REPORT OF THE ENVIRONMENTAL REGULATION COMMITTEE

The following is the report of the Environmental Regulation Committee. In this report, the Committee summarizes key developments in federal and state environmental regulation from July 1, 2014, to June 30, 2015.

I. OIL & GAS

A. LNG

1. Overview

The abundance of domestic natural gas supplies resulting from hydraulic fracturing of shale formations continues to lead to new liquefied natural gas (LNG) export projects. As of July 2015, twenty-two proposed onshore U.S. LNG export terminals with the capacity to deliver over 27 billion cubic feet (Bcf) per day of

LNG remained pending before the Federal Energy Regulatory Commission (FERC)—the federal agency with jurisdiction to review and authorize onshore LNG export facilities.[1] An additional offshore LNG export terminal application remains pending before the United States Maritime Administration and United States Coast Guard—the federal agencies with jurisdiction to review and authorize offshore LNG export facilities.[2]

As of that same date, thirty-seven applications to export LNG (six to free trade countries and thirty-one to non-free trade countries) remained pending before the Department of Energy (DOE)—the agency with jurisdiction to review and authorize the exportation of LNG.[3] The July 2014 to June 2015 period covered by this report captures a window into a continuation of LNG export applications, continued protests to LNG export projects, and the pending court review of a handful of FERC orders approving recent LNG export facilities and operations.

2. New and Expanded Environmental Concerns

Neighboring landowners and environmental groups have raised a series of concerns about alleged cumulative and indirect impacts created by proposals to build LNG export facilities and to export LNG. These protests have been raised in numerous forums, including DOE and the FERC, as well as several court appeals that will test the validity of the FERC's reasoning. The issues raised by these neighboring landowners and environmental groups extend beyond the usual localized concerns to include climate change impacts from greenhouse gas emissions and adverse environmental impacts of increased natural gas production from hydraulic fracturing.

3. Responsible Lead Agencies on Environmental Issues

The Natural Gas Act designates the FERC as the lead agency for coordinating National Environmental Policy Act (NEPA) review of onshore LNG exports under Natural Gas Act section 3.[4] DOE serves as a cooperating agency in these FERC

1. *Proposed North American LNG Export Terminals*, FED. ENERGY REGULATORY COMM'N, http://www.ferc.gov/industries/gas/indus-act/lng/lng-export-proposed.pdf (last updated Sept. 15, 2015) [hereinafter Proposed North American LNG Export Terminals]; Natural Gas Act, 15 U.S.C. § 717b(e) (2012); Comment Request, 78 Fed. Reg. 29,360, 29,360 (May 20, 2013).

2. Maritime Sec. Transp. Act of 2002, 46 U.S.C. § 2101 (2000 & 2005); Sean T. Dixon, *Deepwater Liquefied Natural Gas Ports and the Shifting U.S. Liquefied Natural Gas Market*, OCEAN & COASTAL L.J. 1, 5-6 (2011); Shelia Slocum Hollis, *Liquefied Natural Gas: "The Big Picture" for Future Development in North America*, 2 ENVTL. & ENERGY L. & POL'Y J. 5, 10 (2007).

3. *Long Term Applications Received by DOE/FE to Export Domestically Produced LNG from the Lower-48 States*, DEP'T OF ENERGY, http://energy.gov/sites/prod/files/2015/07/f24/Summary%20of%20LNG%20Export%20Applications_1.pdf; Comment Request, 78 Fed. Reg. 29,360, 29,360 (May 20, 2013); DOE Notice, *New Policy Guidelines and Delegation Orders from Secretary of Energy to Economic Regulatory Administration and Federal Energy Regulatory Commission Relating to the Regulation of Imported Natural Gas*, 49 Fed. Reg. 6684, 6688 (Feb. 22, 1984); DOE Redelegation Order No. 00-006.02, § 1.3.A (Nov. 17, 2014); *see also* Natural Gas Act, 15 U.S.C. § 717b (a)-(c) (2011).

4. Natural Gas Act, 15 U.S.C. § 717n(b)(1) (2011) (other agencies must "cooperate" with the FERC, and the FERC is required to promulgate NEPA-implementing regulations). *See, e.g.*, 15 U.S.C. § 717n(b)(2), 717b-1(a); The Council on Environmental Quality also has pertinent regulations. *See also* 40 C.F.R. § 1502.16 (2014).

processes and performs an independent environmental review in DOE export cases to determine if the FERC's NEPA efforts need to be supplemented.[5] The U.S. Coast Guard serves as the lead agency for coordinating environmental review of offshore LNG export facilities.[6]

NEPA requires federal agencies to consider feasible alternatives to any major action that would significantly affect the quality of the human environment.[7] Opponents to FERC LNG export applications raised a series of legal issues relating to the scope of the FERC's NEPA review during the July 2014 to June 2015 period.

4. Recent Activity

The FERC granted facility-related section 3 LNG export authorization in five projects during the July 2014 to June 2015 period.[8] Four appeals raising NEPA issues were lodged and remain pending before the D.C. Circuit Court of Appeals.[9] During the same period, DOE granted export authority in six projects.[10]

Regarding the environmental review process, in August 2014, DOE adopted a new policy in cases involving exports from onshore LNG facilities to non-free trade countries. Now, DOE will wait until the FERC completes its NEPA review

5. *See, e.g.*, DOE/FE Order No. 3669, *Sabine Pass Liquefaction, LLC*, Docket Nos. 13-30-LNG, 13-42-LNG, 13-121-LNG, at 196 (June 26, 2015) [hereinafter DOE/FE Order No. 3669].

6. Memorandum of Understanding Related to the Licensing of Deepwater Ports Among the U.S. Dep't of the Army, U.S. Dep't of Commerce, U.S. Dep't of Defense, U.S. Dep't of Energy, U.S. Dep't of Homeland Sec., U.S. Dep't of the Interior, U.S. Dep't of State, U.S. Dep't of Transp., U.S. Envtl. Prot. Agency, Fed. Energy Regulatory Comm'n, Council on Envtl. Quality 4 (May 12, 2004), http://www.ferc.gov/legal/mou/mou-23.pdf; Dixon, *supra* note 2, at 6 (citing 33 C.F.R. §§ 148-150 (2015)).

7. Nat'l Envtl. Policy Act § 102, 42 U.S.C. §§ 4321, 4332 (2012); *see also* Council of Envtl. Quality Regulations, 40 C.F.R. §§ 1500-08 (2015).

8. *Corpus Christi Liquefaction, LLC*, 149 F.E.R.C. ¶ 61,283 (2014) (Corpus Christi, TX facility with 2.14 Bcf/d capacity), *reh'g denied*, 151 F.E.R.C. ¶ 61,098 (2015), *appeal pending*, *Sierra Club v. FERC*, FERC Docket No. 15-1133 (May 11, 2015); *Dominion Cove Point LNG, LP*, 148 F.E.R.C. ¶ 61,244 (2014) (Cove Point, MD facility with 0.82 Bcf/d capacity), *reh'g denied*, 151 F.E.R.C. ¶ 61,095 (2015), *appeal pending*, *EarthReports, Inc*. (*dba Patuxent Riverkeeper*), *Sierra Club, and Chesapeake Climate Action Network v. FERC*, FERC Docket No. 15-1127 (May 7, 2015); *Freeport LNG Development, L.P.*, 148 F.E.R.C. ¶ 61,076 (2014) (Freeport, TX facility with 1.8 Bcf/d capacity), *denying reh'g and providing clarification*, 149 F.E.R.C. ¶ 61,119 (2014), *dismissed without opinion sub nom. Sierra Club v. FERC*, No. 14-1190, 2015 WL 1606900 (D.C. Cir. Mar. 16, 2015) (voluntarily dismissed, March 16, 2015), *appeal pending*, *Sierra Club and Galveston Baykeeper v. FERC*, FERC Docket No. 14-1275 (Dec. 10, 2014); *Cameron LNG, LLC*, 147 F.E.R.C. ¶ 61,230 (2014)(Hackberry, LA facility with 1.7 Bcf/d capacity), *order denying reh'g*, 148 F.E.R.C. ¶ 61,237 (2014) (rejecting rehearing request as untimely but nonetheless discussing the merits); and *Sabine Pass Liquefaction, LLC*, 146 F.E.R.C. ¶ 61,117 (2014) (SabinePass, LA facility authorizing 2.76 Bcf/d and Bcf/d amending 2012 export authorization), *order denying reh'g*, 148 F.E.R.C. ¶ 61,200 (2014), *appeal pending*, *Sierra Club v. FERC*, FERC Docket No. 14-1249 (Nov. 17, 2014) ; *amended, Sabine Pass Liquefaction Expansion, LLC*, 151 F.E.R.C. ¶ 61,012 (2015) (authorizing an additional 1.40 Bcf/d).

9. *Sierra Club v. FERC*, FERC Docket No. 15-1133 (May 11, 2015); *EarthReports, Inc*. (*dba Patuxent Riverkeeper*), *Sierra Club, and Chesapeake Climate Action Network v. FERC*, FERC Docket No. 15-1127 (May 7, 2015); *Sierra Club and Galveston Baykeeper v. FERC*, FERC Docket No. 14-1275 (Dec. 10, 2014); *Sierra Club v. FERC*, FERC Docket No. 14-1249 (Nov. 17, 2014).

10. DOE/FE Order No. 3669, *supra* note 5; *Alaska LNG Project, LLC*, DOE/FE Order No. 3643, Docket No. 14-96-LNG (May 28, 2015); *Cheniere Marketing, LLC et al.*, DOE/FE Order No. 3638, Docket No. 12-97-LNG (May 12, 2015); *Dominion Cove Point LNG, LP*, DOE/FE Order No. 3331-A, Docket No. 11-128-LNG (May 7, 2015); *Freeport LNG Expansion, L.P.*, DOE/FE Order No. 3282-C, Docket No. 10-161-LNG (Nov. 14, 2014); *Cameron LNG, LLC*, DOE/FE Order No. 3391-A, Docket No. 11-162-LNG (Sept. 10, 2014).

before it will take final action on the related LNG export application.[11] Prior to that change, DOE's practice was to issue conditional LNG export decisions pending completion of the environmental review process.[12]

Regarding the environmental issues, in May 2014, DOE released a report on the life-cycle greenhouse gas impacts of LNG exports; in August 2014, DOE released a report on the environmental effects of LNG exports, including the hydraulic fracturing of shale formations; and in October 2014, the U.S. Energy Information Administration (EIA) updated a previous LNG export report that in part discussed the consequences of increased LNG exports on increased natural gas prices and energy-related carbon emissions.[13]

B. Scope of NEPA Review

As summarized below, pending court appeals of FERC orders issued between July 2014 through June 2015 authorizing LNG export projects include a number of issues related to the scope of the FERC's NEPA review, specifically, addressing whether alleged induced production of natural gas, increased domestic electric prices, and higher carbon emissions resulting from LNG exports are within the scope of the FERC's NEPA review, either as indirect or cumulative effects.

1. Increased Natural Gas Production

The FERC has rejected arguments advanced by environmental groups that the Commission's review of proposed LNG export projects, pursuant to NEPA, should consider higher levels of carbon emissions resulting from increased natural gas production caused by the projects.[14] In *Corpus Christi Liquefaction, LLC et al.*, for example, the FERC found that "impacts of additional natural gas production as an indirect effect of the . . . Project . . . [was] beyond the scope of review dictated by NEPA."[15] The FERC also has rejected similar arguments that

11. Final Revised Procedures, *Procedures for Liquefied Natural Gas Export Decisions*, 79 Fed. Reg. 48,132, 48,135 (Aug. 15, 2014).

12. Notice of Proposed Procedures, *Proposed Procedures for Liquefied Natural Gas Export Decisions*, 79 Fed. Reg. 32,261, 32,263 (June 4, 2014).

13. DEP'T OF ENERGY, LIFE CYCLE GREENHOUSE GAS PERSPECTIVE ON EXPORTING LIQUEFIED NATURAL GAS FROM THE UNITED STATES (2014), *available at* http://energy.gov/sites/prod/files/2014/05/f16/Life%20Cycle%20GHG%20Perspective%20Report.pdf; DEP'T OF ENERGY, ADDENDUM TO ENVIRONMENTAL REVIEW DOCUMENTS CONCERNING EXPORTS OF NATURAL GAS FROM THE UNITED STATES (2014), *available at* http://energy.gov/sites/prod/files/2014/08/f18/Addendum.pdf; ENERGY INFO. ADMIN., EFFECT OF INCREASED LEVELS OF LIQUEFIED NATURAL GAS EXPORTS ON U.S. ENERGY MARKETS (Oct. 2014), *available at* http://www.eia.gov/analysis/requests/fe/pdf/lng.pdf (this October 2014 report updates a January 2012 EIA study).

14. 151 F.E.R.C. ¶ 61,098 at PP 11-12, 27-28 (finding both that an insufficient causal relationship existed between induced natural gas production and the proposed LNG export project and the alleged impacts of induced production were not reasonably foreseeable); 149 F.E.R.C. ¶ 61,119 at P 30 ("NEPA does not require the Commission, nor is it reasonable for us, to consider induced natural gas production as a factor in our determination."); *see also* 148 F.E.R.C. ¶ 61,237 at P 31; 148 F.E.R.C. ¶ 61,200 at P 13 (finding "[the environmental] impacts which may result from additional shale gas development are not 'reasonably foreseeable.").

15. 151 F.E.R.C. ¶ 61,098 at P 12 (the FERC reasoned that increased domestic natural gas production was not a foreseeable indirect effect of the LNG project.); *see also id.* at P 27 (the FERC also rejected an argument that increased natural gas production should be considered in light of its cumulative impact when added to other

the Commission's environmental review of proposed LNG export projects should consider the increased natural gas drilling and hydraulic fracturing in the Marcellus region caused by the LNG export project.[16] In *Dominion Cove Point LNG, LP*, for example, the FERC found no causal connection between Marcellus Shale production and the export project, and no cumulative impacts, reasoning that Marcellus Shale production was not reasonably foreseeable.[17] The Commission has determined that "it is virtually impossible to accurately estimate how much, if any, of the [LNG] export volumes at a particular facility will come from existing or new gas production."[18]

2. Increased Coal-Generated Electricity

The FERC rejected similar impact-based arguments from parties contending that LNG projects will lead to an increase in coal-generated electricity, and thus the Commission should consider the higher levels of carbon emissions caused by the project in its assessment.[19] In *Corpus Christi*, for example, environmental groups argued that the project would introduce new natural gas demands, which can only be served by either increased natural gas production or reduced natural gas electric generation through greater reliance on coal.[20] In *Corpus Christi*, the FERC found no evidence that the project would cause a shift from natural gas to coal generation in light of the many factors that affect a generator's decision on fuel source.[21] The FERC has rejected related arguments that LNG export projects will increase the price of gas and cause gas-fueled generation to switch to coal.[22]

3. Impacts of Project-Caused Greenhouse Gas Emissions

The FERC has also rejected arguments that it should consider the climate change impacts of LNG projects.[23] *Corpus Christi* again sets an example; the FERC stated that "no standard methodology exists to determine how the proposed project's incremental contribution to GHGs (greenhouse gases) would result in physical effects on the environment, either locally or globally."[24] The FERC also found that its Environmental Impact Statement treated greenhouse gas emissions consistent with the Council on Environmental Quality's *Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas*

past, present and reasonably foreseeable future actions.); 151 F.E.R.C. ¶ 61,095 at P 41 (finding the impacts of an LNG export project on increased production attenuated and outside the scope of the project's NEPA review).

16. 151 F.E.R.C. ¶ 61,095 at P 26.

17. *Id.* at PP 26, 29, 32, 37, 44; *see also* 149 F.E.R.C. ¶ 61,119 at PP 32-33 (finding no cumulative impacts and rejecting request that FERC consider LNG export projects "cover[ing] a vast geographic scope consisting of tens of thousands of square miles.").

18. 151 F.E.R.C. ¶ 61,095 at P 37 (citing *Cheniere Creole Trail Pipeline, L.P.*, 145 F.E.R.C. ¶ 61,074 at P 17 (2013)).

19. 151 F.E.R.C. ¶ 61,098 at PP 32-33.

20. *Id.*

21. *Id.* at P 33; 149 F.E.R.C. ¶ 61,119 at P 53.

22. 149 F.E.R.C. ¶ 61,119 at P 53 ("Changes in natural gas commodity prices are not an impact of the facilities."); *see also* 148 F.E.R.C. ¶ 61,200 at P 13 (finding argument regarding increase in natural gas prices to be an alleged economic harm, which is "beyond the Commission's purview").

23. 151 F.E.R.C. ¶ 61,098 at PP 49-50; *see also* 148 F.E.R.C. ¶ 61,237 at P 32.

24. 151 F.E.R.C. ¶ 61,098 at P 50.

Emissions and Effects of Climate Change in NEPA Reviews.[25] In *Dominion*, the FERC found consideration of greenhouse gas emissions outside the scope of the project, relying on the same rationale it employed to reject consideration of increased production.[26] The FERC has consistently rejected arguments that it should use the Environmental Protection Agency's (EPA) social carbon cost calculator to quantify impacts of LNG exports on greenhouse gas emissions.[27]

C. Natural Gas

1. NEPA Analysis of Cumulative Impacts of Related Pipeline Construction

The D.C. Circuit Court of Appeals remanded to the FERC an environmental assessment (EA) prepared by the FERC under NEPA for further consideration of the cumulative environmental impacts of four related natural gas pipeline construction projects.[28] The Court held that the FERC violated NEPA by considering the project's environmental impacts separate from three inter-related projects undertaken or proposed by the same operator on the same pipeline within a relatively short period of time.

The project at issue ("Northeast Project") was one of four separate upgrades designed to increase capacity on a pipeline to accommodate increased natural gas production in the Marcellus Shale region. The FERC reviewed each of the four projects separately and approved them between 2010 and 2013. The D.C. Circuit found that the FERC violated NEPA by (1) impermissibly segmenting its review of the Northeast Project by not analyzing it in conjunction with the three related projects; and (2) failing to provide a meaningful analysis of the cumulative impacts of the four projects taken together.[29]

NEPA regulations require federal agencies to consider impacts of a proposed action not in isolation, but in conjunction with "connected," "cumulative," or "similar" agency actions.[30] The D.C. Circuit found that the FERC violated this requirement by instead analyzing the Northeast Project as essentially a series of standalone improvements designed to provide natural gas to "different customers within different timeframes."[31] The court rejected the FERC's approach because the physical, functional, and financial links among the projects were intended to function together for the shared purpose of increasing capacity on the pipeline.[32]

25. Comment Request, *Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and Effects of Climate Change in NEPA Reviews*, 79 Fed. Reg. 77,802 (Dec. 14, 2014).

26. 151 F.E.R.C. ¶ 61,095 at PP 56-57.

27. 151 F.E.R.C. ¶ 61,098 at P 50 (rejecting application of social carbon cost calculator and citing *EPA Fact Sheet: Social Cost of Carbon*, ENVTL. PROTECTION AGENCY, http://www.epa.gov/climatechange/Downloads/EPAactivities/social-cost-carbon.pdf); 151 F.E.R.C. ¶ 61,095 at P 54 (rejecting application of EPA social carbon cost).

28. Delaware Riverkeeper Network et al. v. FERC, 753 F.3d 1304, 1320 (D.C. Cir. 2014).

29. *Id.* at 1307-09.

30. 40 C.F.R. § 1508.25 (2012).

31. *Delaware Riverkeeper*, 753 F.3d at 1312.

32. *Id.* at 1315 (citing Taxpayers Watchdog v. Stanley, 819 F.2d 294 (D.C. Cir. 1987) (setting fourth four factors required to show that physically connected projects can be analyzed separately under NEPA)).

The court also held that the FERC's EA for the project had not sufficiently considered "cumulative impacts," as required by NEPA regulations.[33]

2. FERC Policy Statement Regarding Natural Gas Pipeline Cost Recovery Mechanisms for Environmental and Safety Compliance

A FERC-issued Policy Statement allowed interstate natural gas pipelines to seek recovery through a surcharge mechanism for certain capital expenditures made to modernize pipeline system infrastructure in a manner that enhances system reliability, safety, and environmental regulatory compliance.[34] The Policy Statement was prompted by recent regulatory reforms by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration that likely will require interstate natural gas pipelines to make significant capital cost expenditures to enhance the safety and reliability of their systems, and respond to EPA initiatives that may increase pipelines' environmental monitoring and compliance costs, and require existing compressors or other facilities to be replaced or repaired.[35]

FERC's Policy Statement establishes a framework for FERC's evaluation of pipeline proposals for recovering costs associated with replacing old and inefficient compressors or leak-prone pipelines and for performing other infrastructure improvements and upgrades to enhance the efficient and safe operations of pipeline systems. The FERC will evaluate, on a case-specific basis, any proposal for a modernization cost surcharge subject to five guiding standards: (1) the pipeline's base rates must have been recently reviewed through a Natural Gas Act general section 4 rate proceeding, a cost and revenue study, or through a collaborative effort between the pipeline and its customers; (2) eligible costs must generally be limited to one-time capital expenditures incurred to meet safety or environmental regulations or other capital costs shown to be necessary for the safe, reliable, and/or efficient operation of the pipeline, and the pipeline must specifically identify each capital investment to be recovered by the surcharge; (3) captive customers must be protected from cost shifts if the pipeline loses shippers or increases discounts to retain business; (4) the pipeline must include some method to allow a periodic FERC review to ensure rates remain just and reasonable; and (5) the pipeline must work collaboratively with shippers to seek their support for any surcharge proposal.[36]

33. *Id.* at 1319; 40 C.F.R. § 1508.7 (2012) (defining a "cumulative impact" as that resulting from the incremental impact of the action under review when added to other "past, present, and reasonably foreseeable future actions").

34. Policy Statement, *Cost Recovery Mechanisms for Modernization of Natural Gas Facilities*, 151 F.E.R.C. ¶ 61,047 (2015).

35. *Id.* at PP 4-10.

36. The five criteria are based on principles outlined in a January 2013 FERC order that allowed Columbia Gas Transmission, LLC to implement a similar tracker. *Columbia Gas Transmission, LLC*, 142 F.E.R.C. ¶ 61,062 (2013). In *Columbia Gas*, the FERC approved a rate settlement designed to allow the operator to address safety and reliability issues in its aging pipeline system (according to the Order, 73% of Columbia's DOT-regulated pipelines and 55% of its regulated compressor units were installed prior to 1970). The unique features of the settlement persuaded the FERC that it was "just and reasonable" and provided a blueprint for FERC's analysis of cost recovery mechanisms under the Proposed Policy. *Id.* at PP 45, 54, 72, 83, 90.

The FERC states that it intends to allow flexibility in reviewing the standards to allow pipelines and their customers to reach reasonable accommodations based on their system's specific circumstances.[37]

II. ELECTRIC GENERATION

A. Air

1. The Supreme Court's MATS Rule Decision

On June 29, 2015, the Supreme Court issued its opinion in *Michigan v. EPA*.[38] In a 5-4 decision, the Court invalidated the Mercury and Air Toxics Standards (the "MATS Rule" or "Rule") issued by EPA setting limits on mercury, arsenic, and acid gas emissions from coal-fired power plants. The Court determined that EPA should have considered the compliance costs imposed on utilities at the first stage of the agency's regulatory analysis.[39]

The Clean Air Act authorizes the EPA to regulate emissions of hazardous air pollutants from certain stationary sources, such as power plants, refineries, and factories.[40] EPA may regulate fossil-fuel-fired power plants only if the agency first "perform[s] a study of the hazards to public health reasonably anticipated to occur as a result of emissions by [power plants] of [hazardous air pollutants] after imposition of the requirements" imposed by law.[41] If EPA "finds . . . regulation is appropriate and necessary after considering the results of the study," it "shall regulate [power plants] under" section 7412.[42]

For the MATS Rule, EPA completed the study required by statute in 1998, and concluded that regulation of coal- and oil-fired power plants was "appropriate and necessary" in 2000.[43] EPA reaffirmed its "appropriate and necessary" finding in 2012, but did not consider costs as part of that statutory analysis.[44] EPA issued a "Regulatory Impact Analysis" with the new regulation, and estimated that the regulation would impose $9.6 billion per year in costs on power plants. At the same time, the agency issued an estimation of potential benefits from the regulation, which it estimated at $4 to $6 million per year. Industry groups and over twenty states sought review of the Rule in the D.C. Circuit, by challenging EPA's refusal to consider costs in its required "appropriate and necessary" analysis. The appellate court upheld EPA's decision not to consider costs, with one judge concurring, in part, and dissenting, in part.[45]

37. *Id.* at P 71.

38. Michigan v. EPA, No. 14-46, slip op. at 1 (S. Ct. June 29, 2015).

39. *Id.* at 14.

40. 42 U.S.C. § 7412 (2011).

41. 42 U.S.C. § 7412(n)(1)(A).

42. *Id.*

43. Regulatory Finding on the Emissions of Hazardous Air Pollutants from Electric Utility Steam Generating Units, 65 Fed. Reg. 79,825, 79,826 (Dec. 20, 2000); *Id.* at 79,830.

44. National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units, 77 Fed. Reg. 9304, 9326 (February 16, 2012).

45. *See generally* White Stallion Energy Center, LLC v. EPA, 748 F.3d 1222 (2014) (*per curiam*).

The Supreme Court granted certiorari to consider whether EPA unreasonably refused to consider costs in determining to regulate hazardous air pollutants emitted by electric utilities. With Justice Scalia writing for the Court, the majority reviewed the agency's decision not to consider costs at the "appropriate and necessary" stage of regulation under *Chevron USA Inc. v. Natural Resources Defense Council, Inc.*[46] While acknowledging that "*Chevron* directs courts to accept an agency's reasonable resolution of an ambiguity in a statute that the agency administers," the Court explained that "[e]ven under this deferential standard . . . agencies must operate within the bounds of reasonable interpretation."[47] After examining traditional administrative practice and statutory context, the Court concluded that EPA acted unreasonably in concluding that the phrase "appropriate and necessary" did not require a consideration of cost.[48] It held that the "agency must consider cost—including, most importantly, cost of compliance—before deciding whether regulation is appropriate and necessary."[49] The Court reversed the D.C. Circuit and remanded for further proceedings, with the Rule technically in effect while the court determines EPA's next steps.[50]

In concurrence, Justice Thomas wrote that EPA's "request for deference raises serious questions about the constitutionality of [the Court's] broader practice of deferring to agency interpretations of federal statutes" under *Chevron*.[51] The dissent, authored by Justice Kagan, argued that EPA's examination of costs later in the regulatory process was enough to pass muster under section 7412.[52] The dissent acknowledged that "EPA's power plant regulation would be unreasonable if 'the agency gave cost no thought *at all*.'"[53] It continued that "[c]ost is almost always a relevant—and usually, a highly important—factor in regulation."[54] The dissent stated that EPA could "take account of multiple factors related to costs of compliance" to "avoid impracticable regulatory burdens" at the categorization and subcategorization stage for certain types of facilities.[55] The dissent did not agree that costs must be considered at the first stage of regulation under section 7412.[56]

2. The Clean Power Plan

During the June 2014 to June 2015 period, EPA released three interrelated proposals to reduce greenhouse gas emissions from U.S. electric generating units.[57] On June 2, 2014, EPA proposed to reduce greenhouse gas emissions from

46. Chevron v. Natural Res. Def. Council, Inc., 467 U.S. 837 (1984).

47. *Michigan*, No. 14-46, slip op. at 14.

48. *Id.* at 7-8.

49. *Id.* at 14.

50. *Id.* at 15.

51. *Id.* at 1 (Thomas, J., concurring).

52. *Michigan*, No. 14-46, slip op. at 3 (Kagan, J., dissenting).

53. *Id.* at 5 (Kagan, J., dissenting).

54. *Id.* at 6 (Kagan, J., dissenting).

55. *Id.* at 11 (Kagan, J., dissenting).

56. *Id.* at 17 (Kagan, J., dissenting).

57. Proposed Rule, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,830 (June 18, 2014); Proposed Rule, Carbon Pollution Standards for Modified and Reconstructed Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,960 (June 18, 2014);

existing fossil fuel-fired electric generating plants under its Clean Power Plan, relying on section 111(d) of the Clean Air Act (CAA).[58] Also on June 2, 2014, EPA proposed to limit carbon emissions from *"modified"* and *"reconstructed"* fossil fuel and natural gas-fired power plants under the authority of CAA section 111(b).[59] Prior to these two proposals, EPA had proposed "new source performance standards" to address carbon dioxide (CO2) emissions from *new* fossil fuel-fired electric power plants under the authority of CAA section 111(b).[60]

"In the enduring absence of federal climate legislation, the Clean Air Act stands as the central federal mechanism for directly controlling the greenhouse gas (GHG) emissions that cause climate change."[61] "Carbon dioxide (CO2) is the primary greenhouse gas pollutant, accounting for nearly three-quarters of global greenhouse gas emissions and 84% of U.S. greenhouse gas emissions."[62] "Fossil fuel-fired power plants are the largest source of U.S. CO2 emissions."[63] "The electric power sector accounted for 32% of U.S. total greenhouse gas emissions in 2012."[64]

EPA's proposed Clean Power Plan, which addressed existing power plants, prompted the FERC, states, regulated utilities, grid operators, and others to raise concerns related to reliability, infrastructure and market function.[65] In early 2015, the FERC held four technical conferences to address the impacts of the proposed Clean Power Plan on the wholesale and interstate energy markets that the FERC regulates.[66] The proposed Clean Power Plan established state-specific goals to lower carbon emissions from electric generation plants and guidelines to assist

Proposed Rule, Standards of Performance for Greenhouse Gas Emissions from New Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 1430 (Jan. 8, 2014).

58. Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. at 34,830.

59. Carbon Pollution Standards for Modified and Reconstructed Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. at 34,960 (EPA released this revised proposal on June 2, 2014; it was published in the Federal Register on June 18, 2014).

60. Standards of Performance for Greenhouse Gas Emissions from New Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. at 1430 (EPA released this revised proposal in September 2013; it was published in the Federal Register in January 2014).

61. Alice Kaswan, *Controlling Power Plants: The Co-pollutant Implications of EPA'S Clean Air Act § 111(d) Options for Greenhouse Gases*, 32 VA. ENVTL. L.J. 173 (2014). U.S. greenhouse gas pollution includes carbon dioxide, fluorinated gases, nitrous oxide and methane. *Cutting Carbon Pollution in America*, WHITE HOUSE, https://www.whitehouse.gov/climate-change (last visited Sept. 30, 2015).

62. *Clean Power Plan: Learn About Carbon Pollution From Power Plants*, ENVTL. PROTECTION AGENCY, http://www2.epa.gov/cleanpowerplan/learn-about-carbon-pollution-power-plants (last updated Aug. 3, 2015).

63. *Id.*

64. *Id.* "[P]ower plants are not only the largest stationary source of GHG emissions, they are among the nation's largest sources of sulfur dioxide, nitrogen oxides, particulates, and hazardous air pollutants, like mercury." Kaswan, *supra* note 61, at 177 (footnote omitted).

65. Letter from Norman C. Bay, FERC Chairman, and C. LaFleur, C. Honorable, P. Moeller and T. Clark, Commissioners, to Janet G. McCabe, EPA Acting Assistant Administrator, Office of Air and Radiation (May 15, 2015).

66. Notice of Technical Conferences, *Technical Conference on Environmental Regulations and Electric Reliability, Wholesale Electric Markets and Energy Infrastructure*, Docket No. AD15-4-000 (Dec. 9, 2014); *EPA-DOE-FERC Coordination on Implementation of the Clean Power Plan*, FED. ENERGY REGULATORY COMM'N (Aug. 3, 2015), http://www.ferc.gov/media/headlines/2015/CPP-EPA-DOE-FERC.pdf.

state's development plans to meet their goals.[67] The proposal sought to reduce carbon from power plants by thirty percent, measured from 2005 levels, by 2030, with initial reductions to begin in 2020.[68] States were required to submit their proposed plans, either in complete or initial form, by June 30, 2016, with a process for obtaining an extension, one year for state plans and two years for regional plans.[69]

3. Pennsylvania's Right-to-Know Law

A three-judge panel reversed an earlier ruling of the Commonwealth's Office of Open Records (OOR), which held that the Delaware Riverkeeper Network (DRN) was entitled to receive records detailing sampling data from the Pennsylvania Department of Environmental Protection (DEP) Bureau of Radiation Protection's study of technologically enhanced naturally occurring radioactive material (or TENORM), associated with gas and oil extraction.[70]

DRN submitted a request under Pennsylvania's Right-to-Know (RTK) law for copies of records detailing sampling data from DEP's TENORM study. While DEP provided the DRN with 294 pages of general information that described the TENORM study and its status, it denied the request for the underlying sample data on the basis that it "constitute[d] noncriminal investigative records and internal predecisional deliberations" and was official pursuant to DEP's authority under section 301(c) of Pennsylvania's Radiation Protection Act (RPA) and was therefore exempt from public disclosure.[71] In pertinent part, section 301(c) of the Act provides that DEP shall have the power to:

- Develop and conduct comprehensive programs for the registration, licensing, control, management, regulation and inspection of radiation sources and radiation source users;
- Carry out a comprehensive program of monitoring levels of radioactivity in Pennsylvania's environment, including all appropriate tests for alpha, beta and gamma levels in all appropriate media;
- Encourage, participate in, or conduct studies, investigations, training, research, remedial actions and demonstrations relating to control, regulation and monitoring of radiation sources;
- Prepare a report on environmental radiation levels, as determined by the monitoring program, on at least an annual basis.[72]

DRN filed an appeal with the OOR asserting that the provision of the RTK law that exempts investigative materials or records that reveal the progress or result of certain types of official agency investigations did not apply because the

67. *FACT SHEET: Clean Power Plan Overview: Cutting Carbon Pollution from Power Plants*, ENVTL. PROT. AGENCY, http://www2.epa.gov/cleanpowerplan/fact-sheet-clean-power-plan-overview (last updated May 11, 2015).

68. *Id.*; *FACT SHEET: Clean Power Plan Flexibility: Flexible Approach to Cutting Carbon Pollution*, ENVTL. PROT. AGENCY, http://www2.epa.gov/cleanpowerplan/fact-sheet-clean-power-plan-flexibility (last updated May 11, 2015).

69. *Id.*

70. Dep't of Envtl. Prot. v. Del. Riverkeeper Network, 113 A.3d 869 (Pa. Commw. Ct. 2015).

71. *Id.* at 872; Act of July 10, 1984, PA. LAWS 688, § 301(c), *amended by* 35 PA. CONS. STAT. § 7110.301(c) (2015).

72. 35 PA. CONS. STAT. § 7110.301(c)(5).

records were factual in nature and not deliberative. The OOR concluded that the RTK law does not expressly exempt studies from public disclosure, and that the RPA draws a distinction between "studies" (academic or scientific analyses of matters unrelated to the licensing or regulation of a specific activity) and "investigations" (inquiries that may or may not result in sanctions pursuant to the agency's authority). Ultimately, the OOR concluded that DEP did not prove that the TENORM study was an investigation and therefore the requested sampling data was not exempt under the RTK law.[73] DEP appealed the decision.

On appeal, the Commonwealth Court reversed OOR's decision and held that DEP:

> collected the sampling data at issue in compliance with the Radiation Protection Act's mandate that [requires the agency to] monitor, control and regulate radiation sources on an ongoing basis . . . the result of "a systematic or searching inquiry, a detailed examination, or an official probe" in the course of DEP's official duties and, thus, constitutes a noncriminal investigation

which is exempt from disclosure to the public.[74]

B. Water

1. Cooling Water Intake Structures Rule

Section 316(b) of the Clean Water Act requires that the "location, design, construction, and capacity of cooling water intake structures [must] reflect the best technology available for minimizing adverse environmental impact."[75] The final regulation governing cooling water intake structures (CWIS) under CWA section 316(b) at existing large power plants and other facilities that utilize cooling water, including large manufacturing facilities, petroleum refineries, and chemical manufacturing facilities, became effective October 14, 2014.[76]

After years of litigation that largely overturned the EPA's Phase II rule governing CWIS at large electric generating facilities, the EPA, in 2011, entered into a settlement agreement providing for a schedule to propose and finalize new rules. On April 20, 2011, the EPA proposed new regulations governing CWIS at existing facilities.[77] After two Notices of Data Availability supplementing the proposed rule, and five extensions of the settlement agreement, the EPA adopted final rules in August 2014.[78]

73. *Dep't of Envtl. Prot.*, 113 A.3d at 874.

74. *Id.* at 879.

75. National Pollutant Discharge Elimination System—Final Regulations to Establish Requirements for Cooling Water Intake Structures at Existing Facilities and to Amend Requirements at Phase I Facilities, 79 Fed. Reg. 48,300 (Aug. 15, 2014) (to be codified at 40 C.F.R. pts. 122 and 125) [hereinafter CWIS Rule].

76. *Id.* at 48,358.

77. National Pollutant Discharge Elimination System—Cooling Water Intake Structures at Existing Facilities and Phase I Facilities, 76 Fed. Reg. 22,174 (proposed Apr. 20, 2011) (to be codified at 40 C.F.R. pts. 122 and 125).

78. Notice of Data Availability Related to EPA's Stated Preference Survey, 77 Fed. Reg. 34,927 (proposed June 12, 2012) (to be codified at 40 C.F.R. pts. 122-25); Notice of Data Availability Related to Impingement Mortality Control Requirements, 77 Fed. Reg. 34,315 (proposed June 11, 2012) (to be codified at 40 C.F.R. pts. 122-25); CWIS Rule, *supra* note 75, at 48,300.

The new rule applies to facilities that withdraw two million gallons per day (mgd) of water from a water of the United States, and use at least 25% of that water exclusively for cooling purposes.[79] The final rule adopted a compliance mechanism for determining "best technology available" (BTA) for minimizing impingement mortality (IM) that differed from the proposed rule.[80] Most significantly, the final rule eliminated mandated compliance with a proposed annual and monthly maximum IM limit.[81] Instead, the final rule provides seven options to determine BTA for IM at a facility: (1) "installation of closed cycle cooling [(CCC)]"; (2) operating a CWIS "that has a maximum design through screen intake velocity of 0.5 feet per second"; (3) operating a CWIS at an actual "maximum through-screen velocity of 0.5 feet per second"; (4) operate offshore velocity caps that (i) were installed prior to October 14, 2014, (the effective date of the rule), or (ii) are installed after October 14, 2014, and either meet the National IM standard or are part of system of technologies that are determined to be BTA for IM; (5) operating modified traveling screens including measures that are protective of fish or shellfish; (6) operating a system of technologies, management practices, and operational measures that is determined to be BTA for the CWIS; and (7) "achiev[ing] a 12-month [IM] performance standard of all life stages of fish and shellfish of no more than 24 percent mortality, including latent mortality."[82]

The permitting director may also impose additional measures for the protection of shellfish and fragile species.[83] Low capacity factor units, i.e., those units which have "an annual average capacity utilization rate of less than 8 percent averaged over a 24-month block contiguous period," may request a site-specific standard for the unit.[84] The permitting director may also determine that the rates of impingement may be so low that no additional impingement control is warranted.[85]

In contrast, the final rule continues to allow the determination of BTA for entrainment mortality (EM) on a site-specific basis.[86] The determination of BTA for EM is to be based upon the consideration of relevant factors, including control measures to reduce entrainment of federally-listed threatened or endangered (T&E) species, or designated critical habitat.[87] A determination by the permitting director must include consideration of the following factors:

(1) [n]umbers and types of organisms entrained [including federally-listed T&E species]; (2) impact of changes in particulate emissions or other pollutants associated with entrainment technologies; (2) land availability inasmuch as it relates to the feasibility of entrainment technology; (4) remaining useful plant life;

79. CWIS Rule, *supra* note 75, at 48,302.
80. *Id.* at 48,329.
81. *Id.* at 48,303.
82. *Id.* at 48,433-34.
83. CWIS Rule, *supra* note 75, at 48,434.
84. *Id.*
85. *Id.*
86. *Id.* at 48,434.
87. *Id.* at 48,438.

and (5) social costs and benefits, which may include qualitative, quantified, and monetized categories.[88]

The permitting director may also consider, to the extent the applicant submitted information, the following factors:

- [e]ntrainment impacts on the water body;
- [t]hermal discharge impacts;
- [c]redit for reductions in flow associated with retirement of units within ten years preceding [the effective date of the rule];
- [i]mpacts on the reliability of energy delivery within the immediate area;
- [i]mpacts on water consumption; and
- [a]vailability of process water, gray water, waste water, reclaimed water, or other waters of appropriate quantity and quality for reuse as cooling water.[89]

The site-specific analysis includes the ability of the permitting director to conclude that no additional EM technologies are required based upon an analysis that the "social costs [are] not justified by the social benefits," or that "unacceptable adverse impacts cannot be mitigated," by the technologies considered.[90] However, unlike the process for determining BTA for IM, the process for identifying BTA for EM for those facilities that withdraw at least 125 million gallons per day requires a detailed entrainment characterization study, which is subject to peer review.[91]

The rule also addresses the standards for IM and EM for repowered, replaced, or rebuilt units.[92] A new unit at an existing facility must either reduce the design intake flow to a level commensurate with CCC, or demonstrate that technologies and operational measures will reduce adverse environmental impact (AEI) to a level 90% or greater of the reductions commensurate with CCC.[93] A "new unit" is defined as a new "stand-alone" unit at an existing facility where construction of the new unit begins after the effective date of the rules, and that does not otherwise meet the definition of a new facility in the Phase I rule.[94] A "stand-alone" unit is a separate unit that is added to a facility for either the same general industrial operation or another purpose.[95] However, the preamble to the final rule makes it clear that repowering a fossil fuel facility, or power uprates at a nuclear facility, including where a new boiler or new fuel is utilized, is not considered the construction of a new unit.[96]

Finally, the United States Fish and Wildlife Service and the National Marine Fisheries Service (the Services) were assigned an elevated role in the 316(b) process.[97] As part of the rulemaking, the Services issued a Biological Opinion

88. CWIS Rule, *supra* note 75, at 48,438.
89. *Id.*
90. *Id.*
91. *Id.* at 48,427.
92. *Id.* at 48,339.
93. CWIS Rule, *supra* note 231, at 48,434.
94. *Id.* at 48,432.
95. *Id.* at 48,327.
96. *Id.* at 48,310-11.
97. *Id.* at 48,357-58.

under the Endangered Species Act (ESA) section 7.[98] The Biological Opinion states that the final rule is not likely to jeopardize listed T&E species or destroy or adversely modify critical habitat.[99] However, the Biological Opinion did not end the Services' involvement in the 316(b) process going forward. Specifically, the permitting director must submit applications to the field offices of the Services upon receipt for a sixty day review prior to public notice of the draft or proposed permit.[100] The rule specifically cautions that the Services review does not authorize incidental take of T&E species under the ESA.[101] However, the Services state in the Biological Opinion that if the permitting director adopts permit conditions recommended by the Services during the review process, the permittee may be exempted from the incidental take process for the species listed in that permit as long as the permittee complies with the process.[102]

Challenges to the final rule have since been brought in the federal courts and remain pending as of June 30, 2015.[103]

2. Waters of the United States

The jurisdiction of the CWA applies to all navigable waters, defined as "waters of the United States."[104] Current regulations define "waters of the United States" to include navigable waters, interstate waters, and other waters that could affect interstate or foreign commerce, impoundments of waters of the United States, tributaries, territorial seas, and adjacent wetlands.[105]

On June 29, 2015, the EPA and the Department of the Army issued a final rule defining the scope of waters that will be regulated under the CWA, also known as the "Waters of the U.S." rule.[106] The rule creates eight categories of regulated waters.[107] The first four categories: (1) traditional navigable waters (TNW); (2) interstate waters; (3) territorial seas; and (4) impoundments, are jurisdictional by rule.[108] Two categories, (5) tributaries and (6) adjacent waters are jurisdictional by rule where features meet the respective definition in the

98. DIV. OF ENVTL. REVIEW, U.S. FISH &WILDLIFE SERV. & OFFICE OF PROTECTED RESOURCES, NAT'L MARINE FISHERIES SERV., ENDANGERED SPECIES ACT SECTION 7 CONSULTATION: PROGRAMMATIC BIOLOGICAL OPINION ON THE U.S. ENVIRONMENTAL PROTECTION AGENCY'S ISSUANCE AND IMPLEMENTATION OF THE FINAL REGULATIONS SECTION 316(B) OF THE CLEAN WATER ACT (2014) [hereinafter BiOP], *available at* http://water.epa.gov/lawsregs/lawsguidance/cwa/316b/upload/Final-316b-Biological-Opinion-and-Appendices-May-19-2014.pdf.

99. *Id.* at 71.

100. CWIS Rule, *supra* note 75, at 48,439.

101. *Id.*

102. BiOP, *supra* note 99, at 75-76.

103. *See, e.g*, Cooling Water Intake Structure v. U.S. Envtl. Prot. Agency, No. 14-4645 (S.D.N.Y. filed Dec. 18, 2014) (and consolidated cases 14-4657, -4659, -4664, -4667, -4670); Riverkeeper, Inc. v. Office Mgmt. & Budget, No. 1:15-cv-04426-KPF (S.D.N.Y. filed June 8, 2015) (complaint for declaratory & injunctive relief).

104. 33 U.S.C. § 1362(7) (2012).

105. 33 C.F.R. § 328.3(a) (2012).

106. Final Rule, Clean Water Rule: Definition of "Water of the United States", 80 Fed. Reg. 37,054 (June 29, 2015) (to be codified at 33 C.F.R. pt. 328 and in scattered sections of 40 C.F.R.). The Rule became effective on August 28, 2015.

107. *Id.* at 37,057.

108. *Id.* at 37,057-58.

rule.[109] Two categories, seven enumerated regional features with a significant nexus; and eight waters in the 100-year flood plain or within 4,000 feet of a water of the United States with a significant nexus, are jurisdictional where the agencies find, after a case-by-case analysis, that they have a significant nexus to TNW, interstate waters or the territorial seas.[110]

The rule creates new regulatory terms and definitions for determining jurisdiction. A Tributary is newly defined as a water that exhibits a bed, bank and Ordinary High Water Mark (OHWM) and contributes flow, either directly or through another water, to a TNW, interstate water or territorial sea.[111] Additionally, ditches are considered jurisdictional where they exhibit tributary characteristics. Certain ditches are excluded from jurisdiction, e.g. ditches with intermittent or ephemeral flow that do not relocate or excavate a tributary, or drain wetlands or ditches that contribute flow to a TNW, interstate water or territorial sea.[112] Finally, adjacent is defined to include waters that are "neighboring" other waters. Neighboring waters now include: all waters located within 100 feet of the OHWM of a TNW, interstate water or territorial sea; all waters located within the 100-year floodplain and not more than 1,500 feet from the OHWM of such water; and all waters located within 1,500 feet of the high tide line of such waters. The new definition captures features such as ponds, lakes, oxbows and features on industrial sites formerly considered non-jurisdictional.[113]

Waters not within the distance thresholds of the adjacent waters category can be jurisdictional if they are located within the 100-year floodplain or within 4,000 feet of the OHWM or high tide line of waters of the US and are found to have a "significant nexus." Certain listed regional features (prairie potholes, Carolina and Delmarva bays, pocosins, western vernal pools, and Texas coastal prairie wetlands) can also be jurisdictional if they are found to have a significant nexus.[114]

A significant nexus can also be found if any one of the following functions exists: sediment trapping; nutrient recycling; pollutant trapping, transformation, filtering, and transport; retention and attenuation of flood waters; runoff storage; contribution of flow; export of organic matter; export of food resources; and provision of life cycle dependent aquatic for species located in a TNW, interstate or territorial sea.[115]

The rule sets forth several exclusions that include:

- Waste treatment systems, including ponds or lagoons designed to meet the requirements of the CWA;
- Prior converted cropland;
- Certain ditches that are not tributaries;
- Artificial, constructed lakes and ponds created in dry land, such as cooling ponds, settling ponds, and irrigation ponds;
- Artificially irrigated areas that would revert to dry land should watering cease;

109. *Id*. at 37,058-59.

110. *Id*. at 37,059.

111. Clean Water Rule: Definition of "Water of the United States", 80 Fed. Reg. at 37,058.

112. *Id*. at 37,058; 37,078-79.

113. *Id*. at 37,058-59.

114. *Id*. at 37,059.

115. *Id*. at 37,059; *Id.* at 37,091-95.

- Water filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
- Erosional features, including gullies, rills, and other ephemeral features that do not exhibit bed, banks and OHWM;
- Groundwater, including groundwater drained through subsurface drainage systems;
- Stormwater control, wastewater recycling structures, detention and retention basins built for wastewater recycling only where built on dry land; and
- Water distribution structures built for wastewater recycling.[116]
- The rule has triggered legal challenges by a number of states and industry groups.[117]

3. EPA Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity

On June 4, 2015, EPA issued a new National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit for Stormwater Discharges from Industrial Activity (2015 General Permit).[118] The 2015 General Permit replaces the 2008 general permit which had been administratively continued by EPA until permit reissuance, for covered facilities.[119] Facilities previously covered under the existing permit must have submitted a Notice of Intent for coverage under the 2015 General Permit by September 2, 2015.[120]

The 2015 General Permit consists of forty-four separate regional EPA General Permits that may vary from each other based upon differing state or tribal certifications and water quality requirements.[121] The General Permit applies to twenty-nine industrial sectors in jurisdictions where EPA remains NPDES permitting activity.[122]

116. Clean Water Rule: Definition of "Water of the United States", 80 Fed. Reg. at 37,059; *Id.* at 37,096-37,101.

117. *See, e.g.*, Waterkeeper Alliance, Inc. v. U.S. Envtl. Prot. Agency, No. 15-72226 (9th Cir. filed July 22, 2015); Chamber of Commerce v. U.S. Envtl. Prot. Agency, No. 4:15-00386 (N.D. Okla. filed July 10, 2015); Texas v. U.S. Envtl. Prot. Agency, No. 3:15-cv-00162 (S.D. Tex. filed June 29, 2015); Ohio v. U.S. Envtl. Prot. Agency, No. 2:15-cv-02467 (S.D. Ohio filed June 29, 2015).

118. Notice of Final Permit Issuance, Final National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Industrial Activities, 80 Fed. Reg. 34,403 (June 16, 2015) [hereinafter Final Permit]; *See also Fact Sheet: EPA Issues Revised General Permit for Stormwater Discharges from Industrial Activities*, ENVTL. PROT. AGENCY, http://water.epa.gov/polwaste/npdes/stormwater/upload/msgp2015_shortfs.pdf [hereinafter Fact Sheet].

119. Final Permit, *supra* note 118, at 34,403, 34,405; Fact Sheet, *supra* note 118, at 1.

120. Final Permit, *supra* note 119, at 34,405.

121. *Id.* at 34,403.

122. Fact Sheet, *supra* note 118, at 1; The 2015 General Permit applies in areas of the country where EPA is the permitting authority and has made the permit available for coverage, including the states of Idaho, Massachusetts, New Hampshire and New Mexico, the District of Columbia, all U.S. territories with the exception of the Virgin Islands, federally operated facilities in Colorado, Delaware, Vermont, and Washington, most Indian Country lands, and certain activities in specific states (e.g., oil and gas activities in Texas and Oklahoma). Final Permit, *supra* note 118, at 34,402-03, 34,405; Fact Sheet, *supra* note 118, at 1.

The 2015 General Permit requirements are generally similar to the provisions of the 2008 general permit.[123] Significant changes include requiring electronic submission of Notices of Intent (NOI), annual reports and monitoring reports; revised threatened and endangered species eligibility procedures, modifications to effluent limitation requirement, inspections, NOIs, and industry-specific requirements; specific corrective action deadlines; and streamlining of Stormwater Pollution Prevention Plan documentation.[124] Issuance of the 2015 General Permit by EPA has resulted in petitions for review filed with Federal Courts of Appeal.[125]

C. Endangered Species Act (ESA)

Congress passed the ESA in 1973 to protect imperiled species and the habitats on which they depend.[126] Under the ESA, the U.S. Fish and Wildlife Service (FWS) is required to list a species as threatened or endangered when defined scientific criteria are met.[127] Whenever FWS lists a species, it must also designate "critical habitat" for the species, which is then protected from destruction or adverse modification.[128] Additionally, the ESA prohibits the "taking" of a species without authorization.[129] "Taking" is broadly defined to include, among other things, harassing or harming a species.[130] Violation of the take prohibition can lead to civil or criminal penalties.[131]

1. Recent Notable Listing Decisions

In December 2013, FWS proposed to list the northern long-eared bat, whose habitat includes thirty-nine states.[132] On April 2, 2015, FWS released its final rule and interim rule with request for comments.[133] Specifically, the effect of the final rule will be to add the northern long-eared bat to the List of Endangered and Threatened Wildlife.[134] FWS also established an interim rule under the authority of ESA section 4(d) that provides measures that are necessary and advisable to provide for the conservation of the northern long-eared bat.[135] The final rule amending 50 CFR 17.11 and the interim rule amending 50 CFR 17.40 were both

123. Final Permit, *supra* note 118, at 34,405.

124. *Id.* at 34,405-06; Fact Sheet, *supra* note 118, at 1-2.

125. *See, e.g.*, Waterkeeper Alliance, Inc. v. U.S. Envtl. Prot. Agency, No. 15-2091 (2nd Cir. filed June 1, 2015).

126. Endangered Species Act, 16 U.S.C. §§ 1531-44 (2012).

127. 16 U.S.C. § 1533(a)(1).

128. 16 U.S.C. § 1533(a)(3).

129. 16 U.S.C. § 1538(a)(1)(B).

130. 16 U.S.C. § 1532(19).

131. 16 U.S.C. § 1540.

132. Listing the Northern Long-Eared Bat as an Endangered Species, 78 Fed. Reg. 72,058 (proposed Dec. 2, 2013) (to be codified at 50 C.F.R. pt. 17).

133. Final Rule and Interim Rule with Request for Comments, Threatened Species Status for the Long-Eared Bat, 80 Fed. Reg. 17,973 (to be codified at 50 C.F.R. pt. 17).

134. *Id.*

135. *Id.*

effective May 4, 2015.[136] FWS accepted comments on the interim rule amending 50 CFR 17.40 through July 1, 2015.[137]

In October 2013, FWS proposed to list the California and Nevada populations of the greater sage grouse as threatened.[138] FWS subsequently withdrew the proposed rule to list the Bi-State distinct population segment of greater sage-grouse in California and Nevada as threatened, as well as the proposed rules under section 4(d), and to designate critical habitat for the Bi-State greater sage-grouse, on April 23, 2015.[139] These withdrawals were based on the conclusion that the threats as identified in the proposed listing rule no longer are as significant as believed at the time of publication of the proposed rule.[140] FWS found that the threats to the greater sage-grouse and its habitat, given current and future conservation efforts, are reduced below the statutory definition of threatened or endangered.[141]

In April 2014, FWS listed the lesser prairie chicken, whose range also includes areas of the Permian Basin located in western Texas and southeastern New Mexico, as threatened.[142] In June 2014, industry stakeholders sued FWS, challenging the listing as unlawful.[143] Environmental groups also sued, alleging that the species should have been listed as endangered.[144] Litigation remains ongoing.

D. Avian Issues

FWS intends to prepare a programmatic environmental impact statement (PEIS), pursuant to the National Environmental Policy Act, to evaluate the potential environmental impacts of a proposal to authorize incidental take of migratory birds under the Migratory Bird Treaty Act.[145] Specifically, FWS is considering a rulemaking to address various approaches to regulating incidental take of migratory birds, including issuance of general incidental take authorizations for some types of hazards to birds associated with particular industry sectors; issuance of individual permits authorizing incidental take from particular projects or activities; development of memoranda of understanding with Federal agencies authorizing incidental take from those agencies' operations and activities; and/or development of voluntary guidance for industry sectors

136. *Id.*

137. *Id.*

138. Threatened Status for the Bi-State Distinct Population Segment of Greater Sage-Grouse with Special Rule, 78 Fed. Reg. 64,358 (proposed Oct. 28, 2013) (to be codified at 50 C.F.R. pt. 17).

139. Withdrawal of the Proposed Rule to List the Bi-State Distinct Population Segment of Greater Sage-Grouse and Designate Critical Habitat, 80 Fed. Reg. 22,828 (proposed Apr. 23, 2015) (to be codified at 50 C.F.R. pt. 17).

140. *Id.* at 22,828.

141. *Id.*

142. Final Rule, Special Rule for the Lesser Prairie-Chicken, 79 Fed. Reg. 20,074 (Apr. 10, 2014) (to be codified at 50 C.F.R. pt. 17).

143. Permian Basin Petroleum Ass'n v. Dep't of the Interior, No. 7:14-cv-50 (W.D. Tex. June 9, 2014); Okla. Indep. Petroleum Ass'n v. Dep't of the Interior, No. 4:14-cv-00307-JHP-PJC (N.D. Okla. June 8, 2014).

144. Defenders of Wildlife v. Jewell, No. 1:14-cv-1025 (D.D.C. June 17, 2014).

145. Notice of Intent, Programmatic Environmental Impact Statement, 80 Fed. Reg. 30,032 (May 26, 2015).

regarding operational techniques or technologies that can avoid or minimize incidental take.[146] The rulemaking establishes appropriate standards for any such regulatory approach to ensure that incidental take of migratory birds is appropriately mitigated, which may include requiring measures to avoid or minimize take or securing compensation.[147] The deadline for submitting comments is July 27, 2015.[148]

146. *Id.* at 30,032-33.

147. *Id.* at 30,033.

148. *Id.*

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