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# CLIMATE CHANGE™

## LAW & POLICY REPORTER

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## RECENT FEDERAL DECISIONS



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FEATURE ARTICLE

# THE ENDANGERED SPECIES ACT: THE HIGH COURT, THE SERVICES, AND CONGRESS ALL IN PLAY!

*By David C. Smith*

All three branches of the federal government—judicial, executive, and legislative—are actively considering major aspects of the federal Endangered Species Act (ESA or Act). Some decisions and resulting changes are certain; others are probably, based on history, unlikely to be enacted. But with the statute not having been amended or revised since 1988 and no meaningful regulatory reform having occurred since 1986, some argue that updates to what many consider the nation's most powerful environmental regulatory regime is long overdue. Currently pending are: 1) a major case at the Supreme Court regarding the Act's provision for protection of purported "habitat" on private land that is not presently occupied by the protected species nor could it be absent significant intervention and human alteration; 2) broad-sweeping and comprehensive proposed regulatory reforms; and 3) significant proposed amendments to the Act itself in both chambers of Congress.

## An Endangered Species Act Primer

As statutes go, the ESA is actually notably straightforward on paper. Even non-lawyers can readily follow it section-by-section implementation from a nomination for a particular species to be "listed," the designation of particularly important habitat for that species, the role of federal agencies in ensuring that actions that they take do not further imperil listed species, and the Act's prohibition against various categories of harm to the species once listed.

The Act's provisions are carried out in combination by the Departments of the Interior (Interior) and Commerce. Commerce, generally, has jurisdiction over marine and anadromous species, and it has delegated implementation of that authority to the National Marine Fisheries Service (NMFS), also referred to as NOAA Fisheries. All other species are under the jurisdiction of Interior, and it delegated implementation to the U.S. Fish and Wildlife Service (FWS). Collectively, NMFS and FWS are referred to as the "Services."

## ESA Section 4 (16 USC § 1533)

Section 4 of the Act provides the processes and standards for listing species for protection, designation of their protected habitat, and eventual delisting, among other things. There are two categories of listing provided for in the ESA: "threatened" and "endangered." An "endangered species" according to the Act is one that is "in danger of extinction throughout all or a significant portion of its range." A "threatened" species is one:

> . . .that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Section 4 outlines the procedures whereby any interested party or entity may petition the respective Service seeking to invoke the Act's protections for a given species by adding to the list for protection as either threatened or endangered.

The Services usually must also, at the time a species is listed, designate such species' "critical habitat," defined as areas "essential to the conservation of the species." The Services may include both "occupied" and "unoccupied" acreage in the designation within specified parameters.

### ESA Section 7 (16 USC § 1536)

Section 7 requires and outlines the procedures whereby virtually any action by any entity of the federal government must be considered as to its potential impact on species protected under the Act. This includes the issuance of a permit or provision of federal funding to private entities. If any such federal agency action may detrimentally impact a listed species, that agency must "consult" with the respective Service to evaluate such potential harm. Under Section 7, such action may not "jeopardize the continued existence of the species" nor may it result in the "destruction or adverse modification" of its critical habitat.

### ESA Section 9 (16 USC § 1538)

The "teeth" of the ESA are in Section 9. Here, the Act prohibits the "take" of any listed species. Take is broadly defined as: "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

### ESA Section 10 (16 USC § 1539)

Section 10 allows the respective Service to issue a permit to allow "take" of a listed species in proscribed contexts, most frequently in the private sector where such take is "incidental to otherwise lawful activity."

## The U.S. Supreme Court and the ESA

*Weyerhaeuser Company* v. *U.S. Fish and Wildlife Service*, currently pending before the U.S. Supreme Court, presents the issue of whether "habitat" designated as critical by the Services must actually be "habitable" by the species. The case also asks whether a Service's decision not to exclude a given area from designated habitat based on its economic impact to the landowner, as permitted under the ESA, is reviewable by a court.

The dusky gopher frog was listed under the ESA as "endangered" in 2001. In fact, it was and is considered one of the most highly endangered species in the nation, according to the federal government. The FWS did not designate critical habitat for the frog, however, until it was forced to do so by litigation. The designation occurred in 2012. According to the FWS, the frog's historic range included Mississippi, Louisiana, and Alabama.

At the time the FWS designated critical habitat for the frog, it was only known to exist in one location in Mississippi. Nonetheless, the FWS designated 6,477 acres as critical habitat for the frog, including 1,544 acres known as "Unit 1" in Louisiana. Unit 1 was private land and part of an area leased by Weyerhaeuser for timber production activities. The frog had not been seen in Unit 1 since 1965 and, according to Weyerhaeuser, the area no longer contained the biological features that, according to the FWS, were essential for use of the area by the frog.

According to Weyerhaeuser, the FWS' own record provides that the "physical and biological features" that the "frog requires" are absent from Unit 1 and could only be re-established there at extraordinary effort and expense. According to Weyerhaeuser's Reply Brief in the Supreme Court proceedings, the frog requires breeding ponds and:

> . . .'upland forested nonbreeding habitat' 'maintained by fires frequent enough to support an open canopy and abundant herbaceous ground cover' and 'underground habitat' that the 'frog depends upon for food, shelter, and protection.'

Not only are the current conditions on the ground no longer accommodating of the frog's needs, the specified frequent fires for maintenance of the area would be prohibited in the active timber harvesting area.

### Questions for the Supreme Court

Accordingly, the first question that the Court agreed to review in this matter is: Whether the Endangered Species Act prohibits designation of private land as unoccupied critical habitat that is neither habitat nor essential to the conservation of the species?

As a threshold matter, Weyerhaeuser is asking the Court to make a blanket holding that inclusion of unoccupied areas as critical habitat must necessarily involve a more exacting and rigorous standard than inclusion of occupied habitat.

The next question the High Court will review has to do with the ESA's allowance in § 4(b)(2) for the Services to exclude a given area of proposed critical habitat if it determines that the benefit to such species is outweighed by the economic or other impact of including the area in the designation. Although the FWS' own analysis showed that inclusion of Unit

1 in the designation could have an economic impact to the landowner of as much as $34 million in lost development value, the FWS nonetheless determined that potential future biological benefit of the area to the species warranted its inclusion.

When Weyerhaeuser challenged the designation in court, both the trial court and the Fifth Circuit Court of Appeals not only upheld the designation, they ruled that the FWS' decision not to exclude the area on economic grounds was not even reviewable by any court because of a "lack of a judicially manageable standard." Thus, the second question to be reviewed by the Supreme Court is: Whether an agency decision not to exclude an area from critical habitat designation because of the economic impact of designation is subject to judicial review.

The case has garnered broad attention from many stakeholders. *Amicus* briefs in support of Weyerhaeuser and the property owners have been filed by no less than 50 entities including the Chamber of Commerce of the United States, the National Association of Home Builders, the National Mining Association, the Council of State Governments, National Conference of State Legislatures, the National Association of Counties, the National League of Cities, the U.S. Conference of Mayors, and the American Forest Resource Council.

Weighing in supporting the government are: the Center for Biological Diversity, the Sierra Club, former Department of Interior officials, Defenders of Wildlife, the Humane Society of the United States, Wildearth Guardians, and others.

Reportedly *Weyerhaeuser* will be the first case argued in the upcoming Court's term on October 1, potentially the first case to be heard by whomever will replace Justice Anthony Kennedy. The underlying case being reviewed by the Supreme Court was *Markle Interests, L.L.C.* v. *United States Fish and Wildlife Service*, 848 F.3d 635 (5th Cir. 2017).

## The Departments of the Interior and Commerce (and the ESA)

As noted, there have been no comprehensive amendments to the ESA itself since 1988, and there have been no comprehensive revisions to the Act's extensive implementing regulations since 1986. In providing context for the broad-sweeping regulatory revisions now proposed, the Services state:

> In the years since those changes took place, much has happened: The Services have gained considerable experience in implementing the Act, as have other Federal agencies, States, and property owners; there have been numerous court decisions regarding almost every provision of the Act and its implementing regulations; the Government Accountability Office has completed reviews of the Act's implementation; there have been many scientific reviews, including review by the National Research Council; multiple administrations have adopted various policy initiatives; and nongovernmental entities have issued reports and recommendations.

On July 24, 2018, the Services simultaneously published for public comment three packages of proposed regulatory reforms. All of the proposed revisions would apply prospectively only; they would not impact species already listed as threatened or endangered, nor would they impact already designated critical habitat. The deadline for comments on each package is September 24, 2018.

### Regulations Relating to Interagency Consultation (Section 7)

Perhaps the most potentially impactful proposed regulatory revision has to do with the definition of the term "destruction or adverse modification." Recall that Section 7 of the ESA prohibits any federal agency action from jeopardizing the continued existence of a listed species or from causing the "destruction or adverse modification" of the species designated critical habitat.

What constitutes "adverse modification" has been the subject of much debate, both within the Services and in court. In 2001, the Fifth Circuit Court of Appeals in *Sierra Club* v. *United States Fish and Wildlife Service*, 245 F.3d 434 (5th Cir. 2001) invalidated the then-existing regulatory definition for adverse modification. Under that regulation, adverse modification was not implicated until both the recovery and survival of the listed species was implicated. Given the ESA's statutory characterization of critical habitat as areas "essential to the *conservation*" of the species, the *Sierra Club* court differentiated between factors threatening the recovery (an aspect of "conservation") of a species as being implicated well before matters proceed to a more dire point where the very

survival of the species is implicated. By requiring both "recovery *and* survival" to be implicated, the regulation effectively read "recovery" out of the standard and left "survival" as the sole gage. Three years later, the Ninth Circuit Court of Appeals followed suit in *Gifford Pinchot Task Force* v. *United States Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004).

In 2016, the Obama administration promulgated a revised definition of adverse modification as follows:

> Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features.

The Services today are proposing two modifications for this definition. First, the proposed change would add "as a whole" to the end of the first sentence in order to "clarify the appropriate scale of the destruction or adverse modification determination." According to the Services, whether regulatorily actionable adverse modification has taken place should be evaluated relative to:

> . . .the value of the designated critical habitat as a whole for the conservation of a species, in light of the role the action area serves with regard to the function of the overall designation. Further:
>
> . . .a determination of destruction or adverse modification is made at the scale of the entire critical habitat designation. Even if a particular project would cause adverse effects to a portion of critical habitat, the Services must place those impacts in context of the designation to determine if the overall value of the critical habitat is likely to be reduced.

Additionally, the Services propose to delete the entire second sentence from the 2016 definition:

> Many commenters argued that the proposed second sentence established a significant change in practice by appearing to focus the definition on the preclusion or delay of the development of physical or biological features, to the exclusion of the alteration of existing features. A number of commenters believed these concepts were vague, undefined, and allowed for arbitrary determinations.

The Services state that the second sentence is "unnecessary and has caused confusion" and is thus proposing its deletion.

Another term for which the Services are proposing revision is "effects of an action." Currently, the analysis of "effects of an action" parses between notions of "direct," "indirect," "interrelated," and "interdependent" effects. The Services today contend such differentiation is confusing and unnecessary. Instead, the Services now are proposing to collapse the analysis into a single, two-part test:

> First, the effect or activity would not occur but for the proposed action, and second, the effect or activity is reasonably certain to occur.

At the heart of the first prong is a traditional "but for" standard of causation. As for the second prong, the Services incorporate the notion of "reasonable certainty" already present in Section 7 regulations and regulatory practice.

Currently, "effects of an action" includes the notion of an "environmental baseline." The Services are not proposing to redefine "environmental baseline," but they are proposing to pull it out of "effects of an action" and make it a freestanding consideration:

> Moving it to a standalone definition clarifies that the environmental baseline is a separate consideration that sets the stage for analyzing the effects of the proposed action on the listed species and critical habitat within the action area by providing the foundation upon which to build the analysis of the effects of the action under consultation. The environmental baseline does not include the effects of the action under review in the consultation . . . .

Other proposed regulatory changes in the Section 7 consultation context include programmatic consultations, time deadlines for informal consultations,

expedited consultations, and utilization of agency information and data regarding the proposed federal action in biological opinions.

The Services' proposed revisions relating to Interagency Cooperation are available at: https://www.gpo.gov/fdsys/pkg/FR-2018-07-25/pdf/2018-15812.pdf

### Regulations Relating to Species Listing, Delisting, and the Designation of Critical Habitat (Section 4)

Under the express terms of § 4(b)(1)(A) of the ESA, the Services must base their listing determinations "solely on the basis of best scientific and commercial data available after conducting a review of the status of the species." This is widely recognized as prohibiting the Services from considering economic implications of listings. Nonetheless, the Services are now proposing to strike the phrase "without reference to possible economic or other impacts of such determination" from existing regulations relating to listings. While the Services openly recognize they cannot consider economic implications in deciding whether or not to list a species, they do believe inclusion of economic data may better inform the public at large of the implications of their listing decisions.

And somewhat reminiscent of the *Weyerhaeuser* case pending at the Supreme Court referenced above, the Services are proposing reforms to the regulations governing the designation of unoccupied areas as critical habitat. In its 2016 revisions to the regulations, the Obama-era Services removed from regulations the following phrase:

> The Secretary shall designate as critical habitat outside the geographical area presently occupied by a species only when a designation limited to its present range would be inadequate to ensure the conservation of the species.

According to the Services, removal of this prerequisite caused broad concern that the Services "intended to designate as critical habitat expansive areas of unoccupied habitat." To address this concern, the Services are proposing to again require that they must first evaluate areas occupied by the species before proposing inclusion of unoccupied areas.

Several relatively recent listing determinations by the Services withstood judicial challenges premised upon the fact that the threat to the species was not present today but was implicated according to modeling future impacts of climate change. These cases primarily focused on projected reductions in ice sheets from melting based upon rising temperatures. Without specific reference to these cases, the Services are proposing that consideration of whether designating critical habitat for a given species at the time of listing is or is not "prudent," may be influenced by such factors. Specifically:

> In such cases, a critical habitat designation and any resulting section 7(a)(2) consultation, or conservation effort identified through such consultation, could not prevent glaciers from melting, sea levels from rising, or increase the snowpack. Thus, we propose in section 424.12(a)(1)(ii) that designation of critical habitat in these cases may not be prudent because it would not serve its intended function to conserve the species.

The Services' proposed revisions relating to Listing and Designation of Critical Habitat are available at: https://www.gpo.gov/fdsys/pkg/FR-2018-07-25/pdf/2018-15810.pdf

### Regulations Relating to Protections for 'Threatened' Species (Section 9)

Another potentially sweeping proposed change has to deal with how the Act extends protections to "threatened" as opposed to "endangered" species. The ESA itself only expressly applies the take prohibition of Section 9 to endangered species. It leaves to the discretion of the Services crafting appropriate species-specific rules for species designated as threatened. NMFS has continuously operated this way—applying Section 9's blanket take prohibition to species listed as endangered and crafting more narrow, species-specific provisions for species listed as threatened.

Conversely, the FWS has instead incorporated by regulation the Section 9 take prohibition for both threatened and endangered species without differentiation. The FWS has on occasion adopted more focused, so-called "4(d) Rules" to address the specific needs of a given species, the effect of which is often to clarify that specified instances of "take" are permissible without separately obtaining a permit under Section 10.

The FWS is now proposing to revert back to the same practice as NMFS—having the Section 9 prohibition apply only to species listed as endangered and adopt species-specific rules for species listed as threatened.

The proposed revisions related to threatened species are available at: https://www.gpo.gov/fdsys/pkg/FR-2018-07-25/pdf/2018-15811.pdf

## Congress (and the ESA)

### The House of Representatives—The Committee on Natural Resources

Representative Mike Johnson (R-La.) introduced HR 6346 in the House of Representatives on July 12, 2018. Titled "Weigh Habitats Offsetting Locational Effects of 2018" or the "WHOLE Act," the bill simply requires consideration of beneficial measures being taken on behalf of a species. Specifically, the proposed legislation provides:

> In determining whether a Federal agency action is likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of the critical habitat of a species, the Secretary shall consider the offsetting effects of all avoidance, minimization, and other species-protection or conservation measures that are already in place or proposed to be implemented as part of the action, including the development, improvement, protection, or management of species habitat whether or not it is designated as critical habitat of such species. HR 6346.

HR 6346 is pending in the House Committee on Natural Resources and has not at the time of this publication been set for hearing. HR 6346 is available at: https://www.congress.gov/bill/115th-congress/house-bill/6346

### The Senate—the Environment and Public Works Committee

On July 2, 2018, Senator John Barrasso (R-Wy), Chair of the Senate Committee on Environment and Public Works (EPW), released a comprehensive package of proposed amendments to the ESA. Though not yet formally introduced and thus not yet having a bill number, the package includes a broad array of proposed amendments. According to an EPW release:

The discussion draft legislation will:

- Elevate the role of state conservation agencies in species management;
- Increase transparency associated with carrying out conservation under the Act;
- Prioritize available resources for species recovery;
- Provide regulatory certainty for landowners and other stakeholders to facilitate participation in conservation and recovery activities;
- Require that listing of any species must also include recovery goals, habitat objectives, and other criteria established by the Secretary of Interior, in consultation with impacted states, for the delisting or downlisting of the species;
- Require that the satisfaction of such criteria must be based on the best scientific and commercial data available;
- Enable states the opportunity to lead recovery efforts for listed species, including through a species' recovery team;
- Allow such a recovery team to modify a recovery goal, habitat objective, or other established criteria, by unanimous vote with the approval of the secretary of the Interior;
- Increase federal consultation with local communities;
- Improve transparency of information regarding the status of a listed species;
- Create a prioritization system for addressing listing petitions, status reviews, and proposed and final determinations, based on the urgency of a species' circumstances, conservation efforts, and available data and information so that resources can be utilized in the most effective manner;
- Include studies on how to improve conservation

efforts and to understand in greater depth the extent of resources being expended across the federal government associated with implementation of the act; and
•Reauthorize the ESA for the first time since its funding authorization expired in 1992.

The legislative discussion package is available at: https://www.epw.senate.gov/public/_cache/files/b/9/b99b7ec0-cc53-4051-8827-9a1681602304/FD921A33A08582D2C2C4124BDE001F48.esa-amendments-of-2018-discussion-draft.pdf

## Conclusion and Implications

There is only one thing certain at the moment—the *Weyerhaeuser* case remains pending at the Supreme Court, is set for oral argument October 1, 2018, and will likely produce an opinion addressing designation of unoccupied habitat and judicial review of the Services' discretion to exclude areas from critical habitat on economic or other reasons. Beyond that, the future of both the packages of proposed regulatory reforms as well as the proposed statutory amendments to the Act itself remain uncertain. Additionally, the last House Committee Chair to promulgate ESA reforms and pass them out of his committee (only to see them never taken up by the entire House), was voted out of office in the immediately following election cycle after being targeted by special interest opposed to any reform of the Act.

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## CLIMATE CHANGE NEWS

# EUROPEAN UNION AND CHINA ISSUE JOINT STATEMENT CONFIRMING CONTINUED COMMITMENTS UNDER THE PARIS AGREEMENT

On July 16, 2018, following the 20th EU-China Summit in Beijing, the European Union (EU) and China issued a joint statement (Joint Statement) on climate change, confirming their commitments under the 2015 Paris Agreement, the landmark agreement that built upon the United Nations Framework Convention on Climate Change (UNFCCC) to "strengthen the global response to the threat of climate change." The joint statement comes just over a month after Canada, France, Germany, Italy, Japan, the United Kingdom, and the EU issued a similar statement of continued commitment to the Paris Agreement following the G7 Summit in Quebec.

### Background

According to a July 13, 2018 press release issued by the European Commission in advance of the Summit:

> . . .discussions [were] expected to focus on the expansion of the EU-China strategic relationship, on trade and investment, on their commitment to combating climate change and investing in clean energy, and on foreign and security issues, including the situation on the Korean Peninsula and the joint commitment to preserving the Joint Comprehensive Plan of Action—the Iran nuclear deal.

The "Joint statement of the 20th EU-China Summit" reflects these various goals and includes the following statement focused on climate change:

The two sides reaffirmed the importance of combatting climate change and welcomed the adoption of the "Leaders' Statement on Climate Change and Clean Energy," which is annexed to this statement, and the "Memorandum of Understanding to Enhance Cooperation on Emissions Trading between the European Commission and the Ministry of Ecology and Environment of the People's Republic of China." They committed to contributing actively to the conclusion of the Paris Agreement Work Programme at COP 24 in Katowice in order to ensure full and effective implementation of the Paris Agreement.

Attached to the Joint Statement is a nine-page statement focused exclusively on climate change and clean energy, key provisions of which are summarized below.

### Leaders' Statement on Climate Change and Clean Energy

The Leaders' Statement on Climate Change and Clean Energy (Leaders' Statement) begins with the parties' assertion of their continued commitments under the Paris Agreement:

> The EU and China consider climate action and the clean energy transition an imperative more important than ever. They confirm their commitments under the historic 2015 Paris Agreement and step up their cooperation to enhance its implementation.

The Statement also references previous agreements between China and the EU that have focused on climate change and energy:

> Through the *EU-China Joint Statement on Climate Change* in 2015, the *EU-China Roadmap on Energy Cooperation* in 2016, and the present Statement, the EU and China commit to significantly intensify their political, technical, economic and scientific cooperation on climate change and clean energy, in view of the necessary world-wide transformation to a resource efficient, sustainable, low greenhouse gas emission and climate resilient economy and society, in the context of sustainable development and poverty eradication.

One of the key themes of the Leaders' Statement is

"Advancing the UNFCCC Process," and:

> . . .call[s] on all Parties to uphold the Paris Agreement, to implement their [Nationally Determined Contributions (NDCs)] and to strengthen efforts over time, in accordance with the purpose and provisions of the Agreement.

According to United Nations' UNFCCC website, NDCs "are at the heart of the Paris Agreement," and "embody efforts by each country to reduce national emissions and adapt to the impacts of climate change."

According to the Leaders' Statement, in addition to "emphasi[zing] the urgency and priority of accelerating the implementation of pre-2020 commitments" under the UNFCCC:

> . . .[t]he EU and China will communicate, by 2020, long-term low greenhouse gas emission development strategies as foreseen in the Paris Agreement.

The Leaders' Statement also includes commitments to increased bilateral cooperation in the following areas:

> long-term low greenhouse gas emission development strategies; 2) emissions trading; 3) energy efficiency; 4) clean energy; 5) low-emission transport; 6) low-carbon cities cooperation; 7) climate-related technology cooperation; 8) investment in climate and clean energy projects; and 9) cooperation with other developing countries.

### Conclusion and Implications

The continued commitment to the Paris Agreement expressed in the Leaders' Statement echoes a similar statement included in the G7 Summit Communique issued after the June 2018 G7 Summit in Quebec, in which Canada, France, Germany, Italy, Japan, the United Kingdom, and the European Union "reaffirm[ed] their strong commitment to implement the Paris Agreement, through ambitious climate action; in particular through reducing emissions while stimulating innovation, enhancing adaptive capacity, strengthening and financing resilience and reducing vulnerability; as well as ensuring a just transition, including increasing efforts to mobilize climate finance from a wide variety of sources." Notably, the United States is absent from this statement of commitment. In 2017 the United States sent a letter to the UN stating its intent to withdraw from the Paris Agreement. The 2018 G7 Communique included a separate statement on behalf of the United States, which omits reference to the Paris Agreement and states in part: "The United States will endeavor to work closely with other countries to help them access and use fossil fuels more cleanly and efficiently and help deploy renewable and other clean energy sources, given the importance of energy access and security in their Nationally Determined Contributions."

A copy of the Joint Statement, which includes the Leaders' Statement, is available here: http://www.consilium.europa.eu/media/36165/final-eu-cn-joint-statement-consolidated-text-with-climate-change-clean-energy-annex.pdf. A copy of the Charlevoix G7 Summit Communique is available here: https://g7.gc.ca/en/official-documents/charlevoix-g7-summit-communique/.
(Nicole Martin)

## PROPOSED PROJECT TO INCREASE HOOVER DAM POWER PRODUCTION VIA SOLAR AND WIND ENERGY IN ITS EARLY STAGES

The Los Angeles Department of Water and Power has proposed a multi-billion dollar pump station and pipeline project associated with the Hoover Dam. The project would be powered by excess solar and wind energy available during daylight hours, and would generate electricity for distribution in California. The target date for completion of the project is 2028, although the federal government, which operates Hoover Dam, has not yet indicated whether it would support the proposed project.

### Background

Hoover Dam and its associated facilities (Project) were constructed in the 1930s to store Colorado

River water used by California, Arizona, and Nevada. Hoover Dam impounds the Colorado River to form Lake Mead, from which water is released and stored in downstream reservoirs such as Lake Havasu and Lake Mohave. The Colorado River empties into the Sea of Cortez near Baja, California.

The Project also functions as a hydroelectric plant. On average, the Project generates approximately four billion kilowatt hours of hydroelectric power each year. California, Arizona, and Nevada use electricity generated by the Project to serve roughly 1.3 million people, with California cities and public agencies receiving the majority of generated power. The Project's cost of construction was repaid in 1987, and flood control related improvements will be paid off in 2037.

The proposed project, which would consist of a pumping station and pipeline and would cost approximately $3 billion, could increase the efficiency of the Project's use of water. As currently proposed, the pumping station would be located approximately 20 miles downstream of the dam. The pumping station would be powered by excess solar and wind energy generated in California. An underground pipeline would be used to transport water from the pumping station back to Lake Mead, where water could be released to generate hydroelectricity during periods of higher electrical demand.

## More Efficient Use of Alternative Energy

The overarching purpose of the proposed project is to more efficiently use the growing amount of solar and wind energy generated by renewable technologies, particularly in California. Currently, excess energy generated by these technologies cannot be fully distributed across electrical grids due to the risk of overloading the system and causing blackouts. By utilizing renewable energy sources to pump water released downstream back to Lake Mead, the proposed project would, in effect, convert renewable energy into stored energy in the form of water behind Hoover Dam. Water released from Hoover Dam, in turn, generates electricity any time the water flows through its generators, thus producing electricity from stored renewable energy when solar and wind facilities are not operating, during peak periods. However, the proposed project is in the very early stages of engineering and technical assessments, and a host of potential obstacles may arise as the proposed project moves forward, if at all.

The Project would be located on federal lands and operated by the U.S. Bureau of Reclamation (Bureau). While the Bureau has acknowledged the concept of using the Project as a means of storing solar and wind energy generated in California, it has not indicated whether it would support the proposed project. According to the Bureau, more details are necessary before a full evaluation can be made. Federal approval would be necessary to construct the necessary facilities for the proposed project, although the proposed project does not contemplate alterations to existing Project facilities. The National Park Service would be the responsible agency for reviewing environmental and related impacts caused by the proposed project.

## Concerns Raised

Several environmental concerns have already been raised regarding the impact of the proposed project on downstream interests. For instance, by retaining more Colorado River flow in Lake Mead by capturing releases downstream, less water could ultimately make its way to the Colorado River Delta, a sensitive environmental area that has been impacted by upstream dam and reservoir operations. Additionally, Big Horn sheep are reported to rely on flows downstream of Lake Mead and could, it is alleged, also be impacted by greater retention of river water in the reservoir.

Local communities downstream of Lake Mead have also voiced concerns about the potential economic impacts of higher recapture rates for downstream flows while the proposed project is operating. These concerns relate primarily to water levels for boating and other watercraft activities. Water levels in downstream reservoirs like Lake Mohave and Lake Havasu, and the businesses that rely on sufficient water levels to support watercraft and other water-related recreational activities, may suffer, they contend. A Project operating schedule, including conditions for operation produced by negotiations or litigation among stakeholders, has not yet been proposed.

## Conclusion and Implications

The proposed project to construct a pumping station and underground pipeline from downstream of Hoover Dam to Lake Mead is in its very early stages. Technical feasibility of the proposed project, environmental and economic impacts, and funding,

among others potential issues, are uncertain. However, in light of the increased power production from renewable energy sources, particularly in California, it is likely that the proposed project will continue to receive serious attention until a final determination regarding its feasibility is made. Even if the project is pursued, a host of environmental, economic, and technical issues will likely arise, and it will remain to be seen whether a 2028 target date for completing the project is feasible.
(Miles Krieger, Steve Anderson)

## CALIFORNIA PLEDGES SUPPORT FOR GREEN FINANCING OF CLIMATE-RESILIENT INFRASTRUCTURE AND CAPITAL PROJECTS

On August 7, 2018, California State Treasurer John Chiang signed the "Green Bond Pledge," an effort launched in March 2018 that calls for government entities, agencies and corporations to commit to the development of a strategy to use green bond financing to fund infrastructure and capital projects to meet climate change-related challenges. The date also marked the release of Volume 2 of "Growing the U.S. Green Bond Market," an effort spearheaded by Treasurer Chiang to "ignite the green bond market in California and the United States."

### Background

Green bonds are "public sector, private sector, or multilateral institution debt issuances used to finance projects that have positive environmental or climate attributes," according to Volume 1 of "Growing the U.S. Green Bond Market." According to Volume 2 of the report, issued by the Milken Institute Financial Innovations Lab, the massive financing gap for addressing the country's deteriorating infrastructure—estimated at $400 billion over the next ten years in California alone and in the trillions nationwide—presents an opportunity for investment vehicles, such as green bonds, that provide long-term yield and help communities mitigate or adapt to the effects of global warming.

Although relatively immature, with the first green bond introduced in 2007 by the European Investment Bank, the market for green bonds is expanding. A few pertinent facts from Volume 2 of "Growing the U.S. Green Bond Market" are illustrative:

> •In just over a decade, the green bond market has expanded to more than $160 billion issued worldwide in 2017, representing a more than 75[percent] increase from 2016 levels, and nearly four times the dollar volume issued in 2015;
>
> •Some of the world's fastest-growing markets, including China, India, and South Africa, are also among the quickest adopters of green bonds; and
>
> •The Climate Bonds Initiative organization forecasts as much as $300 billion in issuances for 2018.

The report cautions, however, that despite this growth, the green bond market represents only a fraction of the overall bond market in the United States. The report cites several barriers to the continued expansion of the green bond market including the need for standardization of definitions, metrics used to measure the environmental impact of projects, reporting guidelines, and disclosures. Additional barriers identified relate to pricing and market function challenges. The report presents several strategies for tackling these barriers including the establishment of a Responsible Issuer (RI) Program:

> . . .to provide municipalities with guidelines on how to issue a green bond, while standardizing definitions, industry performance metrics, and the process through which projects could be validated and reviewed.

According to its authors:

> . . .[i]t will take an innovative collaboration between policymakers and the financial markets; plus buy-in from both lenders and borrowers across the municipal bond issuance process to streamline and grow the green bond market.

### The Green Bond Pledge

The Green Bond Pledge is another example of an effort aimed at bolstering the green bond market. According to its website, the Green Bond Pledge is a joint initiative developed by international climate finance and environmental groups including the Climate Bonds Initiative, Mission 2020, CDP, Ceres, Citizens Climate Lobby, California Governor's Office, California Treasurer's Office, Global Optimism, NRDC and The Climate Group. Those who sign the Pledge agree that:

> . . .all infrastructure and capital project will need to be climate resilient and, where relevant, support the reduction of greenhouse gas emissions.

Signatories support "the rapid growth of the green bonds market" and:

> . . .pledge to support this goal by establishing a green bonds strategy that will finance infrastructure and capital projects that meet the challenges of climate change while transforming our community into a competitive, prosperous and productive economy.

California is the first state to sign on to the Green Bond Pledge. Its sponsors continue to seek commitments leading up to the Global Climate Action Summit to be held in San Francisco in September, where they intend to:

> . . .highlight the early-adopters of the pledge and launch a broader effort to expand the use of green bonds for infrastructure projects.

### Conclusion and Implications

In an August 7, 2018 press release, Treasurer Chiang is quoted as stating: "As the world's fifth largest economy, California will lead the way and help finance as much new clean infrastructure as we possibly can." He further reiterated California's continuing efforts to address climate change, despite the approach currently being taken at the national level. "While Washington continues to deny the irrefutable science that proves climate change, the Golden State has embarked on an unstoppable path to reduce the dangerous effects of greenhouse gases and build a future that is climate resilient."

Information about the Green Bond Pledge is available here: https://www.greenbondpledge.com. Volumes 1 and 2 of the report, "Growing the U.S. Green Bond Market" are available at: https://www.treasurer.ca.gov/greenbonds/publications/reports/green_bond_market_01.pdf; and https://www.treasurer.ca.gov/growing-the-u.s.-green-bond-mkt-vol2-final.pdf. (Nicole Martin)

## CLIMATE CHANGE SCIENCE

# RECENT SCIENTIFIC STUDIES ON CLIMATE CHANGE

### Pacific Ocean's Effect on Arctic Warming

The Arctic is the region on Earth experiencing the fastest increase in temperature from global climate change. It is projected to have an increase in temperature three times the global average. This effect is known as "Arctic Amplification" and the impacts will include loss of sea-ice at a rate faster than predicted. Paleoclimate records indicate that climate change in the Arctic can be large and happen abruptly. During the last deglaciation (period of time when there was a large-scale melting of glaciers), temperatures increased by 15°C in Greenland coinciding with abrupt warming of the North Pacific and North Atlantic. What is not well understood yet is the relationship between Arctic temperatures and sea-surface temperature patterns and North Pacific and North Atlantic ocean heat flux.

Summer Praetorius led a team at Carnegie's Department of Global Ecology at Stanford University to study the relationship between the changing temperature patterns of the oceans and the Arctic climate. Their research suggests that the changes in the Pacific Ocean have larger impacts on Arctic climate than those in the Atlantic Ocean. To perform this research, the team used the National Center for Atmospheric Research's Community Earth System Model (CESM) to assess the relative climatic impacts of ocean heat flux from each ocean on the Arctic surface temperature.

The researchers found that the changes in Arctic temperature depend on the magnitude of water vapor transfer from the oceans to the Arctic. As the warm moist air travels north, it can lead to more low-level cloud formation, trapping heat near the surface. This can create a feedback where retreating ice and snow lead to increased absorption of solar energy which leads to additional low-cloud formation, amplifying Arctic warming. Very recently, there has been record-breaking Arctic surface warming and sea-ice decline that accompanied unusually warm weather in the North Pacific. This suggests a stronger link between the two regions than previously recognized. The results of this research contribute to our knowledge of potential climate and ecological tipping points in the Arctic.

*See*, S. Praetorius, M. Rugenstein, G. Persad, and K. Caldeira. Global and Arctic climate sensitivity enhanced by changes in North Pacific heat flux. Nature Communications. 2018. 9:3124. DOI: 10.1038/s44167-018-05337-8

### Soil Microorganisms are Becoming Less Effective at Removing Atmospheric Methane

Methane is a greenhouse gas emitted as a by-product of the energy, agriculture, and waste industries. One naturally-occurring mechanism for removing methane from the atmosphere involves consumption by microorganisms in the soil. Small microorganisms called aerobic methanotrophs consume gaseous methane to produce their own energy. The rate of methane consumption by aerobic methanotrophs depends on a number of soil conditions, including soil temperature, pH, moisture, and nitrogen content.

Two researchers from Sichuan Agricultural University and City University of New York conducted a nearly twenty-year investigation into how climate change was impacting the rate of methane consumption by soil methanotrophs. Between the late 1990s to mid-2010s, they collected regular measurements of methane fluxes, soil moisture, nitrogen leaching, and microbial activity at urban and rural sites in Baltimore, Maryland and Hubbard Brook, New Hampshire. This study represents the longest duration of regular methane flux measurements ever conducted in forests. Over the study period, the researchers found that the urban and rural forest soil methane consumption rates declined by 62 percent and 53 percent, respectively. In parallel to their field measurements, they also conducted a thorough literature review and found that global methane consumption by soil microorganisms decreased by 77 percent in three decades in the 0-60 °N latitude bands. The researchers performed a rigorous analysis of the many variables that can alter methane consumption, and suggest

that the decrease can be attributed to long-term changes in soil moisture. This can be tied directly to large-scale changes in precipitation caused by climate change, particularly in the 0-60 °N latitude bands.

Based on the research by Ni and Groffman, forest soils may not be as effective at reducing atmospheric methane levels as previously thought. This has significant implications on global climate models, which rely on aerobic methanotrophs in the soil to act as a strong sink for methane. Moreover, this research suggests that as more methane is emitted, it will become more challenging to remove it using natural feedback cycles.

*See,* Ni, X., and Groffman, P. Declines in methane uptake in forest soils, 2018. *PNAS*. doi: 10.1073/s18073-771-15

## North American Forests Have Limited Capacity to Absorb More Carbon

The amount of carbon dioxide forests can absorb on a large scale remains an open question with many potential answers. As trees grow, they sequester carbon dioxide as carbon biomass. When a tree dies, this carbon is released into the atmosphere or incorporated into the soil as below-ground carbon biomass, depending on whether the tree burns or slowly decays and the other ecological conditions of the surroundings. Given the continued presence of forests, trees serve as a net carbon sink. However, the extent of this sink and projections for how it will change over time remain uncertain.

Researchers from the University of California, Santa Cruz, East China Normal University, the Chinese Academy of Sciences, Sun Yat-sen University, and Northern Arizona University have shown that even under best-case scenarios, above-ground biomass carbon sequestration in North American forests will increase by at most 22 percent above the current level of sequestration. The researchers validated a model of forest biomass carbon sequestration against observations of 140,267 plots of forest in the United States and Canada from 1990 through 2016. The model considers type of forest, temperature, precipitation, and land use assumptions that affect forest area and age of forest. The output shows the observed aboveground biomass with data on forest age throughout the study area. They then projected this model forward through the 2080s under two climate change scenarios, assuming continued biomass accumulation and no further disturbances such as fire or insect outbreaks. The model shows that due to a high current level of forest biomass saturation, even with no future disturbances, the North American forests have limited potential to increase sequestration above current levels.

While this study does not evaluate below-ground carbon biomass, it suggests that the limited potential for forest carbon sequestration be considered when planning greenhouse gas emission targets and mitigation strategies. Forests are unlikely to absorb additional carbon at the rate that atmospheric carbon dioxide is projected to increase. In addition, climate change is likely to exacerbate wildfires and insect infestations, which would further reduce the potential for forests to sequester carbon.

*See,* Zhu, K., et al. 2018. Limits to Growth of Forest Biomass Carbon Sink Under Climate Change. *Nature Communications*. DOI: 10.1038/s41467-018-05132-5.

## Organic Photovoltaic Cells Set New Efficiency Records

Two new studies on the topic of organic solar photovoltaic cells (abbreviated as OPV cells) emphasize the unique advantages presented by the emerging technology. Many types of solar cells have been studied in literature—including inorganic, organic, and perovskite solar cells—but most commercially-available PV cells tend to be silicon-based (inorganic). While it was formerly thought that organic solar cells have lower efficiency ceilings than other PV options, new research indicates that may not be the case.

Organic solar cells have numerous benefits over other materials. They are flexible, semi-transparent, lightweight, and can be printed over large areas. These attributes could make it easier for OPV cells to be integrated into building architecture, incorporated on cars and other surfaces with high solar exposure, and even built into windows. The cells typically pair organic molecules in an active layer, with a blend of donor and acceptor material. The donor material absorbs light and excites electrons, creating electron holes, and the acceptor material separates the bound electrons from the ground state holes. The two primary efficiency losses occur during charge separation at the donor-acceptor interface and during nonradiative recombination, when charges are recaptured at the holes.

A study published in *Nature Materials* and developed by 25 researchers from seven international institutions has outlined design rules for high-efficiency organic solar cells. The study highlights the importance of two design rules: minimizing the energy offset between the donor and acceptor molecular states and ensuring that the low-gap component in the donor-acceptor blend has a high photoluminescence. The paper presents an empirical comparison of numerous donor-acceptor systems, which supports these rules for maximizing cell efficiency.

Another study published in *Science* set a new OPV efficiency record of 17.3 percent. The study authors, led by a research team at Nankai University, utilized a model that relies upon predictive analytics of materials based on their physical characteristics as well as extrapolation of experimental data to identify materials for a multilayer, tandem OPV cell. The model helped the team identify new acceptor materials for both layers, and the tandem cell design stacks multiple active layers to increase the overall efficiency. The laboratory results document a maximum power conversion efficiency of 17.3 percent, surpassing previous records. These results compare favorably against commercial silicon based PV cells that have efficiencies between 18 percent and 22 percent.

While these two studies represent significant breakthroughs in creating OPV cells with higher power conversion efficiencies, other hurdles for OPV technology include high manufacturing costs and material stability.

*See*, Deping Qian, Zilong Zheng, Huifeng Yao, Wolfgang Tress, Thomas R. Hopper, Shula Chen, Sunsun Li, Jing Liu, Shangshang Chen, Jiangbin Zhang, Xiao-Ke Liu, Bowei Gao, Liangqi Ouyang, Yingzhi Jin, Galia Pozina, Irina A. Buyanova, Weimin M. Chen, Olle Inganäs, Veaceslav Coropceanu, Jean-Luc Bredas, He Yan, Jianhui Hou, Fengling Zhang, Artem A. Bakulin, Feng Gao. Design rules for minimizing voltage losses in high-efficiency organic solar cells. *Nature Materials*, 2018; DOI: 10.1038/s41563-018-0128-z; and Lingxian Meng et al. Organic and solution-processed tandem solar cells with 17.3 percent efficiency. *Science*, 2018; DOI: 10.1126/science.aat2612

(David Kim, Libby Koolik, Malini Nambiar, Shaena Berlin Ulissi)

## PENALTIES & SANCTIONS

# RECENT INVESTIGATIONS, SETTLEMENTS, PENALTIES AND SANCTIONS

*Editor's Note: Complaints and indictments discussed below are merely allegations unless or until they are proven in a court of law of competent jurisdiction. All accused are presumed innocent until convicted or judged liable. Most settlements are subject to a public comment period.*

•On July 26, 2018, the U.S. Environmental Protection Agency (EPA) and the Department of Justice (DOJ) announced a Stipulation of Settlement with E.I. Du Pont de Nemours and Company (DuPont) to address alleged chemical accident prevention violations at the company's former La Porte, Texas chemical manufacturing facility. Under the settlement, DuPont will pay a $3.1 million civil penalty. The settlement stems from an incident at the La Porte facility on November 15, 2014, where nearly 24,000 pounds of methyl mercaptan were released within the manufacturing unit for the insecticide Lannate. As a result of the release, four DuPont employees died from a combination of asphyxia and acute exposure to methyl mercaptan. The Lannate unit was shut down after the accident. In March of 2016, DuPont announced that it was closing the facility. The DOJ's complaint against DuPont alleged twenty-two separate violations of the federal Clean Air Act's (CAA) risk management program at the facility, including DuPont's failure to develop and implement written operating procedures, failure to adequately implement management of change procedures, and failure to implement safe work practices, as well as mechanical integrity violations.

•On August 3, 2018, EPA and DOJ announced a settlement agreement with Anchor Glass Container Corporation that will resolve alleged CAA violations at all six of Anchor's container glass manufacturing facilities located in Florida, Georgia, Indiana, Minnesota, New York, and Oklahoma. Under the proposed settlement, Anchor will reduce emissions of nitrogen oxide, sulfur dioxide, and particulate matter at its container glass manufacturing facilities, including spending approximately $40 million to install emissions controls at nine of the eleven furnaces at the facilities that do not already have pollution controls, install continuous emissions monitors at all eleven glass furnaces, and install continuous opacity monitors. Anchor will pay a $1.1 million civil penalty and complete two mitigation projects—a woodburning appliance change-out project and a project to repower, retrofit, or replace vehicle diesel engines. EPA alleges that Anchor violated the CAA when it failed to seek permits for New Source Review major modifications at its container glass facilities.

•On July 2, 2018, EPA and DOJ announced a consent decree with MFA Incorporated and its wholly-owned subsidiary, MFA Enterprises, Incorporated (collectively MFA), to address alleged chemical accident prevention and preparedness violations of the CAA risk management program. The alleged violations relate to the companies' management of anhydrous ammonia at nine of their facilities in Missouri. The facilities have a combined inventory of more than 4.3 million pounds of the anhydrous ammonia. In 2007, MFA pled guilty to one criminal misdemeanor violation of the CAA accident prevention program and admitted it was negligent in failing to inspect, detect wear, and replace a valve on an ammonia storage tank where a release from that valve had hospitalized a worker. As part of the 2007 plea agreement, MFA agreed to come into compliance with applicable industry standards and safety requirements for the storage and handling of anhydrous ammonia. Beginning in 2012, EPA Region 7 conducted inspections and evaluated MFA's compliance at facilities in Missouri and found that, despite the 2007 plea, numerous facilities did not conform to applicable industry standards. EPA also discovered several unreported ammonia releases that had injured workers. EPA's recent complaint alleges numerous violations of CAA risk management program requirements at nine MFA facilities, including: 1) failure to implement procedures to maintain equipment, 2) failure to prop-

erly conduct hazard reviews and address any hazards found in a timely manner, 3) failure to develop and implement written operating procedures that provide clear instructions for safely conducting activities, and 4) failure to disclose in its risk management program submissions all incidents of accidental chemical releases that injured MFA employees. Under the settlement, MFA will pay a civil penalty of $850,000 and ensure that its accident prevention program complies with all applicable CAA requirements. MFA must create and implement corporate polies and engineering specifications for the storage and handling of anhydrous ammonia and a corporate-wide inventory maintenance system. It must also inspect and remedy any problems found within certain parts of its process equipment. Additionally, MFA must update the information it provides to EPA on accidental releases and it must create and maintain a publicly available portion of its website listing accidents and releases that occur after the consent decree is lodged with the court. MFA must also hire an independent third-party auditor to conduct risk management program audits at twenty facilities to identify and correct any potential violations of its risk management program. MFA will also install emergency shutoff equipment at 53 facilities. The electronic shutoff systems will include emergency stop buttons and a remote stop transmitter, which will be worn by an employee to reduce response time to a potential release. The systems would close all shutoff valves and shut down liquid and vapor pumps facility-wide. The estimated cost to implement these systems is about $400,000.

•On July 27, 2018, EPA announced that it has cited General Iron Industries Inc. for excessive air emissions from the company's facility in Chicago, Illinois. General Iron owns and operates a metal shredding and recycling operation. Since 2016, EPA has conducted several inspections at the facility to investigate complaints and assess air pollution. EPA received air emissions data from General Iron in June 2018 in response to EPA's requirement to conduct supervised testing at the facility. After analyzing the results, EPA has determined that volatile organic compound emissions from the facility's shredder exceeded allowable limits. EPA also found that General Iron failed to install adequate air pollution controls and obtain the correct air permit. The results of the metals emissions test from June 2018 indicated that several metal hazardous air pollutants are present in the exhaust gases at detectable levels, but below hazardous air pollutant emission limits. EPA is conducting further analysis of the results as it relates to ambient air in the community surrounding the facility. EPA is reviewing additional air emissions test data related to particulate matter and metals testing conducted in May 2018. EPA is engaged with General Iron to address the alleged violations that ensure adequate measures are enacted to return the facility to compliance.

•On June 26, 2018, EPA announced a CAA settlement with John S. Lane and Son, Inc., a sand and gravel company in Amherst, Massachusetts. A 2016 inspection of the company's plant identified a failure to comply with federal emissions standards. John S. Lane and Son operates stone crushers, screeners, and conveyer belts at its Amherst facility. The stone crushing equipment is subject to federal New Source Performance Standards for Nonmetallic Mineral Processing Plants. The diesel engines used to power the stone crushing equipment are subject to federal National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. In accordance with the agreement, John S. Lane and Son has paid a $93,500 penalty, conducted visible emissions testing, and submitted legally required notifications of its facility's operations. John S. Lane and Son also retrofitted one of its two existing engines with an emissions control device and placed another engine out of service by connecting to the power grid.
(Allison Smith)

## REGULATORY DEVELOPMENTS

# U.S. EPA AND THE DEPARTMENT OF TRANSPORTATION ANNOUNCE NEW VEHICLE EMISSIONS PLAN—CALIFORNIA AND 16 STATES RESPOND WITH SUIT SEEKING TO BLOCK THE PLAN

California's vehicle emissions rules predate the federal Clean Air Act. The Clean Air Act preserved California's rights to set and enforce its own vehicle emission standards as long as they were stricter than the federal standards. On August 2, 2018, President Trump's administration announced a new proposal to govern vehicle emissions, which could prevent California from continuing to set and enforce its own standards.

### Background

According to the California Air Resources Board (CARB), for over five decades, California has used its authority under the Clean Air Act, which has been affirmed by the U.S. Environmental Protection Agency (EPA) and the courts, to issue its own standards for controlling motor vehicle emissions to protect public health and welfare. The law permits other states to adopt California's standards as their own and, to date, a dozen states and the District of Columbia have done so. The current process requires California to request a waiver from EPA when California and EPA standards differ and even though more than 100 waivers have been issued over the past 50 years, President Trump's administration is seeking to revoke California's right to set and enforce its own standards.

### President Trump's New Vehicle Emissions Plan

In 2012, CARB chose to accept compliance with vehicle emissions standards adopted by the EPA for the 2017 through 2025 model years. Thus, under the current system, compliance with EPA regulations is deemed acceptable in California for the 2017 through 2025 model years.

In January 2017, under President Obama's administration, EPA released a final determination to maintain the current national emission standards for 2022 through 2025 model year vehicles. However, on April 13, 2018, under President Trump's administration, EPA issued a notice withdrawing the final determination and finding that the current model year 2022-2025 vehicle emissions standards are not appropriate and should be revised. On May 1, 2018, California and 16 other states and the District of Columbia filed a lawsuit in the U.S. Court of Appeals for the District of Columbia Circuit challenging EPA's action.

Under the current system, emissions standards get stricter as model years progress to the 2025 model year. On August 1, 2018, however, President Trump's administration announced its plan to freeze emission standards at model year 2020 levels as set forth in the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule).

### The Safe Vehicles Rule

The "Safe Vehicles Rule" was jointly published by the U.S. Department of Transportation (DOT) and EPA. As its title suggests, the Safe Vehicles Rule highlights projected safety gains. According to the DOT and EPA, the SAFE Vehicles Rule will lead to:

> . . .[i]ncreased vehicle affordability leading to increased driving of newer, safer, more efficient, and cleaner vehicles. . .[resulting in over]. . .12,000 fewer crash fatalities over the lifetimes of all vehicles built through MY 2029.

DOT and EPA have opined that the Safe Vehicles Rule "reflects a balance of safety, economics, technology, fuel conservation, and pollution reduction."

### California's Response

California issued a strong and coordinated response following the announcement of the proposed Safe Vehicles Rule. Governor Jerry Brown called President Trump's proposal "reckless" and vowed that "California will fight this stupidity in every conceivable way possible." According to California Attorney General Xavier Becerra, President Trump's proposal could

"cost consumers billions of dollars in additional gasoline to run less efficient cars and light-duty trucks" while increasing pollution.

The California Air Resources Board responded to the proposed Safe Vehicles Rule by proposing amendments to its vehicle emissions regulations. According to CARB, the proposed amendments:

> . . .would clarify California's existing regulation to ensure that if the U.S. EPA changes its standards, then automakers wishing to sell cars in California after the 2020 model year would need to meet California's standards—and not possibly weaker federal greenhouse gas standards in the future.

### Conclusion and Implications

Some have opined that California will not be able to meet its statewide greenhouse gas emissions goals if the Safe Vehicles Rule sets the new nationwide vehicle emissions standard. As a result, it is expected that California will do all it can to protect its right to set its own standards. Seeing this looming battle between President Trump's administration and California, the Alliance of Auto Manufacturers issued a press release after the announcement of the Safe Vehicles Rule urging "California and the federal government to find a common sense solution that sets continued increases in vehicle efficiency standards while also meeting the needs of America's drivers." The complaint filed by California and other states in the D.C. Circuit is available online at: https://www.oag.ca.gov/system/files/attachments/press_releases/gliders-petition.pdf (Kathryn Casey)

## CALIFORNIA BECOMES THE FIRST STATE TO REQUIRE SOLAR POWER FOR NEW HOMES BEGINNING IN THE YEAR 2020

California has taken yet another big step towards going green. The California Energy Commission has adopted a triennial update to standards found within the California Building Standards Code. The 2019 Building Energy Efficiency Standards (2019 Energy Standards) will go into effect on January 1, 2020 and will be published as the California Energy Code, in the *California Code of Regulations* (Title 24, Part 6).

### Requiring Solar Systems

One of the updates in the 2019 Energy Standards that's getting the most attention is the new building standards requiring solar photovoltaic systems on certain types of housing in California. The 2019 Energy Standards require new homes to include sufficient rooftop solar energy generation to meet the home's annual electricity consumption. This makes California the first state in the nation to require some type of solar power installed as part of new residential development. The measure was approved unanimously by the California Energy Commission on May 9, 2018, and the new requirement will take effect two years from now, in the year 2020.

Complying with the solar photovoltaic measure involves installing a solar photovoltaic system of a minimum size in all newly constructed low-rise residential buildings permitted on or after January 1, 2020. This includes installation of photovoltaic panels, inverters and necessary wiring. The solar mandate also gives builders the option to install a shared solar grid that serves multiple homes, so that individual solar panels aren't installed on each and every new home. The new solar mandate applies to new single-family homes and multi-family buildings that are three stories or less. The solar measure will not apply to nonresidential, high-rise residential (four or more habitable stories) or hotel/motel buildings; it also will not apply to additions or alterations to existing buildings.

The Building Industry Association—one with a very real vested interest in the nature of the new regulations—expressed satisfaction with a collaborative process towards workable standards. "With this adoption, the California Energy Commission has struck a fair balance between reducing greenhouse gas emissions while simultaneously limiting increased construction costs," said California Building Industry

Association CEO and President Dan Dunmoyer:

> We thank the Commissioners and their staff for working with the building industry during the past 18 months and adopting a set of cost-effective standards that ensures homebuyers will recoup their money over the life of the dwelling.

### But…At What Cost?

The solar mandate is expected to add an average of $10,000 to the price of new homes, although this cost is expected to be offset by savings on monthly energy costs. The California Energy Commission estimates the new standards will increase the cost of a 30-year mortgage by approximately $40 per month, but will result in a savings of $80 per month on heating, cooling and lighting bills. Many have noted that this increase in home prices is significant in light of California's existing housing affordability problems. But for the most part, it seems like the building and construction industry supports the mandate. Many new residential developments already include or offer solar systems for new homes. Plus, providing solar could serve as an attractive selling point for environmentally conscious consumers.

### Greenhouse Gas Emission Reduction Estimates

The new mandate is expected to lower reliance on fossil fuels, which will result in significant reductions in greenhouse gas emissions. The California Energy Commission estimates that the 2019 Energy Standards will result in a net reduction in the emissions of nitrous oxide by approximately 225,000 pounds per year, sulfur oxides by 590 pounds per year, carbon monoxide by 61,000 pounds per year, and particulate matter by 7,400 pounds per year. Statewide greenhouse gas emissions are expected to be reduced by an amount equal to 493 million pounds of carbon dioxide annually.

### Conclusion and Implications

This new solar mandate is a historic plan and reinforces California's role as a global and national leader in clean energy and climate policy. Other states in the country will likely watch as California's newest green effort unfolds, and they can be expected to follow suit by taking a closer look at their own renewable energy options.

The new rules must still be approved by the California Building Standards Commission later this year. More information about the 2019 Building Energy Efficiency Standards is available on the California Energy Commission's website: http://www.energy.ca.gov/

(Nedda Mahrou)

## CALIFORNIA WATER COMMISSION AWARDS $2.5 BILLION FOR NEW WATER STORAGE PROJECTS

The voice of the voters from Proposition 1 in 2014 was heard loud and clear when, on July 24, 2018, the California Water Commission (CWC) approved spending $2.5 billion to fund construction of four new dams and four underground storage projects. The vote of the CWC was unanimous with an 8-0 vote. The CWC's decision provides significant steps forward for water supply planning and reliability, which is all the more critical with evolving changes and uncertainties in the hydrologic cycle and pending regulatory processes involving water resources, namely the Water Quality Control Plan update and the California WaterFix.

### Factual Background

Proposition 1 was brought to the voters in November 2014, which was during a five-year drought, with the drought imposing severe circumstances in many parts of the state. Notably, Proposition 1 is revered as the largest water storage commitment by the state since 1960, which interestingly in 2014 was under Governor Jerry Brown's watch while the 1960 expenditure for what is known as the State Water Project was under the watch of Governor Pat Brown, the current governor's father.

The CWC consists of nine members appointed by the Governor and confirmed by the Senate, serving

as a public forum to discuss water issues, advise the California Department of Water Resources (DWR), and take statutory actions regarding water resource management.

In addition to the projects identified below, the CWC also approved funding for four groundwater storage projects. Those projects are $280 million to the Sacramento Regional County Sanitation District to treat recycled wastewater and provide it to farmers in Sacramento County; $207 million to the Inland Empire Utilities Agency to store recycled water in a groundwater storage bank in San Bernardino County for use by local cities, businesses and farms; $67 million for the Kern Fan groundwater storage project near Bakersfield; and $95 million for the Willow Springs groundwater bank in Kern County, which would add 500,000 acre-feet of new storage.

### The Sites Reservoir

The Sites Reservoir (Sites) is also commonly referred to as North of Delta Offstream Storage, or NODOS. This project is planned to be a large, offstream, reservoir located near Maxwell within the Sacramento Valley, approximately 65 miles north of the City of Sacramento. The DWR would operate the reservoir, with its main purpose being to collect and store winter flood flows from the Sacramento River for later use during the drier times of year, and in a subsequent year if precipitation levels are low. Sites's anticipated capacity is approximately 1.8 million acre-feet. For perspective, Shasta Reservoir is approximately 2 million acre-feet, and Folsom Reservoir is a little less than 1 million acre-feet.

Discussions about Sites started during the 1980s, as Stage II of the State Water Project. Stage I consisted primarily of Oroville Dam and the California Aqueduct. Various political and environmental opponents have hindered the ability for Sites to move forward; however, with the turn of the century and the most recent drought—and inevitably another drought to come—the tides have turned in favor of planning for future droughts, with reservoirs being a key component of such a strategy. Furthering the need for proactive planning is the continuing increase of California's population.

The Sites project was awarded $816 million by the CWC, though proponents of Sites requested $1.7 billion in funding from Proposition 1. Sites's total projected cost is estimated at $5.2 billion.

In addition to closing the financing gap between existing funds and the anticipated cost of the project, speculation exists as to the extent of environmental support for the project. To help mitigate adverse environmental impacts and subsequent opposition from environmental groups, Sites is designed to be an "off-stream" reservoir, meaning the reservoir is not located on an existing streambed but instead is supplied by a transmission pipeline or aqueduct. One such example of an existing off-stream reservoir in California is the San Luis Reservoir, which also is the largest off-stream reservoir in the United States. Off-stream reservoirs are designed to mitigate environmental impacts relative to on-stream reservoirs by not directly affecting fish migration, while also potentially serving as a source of additional cold water that migrating salmonids need for spawning and rearing.

### Other Projects

Also among the CWC's July 24 award are the following projects being undertaken by the Santa Clara Valley Water District and Contra Costa Water District.

Santa Clara Valley Water District was awarded $485 million to construct a new 319-foot tall dam at Pacheco Pass in Santa Clara County's southern and rural area, which is expected to increase storage capacity from 5,500 acre-feet to 140,000, while also adding cold water pool benefits for fisheries.

Contra Costa Water District's project was awarded $459 million to increase the existing dam height at Los Vaqueros Reservoir in eastern Contra Costa County by 55 feet, which is anticipated to increase the reservoir's size by approximately 70 percent. This project has garnered support for its Los Vaqueros project from The Nature Conservancy, Audubon California and the Planning and Conservation League.

### Conclusion and Implications

These projects are intended to increase water supply reliability for urban water users, farms and fisheries (as well as other habitat, such as birds). As if contributing to the needs of each of these interests is not attractive enough to evaluate viability of moving forward with these complex projects, so, too, is the nimbleness of projects to augment water supplies for water users around the state. In other words, projects, particularly such as Sites would potentially operate to

assist with salinity levels and provides water supplies to water users throughout the state, not just within the immediate region. These projects are not without hurdles ahead—the rest of any needed financing for projects must be obtained by January 1, 2022, and some environmental groups might challenge one or more of these projects. With increased swings in precipitation cycles, however, and an ever-increasing population in the state, innovation is necessary. With proper planning, design, construction, and operation, projects like those identified above can help weather the lack of storms in the future.
(Wesley A. Miliband)

## JUDICIAL DEVELOPMENTS

# D.C. CIRCUIT CLEAN AIR ACT NATIONAL AMBIENT AIR QUALITY STANDARDS, AND THE DEFINITIONS OF NATURAL AND EXCEPTIONAL EVENTS

*Natural Resources Defense Council v. U.S. Environmental Protection Agency*, ___F.3d___, Case No. 16-1413 (D.C. Cir. July 20, 2018).

The U.S. Court of Appeals for the District of Columbia Circuit recently upheld a U.S. Environmental Protection Agency (EPA) rule against a facial challenge by petitioner environmental group. The rule determines whether an event is "natural" and qualifies as an "exceptional" event that is exempt from pollution level reporting requirements, or is "caused by human activity" and is not.

### Factual and Procedural Background

The federal Clean Air Act (CAA) allows the EPA to protect air quality by enforcing state and local pollution limits, or National Ambient Air Quality Standards (NAAQS) that local areas cannot exceed. Each state must develop a state implementation plan (SIP), which requires the state to record pollution levels using air quality monitors and report the data quarterly to EPA. If an area meets or falls within the NAAQS for certain pollutants, it has achieved "attainment." Areas that violate the NAAQS receive "nonattainment" designations and must develop an implementation plan to reduce air pollutant emissions.

Since 1977, EPA has recognized that counting emissions caused by "exceptional events" inflates pollutant levels and may cause an area that would otherwise be designated "attainment" to be designated as "nonattainment." EPA adopted a series of informal guidelines to determine whether an event is "exceptional" and this practice was codified in 2005. The CAA allows areas to keep their attainment designation when their pollution levels exceed the NAAQS as long as the emissions result from an exceptional event.

Under the CAA, an event is "exceptional" if it "affects air quality," "is not reasonably controllable," "is caused by human activity unlikely to recur at a particular location" or "a natural event," and an EPA regulation defines the event as "exceptional." 42 U.S.C. Code § 7619(b)(1)(A). Through notice-and-comment rulemaking, EPA proposed that "natural events" include events caused by both natural and human activity, as long as the human activity complies with relevant environmental regulations.

Petitioners Natural Resources Defense Council and Sierra Club (petitioners) objected to the definition, arguing that an event caused by human activity cannot be a natural event. However, EPA rejected petitioners' bright-line definition and adopted its proposed definition as a final rule in October 2016 (2016 Rule). Petitioners petitioned the D.C. Circuit for review of the 2016 Rule's compliance with the CAA. The American Petroleum Institute moved to intervene on behalf of EPA but lacked organizational standing because it was unable to demonstrate that an individual member was injured, and was instead granted the status of amicus curiae.

### The Court of Appeals' Decision

The threshold issue is whether the CAA's definition of "exceptional event" applies to natural causes that are also caused by regulated human activity. An event is "exceptional" if it "is caused by human activity unlikely to recur at a particular location" or is a recurring or non-recurring natural event. Since the CAA did not define "natural event," EPA defined it in the 2016 Rule as one that "results in emissions… in which human activity plays little or no direct causal role." EPA considers "anthropogenic sources" or those originating from human activity, and which are reasonably controlled, "to not play a direct role in causing emissions." To determine whether a recurring event is "natural, and thus exceptional, EPA looks at

the activities that caused the emissions."

### Applying *Chevron* Analysis

In reviewing the EPA's definition of a natural event, the court applied the two-step *Chevron* test from *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 842-43 (1984). First, if Congress has unambiguously addressed the matter in the CAA, Congress' intent must be followed. However, if the CAA is unclear, step two requires deference to EPA's reasonable interpretation of the statute.

In analyzing step one, the court cited dictionaries that defined the ordinary meaning of "natural" as "something unaffected by human activity" or "organic." The court then looked beyond the term's ordinary meaning and to its context in relation to the CAA's statutory scheme to interpret the statute. The pairing of "natural event" with "an event caused by human activity" in the CAA suggested that the pairing intentionally includes events caused by a combination of natural and human activity. To illustrate, the court provided an example of a windstorm that emits dust or small particulate matter into the air, subjecting the event to NAAQS. While the emissions appear to result of a windstorm, and thus a natural event, if the windstorm occurred only because the ground had been loosened by recent construction, then:

> . . .the point at which human contributions convert a natural event into one caused by human activity is blurry at best.

Since the CAA did not unambiguously distinguish between "natural" and human activity, and authorized EPA to promulgate regulations to draw the line, the court proceeded to analyze step two of the *Chevron* test. Petitioners argued that the 2016 Rule upends the distinction between a natural event and human activity and that EPA will treat emissions from recurring human activity as an exceptional event. To support their arguments, petitioners provided an example of a windstorm blowing pollutants from a reasonably controlled power plant to another jurisdiction's air-quality monitor. Petitioners argued that EPA would disregard the power plant's role in producing emissions and would only look to the windstorm to conclude that the event was natural. However, the court rejected petitioners' example, which did not challenge EPA's understanding that that an "exceptional event" must "deviate from normal or expected conditions." The court reasoned that under petitioner's example, the emissions would not be an exceptional event because the emissions resulted from "routine activity." Instead, the court focused on the activities that caused the emissions in petitioners' example to point out that "it was the power plant and not the windstorm that generated the emissions"; the wind only transported the emissions to a different area. Thus, under the 2016 Rule, the emissions would have been attributed the power plant and not the natural activity of the windstorm.

The court contrasted petitioners' example with several examples of its own. A windstorm that sweeps up particulate matter from a dirt road would only be considered a natural event:

> If the road were reasonably controlled, EPA would discount the road's role and only look to the windstorm. But if the road had been improperly maintained (and not reasonably controlled), EPA would consider both the road's and windstorm's contributions to the emissions.

The D.C. Circuit upheld the 2016 Rule's definition as permissible under the CAA.

### Conclusion and Implications

This case upholds the definition of a natural event in a facial challenge to the 2016 Rule. This case provides an excellent example of how *Chevron* deference provides EPA considerable latitude in interpreting an ambiguous term. Aggrieved parties who believe that EPA applies the rule in a way the CAA does not permit can still petition for judicial review for an as-applied challenge.
(Danielle Sakai, Joanna Gin)

# DISTRICT COURT ORDERS EPA TO MAKE A DECISION UNDER THE CLEAN AIR ACT ON THE SAN JOAQUIN OZONE PLAN

*Association of Irritated Residents v. U.S. Environmental Protection Agency et al*, ___F.Supp.3d___, Case No. 3:18-cv-01604 (N.D. Cal. July 24, 2018).

The U.S. District Court for the Northern District of California has given the U.S. Environmental Protection Agency (EPA) deadlines by which it must act on a San Joaquin Valley Air Pollution Control District plan for managing ozone air pollution, in a win for a community group that sued the agency in an effort to force its hand.

Ruling on competing motions for summary judgment last month, U.S. District Judge Yvonne Gonzalez Rogers granted most of the motion filed by the Association of Irritated Residents (AIR) in its lawsuit accusing the EPA of taking too long to approve or reject the San Joaquin Valley Air Pollution Control District's 2016 plan for implementing a 2008 ozone standard rule.

## Background

The federal Clean Air Act (CAA) "sets forth a cooperative state-federal scheme for improving the nation's air quality." *Vigil v. Leavitt*, 381 F.3d 826, 830 (9th Cir. 2004). Under this scheme, the EPA must establish National Ambient Air Quality Standards (NAAQS) that limit concentrations of six "criteria air pollutants" in the outside air. 42 U.S.C. §§ 7408(a)(1), 7409(a), (b). Among these six regulated pollutants is ground-level ozone, a gas that forms when oxides of nitrogen react with volatile organic compounds in the presence of sunlight. The standard at issue here is the NAAQS for ground-level ozone that EPA issued in 2008 (2008 Ozone NAAQS).

After the EPA issues a new or revised NAAQS, it must designate areas as either attaining or not attaining that standard. *Id.* § 7407(d)(1). Areas that do not meet an ozone NAAQS—"nonattainment areas"—may be further classified as "marginal," "moderate," "serious," "severe," or "extreme," depending on the amount by which ozone concentrations in those areas exceed the applicable NAAQS. *Id.* § 7511(a).

States have primary responsibility for ensuring that their air quality meets the standards set by the EPA. *Id.* § 7407(a). To that end, states must develop State Implementation Plans (SIPs) that provide for the attainment, maintenance, and enforcement of the NAAQS in each air quality control region within their borders. *Id.* §§ 7410(a)(1), (2).

This case concerns California's plan for implementing the 2008 Ozone NAAQS in the San Joaquin Valley (2016 Ozone Plan). Because the San Joaquin Valley has been classified and designated as an extreme nonattainment area for the 2008 Ozone NAAQS, the 2016 Ozone Plan must demonstrate that the state will reduce emissions of ozone precursors in the area by an average of three percent per year, as compared to a baseline year.

The San Joaquin Valley Unified Air Pollution Control District (District) approved the 2016 Ozone Plan at a public hearing on June 16, 2016. The District then submitted the 2016 Ozone Plan to the California Air Resources Board (CARB). Following a separate round of notice and comment, on July 21, 2016, CARB approved the 2016 Ozone Plan as a revision to California's state implementation plan. On August 24, 2016, CARB submitted the 2016 Ozone Plan to EPA for action under § 7410(k). On December 19, 2016, the EPA determined that the 2016 Ozone Plan was complete, a finding that triggered the agency's duty to approve or disapprove the 2016 Ozone Plan within 12 months. Thereafter, on February 16, 2018, the U.S. Court of Appeals for the District of Columbia Circuit issued its decision in *South Coast Air Quality Management District v. Environmental Protection Agency*, 882 F.3d 1138 (D.C. Cir. 2018) (South Coast), a case concerning several provisions of the Plan Requirements Rule, including the provision allowing for the use of alternative baseline years—the very provision on which the San Joaquin Valley District relied in choosing the 2016 Ozone Plan's 2012 baseline year. In its decision, the Court in *South Coast* announced its intention to vacate the alternative baseline provision of the Plan Requirements Rule. Thereafter, the EPA filed a petition for rehearing. Briefing is still outstanding on the petition. As a result, the EPA has not acted on the 2016 Ozone Plan.

In March AIR filed its lawsuit in the United States District Court for the Northern District of California seeking to compel the EPA to act on the 2016 Ozone Plan. (*See*, https://www.epa.gov/sites/production/files/2018-03/documents/air_complaint_3.18cv1604_03142018.pdf)

In April AIR filed a motion for summary judgment seeking an order declaring that the EPA had failed to act on the plan and requiring the agency to do so by no later than Dec. 19. In its opposition to the motion, the EPA conceded that it failed to act on the plan and said it could make a decision about nine of the plan's 13 components by that date. It also brought its own summary judgment motion seeking an extended period of time until at least March 19, 2019, to act on the plan's four other elements.

### The District Court's Decision

On July 24, 2018, Judge Gonzalez Rogers ordered the EPA to act on the nine plan components by Dec. 19, siding with AIR in that regard. As for the other four plan elements, she gave the agency until Jan. 31, 2019—extra time, but not as much as it had requested. "The court finds unreasonable EPA's request for nearly thirteen additional weeks," the judge wrote, adding, "at most, an additional extension of six weeks is appropriate."

Judge Gonzalez Rogers also rejected the EPA's motion to stay the lawsuit pending the outcome in *South Coast*. In seeking a stay the EPA argued that without a stay it would be forced to act on the 2018 Ozone Plan "without knowing the law governing" parts of it, due to the continuing dispute on the issue in the D.C. Circuit. The court, however, stated that:

> . . .to grant a stay in this case would undermine the statutory timetable articulated by the CAA, interfere with AIR's capacity to enforce provisions of the 2016 Ozone Plan, and undercut the public interest in enforcement of the CAA.

The court concluded that as a result, the EPA has failed to establish:

> . . .that the instant case is one of the 'rare circumstances' in which 'a litigant in one cause be compelled to stand aside while a litigant in another settles the rule of law that will define the rights of both.'

### Conclusion and Implications

In the instant matter, it was clear to all parties that the EPA had failed to comply with its mandated duties within the statutorily prescribed time period. While a court should compel an agency to correct any statutory violations as quickly as possible, it should not be so quickly that the court's order calls on the agency "to do impossibility." Courts have recognized two categories of circumstances that might delay agency action so as to render compliance with a particular deadline infeasible: 1) budgetary and manpower constraints; and 2) the need for an agency to have more time to sufficiently evaluate complex technical issues. *National Res. Def. Council v. Train*, 510 F.2d 692, 712-713 (D.C. Cir. 1975). Here, the court recognized that the EPA might need more time to evaluate issues that became more complex after issuance of the decision in South Coast. It, however, concluded that the EPA's extension until March 2019 was unreasonable. It, therefore, compromised and exercised its flexible equitable powers by giving the EPA until January 31, 2019, to act on the plan's final four elements.

The court's ruling can be found here: https://www.pacermonitor.com/public/case/23934890/Association_of_Irritated_Residents_v_United_States_Environmental_Protection_Agency_et_al.
(David D. Boyer)

# DISTRICT COURT DISMISSES SEA LEVEL RISE CASES AGAINST OIL AND GAS COMPANIES

*People of State of California v. BP p.l.c.*, Case No. C 17-06011 WHA (N.D. Cal. 2018);
*People of State of California v. BP p.l.c.* Case No. C 17-06012 WHA (N.D. Cal. 2018).

Last year, a number of municipalities filed lawsuits against large oil, gas an oil companies seeking to hold them responsible for damage caused by sea level rise. The cases include claims based on a public nuisance theory, with the municipalities alleging that the oil, gas and coal companies knew that their fossil fuel products would cause harm by significantly increasing carbon dioxide pollution and contributing to global warming and sea level rise. This summer, two of those cases were dismissed by a federal judge. The cases are *People of State of California v. BP p.l.c.* (San Francisco) and *People of State of California v. BP p.l.c.* (Oakland).

## City of Oakland and City of San Francisco Cases

In 2017, the cities of San Francisco and Oakland sued five major oil companies aiming to hold them liable for current and future coastal damage to their cities. When the lawsuits were filed, the cities announced that they were asking the courts to hold the oil companies responsible for the costs of sea walls and other infrastructure necessary to protect the cities of San Francisco and Oakland from impacts of global warming and sea level rise. Specifically, the cities alleged that the damage (existing and potential) was attributable to "the companies' production of massive amounts of fossil fuels."

The cities contended that the oil companies knew about the potential risks to human beings and public and private property, yet:

> . . .continued to aggressively produce, market and sell vast quantities of fossil fuels for a global market, while at the same time engaging in an organized campaign to deceive consumers about the dangers of massive fossil fuel production.

The cities likened the oil companies to "the tobacco companies who were sued in the 1980s" and had "knowingly and recklessly created an ongoing public nuisance."

The lawsuits were originally filed in California state court. The oil companies removed the lawsuits to federal court and, after the cities' motion to remand was denied, the cities amended their complaints to plead a claim for public nuisance under federal common law. On February 27, 2018, U.S. District Court Judge William Alsup requested a "tutorial" on climate change and invited counsel to conduct a two-part tutorial on the subject of global warming and climate change covering the history of climate change and setting forth "the best science now available on global warming, glacier melt, sea rise, and coastal flooding." The tutorial occurred on March 21, in front of a standing room only crowd.

After the tutorial, in separate orders filed in June and July 2018, Judge Alsup dismissed both lawsuits for failure to state a claim (June) and for lack of personal jurisdiction (July).

## The District Court's Decision

### Failure to State a Claim

On April 19, 2018, the oil companies filed motions to dismiss the cities' complaints for failure to state a claim and lack of personal jurisdiction. On June 25, 2018, the court dismissed the complaints for failure to state a claim. In its order dismissing the cases, the court noted that the issue was not over science. Instead, the court opined that all "parties agree that fossil fuels have led to global warming and ocean rise and will continue to do so." According to the court, the legal issue was whether the oil companies should pay for the harm under a public nuisance theory.

Quoting the *Restatement (Second) of Torts*, the court explained that under federal common law, a public nuisance occurs if there is an "unreasonable interference with a right common to the general public." The court outlined the test for public nuisance, but ultimately avoided it, stating that: "there is a more direct resolution from the Supreme Court and our court of appeals." The court discussed the inter-

national nature of global warming and its harms and ruled that the complaints' claims were "foreclosed by the need for federal court to defer to the legislative and executive branches when it comes to" international problems.

### Lack of Personal Jurisdiction

When the court dismissed the cities' complaints for failure to state a claim, the court asked the parties to submit a joint statement as to whether it was still necessary to address pending motions to dismiss the complaints on personal jurisdiction grounds. Based on the responses, the court chose to rule on the pending motions and dismissed the complaints for lack of personal jurisdiction.

Focusing on specific jurisdiction, the court ruled that the cities "failed to show that defendants' conduct is a 'but for' cause of their harm, as required by the second prong of the [specific] jurisdictional analysis." The court ruled that "[i]t is manifest that global warming would have continued in the absence of all California-related activities of defendants." As a result, the cities "failed to adequately link each defendants' alleged California activities to" the cities' harm.

### Conclusion and Implications

Although these cases began in California state court, the decision eventually turned on public nuisance under federal common law. Many will now turn their attention to the remaining public nuisance cases, which continue in California state court, in order to see if a different result is reached. The court's long and detailed order of dismissal is available online at: https://www.documentcloud.org/documents/4559977-Case-Dismissed-6-25-2018.html
(Kathryn Casey)

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