws. First, management of water produced in oil and gas waste is generally exempt from federal regulation as a hazardous waste under the Resource Conservation and Recovery Act (RCRA). RCRA was designed to closely track hazardous wastes from the moment they are generated to the time they are disposed (so called “cradle to grave” regulation). Yet, because EPA concluded oil and gas wastes would not pose the same harms as hazardous wastes and would be generally managed appropriately, oil and gas wastes were specifically exempted in amendments to RCRA in 1988. Lawyers familiar with RCRA will recognize that an exemption from these arcane regulations is essential to help manage oil and gas wastes; without the exemption, many entities would simply be unable to recycle water that is deemed hazardous simply because it contains petroleum constituents. Nevertheless, EPA is currently considering a petition to remove this exemption.

Another key aspect of federal law that has encouraged state policies to address water use is the federal National Pollutant Discharge Elimination System (NPDES) permitting scheme. Currently, EPA effectively has a “zero discharge” requirement for water discharges from oil and gas operations east of the 98th meridian. West of the 98th meridian, some states in water-scarce areas are able to take advantage of an NPDES exemption for treated oil and gas water that meets requirements for reuse with livestock or irrigation. While the east-west divide has generally been workable, EPA is currently reviewing “effluent limitation guidelines” applicable to NPDES permits for the shale oil and gas sector as a whole and geographic preferences could be eliminated. EPA has initiated the first stages of a federal rulemaking, and a final rulemaking will be closely monitored by industry and states.

### **State policies to encourage water reuse**

With this background in mind, it is not surprising that state permitting authorities are taking the lead in regulating water management issues associated with hydraulic fracturing. The regulatory frameworks adopted by Texas and Pennsylvania demonstrate that there is no one-size-fits-all approach to effectively managing complex water issues unique to each state.

Texas, one of the leading producers of oil and gas resulting from hydraulic fracturing operations, only recently updated its rules to both address well integrity associated with hydraulic fracturing and encourage reuse of water. Texas had previously adopted a suite of regulations in 2006 requiring permits for recycling facilities. A few entities developed and submitted application materials related to the siting of treatment facilities, volumes of produced water treated, and rigorous monitoring protocols. Similar permitting requirements applied to both stationary recycling facilities and mobile treatment facilities, and the Texas Railroad Commission (the state agency responsible for regulating oil and gas activities in Texas) encouraged “pilot” projects to test the viability of early water recycling technologies. However, in 2013, after Texas experienced one of its worst droughts of record, the Railroad Commission adopted new rules to further encourage reuse and recycling of water used in hydraulic fracturing by streamlining the requirements applicable to recycling activities conducted “on-lease.” Now, companies are exempt from more rigorous permitting requirements if they treat produced and

flowback water for reuse with new hydraulic fracturing activities. Texas' early adoption of recycling rules and regulatory adaptability have already encouraged a variety of new technologies such as reverse osmosis to be deployed in Texas, and these technologies are likely to be adopted in other regions.

Pennsylvania had different motivations driving its push to encourage recycling water used with hydraulic fracturing in the Marcellus Shale. In April 2011, in response to complaints that oil and gas operators were sending water to public drinking water treatment plants, the state Department of Environmental Protection (PADEP) called for oil and gas drillers to voluntarily stop sending water to these treatment facilities. But unlike in Texas, which has close to 12,000 injection wells used to dispose of oil and gas drilling fluids, Pennsylvania has only a handful of injection wells for disposal of produced water. Thus, in July 2011 PADEP issued new permits and management practices to encourage the reuse of treated produced water by exempting wastewaters processed under these permits from general waste regulations. The Pennsylvania legislature went one step further and required "water management plans" if oil and gas operators did not recycle produced water for further use in hydraulic fracturing operations. These permits and incentives appear to be working. By some accounts, oil and gas operators now recycle more than 90 percent of produced water associated with hydraulic fracturing in Pennsylvania.

Despite clear benefits from the recycling of water used in hydraulic fracturing, some states have been slow to adopt clear policies to encourage the practice. For example, New Mexico and North Dakota, which have significant drilling activities, have taken a more ad hoc, case-by-case approach to the reuse of water in hydraulic fracturing operations. Those states may require more complex permits with public hearings, and other onerous water management requirements may be required for every application to treat water at particular wells. While case-by-case flexibility could be potentially beneficial to some companies, it also causes significant regulatory uncertainty and may add costs to the deployment of emerging technologies if more onerous ad-hoc proceedings are required. One agency staff person's method of evaluating applications may be discontinued if they move on, or operators may be treated differently even if they are using similar recycling technologies. North Dakota is currently considering adopting rules for recycling facilities that may address some of these issues, and to the extent states do address water recycling with hydraulic fracturing, they should follow the lead of Texas and Pennsylvania and streamline requirements to encourage reuse.

### **Federal water regulation, if any, should encourage proactive state policies**

Encouraging good water management practices is critical for continued oil and gas development with hydraulic fracturing, and it is imperative that state oil and gas and water regulators examine ways to incentivize companies to improve their water processes. This issue is only growing in importance with current drought conditions across the country and in oil and gas producing areas. Proactive state policies encouraging water reuse with hydraulic fracturing operations have already dramatically decreased the need for freshwater resources for oil and gas development and encouraged new water treatment technologies and business innovations.

Federal regulation of water used with hydraulic fracturing has the potential to displace many state initiatives. For example, the removal of the exemption of oil and gas wastes from regulation as hazardous waste by EPA could have irreversible effects on the current efforts to reuse water derived from hydraulic fracturing operations. It is also unclear what effects EPA's effluent limitation guidelines for the shale oil and gas sector could have on industry. A worst-case scenario would be the adoption of a one-size-fits-all federal regulatory approach that impairs the ability of states to pursue policies that are appropriate for their own natural resource priorities and challenges. But EPA's regulations could also support state efforts and further encourage water treatment in this sector. The trend to watch over the next few years will be how federal regulation influences state policies and technological innovation. Hopefully federal regulators will see the progress that some states are already making.

## **EPA enforcement: A heightened emphasis on mitigation relief**

**David Markell**

*David Markell is the Steven M. Goldstein Professor and associate dean for Environmental Programs at the Florida State University College of Law. The comments of EPA staff on a draft of this article were very helpful.*

This article reviews key features of a November 2012 U.S. Environmental Protection Agency (EPA) Memorandum entitled *Securing Mitigation as Injunctive Relief in Certain Civil Enforcement Settlements* (2d ed. Nov. 2012) (hereinafter *Mitigation Memorandum* or *Memorandum*) (the agency issued its 1st edition of the *Memorandum* in September 2012). The agency issued the *Memorandum* for the purpose of “strongly encourag[ing] [EPA enforcement personnel] to seek mitigation, where appropriate, as a component of the injunctive relief they seek in civil judicial enforcement cases.” Implementation of the *Mitigation Memorandum* coincides with an agency effort to more fundamentally reconsider its approach to compliance promotion, which EPA calls its Next Generation (Next Gen) Compliance Initiative and characterizes as a “new paradigm” for promoting compliance. See e.g., U.S. EPA, Office of Enforcement and Compliance Assurance National Program Manager Guidance FY 2014 at 10–12 (June 12, 2013). As EPA revisits its approach to improving compliance more generally, the *Mitigation Memorandum* offers insights into EPA's strategies for pursuing formal enforcement, including civil judicial cases.

**EPA's new Mitigation Memorandum**

In its Mitigation Memorandum, EPA reinforces the importance of a significant feature of formal enforcement: EPA's pursuit of what it styles "mitigation" injunctive relief in civil enforcement cases. EPA views "mitigation" relief as a form of "redress in connection with the consequences of a set of violations." The agency's pursuit of mitigation has considerable practical significance given both the high cost of mitigation in some cases and the not insubstantial transaction costs to negotiate and implement a mitigation project.

EPA's Memorandum includes at least three key features. It defines what the agency means by "mitigation," and in doing so explains how mitigation differs from injunctive relief that requires a party to return to compliance; it explains how mitigation differs from "Supplemental Environmental Projects" (SEPs), another form of relief that EPA sometimes negotiates in enforcement cases; and it provides guidance for agency personnel to determine when, and how, to pursue mitigation in an enforcement case. Beyond these three practical purposes, the Memorandum discusses EPA's legal authority to pursue mitigation.

**Defining mitigation**

EPA defines "mitigation" as "injunctive relief . . . to remedy, reduce or offset . . . harm caused by the alleged violations in a particular case." The agency identifies four types of mitigation projects, each of which is to provide "identifiable benefits":

- Cleaning up illegally emitted or discharged pollutants from the environmental media affected by the violation;
- Limiting [more stringently than required by law] the amount of future pollutants emitted or discharged . . . to address past excesses;
- Addressing the impacts on human health, wildlife or the environment from the . . . noncompliant discharges [such as restocking fish if a Clean Water Act violation resulted in a loss of fish];
- Monitoring . . . the pollution emitted or discharged from a facility.

Memorandum at 2–3.

EPA notes that, while the agency often requires violators to undertake actions to prevent future non-compliance, in contrast to that form of injunctive relief, mitigation "is not focused on preventing future violations"; instead, mitigation is intended to "redress harm."

**Contrasting mitigation with SEPs**

EPA identifies three "significant differences" between mitigation and SEPs (for more on SEPs, see EPA Final SEP Policy (May 1, 1998)). First, EPA asserts that a court could order an alleged violator to implement a mitigation project if the project were needed to redress harm caused by the violation. A SEP, in contrast, is a "voluntary project" that EPA lacks the authority to require a defendant to undertake. Second, mitigation projects must be "closely connect[ed]" to the harm resulting from the violations because their purpose is to redress that harm; in contrast, the "nexus" required for a SEP is much looser. EPA indicates that a project that would reduce the likelihood that similar violations will occur might be approvable as a SEP but would not be appropriate as a mitigation project. Third, a defen-

dant's agreement to a mitigation project is not supposed to result in a reduction of the payable penalty. In contrast, EPA may agree to reduce a payable penalty in exchange for a defendant's commitment to undertake a SEP.

While it distinguishes between mitigation and SEPs, EPA acknowledges that the same project may qualify as one or the other depending on the circumstances. For example, EPA suggests that diesel school bus retrofits may be suitable as a mitigation action if the retrofits will reduce excess emissions, while such retrofits might be more appropriate as a SEP if violations consist solely of a failure to do required emissions testing but do not involve evidence of excess emissions (i.e., there is no "redress" involved).

### **When EPA is likely to pursue mitigation and how it will do so**

EPA's Memorandum indicates that the decision regarding whether to pursue mitigation in enforcement situations is "fact-dependent" and should be made on a case-by-case basis. The Memorandum identifies two "threshold considerations" to guide agency staff in conducting this ad hoc analysis. First, agency staff should assess whether the violations "resulted in a harm that can be effectively redressed." Second is whether mitigation actions are available that would effectively redress the harm. The Memorandum identifies a series of additional important factors in evaluating whether to pursue mitigation, including:

[T]he extent of harm the violations caused; the characteristics of the impacted area and community; the potential for increased resource burdens in preparing the case, as well as those associated with monitoring compliance with the settlement; and an overall assessment of any litigation risk associated with pursuing the violations or the contemplated mitigation actions.

The agency also acknowledges that mitigation projects may involve significant transaction costs, as has long been the case for SEPs:

Case teams should also recognize that pursuing mitigation has the potential to create significant additional agency resource burdens, such as the need for expert opinions and more detailed analyses of environmental harm and/or public health effects, and can substantially increase the length and complexity of settlement discussions. It also has the potential to create post-settlement burdens associated with monitoring compliance during implementation. Each of these factors should be taken into account.

Another key feature of EPA's strategy for pursuing mitigation involves whether EPA should consider a defendant's willingness to conduct mitigation in its penalty calculations. On the one hand, EPA's Memorandum provides explicitly that "in general, a defendant's willingness to undertake mitigation does not justify a reduction in the civil penalty the government would otherwise demand in settlement." The agency's logic is straightforward: EPA has the authority to require a defendant to do mitigation; as a result, a defendant's willingness to do "what could be legally required" does not warrant a penalty reduction. On the other hand, the Memorandum also indicates that mitigation actions might support a reduction in the gravity-based portion of a penalty if the commitment to conduct mitigation

evinces a high degree of cooperation by the defendant. In addition, the Memorandum suggests that litigation risks may be a basis for reducing a payable penalty in order to finalize a settlement that avoids those risks and includes mitigation as part of the settlement package.

EPA indicates that the new Memorandum “is not meant . . . to alter” EPA’s traditional practice of “routinely seeki[ng]” restorative measures under the Clean Water Act § 404 program or the agency’s practices under various remedial authorities, such as those in the Comprehensive Environmental Response, Compensation, and Liability Act and the Resource Conservation and Recovery Act (RCRA).

### **Issues that EPA’s Mitigation Memorandum potentially raises**

At least three issues are worth highlighting at this early stage of implementation of EPA’s Mitigation Memorandum. One involves EPA’s claim that it possesses the legal authority to pursue and obtain “mitigation” relief based on “courts’ authority to employ all equitable remedies necessary to achieve complete justice.” The agency cites a series of court decisions approving mitigation relief under provisions of several major environmental statutes (e.g., the Clean Air Act, Clean Water Act, and RCRA), including *United States v. Cinergy Corp.*, 582 F. Supp. 2d 1055 (S.D. Ind. 2008), a Clean Air Act case that EPA cites as the most recent decision to uphold the United States’ authority to obtain mitigation relief. Because, as EPA acknowledges, Congress has the capacity to strip courts of their equitable powers, a court’s decision about mitigation-styled relief may raise separation of powers issues in some circumstances. For a decision in which the Supreme Court concluded Congress had limited judicial discretion, see *TVA v. Hill*, 98 S. Ct. 2279 (1978).

Agency implementation of the Memorandum also will raise a series of practical implementation issues. For example, issues will arise concerning the types of mitigation EPA will approve and level of nexus to the alleged violations the agency will require; the effect the pursuit of mitigation will have on the process for negotiating and litigating cases; and the effect pursuing mitigation-style relief will have on the size of the penalty required and the types of other injunctive relief sought. The partial list of post-Mitigation Memorandum settlements that include mitigation provided below gives a starting point for assessing the agency’s early track record in addressing these types of questions.

A final issue that may have longer-term effects on EPA policy-making strategies involves the impact, if any, of EPA’s decision to promote pursuit of mitigation relief on the agency’s effort to achieve an “optimal level” of enforcement activity. “Too much” enforcement may deter socially useful activity in ways that undermine welfare-enhancing activity. On the other hand, “too little” enforcement may encourage socially-destructive activity that causes more harm than benefit (for a recent claim that we may be moving in the latter direction, see e.g., Joel A. Mintz and Victor Flatt, EPA’s enforcement retreat, *The Hill* (Jan. 10, 2014)). To the extent that EPA’s issuance of its Mitigation Memorandum signals the agency’s intention to seek more (and more costly) relief in enforcement cases, this approach has implications for the ongoing debate about the effectiveness of government compliance promotion efforts in achieving the goal of optimal deterrence (see, e.g., the Congressional Research Service’s June 2013 assessment of EPA enforcement, listing as an “area [ ] of continued interest” “whether penalties



are strong enough to serve as a deterrent and maintain a level economic playing field, or too harsh and thus causing undue economic hardship.” Robert Esworthy, Federal Pollution Control Laws: How Are They Enforced?, Congressional Research Service Report for Congress, RL34384 (June 18, 2013)).

**Examples of Post-Mitigation Memorandum EPA Mitigation Settlements (summaries are taken from the EPA website’s Enforcement pages, hyperlinks provided)**

**Cabot Corporation:** The proposed consent decree requires Cabot to spend \$450,000 on environmental mitigation projects in the communities surrounding each of its facilities, with no less than \$100,000 spent in each community. The projects will consist of various energy savings projects that also have criteria pollutant reduction benefits.

**Holcim (US) Inc.:** Holcim will spend at least \$150,000 on a mitigation project which will reduce emissions of NOx, CO, VOC, and PM through replacement of an outdated loader with a newer model that complies with Tier 4 emission standards. . . . Over approximately seven years, Holcim’s new loader will emit 5 tons less NOx and hydrocarbons and 0.03 tons less PM due to operating a Tier 4 engine over a Tier 2 engine.

**Shell Deer Park (SDP):** SDP will implement three mitigation projects valued at between \$15 and \$60 million. SDP will: (1) significantly modify its wastewater treatment plant to reduce emissions of VOCs; (2) control VOC emissions from certain tanks by replacing two old tanks, repairing one tank, and engaging in an innovative bi weekly infrared camera imaging program for fifteen other tanks; and (3) control emissions of hazardous air pollutants (HAPs) and VOCs at its benzene production unit through enhanced monitoring and repair practices. When fully implemented, EPA estimates that these projects will reduce VOC emissions by at least 300 tons per year.

**Dominion Energy, Inc.:** Dominion Energy agreed to spend approximately \$9.8 million on environmental mitigation projects to resolve Clean Air Act (CAA) violations. Dominion will pay \$750,000 to the National Park Service and Forest Service for projects to mitigate the harmful effects of acid deposition caused by power plants on park and forest service lands surrounding each plant. The remaining \$9,000,000 project dollars will be divided among the following environmental mitigation projects, assuring that \$3,625,000 is spent on projects within Massachusetts, Rhode Island, and Connecticut, while the balance of \$5,375,000 will be spent on projects in Indiana and Illinois. Project include energy efficiency, weatherization and renewable energy projects; wood stove change out and retrofit programs; land acquisition and restoration; and locomotive idle reduction and other clean diesel projects.

## **ESI in environmental enforcement: Less is more?**

**Justin Savage and Emily Kimball**

Published in Trends, Volume 45, Number 4, ©2014 by the American Bar Association. Reproduced with permission. All rights reserved. This information or any portion thereof may not be copied or disseminated in any form or by any means or stored in an electronic database or retrieval system without the express written consent of the American Bar Association.

*Justin Savage and Emily Kimball are respectively a partner and an associate at Hogan Lovells US, LLP.*

The rise of electronically stored information (ESI) poses a unique challenge to environmental litigators. Even before the era of Big Data, environmental litigation was complex. Few areas of the law rely so heavily on multifaceted and intricate statutes and regulations. Armies of acronyms march across the pages of environmental briefs, challenging the readers' attention. Discerning the facts poses equally daunting challenges. Expert testimony is the norm.

This article discusses recent decisions on managing the ESI avalanche in environmental litigation, focusing on two enforcement actions brought by the U.S. Department of Justice (DOJ) on behalf of the U.S. Environmental Protection Agency (EPA), *United States v. DTE Energy Co.*, No. 10-cv-13101-BAF-RSW, 2011 WL 3706585 (E.D. Mich. 2011), rev'd 711 F.3d 643 (6th Cir. 2013), and *In re Oil Spill by the Oil Rig Deepwater Horizon*, 10-md-2179 (E.D. La. filed Aug. 10, 2010).

### **The continued growth of ESI**

In the past decade, electronic discovery or "e-discovery" has extended the traditional paper discovery process to encompass ESI including e-mail, instant messages, word processing files, spreadsheets, social networking content, and any other electronic information that may be stored on desktops, laptops, file servers, smartphones, employees' home computers, and other electronic platforms. Not only is ESI more voluminous than hard copy documents, but it is also more dynamic. For example, metadata, a type of non-apparent information, can be modified simply by opening and closing a document. The rise in e-discovery, which now dwarfs paper discovery in both civil and criminal litigation, is tied primarily to the exponential generation of ESI.

Humanity presently creates as much digital information in two days as was created from the beginning of computing until 2003. Consider the following: The total amount of digital information created grew from 494 billion gigabytes in 2008 to 800 billion gigabytes (900 exabytes or 0.8 zettabytes) in 2009 (a 62 percent increase), to 1200 billion gigabytes (1,350 exabytes or 1.2 zettabytes) in 2010. Wikibon Blog, *Information Explosion and Cloud Storage* (last visited Dec. 3, 2013); *All Too Much, Special Report: Managing Information*, *The Economist*, Feb. 25, 2010.

A 2012 study by the International Data Corporation predicts that from 2005 to 2020 the digital universe will grow by a factor of 300, from 130 exabytes to 40,000 exabytes, or 40 trillion gigabytes. That represents more than 5,200 gigabytes for every man, woman, and child in 2020 and assumes that the digital universe will double nearly every two years between 2012 and 2020. John Gantz and David Reinsel, "The Digital Universe in 2020: Big Data, Bigger Digital Shadows, and Biggest Growth in the Far East" (Dec. 2012).

The Radicati Group, a technology market research firm, estimates that as of 2013 there are over 2.4 billion e-mail users worldwide, including both business and consumer users. Worldwide e-mail traffic, including both business and consumer e-mails, is estimated to be over 182 billion e-mails per day by the end of 2013, growing to nearly 207 billion e-mails per day by the end of 2017. *Email Market 2013-2017 Report*, The Radicati Group, Inc. (Nov. 2013). Likewise, social media accounts, including

Published in Trends, Volume 45, Number 4, ©2014 by the American Bar Association. Reproduced with permission. All rights reserved. This information or any portion thereof may not be copied or disseminated in any form or by any means or stored in an electronic database or retrieval system without the express written consent of the American Bar Association.

both consumer and enterprise accounts, will grow from 3.1 billion in 2012 to 4.9 billion by 2016 and individual users are expected to rise from 1.6 billion in 2012 to 2.3 billion in 2016. Social Media Market 2012–2016 Report, The Radicati Group, Inc. (June 2012).

**Limiting the production of ESI in an environmental enforcement case: *United States v. DTE Energy Co.***

The explosion in ESI is well illustrated in *United States v. DTE Energy Co.*, No. 10-cv-13101-BAF-RSW, 2011 WL 3706585 (E.D. Mich. 2011), rev'd 711 F.3d 643 (6th Cir. 2013). There, DOJ brought an enforcement action on behalf of EPA against DTE Energy, an electric utility, alleging violations of the Clean Air Act's New Source Review permitting provisions. DTE Energy served numerous requests for production that required EPA to search through past and present rulemaking, permitting, and enforcement files for responsive documents. In addition to providing past productions from other cases, EPA agreed to produce information from agency headquarters and the regional EPA office overseeing the case. In conducting its search, EPA identified over 100 personnel in ten EPA offices as having potentially responsive documents. The magnitude of the ESI collection required EPA IT personnel to expend over 240 hours to manage the technical aspects of the discovery production. Federal employees spent over 3,000 hours of time searching for, collecting, reviewing, and producing documents in response to defendants' requests.

However, EPA moved for a protective order to preclude additional nationwide discovery of the other EPA regional offices and components. In seeking this protective order, EPA argued that nationwide discovery would be unreasonably burdensome and estimated that it would need to search for and review over 1.946 million e-mails, over 1,434 gigabytes of loose e-documents, and over 5,119 linear feet (nearly a mile) of paper documents to identify potentially responsive documents.

The court granted the protective order against DTE Energy's request for nationwide discovery, with certain provisos that are not relevant to this discussion. While there is no written opinion, the magnitude of the request may have played a role in the decision. Another important factor may have been that EPA argued that a nationwide production would have been duplicative because it agreed to produce information from EPA headquarters, which oversees the other regions.

The take-away lessons of *DTE Energy* are significant. No large institutional litigant, including the government, can simply refuse to produce a significant amount of ESI. The question in *DTE Energy*—and many other cases—will likely be “how big is too big of an ESI production”? The line in each case may differ depending on the circumstances. Judges will continue to rely on familiar discovery factors such as burden, cost, fairness, reasonableness, and proportionality.

**Time limits on civil trials: *In re Oil Spill by the Oil Rig Deepwater Horizon***

While ESI discovery provides more information, there may be less time to present it. Federal judges are imposing time limits on civil trials. See Benjamin Weiser, *A 9/11 Judge Sets a Month as a Time Limit for a Trial*, N.Y. Times (Apr. 27, 2011). Judges may be reacting to the age-old tendency of lawyers to “over-try” their cases, a propensity made worse by ESI deluge.

Time limits on trial were recently imposed in the Deepwater Horizon litigation, *In re Oil Spill by the Oil Rig Deepwater Horizon*, 10-md-2179 (E.D. La. filed Aug. 10, 2010). The case involves consolidated litigation brought against companies due to the 2010 oil spill in the Gulf of Mexico, including claims brought by EPA under the Clean Water Act. The parties produced a vast amount of ESI, amounting to millions of pages were it all ever printed out. Before the second phase of the trial in the case was held in October 2013, the presiding judge, the Honorable Carl Barbier, imposed time limits, including an order specifying the exact number of minutes each party would be allowed for opening statements. See Amended Pre-Trial Order No. 54, *In re Oil Spill by the Oil Rig Deepwater Horizon*, 10-md-2179 (E.D. La. Jan 4, 2013).

This time-limitation trend is also evident in recent bellwether trials that have occurred in mass tort litigation. For example, in the pharmaceutical product liability mass torts case *In re Vioxx Products Liability Litigation*, 05-md-01657 (E.D. La. filed Feb. 17, 2005), U.S. District Judge Eldon E. Fallon strictly limited the trial time for each side to a maximum of seven days for each side to present its case. As a result, each of the Vioxx bellwether trials was tried in less than three weeks. Similarly, in *In re Propulsid Products Liability Litigation*, 00-md-1355 (E.D. La. filed Aug. 7, 2000), the trial was completed in a total of eight days due to similar trial time limits and case management techniques.

The significance of time limitations cannot be overstated in the age of ESI. Because of the risk of a clock being imposed on a trial, counsel will need to carefully analyze how to cull ESI into a manageable presentation. Factors to consider include the technical capabilities of the court hearing the matter, the time investment needed to present the ESI, and whether huge volumes of ESI can be reduced to a more manageable form. For example, counsel faced with numerous e-mails or spreadsheets might consider preparing a summary of the ESI under Federal Rule of Evidence 1006. That rule allows the proponent of voluminous information to prepare a summary, chart, or calculation of the information in lieu of introducing each underlying document into the record.

Of course, whether time limits are reasonable in any case requires a careful balancing of the competing interests in fairly allowing the parties to present their cases and judicial economy. Excluding a key witness because the clock ran out seems unfair. But forcing a judge or jury to sit through duplicative and tedious proof harms the judicial process as well. When dealing with a large volume of ESI, practitioners facing trial time constraints will need to streamline the presentation of their evidence and present it in the most compelling and least cumulative manner possible.

### **ESI and attention economics in environmental litigation: Keep it simple stupid**

Nobel-prize winning economist Dr. Herbert Simon wrote that: “a wealth of information creates a poverty of attention.” Herbert A. Simon, *Designing Organizations for an Information-Rich World*, Speech at the Johns Hopkins University and Brookings Institution Symposium, in *Computers, Communication and the Public Interest* 37, 40 (Martin Greenberger ed., 1971). An entirely new field of inquiry, “attention economics,” grew from that observation. It posits that information competes in our minds for the scarce resource of attention.

ESI production and trial presentation can disrupt the attention economy of the judicial system, resulting in the types of judicial limits on ESI discussed in this article. To minimize the risk of these judicial interventions, environmental litigators should explore opportunities to reduce the ESI burden. While often ignored, Federal Rule of Civil Procedure 29 grants the parties wide latitude on reaching discovery stipulations. Consider streamlining ESI with Rule 29 stipulations on the scope and manner of production. At trial, strive toward the minimal number of exhibits—no one can remember several hundred e-mails, spreadsheets, and other ESI. Of course, uncooperative opposing counsel can make it difficult to reach agreements governing discovery and trial, but that is no excuse for failing to try. Above all else, keep it simple stupid.

## **Consent decree cannot circumvent the statutory public review process to change federal management plans**

**Scott W. Horngren and Shay S. Scott**

*Scott W. Horngren is staff attorney for the American Forest Resource Council. Shay S. Scott is a partner in the firm of Haglund Kelley, LLP. They represented the appellant D.R. Johnson Lumber Company in Conservation Northwest v. Sherman.*

Litigation settlements that affect the management of public lands will be more difficult after the Ninth Circuit's decision in *Conservation Northwest v. Sherman*, 715 F.3d 1181 (9th Cir. 2013). Litigants will have to be more careful that settlements do not substantively change land management plans or circumvent plan amendment and public participation procedures. The Ninth Circuit's reasoning could limit settlements under other statutes that also require public involvement in agency decision making. In *Conservation Northwest* there was some question about whether the agreement between the plaintiffs and federal defendants was a "settlement agreement" or "consent decree." The distinction, however, was not central to the court's decision.

The concept of "sue and settle"—as a means to evade public involvement in agency rulemaking and decisions—has been addressed in federal legislation introduced to require an opportunity for public comment on settlement agreements and consent decrees before court approval. Sunshine for Regulatory Decrees and Settlements Act of 2013, S. 714 and H.R. 1493, 113th Cong. 2013–2014. The concern is that settlements can impose significant costs and expand the regulatory burden on industries while contravening statutory and regulatory review procedures. The attorneys general of 12 states have sued the U.S. Environmental Protection Agency (EPA) under the Freedom of Information Act to disclose

documents related to agreed settlements with environmental groups regarding adoption of regulations for the Clean Air Act's Regional Haze program. *Oklahoma v. EPA*, Case No. 5:13-cv-00726-M (W.D. Okla. July 16, 2013).

### **Survey and Manage**

Conservation Northwest involved the U.S. Forest Service and Bureau of Land Management (BLM) decisions to remove a time-consuming, multimillion-dollar, species-survey requirement that prevented achieving the economic goals of the 1994 Northwest Forest Plan (officially referred to as the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related to Species within the Range of the Northern Spotted Owl). Courts have considered federal land-managing agencies' plans as rules because they are adopted through public notice and comment. The Northwest Forest Plan covers 24 million acres and includes a "mitigation measure" called "Survey and Manage" that imposes region-wide and project-level survey requirements for Survey and Manage species. These 400 or so species include fungi, bryophytes, lichens, mollusks, amphibians, plants, and a mammal—none of which are listed under the Endangered Species Act. The species were subject to the Survey and Manage program either because they were apparently rare and thought to have a close association with old growth forest or because the agencies simply lacked information about them. Survey and Manage is time consuming, costly, and limits timber production. It can take up to two years to complete a survey; many species have a narrow seasonal "window" for surveys; and for certain species, the agency precludes some management activities such as timber harvesting if the species is found.

### **Agencies' failed attempt to eliminate Survey and Manage through the public process**

In 2001, timber industry groups sued to set aside the Survey and Manage program as illegal. The case was settled in 2003 on terms that required the agencies to consider an amendment to the Northwest Forest Plan that would include as one alternative the elimination of Survey and Manage. *Douglas Timber Operators v. Secretary of Agriculture*, Case No. 6:01-cv-6378-AA (D. Or. 2001). In 2004, the agencies completed an environmental impact statement (EIS) and selected the alternative that eliminated Survey and Manage. The court found that the EIS violated the National Environmental Policy Act (NEPA). *Northwest Ecosystem Alliance v. Rey*, 380 F. Supp. 2d 1175 (W.D. Wash. 2005). Then in 2007, the agencies completed another EIS amending the Northwest Forest Plan to eliminate Survey and Manage entirely. Plaintiff environmental groups challenged the action on various grounds, and the district court again held that the EIS violated NEPA. *Conservation Northwest v. Rey*, 674 F. Supp. 2d 1232 (W.D. Wash. 2009). The court declined to address the issue of a remedy "[d]ue to the highly complex issues at stake." *Id.* at 1257.

Following the 2009 decision, the environmental groups and the agencies engaged in settlement discussions for over a year, but intervenor D.R. Johnson Lumber Company (D.R. Johnson) was excluded from the discussions. In July 2011, the court approved a consent decree entered into by the plaintiffs and the agencies (but not the intervenor). The consent decree was not subject to public notice or comment.

**The consent decree and the appeal**

The extensive 20-page consent decree resolved which species remained subject to Survey and Manage under the Northwest Forest Plan, which species were exempt from Survey and Manage, the intensity of survey effort required for the remaining species, and how forest practices had to be restricted if smaller reserves for species were used. For example, for the lichen *Nephroma occulta*, no predisturbance surveys were required under the Northwest Forest Plan, but the consent decree increased the surveying obligation by requiring surveys for all ground-disturbing activities. The district court concluded that approving a consent decree invokes a “judicial act,” and not agency action, so the general rules applicable to agency action do not apply. *Conservation Nw. v. Rey*, Case No. C08-1067-JCC (W.D. Wash. July 6, 2011) (ECF No. 91 – Stipulation and Order).

D.R. Johnson argued that the terms of the consent decree imposed permanent and substantive changes to the Northwest Forest Plan. The statutes and regulations governing management plan amendments—the National Forest Management Act (NFMA), the Federal Land Policy and Management Act (FLPMA), and NEPA—require that changes to management plans must comply with plan amendment procedures and public participation requirements. For example, for BLM plans, “[t]he public shall be provided opportunities to meaningfully participate in and comment on the preparation of plans, amendments and related guidance and be given early notice of planning activities.” 43 C.F.R. § 1610.2(a).

The common law provides that a court should not approve a consent decree if it violates the law or public policy. *Sierra Club v. Elec. Controls Design, Inc.*, 909 F.2d 1350, 1355 (9th Cir 1990). D.R. Johnson appealed the approval of the consent decree on the grounds that a court cannot approve a consent decree that would allow plaintiffs and the agencies to modify management plans without following the law governing plan amendment and public participation procedures in NFMA, FLPMA, and NEPA.

**Consent decree held to be an improper means to amend plans**

The Ninth Circuit concluded that although courts should encourage settlement of disputes, the district court cannot approve a consent decree under the guise of a judicial act when it significantly amends an agency rule without going through statutorily required procedures. The court held that “the district court abuses its discretion when it enters a consent decree that permanently and substantially amends an agency rule that would have otherwise been subject to statutory rulemaking procedures.” *Conservation Northwest*, 715 F.3d at 1187. The court found that the consent decree established the rules for Survey and Manage that were essentially permanent unless and until the agencies decide to conduct further analysis and decision making. The court noted that if the agencies are satisfied with the version of the Survey and Manage as amended by the consent decree, they could simply let it stand indefinitely. While it is true that courts should encourage settlement, “[b]ecause the consent decree in this case allowed the Agencies effectively to promulgate a substantial and permanent amendment to Survey and Manage without having followed statutorily required procedures, it was improper.” *Id.* at 1188. Setting aside the consent decree, the Ninth Circuit remanded the case to the district court for further proceedings on injunctive relief.

**Implications**

The Ninth Circuit decision supports the argument that federal agencies cannot indiscriminately use the “sue and settle” strategy involving sweetheart lawsuits as a means to make substantive policy changes without going through rulemaking procedures. Even if a suit is not prearranged and an agency finds itself faced with an adverse court decision, it cannot solve its problem by agreeing to capitulate to the plaintiff if the demanded consent decree terms permanently and substantially change an agency rule. The Ninth Circuit decision has accomplished in small part what Congress is currently considering in the Sunshine for Regulatory Decrees and Settlements Act of 2013.

In the case of federal land managing agencies, the decision also means that the agencies and a plaintiff cannot make a deal through a consent decree to change the terms of a Forest Service forest plan or a BLM resource management plan. This does not mean the agencies are powerless to enter into a consent decree that involves changing a management plan. A consent decree that proposes rather than adopts a substantive change to a management plan would be legally sound. A consent decree is valid if it requires an agency to pursue a proposed change to the management plan through required plan amendment procedures or a proposed rule change following statutorily required rule making procedures. For example, a consent decree in which an agency agrees to consider an alternative to amend the management plan to prevent ground-disturbing activities on steep slopes as an alternative in an EIS circulated for public comment would be consistent with the Conservation Northwest decision. However, the consent decree would run afoul with Conservation Northwest if the decree committed the agency to prevent ground-disturbing activities on steep slopes under the terms of the decree. Likewise, a consent decree in which an agency agrees to consider modifying a rule through notice and comment procedures under the Administrative Procedure Act would likely survive attack, while a decree that makes a permanent rule change would not.

The Conservation Northwest decision will also provide a basis to challenge an agency’s de facto amendment to management plans through internal administrative action without following procedures for public input. Agencies are often tempted to abandon (or revise) provisions of their management plans internally in response to new information or changed thinking about resource management to avoid cumbersome plan amendment and public participation procedures, particularly with resource management plans that have been in place for a decade or more. For example, an agency decision to expand restrictions on the location or type of grazing, timber harvest, or oil and gas leasing areas beyond the provisions of a management plan is not uncommon. However, the Conservation Northwest decision will make these internal agency changes more vulnerable to challenge in the future.

**In Brief**

**Theodore L. Garrett**

Published in Trends, Volume 45, Number 4, ©2014 by the American Bar Association. Reproduced with permission. All rights reserved. This information or any portion thereof may not be copied or disseminated in any form or by any means or stored in an electronic database or retrieval system without the express written consent of the American Bar Association.



*Theodore L. Garrett is a partner of the law firm Covington & Burling LLP in Washington, D.C. He is a past chair of the Section and is a contributing editor of Trends.*

### **Constitutional law**

The ethanol and crude oil provisions in California's low carbon fuel standard do not violate the Commerce Clause of the U.S. Constitution, a divided panel of the Ninth Circuit held. *Rocky Mountain Farmers Union v. Corey*, 730 F.3d 1070 (9th Cir. 2013), rehearing en banc denied, \_\_\_ F.3d \_\_\_, 2014 U.S. App. LEXIS 1149 (Jan. 22, 2014). Reversing a district court ruling, the majority rejected plaintiffs' claim that the standard is inherently discriminatory against out-of-state ethanol, stating that they would not "block California from developing this innovative, nondiscriminatory regulation to impede global warming." The court did not rule on the issue of whether the California regulations are preempted by two federal laws, namely the federal Renewable Fuel Standard and the Energy Independence and Security Act of 2007, and remanded the lawsuit to the district court for further proceedings.

### **CERCLA**

The Second Circuit held that a state's installation of pollution control equipment to address groundwater contamination was not barred by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) statute of limitations for remedial actions. *New York v. Next Millenium Realty*, 732 F.3d 117 (2d Cir. 2013). Although the state referred to the equipment as interim "remedial" measures in the record of decision, the court was willing to assume that the state may have been using that term in a general sense as addressing both emergency and long-term conditions. The court concluded that the efforts in question were measures in response to immediate concerns with the municipal water supply and were thus governed by the CERCLA statute of limitations for removal actions.

### **Air quality**

The Ninth Circuit upheld the Environmental Appeals Board's rejection of a challenge to an oil exploration permit, issued by EPA under the Clean Air Act (CAA), which was not accompanied by an analysis of the potential incremental impact of an offshore drilling vessel. *Alaska Wilderness League v. EPA*, 727 F.3d 934 (9th Cir. 2013). The court of appeals found that the CAA provision was ambiguous, and therefore deferred to EPA's conclusion that the Prevention of Significant Deterioration (PSD) program did not require an "increments" analysis because it was not required by the state implementation plan and the source is not a major emitting facility under the CAA. The Ninth Circuit also upheld EPA's exemption of a 500-meter radius surrounding the vessel from ambient air quality standards.

The Tenth Circuit upheld EPA's rejection of a petition objecting to the issuance of a Title V permit by the Colorado Department of Public Health and Environment for a coal-fired power station. *Wildearth Guardians v. EPA*, 728 F.3d 1075 (10th Cir. 2013). Petitioner claimed that PSD requirements applicable to major modifications had been triggered, relying on a notice of violation issued by EPA. Unpersuaded by a contrary Second Circuit decision, the court in *Wildearth Guardians* deferred to EPA's position that a party cannot rely solely on the existence of a notice of violation to demonstrate noncompliance, noting that such a notice reflects only the beginning of a process designed to test the accuracy of the agency's initial conclusions. The court also found that petitioner's evidence of annual emissions failed to demonstrate that a major modification had occurred.

**Water quality**

The Eleventh Circuit upheld a U.S. district court's dismissal of a Clean Water Act citizen suit against a mining company that allegedly violated new source performance standards. *Black Warrior Riverkeeper, Inc. v. Black Warrior Minerals*, 734 F.3d 1297 (11th Cir. 2013). The plaintiffs provided notice of alleged violations of both its National Pollutant Discharge Elimination System permit and new source performance standards and then filed suit alleging violations of only the new source performance standards before the 60-day waiting period in section 1365(b) of the act expired. The state then sued Black Warrior for violations of its permit. The Eleventh Circuit found that the citizen suit was "a thinly veiled attempt to beat the State of Alabama to the courthouse" in order to avoid being barred from bringing suit. Although section 1365(b) does not apply to suits concerning new source performance standards, the Eleventh Circuit held that 60 days' notice was required to prevent an exception from swallowing the general rule: "To allow a citizen to evade the 60-day waiting period by suing a permit holder for alleged violations of the new source performance standards without regard to the conditions of the discharger's permit would both undermine the overarching permitting scheme and nullify the statutory preference for governmental enforcement."

The Fifth Circuit vacated a civil penalty award of \$6 million against a petroleum company. *United States v. CITGO Petroleum*, 723 F.3d 547 (5th Cir. 2013). The district court found that the cost savings to CITGO from foregoing certain maintenance projects that would have prevented a spill were almost impossible to determine, and provided a range rather than quantifying the specific economic benefit. The Fifth Circuit held that the district court erred in failing to make a finding on the amount of economic benefit, though "admittedly difficult," and remanded the matter for further proceedings.

**Energy**

The D.C. Circuit ruled that the Maryland Department of the Environment (MDE) must make a decision on a CAA permit application for a natural gas compressor station. *Dominion Transmission, Inc. v. Summers*, 723 F.3d 238 (D.C. Cir. 2013). The company received a certificate of public convenience and necessity from the Federal Energy Regulatory Commission (FERC), but MDE twice refused to process the company's application for an air quality permit because the applicant had not shown that the project received approval from local zoning authorities as required by the Maryland code. The court noted that state and local regulations are preempted by the Natural Gas Act to the extent that they would delay the construction of facilities approved by FERC. On remand, the state must either process the application for an air quality permit or identify non-preempted zoning or land use requirements that the applicant has not complied with.

## **Views from the Chair: Section continues tradition of high-quality educational programs**

**William L. Penny**

Published in Trends, Volume 45, Number 4, ©2014 by the American Bar Association. Reproduced with permission. All rights reserved. This information or any portion thereof may not be copied or disseminated in any form or by any means or stored in an electronic database or retrieval system without the express written consent of the American Bar Association.

*William L. Penny is a member of the Environmental, Natural Resources and Energy Service Group of Stites & Harbison PLLC in Nashville and is chair of the ABA's Section of Environment, Energy, and Resources.*

As I have often stated, my introduction to the Section was at an Annual Conference on Environmental Law at Keystone, Colorado (now called the Spring Conference and no longer at that location). I will never forget the outstanding quality of that program, with nationally known environmental attorneys from private practice, government, academia, and nongovernment organizations and the unparalleled networking opportunities. That tradition of excellence continues, expanding and changing to meet the needs of Section members. The Section now hosts three major conferences, a policy symposium, a special practice area conference, regional conferences, webinars, and committee conference calls.

The Section's three major conferences are the Spring Conference, Water Law Conference, and Fall Conference. The Spring Conference began 43 years ago in 1971 when environmental law was in its early days, and the Section was known as the Section of Natural Resources Law. The conference began with just a few attorneys in a small conference room in Denver but rapidly grew and expanded and moved to the newly built Keystone Resort in Keystone, Colorado. Three years ago, the Section moved the Spring Conference to Salt Lake City where the 43rd Spring Conference will be held March 20–22, 2014. Next year the conference location will begin rotating among selected cities.

The first Water Law Conference was held in 1982 and for many years focused primarily on western water resource issues. Water law has been expanding its breadth to include more global water issues, such as water quality and eastern water issues. To embrace that change the conference moved last year from its historic home in San Diego to Las Vegas, where it will be held again this coming June and then rotated among selected cities.

The first Fall Conference was held in Asheville, North Carolina, in 1992. The Fall Conference took advantage of the then-meteoritic interest in environmental law as well as the need to incorporate energy and resource programming. This broad CLE offering was combined with the Fall Council Meeting and various committee and Section leadership activities. The conference's location has since rotated throughout the country—usually alternating between the western, middle, and eastern United States, being held in the Baltimore/DC metro area every post-election year.

Quite a bit of work goes into developing our major conferences, and I thought I would provide an “inside” view of how they are developed.

The Conference Optimization Committee, led a few years ago by Channing Martin, determined that Fall Conference attendance varied significantly based on the city selected. A process was therefore put into place to select more popular locations for all of our conferences. The Section's education officer, Peter Wright, with Sean Dixon, Section staff, and others developed a survey that asked our members where they wanted the Section to meet for the Spring, Water, and Fall conferences, as well as what factors influenced their decision to attend a Section conference.

You spoke and we listened. Based on the responses to our Location and Branding Survey, the Section, beginning in 2015, will be rotating conference locations among eight cities that were favored by our members. In 2015, the Spring Conference will be in San Francisco, the Water Law Conference in Denver, and the Fall Conference in Chicago. The 2015 Spring Conference will be particularly special as it will be planned and coordinated with the 22 other ABA sections, divisions, and forums that our Section is charged to coordinate with on environmental matters.

Programming for our major conferences is a very detailed, painstaking process. The Section chair-elect appoints a planning committee chair for each conference that will be held during his/her term. The planning committee chair then selects committee members, subject to the Section chair elect's approval. A planning committee usually meets in person and then holds regular conference calls during the year to identify session topics, speakers, sponsors, and networking activities. Fawziah Bajwa, our Section's assistant director—with considerable assistance of Julie McCullough, our program assistant—puts her meeting planning expertise to work before and during our conferences to make them run smoothly and cost effectively, addressing a myriad of issues, some visible and many behind the scenes.

For many years, the Section's substantive committees were requested to propose detailed session topics for the Spring and Fall conference planning committees' evaluation. However, this process was frustrating for all parties as it generated many more topics than a single conference could accommodate. In some cases, suggestions for popular topics were not submitted at all, and in others the topics proposed were so narrow that they were unlikely to draw a large audience. As a result, the planning committees combined topics, reworked topics, or came up with new topics, and thus, very few topics were selected as submitted.

The Education Service Group responded to the frustration and disappointment with the old process, introducing a new model for the Spring and Fall conferences (the Water Law Conference has always used the "new" model for its planning). The planning chair will schedule a conference call with substantive committee chairs or their representatives and ask each committee to propose one or more session ideas or "hot topics." Those ideas will then go to the planning committee for consideration. Accepted topics will then be assigned to the relevant committee(s) to develop. The 22nd Fall Conference chair, John Jacus, has already conducted these calls for the conference being held in Miami in October 2014.

In addition to the conference planning aspect, the calls can inform the Education Service Group of substantive environmental, energy, and resources issues and speakers of greatest current interest. These discussions are also of interest to the Publications Service Group as a means to generate ideas for articles and books and to identify prospective authors. The reviews of the new planning model so far have been positive.

The Section's conference planning is guided by a considerable amount of historical data, the experience of members who are veterans of many of our conferences, and our Standards of Excellence. For example, no speaker or moderator is contacted until the Education Service Group has approved that

person. As a rule of thumb, panels are limited to no more than three speakers and a moderator. Consideration must be given to diversity on each panel. Our Section expects that moderators do much more than simply introduce the speakers and keep time. They are expected to play a substantive role in the presentation and to facilitate the panel's interaction with the audience. Conferences are budgeted for one person on a panel to be eligible for travel reimbursement (the Section cannot pay for speakers). Many decisions have to be made by the Education Service Group and a conference planning committee, with considerable assistance from our Section staff, to have a successful conference.

During the year, Fawziah and other Section staff are actively working with the different planning committees to get conferences planned, promoted, and implemented. They visit prospective hotels and negotiate food and beverage rates and room rates, and arrange a variety of activities at the hotels selected for conferences. The Section uses printed brochures, e-mail, social media, and our website to market our conferences. Our Section staff work especially hard at the conference sites because it seems that no matter how much advance planning takes place the hotel, the speakers, or the attendees can present all sorts of last-minute challenges. Technology and travel frequently create issues for our conferences not to mention government shutdowns. Our Section staff do such a great job of meeting these challenges that attendees rarely notice any glitches. The success of our Section's conferences over the decades has been the result of our dedicated volunteer Section members and talented and experienced professional Section staff.

We appreciate your past support of Section conferences and hope to see you soon at an upcoming conference!

## **Please join us for the 32nd Annual Water Law Conference**

### **Rodney Smith and Robin Kundis Craig**

*Rodney Smith is an attorney in the Department of the Interior's Office of the Solicitor. This article expresses Mr. Smith's personal views and does not represent the views of the Department of the Interior or of the United States. Robin Kundis Craig is the William H. Leary Professor of Law at the University of Utah S.J. Quinney College of Law. Mr. Smith serves as chair and Ms. Craig serves as vice chair of the Section's 32nd Annual Water Law Conference.*

We are pleased to invite you to the 32nd Annual Water Law Conference being held June 4–6, 2014, at the Red Rock Resort in Las Vegas. This year's conference continues the ABA Section of Environment, Energy, and Resources' three-decade tradition of addressing the most important and timely issues for the water resources community.

There will be exciting material for all areas of water law practice and all types of practitioners. For your day-to-day practice, a nuts-and-bolts presentation on aquifer mechanics will address what water lawyers need to know to effectively represent their clients. In addition, the ethics presentation will cover common scenarios and pitfalls to avoid in a water resources practice.

All attorneys and water managers will find helpful insights from the following sessions on

- strategies for coping with aging water infrastructure challenges in the face of shrinking budgets,
- how federal and state climate change regulation is likely to affect water users in all sectors,
- the effects that energy development through hydraulic fracturing is having on water resources in several eastern and western water basins,
- the latest developments in water-related takings, and
- models for allocating interstate water resources.

New lawyers and law students will benefit not only from the aquifer mechanics and ethics panels but also the Tribal Water Law 101 session, which will introduce the basics of tribal water issues and set the stage for a more detailed discussion of the latest issues in tribal water settlements. Finally, the conference will explore issues important to the host community of Las Vegas, which provides a local example of how many of these complex interstate, supply, and infrastructure challenges must be addressed at the same time.

The location at the Red Rock Resort provides opportunities either to enjoy the beautiful sandstone scenery surrounding the resort or to venture into the exciting dining, shopping, and nightlife that Las Vegas has to offer. Las Vegas is also a great place for a vacation. Red Rock Canyon National Conservation Area is minutes away, Hoover Dam is a short 45-minute drive, and Valley of Fire State Park is an hour away. The spectacular scenery of Zion, Bryce Canyon, and Grand Canyon National Parks is also within a day's drive.

Plan now to join us for the 32nd Water Law Conference. The conference web page at [www.ambar.org/EnvironWL](http://www.ambar.org/EnvironWL) has the latest information and will be updated as new information becomes available. Online registration through the website offers a convenient way to reserve your spot. We look forward to seeing you in June.