

CLIMATE CHANGE TM

LAW & POLICY REPORTER

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FEATURE ARTICLE

THE EBB AND FLOW OF THE FEDERAL CLEAN WATER ACT—
EPA RELEASES NEW PROPOSED ‘WATERS OF THE UNITED STATES’
RULE DEFINING THE SCOPE OF THE ACT

By John Sittler and Paul Noto

The U.S. Environmental Protection Agency (EPA) released its new proposed “waters of the United States” (WOTUS) rule on December 11, 2018. The proposed rule has not yet been officially published in the *Federal Register*, but is expected to be published soon. The new proposed rule would replace rules enacted under President Obama and repeal protections on large stretches of U.S. waterways. (See related coverage of this issue at page 12345678901234567890 in this issue of *Eastern Water Law & Policy Reporter*.)

Background

The federal Clean Water Act (CWA) was passed in 1972 with the goal of reversing significant water pollution across the country by protecting “navigable waters.” The general understanding of the term was that used by the Supreme Court in *The Daniel Ball*, 77 U.S. 557, 563 (1871)—waterways are navigable:

...when they are used, or are susceptible of being used, in their ordinary condition, as highways of commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.

By the time of the CWA, U.S. Supreme Court precedent had expanded the term to include non-navigable tributaries, if that was necessary to protect the navigable waterway. See, *Oklahoma ex rel. Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508, 523 (1941). Unfortunately, Congress did not further define “navigable,” but rather left it up to EPA and the U.S. Army Corps of Engineers (Corps), paving the way

for decades of litigation that attempted to determine what waters the CWA protects.

The last time the Supreme Court spoke on the issue was in 2006 in *Rapanos v. United States*, 547 U.S. 715 (2006). That case was a plurality decision, further muddying the issue and resulting in unclear precedent. *Rapanos* particularly focused on wetlands and the extent to which they are covered under the CWA. The late Justice Antonin Scalia, writing for the four-justice plurality, said that WOTUS can only refer to “relatively permanent, standing or flowing bodies of water” not “occasional,” “intermittent,” or “ephemeral” flows. Justice Kennedy, who voted with the plurality, but only through his separate concurring opinion, said that wetlands need only a “significant nexus” to a navigable water in order to be protected under the CWA.

The Clean Water Rule

In 2015, the Obama administration enacted the Clean Water Rule (2015 Rule) in an attempt to clarify what constituted navigable waters under the CWA. Key components included the inclusion of wetlands and ephemeral streams (those that only flow when it rains). Instead of adjudicating tributaries on a case-by-case basis, the 2015 Rule clarified that if a stream had a bed, bank, and high-water mark (physical features of flowing water), it garnered CWA protections. Regarding wetlands, the 2015 Rule used Justice Kennedy’s “significant nexus” test but also provided they would be protected if they were within 100 feet, or within the 100-year floodplain, of a navigable waterway. This distance requirement in particular was met with opposition because it was not included in the proposed rule, only the final rule.

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Although the EPA claimed that the 2015 Rule merely created certainty for 3 percent of the nation's waterways, it was met with significant blowback, particularly from agriculture and industry groups. The 2015 Rule was repeatedly called a federal power grab, even with its explicit exemptions for certain farm waterways including puddles, ditches, artificial stockwatering ponds, and irrigation systems that would revert to dry land if irrigation were to stop.

One of the more vocal opponents of the 2015 Rule was then candidate Donald Trump who called the rule “destructive and horrible” during his campaign. Throughout the 2016 election cycle, he repeatedly promised to do away with the rule, a promise, which he began fulfilling immediately.

‘Repeal and Replace’

Shortly after entering office, President Trump announced his plan to “repeal and replace” the 2015 Rule. On February 28, 2017 he issued an executive order instructing the EPA to begin this process. The plan is comprised of two phases: first, a repeal of the 2015 Rule to revert regulation back to the pre-Obama WOTUS definition for the immediate future, and second, to adopt a new rule with the goals of eliminating uncertainty and reducing regulatory costs.

EPA published a final rule on February 6, 2018 adding an “applicability date” to the 2015 Rule. That means that the 2015 Rule, which was scheduled to go into effect on August 16, 2018, now doesn't take effect until February 6, 2020. This essentially gives the Trump EPA additional time in which to repeal the 2015 Rule and to propose and implement a new rule. The applicability date rule was immediately challenged in several lawsuits across the country. The principle challenge was that the EPA was in violation of the Administrative Procedure Act because it did not solicit comments as part of the standard notice and comment rulemaking process. The EPA argued that the applicability date rule was not an entirely new rule, and therefore notice and comment was not required.

The Southern Environmental Law Center was the principal plaintiff in a challenge that resulted in the applicability date rule being invalidated on procedural grounds. The U.S. District Court for the District of South Carolina invalidated the rule in 26 states, creating a patchwork of jurisdictions where the 2015 Rule applies. Additional lawsuits have resulted in the

2015 Rule now applying in 28 states, the District of Columbia, and the U.S. Territories, while the pre-Obama WOTUS definition, thanks to the applicability date rule, controls in the remaining 22 states. The only western states where the 2015 Rule applies are California, Oregon, and Washington.

The actual repeal of the 2015 Rule has been a messy process with several comment periods. After initially publishing a proposed repeal rule on July 27, 2017, the EPA later republished the rule on June 29, 2018 clarifying that this proposed rule would repeal the 2015 Rule in its entirety. The comment period for that proposed rule closed on August 13, 2018, and a final rule has not yet been published.

The New Proposed Rule

Although the new proposed rule has not yet been published, the EPA and Corps released a “pre-publication” rule on December 11, 2018. The rule lists six categories of waters that will be protected under the CWA, while including language that specifically exempts any waterway not mentioned in those six categories.

The categories of protected waters follow.

Traditionally Navigable Waterways

The least controversial category, there is no doubt that the WOTUS definition includes traditionally navigable waterways. This term includes rivers, streams, large lakes, and oceans that could be traveled by boat or used for commerce. There is no question that these larger waterways were intended to be included as WOTUS.

Impoundments

There is no change from the 2015 rule regarding regulation of impoundments—this is also the same as the 1986 CWA regulations. This category includes check dams and perennial rivers that form lakes and ponds behind them. However if fill material, under a valid § 404 permit, transforms a water body into an upland (an area above the high-water mark that does not qualify as a wetland), the waters would no longer be considered WOTUS. The proposed rule notes that EPA will be seeking comment on the status of an unprotected wetland if, after being turned into a pond, no longer meets the standards for ponds, discussed below.

Tributaries to Navigable Waterways

The standard for tributaries under the new proposed rule is those that contribute “extended periods of predictable, continuous, seasonal surface flow occurring in the same geographic feature year after year” to traditionally navigable waters. This is a departure from the 2015 Rule physical standard of having a bed, bank, and high-water mark.

Although the new rule specifically excludes ephemeral streams, it is unclear how often, or how much, water a tributary would need to carry to be federally regulated. The proposed rule states that the tributaries would be evaluated on whether they contribute on a typical year—based on a 30-year average—but offers no further guidance. EPA noted in a press conference that it would require decisions in the field to determine what constitutes a typical year within the 30-year average. Several commentators believe that this classification includes streams that do not flow all year, provided the flows are predictable and continuous within the season of flows. That means that some, but not all, of western snowmelt-fed streams would continue to be protected.

Ditches

Regulation of ditches under the new proposed rule is split into two main categories. First, ditches that function like a traditional navigable waterway—such as the Erie Canal—will continue to be federally regulated as navigable waters. However, other ditches are regulated much like tributaries to navigable waterways. If the ditches contribute flow to a traditional navigable waterway in a typical year, they will continue to be regulated. Again, like tributaries, it is unclear how often, or how much water will need to flow from the ditches to a navigable waterway to meet the “typical year” standard. Ditches that relocate a protected tributary, or ditches built through wetlands with surface water connections would be regulated.

Lakes and Ponds

Lakes large enough to be considered traditionally navigable waters are of course still included as WOTUS under the proposed rule. However, smaller lakes and streams would now be subject to the same standard as ditches and tributaries—they will only be regulated if they contribute intermittent or perennial flow to downstream navigable waters. This is a

departure from the 2015 Rule that covered all naturally occurring lakes and ponds either within 100 feet of a navigable waterway, or within 100-year floodplain and within 1,500 feet of its ordinary high-water mark. Lakes and ponds that contribute to navigable waterways via flooding, such as oxbow lakes, would be regulated provided that the contribution happens when examined on the rolling 30-year average standard. Artificial ponds, such as those constructed for stockwatering, would continue to be exempt from regulation.

Wetlands

The proposed rule would include all “adjacent wetlands”, *i.e.* those that abut or have a direct hydrological connection to a federally regulated WOTUS. This is a split from the 2015 Rule’s standard of having a “significant nexus,” which itself was taking from Justice Kennedy’s concurring opinion in *Rapanos*. The 2015 Rule also included specific distance requirements for jurisdictional wetlands—100 feet from a navigable water or within that waterway’s 100-year floodplain. This controversial requirement would be eliminated under the new proposed rule. Waters that have been naturally or artificially (with a valid § 404 permit) transformed to uplands would no longer be considered wetlands.

Everything Else Is Not WOTUS

The new proposed rule specifically provides that any water that does not fit into one of the above categories is *not* a water of the United States subject to regulation under the CWA. This includes ditches (other than those listed above), prior converted cropland (excluded since 1993), and importantly, all groundwater. The regulation of groundwater under the CWA has been a contentious issue over the history of the act, most recently resulting in a circuit split between the Fourth and Sixth circuits.

The main issue is whether discharges into groundwater that later end up in a navigable water are able to be regulated. The Fourth Circuit Court of Appeals held that, although it takes a specific fact inquiry, if groundwater can be hydrologically traced to a navigable water, then that groundwater is considered WOTUS. *Upstate Forever v. Kinder Morgan Energy Partners LP* (4th Cir. April 12, 2018). The Sixth Circuit later held the exact opposite, finding that

groundwater, by its very nature, can never be traceable to a navigable water. *Tennessee Clean Water Network, et al. v. Tennessee Valley Authority* (6th Cir. September 24, 2018). Although either, or both, of those cases are likely to be appealed to the Supreme Court, the issue of groundwater regulation would no longer matter under the proposed rule.

Interstate Waters

The 1986 CWA regulations first introduced separate sections for interstate waters, including interstate wetlands. Under the new proposed rule, that section would be eliminated, and the classification of all interstate waters would be under one of the other six categories, or not regulated.

Initial Reception

EPA and the Corps released a joint press release and held a press conference concurrently with the pre-publication rule to discuss the proposed changes. Acting EPA Administrator Andrew Wheeler said the new proposed rule would be “clearer and easier to understand” and “would end years of uncertainty over where federal jurisdiction begins and ends.” This goal of simplicity was echoed by EPA Assistant Administrator for Water David Ross who said the “goal was to provide as few categories [of WOTUS] as possible.”

As expected, industry and agriculture groups have been initially favorable to the proposed rule in its pre-publication form, while environmental groups have been opposed. American Farm Bureau Federation President Zippy Duvall said the new rule will “empower” farmers and ranchers to comply with the law. Other supporters included U.S. Secretary of Agriculture Sonny Perdue, U.S. Secretary of the Interior Ryan Zinke, the National Cattleman’s Beef Association, the National Council of Farmer Cooperatives, and the Agricultural Retailers Association.

Several environmental groups immediately released statements condemning the new proposed rule, including the National Resources Defense Council, which said the proposal “would be the most significant weakening of the Clean Water Act protections in its history.” Trout Unlimited also took aim at the reduction in tributary protections, noting that “more than 117 million Americans get their drinking water from small intermittent and ephemeral headwater streams.”

There has also been controversy surrounding the exact number of waterways currently protected under the 2015 Rule that would no longer be classified as WOTUS under this proposal. Various environmental groups have claimed that the new proposed rule would eliminate protections on 60 percent of the country’s waterways and up to 1/3 of the country’s drinking water. Acting Administrator Wheeler responded to these claims in the press briefing, saying:

... [t]hat 60 percent number is from the previous administration. But maps do not distinguish between ephemeral and intermittent waters. There is not map that identifies all the waters of the United States.

In a rebuttal to Wheeler’s claim to not know exactly how many waterways would lose protection under the proposed rule, *E&E News* recently obtained a 2017 slideshow by EPA and Corps staff showing that 18 percent of streams and 51 percent of wetlands would not be protected under the new WOTUS definition. The slides, obtained through a Freedom of Information Act request, were prepared for a presentation to former EPA Administrator Scott Pruitt and former Corps Deputy Assistant Secretary Douglas Lamont.

Conclusion and Implications

The new proposed rule is expected to immediately be published in the *Federal Register*, upon which interested parties will then have 60 days to file comments. EPA and the Corps are planning to host an informational webcast on January 10, 2019, and then a listening session in Kansas City, Kansas on January 23, 2019, implying that the rule will at least be published before then. After the comment period closes, EPA will then review the comments and publish a final rule that takes into account those comments and is based on the record established throughout the process. This is often a long process, and it is possible that there will be a second comment period as with the repeal rule. Considering the amount of litigation that has already gone into the applicability rule, it is likely that there will be legal challenges to both the repeal rule and new proposed rule once they are published.

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CLIMATE CHANGE NEWS

ROYAL DUTCH SHELL TO LINK CARBON FOOTPRINT TARGETS TO EXECUTIVE COMPENSATION

On December 3, 2018, Royal Dutch Shell PLC (Shell) issued a joint statement with institutional investors in which it committed to certain steps to further the goals of the Paris Agreement on climate change, including linking executive compensation to short-term carbon footprint targets.

Background

The joint statement was developed between Shell and a group of institutional investors, led by Robeco and the Church of England Pensions Board, on behalf of the Climate Action 100+ initiative. According to the Joint Statement:

Climate Action 100+ is a five-year initiative led by investors to engage systemically important greenhouse gas emitters and other companies across the global economy that have significant opportunities to drive the clean energy transition and help achieve the goals of the Paris Agreement. To date, 310 investors with more than USD \$32 trillion in assets under management have signed on to the initiative.

Shell's Joint Statement With Investors

According to a December 3, 2018 press release, Shell:

...plans to set short-term targets as part of a long-term ambition to reduce the Net Carbon Footprint of its energy products. The company plans to link these targets to executive remuneration, subject to shareholder approval.

Joint Statement Summary

Shell has committed to take certain actions "in order to demonstrate further industry leadership and alignment with the goals of the Paris Agreement on climate change," including the following, as quoted directly from the Joint Statement:

•Public Short-term Net Carbon Footprint Targets

1) Shell has stated a long-term ambition to reduce its Net Carbon Footprint associated with the energy products it sells in step with society's drive to meet the goals of the Paris Agreement. Shell aims to reduce its Net Carbon Footprint by around half by 2050 and by around 20% by 2035 as an interim step.

2) To operationalise this long-term ambition, Shell will start setting specific Net Carbon Footprint targets for shorter-term periods (three or five years). The target will be set each year for the next three- or five-year period. The target setting process will start from 2020 and will run to 2050.

•Targets Linked to Remuneration

1) Taking into account the perspectives gained through its engagements with shareholders and other relevant stakeholders, Shell will incorporate a link between energy transition and long-term remuneration as part of its revised Remuneration Policy, which will be subject to a shareholder vote at the 2020 Annual General Meeting (AGM).

2) If approved at the AGM, the policy will include a Net Carbon Footprint-related measure, as well as other measures, to have a balance of leading and lagging performance metrics over a three- or five-year performance period. The measures for each performance period will be set on an annual rolling basis at the time of the award and will be subject to the annual remuneration target-setting process as well as to the final plan design. The measures and targets will evolve as time progresses over the years to 2050.

3) The final plan design is being discussed with shareholders, including details relating to the ap-

appropriate remuneration structure and appropriate measures and metrics.

• Review of progress

1) On an annual basis, Shell will publish an update on its progress towards lowering its Net Carbon Footprint. In the initial years, this disclosure will be made in the Sustainability Report, but with a commitment, in line with TCFD best practice, to integrate this into the Annual Report and Form 20-F as appropriate.

2) Shell will seek third-party assurance of its reported Net Carbon Footprint and assurance statements will be published on the Shell website. Shell will also continue to work closely with reputable institutions, such as the Transition Pathway Initiative (TPI), to help in their assessment of Shell's progress.

3) Every five years, Shell will review the updated Nationally Determined Contributions (NDCs) in line with the Paris Agreement mechanism, the updated scenarios on decarbonisation trajectories and any other developments to assess societal progress in the energy transition. The outcome of this review will be used to calibrate Shell's ambition and pace of change in line with that of society. The first such review is currently anticipated to take place after 2022.

• Alignment with the TCFD Recommendations

1) Shell has been an early supporter of the TCFD and will continue to support and promote the implementation of respective recommendations.

2) Shell will continue to disclose at relevant intervals in line with the TCFD recommendations. This includes the disclosure of its metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

3) During Management Day 2017, Shell disclosed potential ranges of developments in parts of its existing portfolio to achieve the NCF ambition. Shell will provide transparent and relevant updates through future Shell Energy Transition reports (or any related disclosure) as Shell's strategy evolves.

• Corporate Climate Lobbying

1) Shell acknowledges the "IIGCC Investor Expectations on Corporate Climate Lobbying" and recognises the importance of ensuring that its membership in relevant trade associations does not undermine its support for the objectives of the Paris Agreement on climate change.

2) Shell is undertaking a review of these memberships to assess alignment with the company's stated positions. The result of this review will be made public in Q1 2019.

3) Shell will continue to track and provide information about its trade association activities on climate change-related topics, areas of misalignment and the actions taken in that regard.

Investors Played a Key Role

According to the Joint Statement, institutional investors played a key role in this effort:

As institutional investors and in the context of the Climate Action 100+ initiative, we have engaged with Shell to further build on its ground-breaking Net Carbon Footprint ambition by setting short-term Net Carbon Footprint targets consistent with this ambition and integrating these targets into executive remuneration.

As long-term investors, we share the desire of the Board and management of the company to seek a positive future for the company, which is aligned to the goals of the Paris Agreement on climate change. This has been our motivation for this engagement.

Conclusion and Implications

The Joint Statement, including Shell's commitments described therein, may serve as a model for investor-led changes to corporate policies relating to climate change. The Joint Statement is available at the following location: <https://www.shell.com/media/news-and-media-releases/2018/joint-statement-between-institutional-investors-on-behalf-of-climate-action-and-shell.html>. The December 3, 2018 press release is available at the following location: <https://www.shell.com/media/news-and-media-releases/2018/leading-investors-back-shells-climate-targets.html>. (Nicole Martin)

PUBLIC HEALTH REPORT PROVIDES CLIMATE CHANGE IMPACTS, WARNINGS, AND HOPE FOR THE FUTURE

Several recent reports and studies have looked at the physical impacts of climate change, including sea-level rise and wildfires. A recent report published in the public health journal, *The Lancet*, considers the global health risks posed by climate change. That report, which is the “product of a collaboration of 27 leading academic institutions, the UN, and inter-governmental agencies from every continent,” is the 2018 *Lancet Countdown*.

Positive Climate Change Trends

The 2018 *Lancet Countdown* reviews seven of ten recommendations made in the 2015 *Lancet Countdown* and ultimately concludes that there is a reason for cautious optimism, but that substantially faster progress is needed over the next five years in order to meet the goals set forth in the landmark Paris Agreement. Updates of certain recommendations are summarized below:

Recommendation 1: Invest In Climate Change And Public Health Research

Since 2007, the number of published articles on health and climate change in scientific journals has increased by 182 percent

Recommendation 2: Scale Up Financing For Climate-Resilient Health Systems

Although national-level spending is increasing, climate financing for mitigation and adaptation remains well below the US \$100 billion per year that was committed in the Paris Agreement.

Recommendation 3: Phase Out Coal-Fired Power
Coal consumption remains high, but has continued to decline in 2017, a trend which is largely driven by China’s decreased reliance and continued investment in renewable energy.

Recommendation 4: Encourage City-Level Low-Carbon Transition To Reduce Urban Pollution
In 2017, a new milestone was reached, with more than two million electric vehicles on the road, and with global per-capita electricity consumption for road transport increasing by 13 percent from 2013

to 2015. China is responsible for more than 40 percent of electric cars sold globally.

Recommendation 5: Establish The Framework For A Strong And Predictable Carbon Pricing Mechanism

Although a global carbon pricing mechanism has seen limited progress, the proportion of total greenhouse-gas emissions covered by national and regional instruments is increasing from a low base.

Recommendation 9: Agree And Implement An International Treaty That Facilitates The Transition To A Low-Carbon Economy

In response to the USA’s announcement of its intention to withdraw from the Paris Agreement, the great majority of countries provided statements of support for the agreement, reaffirming their commitment to hold global average temperature rise to well below 2°C.

More Work To Do

The report’s conclusions about public information and political engagement on climate change are especially interesting. The report notes that both are crucial for action on climate change and that barriers to action on health change and climate change are generally societal, not technical.

The report makes three conclusions regarding public information and political engagement: 1) engagement in health and climate change has increased in the media and science over the past decade; 2) engagement remains partial and uneven, generally driven by individual regions and countries; and, 3) the rise in engagement represents a very small part of public and political engagement on climate change (for example, the report notes that a review of national newspapers and scientific journals shows that less than 5 percent of climate change coverage relates to health).

Ultimately, the report provides four key messages:

- Present day changes in heat waves, labour capacity, vector-borne disease, and food security provide early warning of the compounded and

overwhelming impact on public health that are expected if temperatures continue to rise. Trends in climate change impacts, exposures, and vulnerabilities show an unacceptably high level of risk for the current and future health of populations across the world.

- A lack of progress in reducing emissions and building adaptive capacity threatens both human lives and the viability of the national health systems they depend on, with the potential to disrupt core public health infrastructure and overwhelm health services.

- Despite these delays, a number of sectors have seen the beginning of a low-carbon transition, and it is clear that the nature and scale of the response

to climate change will be the determining factor in shaping the health of nations for centuries to come.

- Ensuring a widespread understanding of climate change as a central public health issue will be crucial in delivering an accelerated response, with the health profession beginning to rise to this challenge.

Conclusion and Implications

Recent reports and studies appear to focus on the physical impacts of climate change. The 2018 *Lancet Countdown* highlights the direct health-related impacts caused by climate change and provides recommendations to improve conditions in the future. (Kathryn Casey)

CLIMATE CHANGE SCIENCE

RECENT SCIENTIFIC STUDIES ON CLIMATE CHANGE

Achieving a Sustainable Food Future to Meet 2050 Climate Goals

The global population is expected to grow from 7 billion in 2010 to 9.8 billion in 2050, resulting in an increase in food demand by more than 50 percent and a demand for animal-based foods by nearly 70 percent. Left unchecked, the production of food could result in increases in greenhouse gas (GHG) emissions that would exceed the climate goal under the Paris Agreement of limiting global temperature rise to less than two degrees Celsius.

The World Resources Institute (WRI) released a synthesis report on their findings for achieving a sustainable food future. The challenge in feeding the growing population while at the same time meeting the climate goals can be described by closing three “gaps”: 1) The food gap—the difference between the amount of food produced in 2010 and the amount necessary to meet demand in 2050 (7,400 trillion calories), 2) The land gap—the difference between the agricultural land area in 2010 and the area required in 2050 if crop and pasture yields continue to grow at past rates (593 million hectares), and 3) The GHG mitigation gap—the difference between the annual GHG emissions from agriculture and land-use change in 2050 and the target required to keep global warming below 2 degrees Celsius (11 gigatons). To put into perspective the role of food production on GHG emissions, left unchecked, agricultural emissions are likely to be 70 percent of the total allowable emissions for all sectors by 2050.

The report develops a “menu of solutions” that addresses each of the gaps, organized into five “courses”:

- 1) Reduce growth in demand for food and other agricultural products. Important components of this course are making sure to reduce the loss and waste of food and shifting diets to reduce ruminant meat (e.g., beef and lamb) consumption.
- 2) Increase food production without expanding agricultural land. An issue with increased food pro-

duction is that it often encroaches on forest land, which can release carbon into the atmosphere. Important components of this course are to increase livestock and pasture productivity and improving crop yields.

- 3) Protect and restore natural ecosystems and limit agricultural land-shifting. This course includes reforestation of abandoned agricultural lands and limiting inevitable cropland expansion to lands with the lowest carbon and environmental costs per ton of crop.

- 4) Increase fish supply. Fish consumption has lower environmental impacts compared to consumption of beef and lamb. This course includes solutions for improving wild fisheries management and increasing aquaculture production.

- 5) Reduce GHG emissions from agricultural production. Many common agricultural practices have direct GHG emissions such as from fertilizer use and enteric fermentation. This course aims to reduce these direct emissions from agricultural production.

Researchers used the GlobAgri-WRR model to show how the menu of solutions proposed in the study can close the GHG mitigation gaps by 2050. The model quantifies food production and consumption from national diets, populations, and land-use demands and then estimates resulting GHG emissions.

See, T. Searchinger, R. Waite, C. Hanson, J. Ranganathan. *Creating a Sustainable Food Future: Synthesis Report*. World Resources Institute, 2018

Air Quality Co-Benefits Would Offset Costs of Achieving Paris Climate Agreement Targets

Most countries proposed National Determined Contributions (NDCs) at the Paris Climate Agreement to achieve a share of the greenhouse gas (GHG) reductions needed to reduce the impacts of

global climate change. The expected cost and stringency of the NDCs varies widely by country. Previous studies have assessed the climate-related benefits of reduced GHGs, such as avoided sea level rise and impacts from natural disasters. However, the benefits of GHG mitigation strategies are much higher if air quality co-benefits are also calculated.

Researchers at the European Commission, Joint Research Center; Spadaro Environmental Research Consultant; and Ecometrics Research and Consulting have evaluated the value of air quality co-benefits for climate change scenarios at a country-level scale. If all NDCs are achieved, the global temperature is still expected to increase by more than 2°C by 2100. Therefore, the researchers evaluated both a scenario that achieves all NDCs and a more stringent scenario that limits warming to 2°C. Costs and benefits are compared to a reference scenario that incorporates economic, population, and emissions growth consistent with currently-adopted policies.

The researchers projected scenarios for the impacts of climate policies on air pollutants including black carbon (BC), organic carbon (OC), sulfur dioxide (SO₂), nitrogen oxides (NO_x), particulate matter less than 2.5 microns in diameter (PM_{2.5}), and carbon monoxide (CO). Reductions in fossil fuel combustion that reduce GHGs also strongly reduce SO₂ and NO_x. Locally significant reductions in PM_{2.5} also occur, which lead to a corresponding global decrease in ozone (O₃). To evaluate health benefits, the researchers analyzed changes in concentrations of air pollutants that are linked to premature mortality and sick days or productivity. They used the value of a statistical life and labor market value to quantify the monetary benefits of the avoided mortality and improved productivity under each scenario in each country. To evaluate agricultural benefits, the most substantial benefits accrued to regions with both high O₃ reductions and highly ozone-sensitive crops. The agricultural market value was used to assess cost.

The air quality co-benefits of avoided premature mortality, reduced lost work days due to sickness, and improved agricultural yields more than offset the cost of climate mitigation policies over 2015-2050. Results varied by location, with very high co-benefits in countries such as China and India that have polluted air that is projected to remain polluted without major actions in the coming decades. The air quality co-benefits in those countries were valued over \$200

per metric ton of carbon dioxide equivalents avoided. The US has the potential for one of the highest benefits per capita due to agricultural co-benefits. This study highlights the benefits of fully integrated cost-benefit analyses for mitigation programs. Further studies could look at other co-benefits such as avoided wildfires and associated impacts, indoor air quality implications, and health-care expenditures or co-benefits for other diseases.

See Vandyck, T., et al. 2018. Air quality co-benefits for human health and agricultural counterbalance costs to meet Paris Agreement pledges. *Nature Communications*. DOI: 10.1038/s41467-018-06885-9

Ice Clouds and Global Climate Cooling

Clouds play an important yet complicated role in the climate system. Depending on cloud extent, type, color, and thickness, a cloud can either trap heat from escaping to space or block radiation from hitting the Earth's surface. According to the Intergovernmental Panel on Climate Change, the exact effect that clouds have on climate is the largest piece of uncertainty in modern climate models (Boucher *et al.*, 2013). Within the complex cloud problem, clouds made entirely of ice (ice clouds) pose an additional challenge because individual component ice crystals are tremendously diverse and difficult to study. The structure of the ice crystal and the roughness of its surface contribute directly to the cloud's ability to interact with light and radiation.

Researchers from Germany, France, Switzerland, China, and the USA performed a comprehensive analysis of ice crystals and their interaction with radiation. The study involved multiple in-situ measurements of clouds, extensive lab work, and detailed climate modelling. First, measurements of light scattering by ice crystals from natural clouds were taken over North America, Iceland, Europe, South America, and Oceania. Next, these measurements were compared against laboratory-created ice crystals to understand structural differences. From this, researchers determined that the majority (61-81 percent) of naturally occurring ice crystals are structurally imperfect. They then performed an analysis of how different ice crystals interact with light and found that these microscopic deformities enhance the crystal's ability to scatter light. Altogether, these results indicate that there are more ice crystals that are more effective cooling agents. As a final step, the team

added the enhanced scattering ability as a parameter in their climate model and found that these imperfect ice clouds reflected more radiation than prior estimations. Based on these models, the researchers predict that ice clouds may be able to reflect up to 1.12 Wm^{-2} globally. This is not tremendously large, compared to the global average 50 Wm^{-2} of radiation reflected by all clouds, but it does suggest that clouds may be a more powerful atmospheric cooler than previously estimated.

Unfortunately, as global climate and localized air quality change, the cloudscape will change too. With global temperature warming, it may become less favorable for ice clouds to form, reducing or eliminating the ability of ice clouds to shield the Earth's surface from incoming solar radiation. However, this study shows that ice clouds are more capable of slowing global warming than previously assumed, which can be incorporated into future climate models to refine uncertainty.

See, Järvinen, Emma, et al. Additional global climate cooling by clouds due to ice crystal complexity. *Atmospheric Chemistry and Physics*, 2018; DOI: 10.5194/acp-18-15767-2018

See also: Boucher, Olivier, et al. Clouds and Aerosols. In: *Climate Change 2013: The Physical Science Basis*, 2013.

Assessing the Efficiency of Land Use Changes for Climate Change Mitigation

Land use changes are vital climate policy considerations as soil and native vegetation sequester large amounts of carbon. The loss of this sequestration capacity from the expansion of agriculture as well as the emissions from agricultural production itself contribute between 20-25 percent of global greenhouse gas (GHG) emissions. Food demand is expected to grow by more than 50 percent by 2050, while most climate policy scenarios require maintaining or even increasing land-based carbon.

In this context, identifying efficient uses of land for both carbon storage and food production is critical to fulfill climate strategies. A recent study from researchers at the Princeton University Woodrow Wilson School of Public and International Affairs reports a

“carbon benefits index” to assess the efficiency of land use changes for climate change mitigation.

The index evaluates how changes to land use output types, output quantities, and production processes relate to GHG emissions and carbon storage potential. Thus, a “carbon efficient” land use is one that reduces GHG emissions or increases global carbon storage overall, but also meets global food demand.

The researchers applied the carbon benefits calculation to several relevant land use choices. For example, the authors assessed beef production-related grazing land changes in Brazil and found that improving grazing management practices in Brazil (from poor to medium quality) has the same carbon storage potential as planting one hectare of forest in Europe or the United States. The authors also looked at biofuel production-related land use changes in the United States and found that consumption of ethanol or biodiesel has double or triple the GHG emissions as gasoline or diesel over a 30-year period. These estimates are 6-14 times as high as estimates from California and European Commission economic modeling. The large impact of biofuel consumption is primarily influenced by the “carbon opportunity cost” of replacing crops with bioenergy feedstocks.

By defining the concept of “carbon benefit,” the study offers a refinement over existing land use discussions related to climate, which tend to assume that land only offers climate benefits insofar as it sequesters carbon or is used for biofuel production. Instead, this approach highlights how all efficiency improvements result in climate benefits. The study authors emphasize the need to increase both the efficiency of production and the efficiency of consumption, which are likely separate policy efforts. However, the carbon benefits index does not include related land use considerations for decision-makers, including biodiversity or other ecological impacts.

Timothy D. Searchinger, Stefan Wirsenius, Tim Beringer, Patrice Dumas. Assessing the efficiency of changes in land use for mitigating climate change. *Nature*, 2018; 564 (7735): 249 DOI: [10.1038/s41586-018-0757-z](https://doi.org/10.1038/s41586-018-0757-z) (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 December 18, 2018, the U.S. Department of Justice (DOJ) announced that IAV GmbH, a German company that engineers and designs automotive systems, has agreed to plead guilty to one criminal felony count and pay a \$35 million criminal fine as a result of the company's role in the Volkswagen AG scheme to sell diesel vehicles in the United States containing a defeat device to cheat on U.S. vehicle emissions tests. IAV is charged with and has agreed to plead guilty to one count of conspiracy to defraud the United States and Volkswagen's customers and to violate the CAA by misleading the U.S. Environmental Protection Agency (EPA) and U.S. customers and whether VW and Audi-branded diesel vehicles complied with U.S. vehicle emissions standards. IAV and its co-conspirators knew the vehicles did not meet U.S. emissions standards, worked collaboratively to design, test, and implement software to cheat the U.S. testing process. IAV was also aware that VW concealed material facts about its cheating from federal and state regulators and U.S. customers. Under the terms of the plea agreement, IAV will plead guilty to this crime, will serve probation for two years, will be under an independent corporate compliance monitor who will oversee the company for two years, and will fully cooperate in the DOJ's ongoing investigation and prosecution of individuals responsible for these crimes. IAV's \$35 million fine was set according to the company's inability to pay a higher fine amount without jeopardizing its continued viability.

- On December 12, 2018, EPA announced a proposed settlement with Tradebe Treatment and Recycling Northeast, LLC that resolved alleged violations of the Clean Air Act (CAA) and the Resource

Conservation and Recovery Act (RCRA) at the company's hazardous waste treatment, storage, and disposal facilities in Meriden and Bridgeport, Connecticut. The proposed settlement requires Tradebe to pay a \$525,000 civil penalty and maintain full compliance with its RCRA permits and applicable hazardous waste laws, including RCRA air pollution control regulations. Both facilities will spend at least \$920,000 to maintain compliance with the facilities' air permits and install new air emission control systems to permanently replace their current control systems in order to better control hazardous waste air pollutants and volatile organic compounds (VOCs). In 2015, EPA conducted a RCRA inspection of Tradebe's Meriden facility and conducted CAA inspections at both facilities. Also in 2015, the Connecticut Department of Energy and Environmental Protection conducted a RCRA inspection of the Bridgeport facility and issued a state RCRA notice of violation after identifying potential violations there. EPA subsequently issued a RCRA notice of potential violation to the Meriden facility and issued a CAA notice of violation to both facilities. Tradebe has already addressed and corrected the alleged RCRA violations that EPA and the State of Connecticut identified during their inspections of the company's two facilities. Tradebe also obtained new air permits at the facilities to comply with the CAA.

- On November 14, 2018, Hyundai Construction Equipment Americas Inc. pled guilty and was sentenced in federal court in Atlanta, Georgia to pay a \$1.95 million criminal fine for conspiring to defraud the U.S. government and to violate the CAA. The charges relate to construction equipment Hyundai imported for sale into the U.S. from the Republic of Korea that contained engines that did not comply with CAA air emissions standards. Hyundai imports construction and other equipment into the U.S. and sells it to its dealer network. During a phase-in period for new air emissions standards, Hyundai opted to participate in a transition program that allowed it

to import limited numbers of engines not in compliance with the new standards. As part of the program, Hyundai had to report the number of imported noncompliant engines to EPA. Hyundai's imports of noncompliant engines substantially exceeded its allowance. A consultant retained by Hyundai to provide advice about complying with the requirements warned the company that it was out of compliance and that it risked a substantial penalty. The consultant advised Hyundai to stop importing and notify EPA, though Hyundai continued to import the noncompliance engines and its employees conspired to lie to EPA and impede EPA's ability to enforce the emission standards. Ultimately submitted a report that intentionally understated the number of non-compliant engines it had imported from Korea.

- On December 14, 2018, EPA announced a settlement with Georgia-Pacific Chemicals LLC and Georgia-Pacific Consumer Operations LLC of alleged violations of the CAA. The complaint against Georgia-Pacific alleged that the violations occurred at the companies' paper and chemical products facilities in Crossett, Arkansas. Under the settlement, Georgia-Pacific is required to take steps to correct the violations, implement a mitigation project to reduce hydrogen sulfide (H₂S) emissions, and implement three supplemental environmental projects to further control H₂S. The companies will pay a \$600,000 civil penalty to the United States and the Arkansas Department of Environmental Quality. The complaint and settlement are the result of an EPA inspection of the Crossett, Arkansas facilities in 2015. The inspection revealed a lack of air pollution controls at two wood pulp washers at the facilities. Georgia-Pacific will install the appropriate controls on its washers, update leak-control and compliance-monitoring procedures, and conduct emissions and performance testing on other control systems. The measures required by the settlement are designed to achieve reductions of hazardous air pollutants released from the facilities. Georgia-Pacific has also installed a \$2.9 million mitigation project to reduce H₂S emissions and odors from its wastewater discharges. Georgia-Pacific will spend approximately \$2 million to reduce the potential for H₂S emissions from the companies' processes and establish air monitoring for H₂S along the fence line of the facilities for at least three years.

, with monitoring data available to the public in real time online.

- On November 21, 2018, EPA announced settlements with seven companies across New England for alleged violations of the CAA and other laws, related to refrigeration and cooling units using anhydrous ammonia. Collectively, the seven companies will spend more than \$750,000 to comply with the applicable laws and pay more than \$580,000 in civil penalties. Among the settlements, Finicky Pet Food, Inc. of New Bedford, Massachusetts will pay a \$89,140 penalty and provide almost \$100,000 worth of protective clothing to the New Bedford fire department and certify to EPA that it is in compliance with federal clean air laws. EPA alleges that Finicky violated the CAA General Duty Clause requirements in relation to its ammonia refrigeration systems that have less than 10,000 pounds of ammonia, by failing to properly assess the refrigeration system for hazards, maintain and label piping and equipment, appropriately store combustible materials, and have adequate ventilation and ammonia alarms. The company also failed to annually report the presence of hazardous chemicals to emergency response and planning agencies under the Emergency Planning and Community Right-to-Know Act (EPCRA). McCain Foods USA, Inc. will pay a \$225,000 penalty for alleged violations of the CAA chemical accident prevention regulations, or risk management planning rule, and EPCRA. McCain Foods produces frozen potato products and uses anhydrous ammonia in two refrigeration processes at its Easton, Maine facility and stores more than 10,000 pounds of ammonia, the threshold for the risk management planning rule. McCain will be required to work with local emergency responders on a plan to notify local Amish residents in the event of an ammonia release. Twenty-Five Commerce, Inc. of Norwalk, Connecticut has agreed to correct alleged violations of the Comprehensive Emergency Response, Compensation and Liability Act (CERCLA) and EPCRA and pay a \$27,095 penalty. Twenty-five Commerce failed to notify the National Response Center of an ammonia release under CERCLA and failed to submit required reports to emergency response and planning agencies under EPCRA after a 2016 ammonia release was detected by employees of a neighboring company. Twenty-Five Commerce was

also not meeting standards of care under the CAA General Duty Clause. Guida-Seibert Dairy Company will pay a \$157,214 penalty to settle allegations that the company violated the CAA risk management planning rule and chemical release reporting requirements of CERCLA. After EPA inspected the New Britain, Connecticut dairy, a clamp truck accidentally ran into ammonia feed line, causing an ammonia release. The Maine Wild Blueberry Company has agreed pay a \$53,000 penalty to settle allegations that it violated the CAA risk management planning rule at its blueberry processing plant and cold storage warehouse in Machias, Maine. One of EPA's concerns was that the nearest team of emergency responders with the training needed to enter buildings during an

ammonia release was located hours away. After the inspection, the company made changes to ensure local fire fighters would never have to enter the facility to turn off key equipment and ventilate ammonia. New England Sports Management Corporation will pay a \$24,263 penalty to settle claims that the company had not completed a required hazard review or submitted reports notifying emergency responders about the presence of ammonia at its ice skating rink complex in Marlborough, Massachusetts. High Liner Foods (USA), Inc. will pay \$7,200 for alleged violations of the CAA risk management planning rule at its cold storage warehouse in Portsmouth, New Hampshire.

(Allison Smith)

REGULATORY DEVELOPMENTS

INDEPENDENT SYSTEM OPERATORS AND REGIONAL TRANSMISSION ORGANIZATIONS SUBMIT ENERGY STORAGE COMPLIANCE PLANS TO FERC AHEAD OF PARTY COMMENTS

As required by the Federal Energy Regulatory Commission's (FERC) unanimous Order 841, issued this past February, Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs) submitted their much anticipated compliance plans on December 3, 2019, mapping out new rules to facilitate greater and non-discriminatory access of energy storage resources to the wholesale electric market. With the RTO and ISO plans now submitted, parties have until December 24 to review and submit comments. This is widely seen as the first step of a long process in making energy storage resources more widely accessible, lowering costs, and helping states looking to achieve renewable energy goals.

Background

When it issued, Order 841 was widely hailed as a landmark ruling that would "open the floodgates" for energy storage participation in wholesale power markets. The overarching goal of Order 841 is to encourage and increase the use of energy storage resources in the wholesale electric market. Doing so will drive down energy prices and the costs of energy storage, while also helping states meet their clean-energy goals.

Specifically, Order 841 requires that RTOs/ISOs develop rules that must:

- Ensure that an energy storage resource can provide all the services it is technically capable of providing,
- Ensure that an energy storage resource can be dispatched and can set market clearing prices as both a buyer and a seller,
- Account for the physical and operational characteristics of storage resources through bidding parameters or other means,

- Establish a minimum size for participation in RTO/ISO markets that does not exceed 100 kW, and
- Specify that the sale of electricity from the RTO/ISO markets to a storage resource that the resource resells must be at the wholesale locational marginal price.

Such modifications mean that there will now be storage-specific bidding parameters, and will allow for market participation of storage assets as both supply and demand resources. Altogether, these measures will act as a necessary market complement to the increasing regulatory mandates for greater reliance on renewable energy resources, and even for energy storage. Integrating energy storage resources into the wholesale market is crucial to scaling the resource, and also to smoothing over the reliability of intermittent renewable energy resources such as wind or solar.

Compliance Filings

The compliance filings submitted to FERC in December total over 2,500 pages of material and will take significant time to process and review. In fact, some parties have already sought an extension of the December 24 deadline to respond. Given the complexity of the plans and the work that will need to be done to implement the proposed modifications, at least one RTO, PJM Interconnection, has requested that FERC provide an early ruling, as soon as February 1, 2019, on the plans to allow the RTOs and ISOs time to comply.

Conclusion and Implications

With the compliance filings submitted on December 3, 2018, actual implementation is expected three-hundred and sixty-five days thereafter, give or take some time for additional motions, requests for rehearing, and FERC review. While this is only the start-

ing point of what will be a long process in making energy storage a more widely used and less expensive energy resource, it is widely seen as a crucial measure,

particularly as states—including California and more recently Washington—set goals of achieving 100 percent renewable energy resource supply by 2045. (Lilly McKenna)

CALIFORNIA PUBLIC UTILITIES COMMISSION ISSUES DECISION ADJUSTING CALCULATION METHODOLOGY FOR EXIT FEES CHARGED TO CUSTOMERS—REHEARING SOUGHT

California regulators have been grappling with how to address the rapid development of Community Choice Aggregators (CCAs), which are local, government-run programs that procure energy on behalf of local residents, and the corresponding departure of customer base from investor-owned utilities (IOUs). In October, the California Public Utilities Commission (CPUC or Commission) issued a controversial decision that adjusts the calculation methodology for the exit fee, also known as the Power Charge Indifference Adjustment (PCIA), that is charged to CCA customers in rates upon leaving IOU service. The adjustment, as refined in the Commission decision, results in increased costs for CCAs and it represents a departure from the initial Decision that was issued in August by the Assigned Administrative Law Judge overseeing the proceeding.

On November 19, 2018, several groups, including a number of CCAs in addition to environmental and industry advocacy groups, sought rehearing of the Commission’s final decision.

Background

Investor-owned utilities have traditionally procured energy contracts for customers, in addition to owning and developing the infrastructure that distributes this energy to customers. Over the past several years, however, California has seen rapid and widespread growth of CCA networks across the state. CCA-enabling legislation has been on the books in California since 2002 (AB 117, 2001 and SB 790, 2011) but has more recently gained steam, particularly with a focus on meeting local needs and delivering clean energy resources to customers. This sudden departure in IOU’s customer-base, coupled with its statutory duty to remain a “provider of last resort”, raises a number of policy and legal issues for consideration.

The challenge recently put to the Commission in its Rulemaking 17-06-026, is how to reconcile the costs that IOUs have already incurred, largely through long-term contracts that were procured as a result of the 2001 energy crisis, such that the remaining customer base is not unfairly burdened with higher rates to absorb long-term costs and to do so across a diminished customer base. Since the cost of renewable energy has decreased significantly over the years, CCAs also benefit from their ability to procure new energy contracts at more competitive pricing levels on behalf of their new customer base, rather than the older, long-term contracts that IOUs previously entered into, often at the direction of the Commission.

Codification of ‘Cost Indifference’ in SB 350

In 2015 the Legislature codified this “cost-indifference” task in its enactment of SB 350, which added §§ 365.2 and 3.66.3 to the Public Utilities Code to make explicit the dual requirements that 1) customers that remain with bundled IOU service do not experience any cost increases when other retail customers elect to join CCA networks, and 2) that customers who depart for CCA service do not experience any cost increases due to an allocation of costs that were not incurred on behalf of the departing load.

The Power Charge Indifference Adjustment

The Power Charge Indifference Adjustment (PCIA) is intended to capture this concept of a customer cost-indifference. The November Commission decision made a number of adjustments to the PCIA methodology that ultimately result in raising the PCIA price, and thus increasing the costs for CCA customers. For example, the Commission decision ultimately chose to include Legacy Utility Owned

Generation (UOG) costs in the PCIA, a departure from the Administrative Law Judge's Proposed Decision. The Commission also adopted a PCIA cost cap to limit the change from one year to the next, and it declined to adopt a time limit or to "sunset" the PCIA obligation. The Commission decision added a true-up mechanism to increase the accuracy of the PCIA cost allocation between bundled IOU customers and departing load customers joining CCAs.

Concurrent with the 17-06-026 Rulemaking proceeding, the Commission has held a number of *en bancs* to engage stakeholders, experts, and California Energy Commission staff on how to address the changing electric market, particularly with the onset of CCA providers.

Conclusions and Implications

Overall, the final decision is seen as very favorable to the IOUs. CCAs and industry groups seeking rehearing must show the Commission decision to be unlawful or erroneous: "The purpose of an application for rehearing is to alert the Commission to a legal error, so that the Commission may correct it expeditiously." (Rule 16.1 California Code of Regulations Title 20, Division 1, Chapter 1) While the parties await a decision on the rehearing application regarding the PCIA, many other important issues impacting CCA growth will continue—for example, the next phase of the Commission Rulemaking 17-06-026. (Lilly McKenna)

LEGISLATIVE DEVELOPMENTS

DISTRICT OF COLUMBIA MOVES TOWARD ONE HUNDRED PERCENT RENEWABLES BY 2032 WITH ‘CLEAN ENERGY OMNIBUS AMENDMENT ACT’

On December 18, 2018, the Council of the District of Columbia adopted the Clean Energy D.C. Omnibus Amendment Act of 2018 (Act), which will require the city to transition its electric supply to 100 percent renewable sources by 2032. The bill was adopted unanimously during its second and final reading and is widely considered one of the most ambitious efforts undertaken by a state or local government to reduce carbon emissions.

Background

The Act was introduced on July 10, 2018 as an amendment to the District’s Renewable Energy Portfolio Standard Act of 2004, which required the District’s Public Service Commission:

. . .to implement a renewable energy portfolio standard [applicable to all District retail electricity sales] through which a fixed percentage of electric provider’s supply source would be from renewable energy.

The portfolio standard was tied to certain categories of renewables. A “tier one renewable source” is defined as one or more of the following types of energy sources: i) solar energy; ii) wind; iii) qualifying biomass; iv) methane from the anaerobic decomposition of organic materials in a landfill or wastewater treatment plant; v) geothermal; vi) ocean, including energy from waves, tides, currents, and thermal differences; and vii) fuel cells producing energy from a tier one renewable source from specified tier one renewable sources. A “tier two renewable source” is defined as one or more of the following types of energy sources: i) hydroelectric power other than pumped storage generation; or ii) waste-to-energy.

In order to meet the renewable portfolio standard, the 2004 Act requires electricity suppliers to obtain “renewable energy credits,” as that term is defined, equivalent to the specified percentage for each electricity product sold at retail by the supplier. Prior to

the adoption of the 2018 amendment, the District’s standard required 50 percent renewables by 2032. The 2018 Act doubles that target.

Key Provisions of the Bill

Key provisions of the 2018 Act are summarized below:

- Increases the renewable energy portfolio standard to 100 per from tier one renewable sources, and not less than 5.5 percent from solar energy specifically, by 2032;
- Establishes new targets for years after 2032, ramping up the percentage required from solar energy to 10 percent in 2041 and thereafter;
- Establishes a building energy performance standard program at the Department of Energy and Environment;
- Requires that by January 1, 2020, the Department of General Services (DGS) must develop a “strategic energy management plan for reducing energy and water use across the DGS portfolio of buildings”;
- Amends the District of Columbia Traffic Act to require adoption of regulations tying the vehicle excise tax to fuel efficiency;
- Requires preparation of “a comprehensive clean vehicle transition plan outlining strategies that will encourage and promote the adoption of zero-emission vehicles by drivers in the District”; and
- Authorizes the Mayor to commit the District to participation in regional programs with the purpose of limiting greenhouse gas emissions from the transportation sector and impose fees on motor fuel sales or distribution, with certain limitations.

Conclusion and Implications

The Clean Energy D.C. Omnibus Amendment Act of 2018 is indicative of ongoing efforts by states and municipalities to tackle climate change at the lo-

cal level. Additional information about Act is available at the following location: <http://lims.dccouncil.us/Legislation/B22-0904?FromSearchResults=true>. (Nicole Martin)

CALIFORNIA LEGISLATURE PASSES NEW GREENHOUSE GAS STANDARDS FOR UBER, LYFT AND OTHER RIDE-SHARING PLATFORMS

Uber and Lyft are on the verge of estimated \$120 billion and \$15 billion IPOs, respectively, in 2019. Uber has completed over 10 billion rides and recently Lyft announced that it hit 1 billion rides. Recognizing the increased role that companies like Uber® and Lyft® play in our lives, in 2018 the California Legislature passed SB 1014, which was signed into law by Governor Brown.

SB 1014 creates the California Clean Miles Standard and Incentive Program and establishes new greenhouse gas emissions (GHG) standards for transportation network companies (TNC) like Uber and Lyft. Some have opined that SB 1014 generally mandates Uber, Lyft and other TNCs to purchase zero emissions vehicles (ZEV).

Uber, Lyft and Electric Vehicles

According to a California Senate Rules Committee bill analysis on SB 1014, TNCs:

...are attracting passengers away from public transit, biking, and walking while increasing the number of carbon-combustion vehicles on the road.

One study estimated that between November 2016 and October 2017 TNC operations produced emissions equivalent to the annual energy use of 100,000 households. The same study opined that increased use of electric vehicles (EV) could help the state of California reach their goal of 5 million ZEVs by 2030. SB 1014's proponents also hope that it will encourage ride-sharing, like UberPOOL and Lyft Line. UberPOOL and Lyft Line connect clients with other passengers with the same route or location, thereby encouraging carpooling and lowering GHG emissions.

When talking about EVs, Uber's global head of

sustainability, Adam Gromis, has said:

It's hard to drive an electric vehicle for Uber today [because] Drivers spend a lot of time worrying about whether they can finish the ride without running out of charge, and a lot of time looking for charging stations and charging the vehicles.

Uber was neutral on SB 1014 while Lyft opposed it contending that it could have a negative impact on low-income and part-time drivers who use Lyft to supplement their incomes, a contention that the bill's sponsor, Senator Nancy Skinner, rejected. Others also challenged Lyft's position arguing that since Lyft has an official goal of all electric autonomous vehicles operating on the Lyft platform, that by itself would remove low-income and part-time drivers from the Lyft platform.

Lyft co-founder John Zimmer has also said in interviews that owning a car will not make any sense by 2025 with companies like Lyft potentially offering monthly ride subscriptions. Mr. Zimmer has also opined that in the future some cities will only allow autonomous vehicles in certain parts of their cities.

SB 1014 Requirements

SB 1014 includes requirements for the California Air Resources Board (CARB) and TNCs. Specifically, SB 1014 includes the following:

- 1) Requires CARB to establish a per-passenger, per-mile GHG emission baseline for TNC vehicles by January 1, 2020.
- 2) Requires CARB to adopt by 2021, targets and goals to reduce TNC vehicles' GHG emissions below the baseline by 2023.

3) The targets and goals established by CARB must be feasible and consistent with existing state ZEV deployment goals.

4) The targets and goals established by CARB must include annual goals for increasing the use of ZEVs in TNC travel.

5) Beginning January 1, 2022, and every two years thereafter, TNCs must develop a GHG reduction plan that include proposals on how to meet the targets and goals for reducing GHG emissions established by CARB.

With respect to ride-sharing, a Senate Rules Committee analysis also recognized that driver income, driver turnover, and ZEV infrastructure limitations

may limit the degree to which ZEVs are used. Therefore, SB 1014 also directs CARB, the Public Utilities Commission and the Energy Commission to ensure that ongoing state efforts to accelerate the adoption of ZEVs and charging infrastructure consider the goals of the California Clean Miles Standard and Incentive Program.

Conclusion and Implications

The increase in the use of TNCs is clear and the state of California appears to see them as an added resource toward its goal of 5 million ZEVs by 2030. It will be interesting to see how CARB establishes the greenhouse gas emission baseline and how TNCs respond in their greenhouse gas reduction plans. (Kathryn Casey)

JUDICIAL DEVELOPMENTS

D.C. CIRCUIT ASSIGNS TO JUDICIAL MERITS PANEL, MOTIONS IN CALIFORNIA'S FIGHT AGAINST TRUMP ADMINISTRATION'S ROLLBACK OF GREENHOUSE GAS EMISSION STANDARDS

California v. U.S. Environmental Protection Agency, Case No. 18-1114 (D.C. Cir. Nov. 21, 2018).

On November 2018, the U.S. Court of Appeals for the District of Columbia (D.C. Circuit) issued an order referring motions to dismiss filed by the U.S. Environmental Protection Agency (EPA) and two automobile manufacturer trade associations to a three-judge merits panel. Seventeen states, led by California, alongside the District of Columbia and petitioners of three consolidated cases (petitioners), sought the court's review of EPA's decision to revise optimistic regulations implemented by the Obama administration regarding greenhouse gas (GHG) emissions and fuel economy standards for vehicles. These regulations were the previous administration's attempt to lessen or slow down the impacts of climate change and air pollution. The motions to dismiss generally alleged that the D.C. Circuit lacks jurisdiction to review the petition because 1) the "Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light-Duty Vehicles," 83 Fed. Reg. 16,077-87 (Apr. 13, 2018) (Revised Mid-term Evaluation) did not constitute a "final agency action"; 2) the petition is unripe; and 3) petitioners lack standing.

Greenhouse Gas Emission and Fuel Economy Standards

In 2010, the EPA and the National Highway Traffic Safety Administration (NHTSA) issued regulations to set greenhouse gas emission and fuel economy standards for light-duty vehicles for model years 2012 through 2016. See, "Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards," 75 Fed. Reg. 25,324 (May 7, 2010) (2010 Regulation). The 2010 Regulation responded to the dire need for reductions of GHG emissions and improvements in fuel economy from cars in order to reduce air pollution endangering public health and welfare. Most notably, the 2010 Regulation established a National Program of unified

and harmonious standards relating to GHG emissions and fuel economy of light-duty vehicles. Before this National Program, the automotive industry was faced with several different federal or state agencies regulating the same aspects of motor vehicle performance.

In 2012, federal agencies reinforced their commitment to the National Program by establishing and finalizing regulations similar to those in 2010 for light-duty vehicles covering model year 2017-2025. See, "2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards," 77 Fed. Reg. 62,624 (Oct. 15, 2012) (2012 Regulation). Acknowledging that they were setting regulations for model years in the far future, EPA required a midterm evaluation to review the appropriateness of the 2012 Regulation's standards and goals for reducing GHG emissions and fuel economy (Midterm Evaluation). By April 2018, the EPA and National Highway Traffic Safety Administration (NHTSA) were required to evaluate the appropriateness of the 2012 Regulation with updated information, including, but not limited to, the effectiveness and costs of fuel-saving technologies, the price of gasoline, and consumer demand for vehicles with higher fuel economy. Based on the information gathered, EPA would make a final rule concerning whether its 2012 Regulation remained appropriate or should be adjusted.

The Midterm Evaluation

After undergoing a comment-and-review period, in January 2017, approximately 16 months before its April 2018 deadline to complete the Midterm Evaluation, the federal agencies concluded that the standards within the 2012 Regulation were appropriate based on present-day facts and would be maintained for the model year 2022-2025 vehicles (2017 Final Determination).

The Midterm Evaluation—Revised?

The automotive industry and trade associations objected to EPA's analysis and conclusions contained in its 2017 Final Determination. Several carmakers and stakeholders found the 2012 Regulation for future model years to be too stringent and costly. With the new Trump Administration at the helm, in March 2017, EPA announced it would reopen the Midterm Evaluation and reconsider the 2017 Final Determination.

Subsequently, EPA published a revised Midterm Evaluation, concluding differently than in its 2017 Determination. 83 Fed. Reg. at 16,077 (Revised Midterm Evaluation). Namely, the Revised Midterm Evaluation determined that the 2012 Regulation was not appropriate and should be revised. EPA announced it would initiate a rulemaking process to further consider appropriate GHG emission standards for the future model years. The Revised Midterm Evaluation commenced the filing of the petition by the states in the D.C. Circuit.

The Motions to Dismiss

In May 2018, petitioners requested the D.C. Circuit review the Revised Midterm Evaluation. Specifically, whether the Revised Midterm Evaluation was arbitrary and capricious, an abuse of discretion, and otherwise not in accordance with the EPA's statutory obligations pursuant to the Clean Air Act, 42 U.S.C. § 202(a)(1), the Administrative Procedure Act, EPA's own regulations, and other relevant law.

Two months after petitioners commenced the lawsuit, the EPA and trade associations (respondents) quickly filed their motions to dismiss. The motions largely alleged the same facts and grounds for dismissal. The respondents argued: 1) the Revised Midterm Evaluation was not a "final agency action," and thus, not justiciable at that time; 2) the petitions were unripe; and 3) petitioners lack standing.

Final Agency Action, Ripeness, and Standing

EPA argued that the Revised Midterm Evaluation was not the consummation of the EPA's decision-making process. Instead, the Revised Midterm Evaluation was merely a decision to initiate a notice-and-comment rulemaking process, without making a determination of what outcome of that rulemaking

process will be. Based on its interlocutory and tentative nature, EPA argues that the Revised Midterm Evaluation was not a final action, and the D.C. Circuit lacks jurisdiction to review the Revised Midterm Evaluation at this time. EPA further contends that petitioners must allow the agency to undergo and conclude an additional rulemaking process, pursuant to the Revised Midterm Evaluation, for new standards before a petition of this nature can be filed.

Largely for the same reasons, respondents, the automotive and trade associations, believe the petitions are not ripe for review and that the:

...administrative process is threatened by piecemeal review of substantive underpinnings of a rule, and judicial economy is disserved because judicial review might prove unnecessary if persons seeking such review are unable to convince the agency to alter a tentative position. *Am. Petroleum Inst. v. U.S. EPA*, 683 F.3d 382, 387 (D.C. Cir. 2012) (quoting *Abbot Labs v. Gardner*, 387 U.S. 136, 149 (1967)).

Respondents further contend that petitioners lack standing because they cannot identify any injury traceable to the Revised Midterm Evaluation, nor can they establish that any injury would likely be redressed by a favorable decision.

Petitioners' Opposition to Motion to Dismiss

Petitioners argue that the Revised Midterm Evaluation was a final agency action; namely, that EPA definitively determined that the GHG emission standards should be revised. Petitioners deny EPA's "interlocutory" or "tentative" characterization of the Revised Midterm Evaluation. According to petitioners, the EPA unequivocally concluded:

[T]he current [greenhouse gas] emission standards for model year 2022-2025 light-duty vehicles presents challenges for auto manufacturers due to feasibility and practicability, raises potential concerns related to automobile safety, and results in significant additional costs on consumers. 83 Fed. Reg. at 16,078.

Petitioners also point to EPA's conclusion that it would not be "practicable" to meet the 2012 Regulation standards without a "significant electrification

and other advance vehicle technologies that lack a requisite level of consumer acceptance.” 83 Fed. Reg. at 16,081.

EPA August 2018 Proposal

In the midst of briefing for the motions to dismiss, the EPA issued a proposed new rule for GHG emissions and fuel economy standards for light-duty vehicles for model years 2021 through 2026 (2018 Proposal). The 2018 Proposal would supersede standards within the Revised Midterm Evaluation and freeze GHG emission regulations after model year 2020 vehicles, instead of increasing them through 2025 vehicles pursuant to the 2012 Regulation. According to EPA, the 2018 Proposal utilizes a new analysis and updated information regarding GHG emissions.

Additionally, the 2018 Proposal attempts to withdraw California’s longstanding authority to set its own GHG emission regulations, which have been more stringent than federal regulations (California Waiver). Twelve other states have adopted California’s standards as their own.

The respondents referred to the 2018 Proposal in its briefing for the motions to dismiss, but due to the scope of the petition, no further briefing was providing on the 2018 Proposal thus far.

The Merits Panel

The Court of Appeals ordered the motions to dismiss to come before a merits panel, which is an indicator of the D.C. Circuit’s hesitance to accept EPA’s jurisdictional arguments outright. The three-judge

panel will consider the merits of each party’s arguments with additional briefing, with direction by the Court for the parties to address and analyze the issues rather than incorporate arguments in prior briefs by reference.

Conclusion and Implications

With the 2018 Proposal seeking to supersede the Revised Midterm Evaluation, revise the National Program, and revoke the California Waiver, the automobile industry may face uncertainty as to the standards to which its model year 2020 and future vehicles should adhere to. It is possible that the 2018 Proposal, after undergoing its comment-and-review period, may create different automobile markets within the United States—one for states with more stringent regulations concerning GHG emissions, and another for states adhering to the broader federal standards pursuant to the 2018 Proposal.

Additionally, a mootness argument can be made regarding the need to review the Revised Midterm Evaluation. It is presently unclear how the 2018 Proposal will impact the current review of the Revised Midterm Evaluation before the merits panel. EPA asserts that the 2018 Proposal is a *de novo* rulemaking process that is independent of the 2012 Regulation and Revised Midterm Evaluation, and will ultimately supersede any regulation concerning GHG emission and fuel economy standards.

For more information regarding the 2018 Proposal, visit <https://www.federalregister.gov/d/2018-16820> (Nicolle A. Falcis, David D. Boyer)

DISTRICT COURT CONFIRMS THE RIGHTS OF CITIZENS TO COMPEL THE ENFORCEMENT OF THE CLEAN AIR ACT WHEN EPA DOES NOT ACT

Committee for a Better Avrin v. Andrew Wheeler,
___F.Supp.3d___, Case No. 4:18-cv-05700 (N.D. Cal. Oct. 24, 2018).

The federal Clean Air Act creates a “cooperative federalism” arrangement by which the U.S. Environmental Protection Agency (EPA) works with state air quality agencies to remedy air pollution. In summary, this arrangement requires the EPA to identify areas that exhibit unacceptable levels of air pollution and then work with states to ensure they develop and

implement plans to address the air pollution within a specific timeline. However, if the EPA fails to meet its statutory obligations to require state agencies to address air pollution in a timely matter, citizens can seek a court order to compel action. (42 U.S.C. § 7604(a)(2)).

In *Committee for a Better Avrin v. Andrew Wheeler*,

the U.S. District Court for the Northern District of California found that the EPA failed to meet its enforcement obligations under the Clean Air Act with respect to air pollution in the San Joaquin Valley. Thus, the court ordered the EPA to take specific steps to require California to meet its Clean Air Act obligations. This case demonstrates the process by which citizens can take action to ensure enforcement of the Clean Air Act when the EPA does not.

The Clean Air Act Process for Addressing Air Pollution

To address air pollution throughout the country, the Clean Air Act creates a multi-step process that requires the EPA to develop clean air standards, identify areas that are not in compliance, and require states to develop and implement plans to remedy the pollution. First, the Act requires the EPA to develop National Ambient Air Quality Standards (NAAQS) that generally establishes the allowable concentration of specific air pollutants applicable nationwide. 42 U.S.C. §7409(a). The EPA is then charged with assessing the nation's air quality and identify any specific areas that do not meet the NAAQS standards. 42 U.S.C. §7407(d)(1).

For areas that are not in compliance with the NAAQS, states must develop a specific plan to bring the area into compliance, known as a nonattainment State Implementation Plan (SIP). 42 U.S.C. §7407(a). The EPA is charged with enforcing the SIP requirements through a three-step process set forth in the Clean Air Act.

First, the EPA designates any area in noncompliance with the applicable NAAQS as a "Moderate Area" which requires the state to submit a SIP within 18 months to bring the area to compliance within six years. 42 U.S.C. §7513(a). Second, if the EPA determines that the area in question cannot be remediated within the 18 month timeline for Moderate Areas, the EPA must reclassify the area as a "Serious Area." 42 U.S.C. §7513(b)(1). This Serious Area classification extends the remediation timeline to ten years but the state must implement stricter pollution prevention and control measures. 42 U.S.C. §7513(c)(2). As with the Moderate Areas, states must submit the SIP within 18 months after the reclassification to a Serious Area. 42 U.S.C. §7513(b)(2).

Third, if a Serious Area does not meet the NAAQS by the required remediation date, the EPA must require the state to submit a revised SIP within

12 months. 42 U.S.C. §7513(a)(d). This revised SIP plan must reduce air pollution emissions by at least 5 percent annually until the air meets the NAAQS standards.

Thus, the Clean Air Act creates a system that relies heavily on state agencies developing and implementing specific plans, in the form of SIPs, to address air pollution. However, the EPA is required to implement the three-step process by identifying non-compliance areas, reviewing state SIPs, and ensuring states implement the SIPS to achieve compliance.

If a state fails to submit a SIP within the timelines set forth in any of the three steps, the EPA is required to make a "finding of failure to submit" by publishing a notice in the Federal Register. 42 U.S.C. §7410(k)(1)(B). If the state does not address this finding of failure within 18 months, the EPA must impose stricture permitting requirements for new pollution sources in the area in the form of required pollution offsets. 42 U.S.C. §7509 (a),(b)(2). After two years, if the state does not submit a SIP, the state may lose highway funds and the EPA must impose its own federal SIP. 42 U.S.C. §§ 7410(c)(1), 7509(a), (b)(1); 40 C.F.R. § 52.31(d)(1). If the EPA fails to take any of these actions, citizens may seek a court order to compel action. 42 U.S.C. §7604(a)(2).

PM Standards

The EPA established the first particulate matter (PM) standards in 1997, which generally set the maximum level of PM in the air to protect human health (the 1997 PM Standards). 62 Fed. Reg. 38,652 July 18, 1997. In 2005, the EPA found the San Joaquin Valley's air did not meet the 1997 PM Standards and therefore, designated it a Moderate Area. On May 7, 2015, the EPA reclassified the San Joaquin Valley as a Serious Area, which required California to submit a revised SIP to address PM and implement control measures to reduce PM emissions to an acceptable level within ten years, December 31, 2015. On November 23, 2016, the EPA found that the San Joaquin Valley did not meet the required standards and therefore, missed its 2015 deadline. This failure triggered the third step in the Clean Air Act, requiring California to submit a revised SIP within 12 months to reduce PM at least 5 percent annually. To date, California has failed to submit this revised SIP. Nevertheless, the EPA did not issue a notice of this failure.

After the 1997 PM Standards, the EPA released two updated standards to address PM, which followed the same pattern with respect to the San Joaquin Valley. In 2006, the EPA adopted 24-hour PM NAAQS (the 2006 PM Standards). On December 14, 2009, the EPA found San Joaquin as a Moderate Area based on these new requirements. The EPA then deemed San Joaquin Valley a Serious Area based on the 2006 PM Standards which required California to submit a revised SIP by August 2017. To date, the state has not submitted the required SIP to the EPA for review. Finally, in 2012, the EPA issued new annual PM standards (the 2012 PM Standards) and deemed San Joaquin Valley a Moderate Area based on these new standards in 2015. California has yet to submit a SIP for review to meet these new PM standards.

Thus, for all of these three PM standards, the Clean Air Act required the EPA to issue a formal finding establishing that California failed to submit the required SIPs. These notices are required to start the clock for potential penalties against California, including potentially issuing federal SIPs to address the PM issues.

The District Court's Decision

The District court assessed the PM found in the air of the San Joaquin Valley, located in the Central Valley of California. In sum, exposure to PM has been linked to a number of health issues, including respiratory and cardiovascular diseases. Thus, pursuant to the Clean Air Act, the EPA developed three separate NAAQS for PM. As summarized below, the EPA found the San Joaquin Valley to be in noncompliance with each of the three applicable NAAQS, but failed to complete the enforcement process required by the Clean Air Act.

Because of the EPA's inaction, the Committee for a Better Avrin (Committee) filed a lawsuit, asking the court to issue an order requiring the EPA to comply with the Clean Air Act and issue findings against California based on the condition of the San Joaquin Valley. Specifically, the Committee asked the court to require the EPA to make formal findings declaring that California failed to provide the following:

- 1) A SIP as required after the San Joaquin Valley missed the deadline for achieving the 1997 PM Standards;
- 2) A SIP as required after the San Joaquin Valley was reclassified as a Serious Area with respect to the 2006 PM Standards; and
- 3) A SIP as required after designation of the San Joaquin Valley as a Moderate Area with respect to the 2012 PM Standards.

The Motion for Summary Judgment

After filing the initial complaint, the Committee filed a Motion for Summary Judgment, contending that the plain facts showed that the EPA must be compelled to make the findings listed above pursuant to the Clean Air Act. The court reviewed the EPA's prior findings and granted the Committee's Motion for Summary Judgment, finding that the Clean Air Act created a mandatory, nondiscretionary duty to follow the enforcement process set forth above. Since the EPA found the San Joaquin Valley in violation of its various PM standards, the Clean Air Act requires the EPA to follow through and make the findings necessary to compel California to meet its Clean Air Act obligations or face further penalties from the EPA. The court also granted the Committee reimbursement of its costs as a result of its enforcement actions, including attorneys' fees.

Conclusion and Implications

Pursuant to the Committee's Motion for Summary Judgment, the court issued an order requiring the EPA to make the required findings within 30 days of the order. The findings required by the court will ultimately force California to develop and submit SIPs to clean the air in the San Joaquin Valley. This result also provides a roadmap for citizens who are concerned about the inaction of either state agencies or the EPA to enforce the Clean Air Act. The court's order is available online at: https://earthjustice.org/sites/default/files/files/Order-EPA-issue-findings_2018-10-24.pdf

(Stephen M. McLoughlin, David D. Boyer)

DISTRICT COURT CONCLUDES FEDERAL AGENCIES' ENVIRONMENTAL ASSESSMENT OF COASTAL 'FRACKING' VIOLATED THE ESA AND COASTAL ZONE ACT

Environmental Defense Center v. U.S. Bureau of Ocean Energy Management, ___F.Supp.3d___, Case No. CV168418PSGFFMX (C.D. Cal. Nov. 9, 2018).

The U.S. District Court for the Central District of California recently granted in part and denied in part seven cross-motions for summary judgment relating to the issuance of a final environmental assessment for fracking and acidizing in oil production off the California coast. The federal Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE) issued a Final Environmental Assessment (EA) on the potential impacts of offshore well stimulation treatments, more commonly known as “fracking” or “acidizing,” on the Pacific Outer Continental Shelf. Plaintiffs claim BOEM and BSEE violated their statutory obligations under the National Environmental Policy Act (NEPA), federal Endangered Species Act (ESA), and Coastal Zone Management Act (CZMA) when they issued a Final EA. The court found the federal agencies had complied with NEPA requirements, but had violated provisions of the Endangered Species Act and CZMA. The court ordered prohibitory injunctions preventing the federal agencies from issuing any well stimulation treatments plans or permits until BOEM and BSEE 1) complete a formal consultation with Fish and Wildlife Service (FWS) pursuant to the Endangered Species Act, and 2) complete the CZMA review process.

Factual and Procedural Background

This case consolidated two successor cases which culminated in settlement agreements where BOEM and BSEE agreed to conduct an EA and withhold any future application permits for well stimulation treatments. After the agencies issued the Final EA and subsequent Finding of No Significant Impact (FONSI), three groups of plaintiffs filed separate suits challenging the EA and FONSI. All three cases were transferred to the U.S. District Court and consolidated in the present case. The parties then cross-moved for summary judgment on seven claims under NEPA, the Endangered Species Act, and CZMA.

NEPA requires federal agencies to prepare an

Environmental Impact Statement (EIS) when federal action is proposed that will significantly affect the quality of the human environment. Alternatively, a federal agency may prepare an EA and provide a concise summary on whether an EIS is even required, and if the agency finds that there will be no significant impact, then it can forgo the EIS and issue a FONSI. BOEM and BSEE reviewed four proposed plans relating to well stimulation treatments and then issued a FONSI based on a determination that there would be no significant impact on the human environment. The federal agencies argued that they had not taken any “major federal action” to trigger the statutory requirements of NEPA. The plaintiffs disagreed, challenged the adequacy of the EA, and argued that the agencies should have prepared the more robust EIS.

Under § 7 of the Endangered Species Act, a federal agency must ensure that any action they authorize is not likely to result in the jeopardization of any endangered, or threatened species, or result in the destruction of critical habitat. 16 U.S.C. §1536(a)(2). The ESA requires procedural mandates, including at least informal consultation with Fish and Wildlife Services and National Marine Fisheries Services (NMFS), even if a certain substantive outcome or determination is not reached. Plaintiffs allege BOEM and BSEE failed to initiate consultation with either FWS or NMFS before issuing the EA. The federal agencies argue that the consultation requirements were not triggered because they had not taken “action” within the meaning of the statute.

The CZMA gives coastal states the right to review federal agency activity and if the state finds that federal activity is inconsistent with the state’s coastal management plan, the state may seek relief in federal court. The plaintiffs allege BOEM and BSEE violated the CZMA by failing to prepare and submit a determination to the California Coastal Commission on whether the proposed use of well stimulation treatments is consistent with California’s coastal management plan. The federal agencies argued that they had

not taken the required federal agency activity that would have triggered review under the CZMA.

The District Court's Decision

The NEPA Claims

The court determined that NEPA claims were reviewable because the proposal to allow well stimulation treatments on the Pacific Outer Continental Shelf was a major federal action. The court then denied the plaintiffs' NEPA claims because the federal agencies took the requisite "hard look" at the environmental effects of "fracking" on the Pacific Outer Continental Shelf and reasonably concluded that there would be no significant impact. The court reviewed the agencies' action under a deferential standard that looks for agency action that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." Finding the federal agencies had made informed decision-making and satisfied public participation requirements for the EA, the court rejected the plaintiffs' challenges to the substance of the EA. The court then considered whether an EIS should have been prepared instead of an EA, and found that the intensity factors required under the statute were not present. Lastly, the court found BOEM and BSEE had provided a reasonable range of alternatives in preparing the EA.

The ESA Claims

The Endangered Species Act claims were based on the federal agencies' failure to initiate consultation with the FWS and NMFS, as required by Section 7 of the act before issuing the Final EA. The NMFS claim was found moot because BOEM and BSEE adequately initiated and completed consultation with NMFS.

NMFS issued a letter concurring with BOEM and BSEE's determination. In contrast, BOEM and BSEE asked FSW to engage in a formal consultation given the adverse effect of an accidental oil spill on certain species. The court determined that the federal agencies violated the Endangered Species Act, however, by issuing their Final EA before the consultation was complete. The court granted the plaintiffs' request for declaratory relief and issued an injunction prohibiting the agencies from proceeding with well stimulation treatments permitting until consultation with FWS is complete.

The Coastal Zone Management Act Claims

Finally, the court granted the plaintiffs' motion for summary judgment on the CZMA claims and issued an injunction prohibiting the agencies from approving permits until they complete the required CZMA process. The court found that the broad statutory language of "federal agency activity" included the federal action at issue and the federal proposal as described in the Final EA is reviewable under 16 U.S.C. §1456(c) (1).

Conclusion and Implications

This case illustrates that issuance of plans or permits may constitute an "action" under the Endangered Species Act or a "federal agency activity" under the CZMA, triggering interagency consultation and review requirements. Even under a deferential standard of review, federal agencies may be ordered to refrain from any further action unless and until the Endangered Species Act and CZMA consultations are completed.

(Rebecca Andrews)

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