Foreword

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It is our pleasure to introduce the *Ecology Law Quarterly*'s 2018–19 Annual Review of Environmental and Natural Resource Law. In its nineteenth year, the Annual Review is the product of collaboration among the student authors, ELQ's editors, Berkeley Law's environmental law faculty, and the Center for Law, Energy and the Environment.

We wish to extend our gratitude to Bonnie Stender, Maribeth Hunsinger, and Amy Collier, all of whom will soon be members of the bar. They served as teaching assistants and advisors to the authors. They dedicated themselves to helping the authors master developing areas of the law, and craft interesting and compelling papers. We also wish to thank the now-graduated ELQ Co-Editors-in-Chief, Stephanie Phillips and Craig Spencer. They orchestrated the Annual Review's publication process.

But the most enthusiastic recognition must go to the authors, without whom the Annual Review would not exist. Researching in an unsettled area of the law, developing a thesis, and drafting a scholarly work over the course of a single academic year is no easy feat. We applaud their hard work.

The Annual Review also features In Brief comments on recent appellate decisions written by students in the midst of their first year of law school. We commend these authors for their efforts during their very busy 1L year.

Law professors, students, legal historians, and countless other scholars seeking insight into the major developments in environmental, natural resource, and land use law during the past year will benefit from this Annual Review. We were honored to have the opportunity to work with the authors. Several themes arise from their Notes.

Not surprisingly, several of this year's contributions to the Annual Review center on climate change-related circuit court decisions. Other notes focused on the Clean Water Act, the National Environmental Policy Act, the treaty rights of tribes, and environmental justice.

CLIMATE CHANGE

As climate change threatens low-lying and coastal areas around the world, the global community must make difficult choices in the face of floods, hurricanes, and rising seas. Using the American Gulf South as a lens, Katie

Sinclair's provocative note examines the long-running battle to ensure compensation of the victims of Hurricane Katrina, the type of disaster that will only be exacerbated by the effects of climate change.[1] The saga came to an end in *St. Bernard Parish Government v. United* States,[2] in which the Court of Federal Claims shielded the Army Corps of Engineers for its mismanagement of New Orleans's levee system. Ms. Sinclair explores the potential for compensating victims of climate change-induced flooding and hurricanes in tort and under the National Flood Insurance Program. She concludes that relocation will be one of the few options for certain low-lying and flood-prone areas. Ms. Sinclair goes on to explore the cultural and economic upheaval accompanying displacement, promoting a program focusing on preserving community ties and avoiding a repeat of the eminent domain and urban renewal injustices of the past.

There can be little doubt that climate change will require creative and decisive regulatory solutions. In "Ignoring the Courts: A Contextual Analysis of Administrative Nonacquiescence,"[3] Thomas W. Matthew analyzes the U.S. Court of Appeals for the District of Columbia's decision in *National Environmental Development Association's Clean Air Project v. EPA*.[4] The D.C. Circuit affirmed the federal Environmental Protection Agency's policy of varying the interpretation that the Clean Air Act mandates depending on variations in circuit court precedent. Mr. Matthew argues that the continued debate over whether environmental regulations should be uniformly applied and centrally enforced is the direct result of interdisciplinary efforts to analyze and mitigate human impacts on planetary health. He concludes that the decision to differentiate the interpretation of the law based on geography should be context-specific and cautiously applied.

Regulatory change is needed to combat the American West's growing frequency of intense wildfire air pollution. Fire scientists have long emphasized the importance of using fire itself as a natural, regenerative event to maintain forest health and reduce large wildfire air pollution events. But government at all levels have committed to suppressing wildfires, thereby loading forests with fuel and increasing the risk of catastrophic wildfires. In light of the so-called "exceptional events" rule under the Clean Air Act allowing the use of prescribed fire as a wildfire management tool, in *NRDC v. EPA*,[5] the D.C. Circuit grappled with local implementation of air quality laws hindering the use

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1. Katie Sinclair, *Water, Water Everywhere, Communities on the Brink: Retreat as a Climate Change Adaptation Strategy in the Face of Floods, Hurricanes, and Rising Seas*, 46 ECOLOGY L.Q. 251, 259 (2019).

2. 887 F.3d 1354 (Fed. Cir. 2018).

3. Thomas W. Matthew, *Ignoring the Courts: A Contextual Analysis of Administrative Nonacquiescence*, 46 ECOLOGY L.Q. 251, 311 (2019).

4. 2018 WL 2749179 (D.C. Cir., June 8, 2018).

5. No. 16-1413 (D.C. Cir., July 20, 2018).

of prescribed fire for forest management. Looking to California and its San Joaquin Valley as a case study, Ben Richmond used data obtained through a public records request to show that while land managers and air quality regulators in the San Joaquin Valley have drastically increased their use of prescribed fire, that increase is not sufficient to return the southern Sierra Nevada to a natural fire-adapted ecosystem. In "Beyond the Exceptional Events Rule: How the Local Implementation of Air Quality Regulations Affects Wildfire Air Policy," Mr. Richmond argues that policy makers should pursue even more aggressive options to encourage prescribed fire by modifying the structure of air quality law.[6] He makes the case that subjecting large wildfires to the requirements of the Clean Air Act would incentivize local air managers to develop plans to mitigate the effects of wildfire in the long term. He further argues that limiting local air quality regulators' authority over land managers' use of prescribed fires would also encourage further use of prescribed fire. Mr. Richmond's note was the winner of the Harmon Award as the best paper addressing an environmental law topic in 2019.

LAND USE

California is in the throes of the worst housing crisis in the state's history. This shortage has widespread impacts, from exacerbating economic inequalities to crippling the state's efforts to meet its greenhouse gas emission reduction targets. Coupled with historic racial zoning, the housing crisis has hit the state's minority and impoverished communities particularly hard. The California legislature has responded with a bevy of legislation in 2017 and 2018 aimed at pushing cities to build more housing units. In his note, "Because Housing Is What? *Fundamental*. California's RHNA System as a Tool for Equitable Housing Growth," Jeff Clare analyzes the changes made to the state's Regional Housing Needs Assessment, and how those changes might provide for a more equitable housing strategy.[7] Mr. Clare summarizes the state's dense housing element law and its historic inadequacies, and explores how the new laws target these inadequacies. Mr. Clare concludes by addressing the continuing issues surrounding equity in California's housing policy.

ENERGY LAW

A well-functioning electricity system is fundamentally important to the American way of life. The idea of promoting grid resiliency was present in a proposed rulemaking from the Department of Energy to justify compensating the coal and nuclear industries for the resiliency attributes they provide the

6. Ben Richmond, *Beyond the Exceptional Events Rule: How the Local Implementation of Air Quality Regulations Affects Wildfire Air Policy*, 46 ECOLOGY L.Q. 251, 343 (2019).

7. Jeff Clare, *Because Housing is What? Fundamental. California's RHNA System as a Tool for Equitable Housing Growth*, 46 ECOLOGY L.Q. 251, 373 (2019).

grid. While this rule was ultimately rejected, it led to resiliency as the subject of a lengthy action by the Federal Energy Regulatory Commission, which sought information from large sectors of the industry about what they are doing to promote resiliency. However, representatives of the industry do not agree on how to best achieve resiliency or exactly what resiliency means. In her note, "Federal Regulation for a 'Resilient' Electricity Grid," Stephanie Phillips explores the emergence of the term resiliency within the context of federal electricity regulation.[8] Ms. Phillips explores proposed themes for how resiliency relates to, and might be distinguishable from, the well-understood federal electricity regulatory frameworks of reliability and resource adequacy. If a specific technical problem is successfully connected to the concept of resiliency, she argues that the term could likely easily be housed conceptually and achieved within such existing regulatory frameworks. If a specific problem is not agreed upon, Ms. Phillips argues that the idea of resiliency could potentially be used strategically to justify broader administrative or legislative actions. Ms. Phillip's note was the winner of the 2019 Energy and Climate Change Legal Writing Award.

ENVIRONMENTAL JUSTICE

In drafting the Principles of Environmental Justice, people of color laid out the framework for the environmental justice movement. Since then, many conceptions of environmental justice have arisen. Some focus on distributive justice, or balancing the environmental benefits and burdens amongst all communities. Others focus on procedural justice, seeking to increase equal access to decision making. But few encapsulate both concepts while also recognizing environmental justice communities' distinct characteristics. In "Put Your Money Where Their Mouth Is: Actualizing Environmental Justice by Amplifying Community Voices," Candice Youngblood argues that three key components are necessary to achieve a more complete conception of environmental justice.[9] Because environmental justice emphasizes the notion "we speak for ourselves," Ms. Youngblood shifts attention back to the Principles of Environmental Justice and lays out guideposts for empowering, rather than usurping, the communities that founded the environmental justice movement.

CLEAN WATER ACT

Two authors addressed the ongoing debate about how much of the U.S. is subject to the mandates of the federal Clean Water Act.[10]

8. Stephanie Phillips, *Federal Regulation for a "Resilient" Electricity Grid*, 46 ECOLOGY L.Q. 251, 415 (2019).

9. Candice Youngblood, *Put Your Money Where Their Mouth Is: Actualizing Environmental Justice by Amplifying Community Voices*, 46 ECOLOGY L.Q. 251, 455 (2019).

10. 33 U.S.C. §§ 1251–1387.

In the past two decades, the Supreme Court has significantly reduced the deference given to the Army Corps of Engineers' "jurisdictional determinations" to determine whether land is subject to the Clean Water Act. Prior to *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*,[11] the U.S. Supreme Court had continuously upheld the Corps' interpretation of the Clean Water Act's jurisdictional reach. Following *Solid Waste Agency*, however, the Court has continuously raised the level of scrutiny applied to the Corps' jurisdictional rules. In "Jurisdictional Determinations and Judicial Scrutiny,"[12] Michael Riggins uses the Seventh Circuit Court of Appeal's decision in *Orchard Hill Building Co. v. U.S. Army Corps of Engineers*,[13] to explore how the Supreme Court's scrutiny of the Corps' jurisdictional determinations has evolved. He starts his analysis with the Court's relatively lax approach in *United States. v. Riverside Bayview Homes*,[14] and continues through the Court's gradual heightening of scrutiny in *Solid Waste Agency*, *Rapanos v. United States*,[15] and *Hawkes v. Army Corps of Engineers*.[16] Mr. Riggins argues that this evolution's conservative underpinnings limit the Corps' regulatory authority and undermines the Clean Water Act's environmental goals.

The Sixth Circuit Court of Appeals held that the mandates of the Clean Water Act should not apply to groundwater with a sufficient hydrological connection to surface water, while the Fourth and Ninth Circuits came to the opposite conclusion. In February 2019, the U.S. Supreme Court granted certiorari to *Hawai'i Wildlife Fund v. County of Maui*,[17] to resolve this debate. Although EPA's position until April 2019 was that these waters are covered by the Clean Water Act, EPA never created a clear rule to decide close cases. It now believes that hydrologically connected groundwater is not covered. In "Underground Pathways to Pollution: The Need for Better Guidance on Groundwater Hydrologically Connected to Surface Water," Kaela Shiigi argues that environmental groups should have lobbied the EPA to promulgate a rule on this topic during an environmentally friendly administration.[18] If the Ninth Circuit's holding is affirmed, Ms. Shiigi believes that EPA should clearly promulgate a rule that hydrologically connected groundwater is covered by the Clean Water Act and provide guidelines for determining the extent of the necessary groundwater connectivity.

11. 531 U.S. 159 (2001).

12. Michael Riggins, *Jurisdictional Determinations and Judicial Scrutiny*, 46 ECOLOGY L.Q. 251, 485 (2019).

13. No. 17-3403 (7th Cir., June 27, 2018).

14. 474 U.S. 121 (1985).

15. 547 U.S. 715 (2006).

16. 137 S. Ct. 1807 (2016).

17. 886 F.3d 737 (9th Cir. 2018).

18. Kaela Shiigi, *Underground Pathways to Pollution: The Need for Better Guidance on Groundwater Hydrologically Connected to Surface Water*, 46 ECOLOGY L.Q. 251, 519–20 (2019).

NATIONAL ENVIRONMENTAL POLICY ACT

NEPA lawsuits usually revolve around complex technical or scientific issues that ignore the concerns and values articulated by stories that the public tells about its relationship to the natural world. Jarrod Ingles's note, entitled "A Narrative Understanding of NEPA Public Participation," is unlike any other to have appeared in an Annual Review.[19] He focuses on the Tenth Circuit Court of Appeal's decision in *WildEarth Guardians v. the Bureau of Land Management*,[20] and offers a provocative explanation for why public agencies struggle to fully engage the public through the public participation process required under the National Environmental Policy Act.[21] Noting that many legitimate values are neither economic nor scientific, Mr. Ingles argues that a core problem with the current NEPA public participation model is that it elevates environmental narratives of efficient economic and scientific management over all other environmental narratives.

TRIBAL RIGHTS

Across the Pacific Northwest, historic salmon runs have decreased by an alarming 95 percent. This crisis particularly impacts the spiritual and economic health of tribes dependent on salmon runs. One major cause of salmon decline is habitat destruction. Twenty-one western Washington tribes, together with the federal government, brought suit to address the protection of salmon habitat. In June 2018, the U.S. Supreme Court's *per curium* order in *United States v. Washington*,[22] affirmed the Ninth Circuit Court of Appeal's decision in *United States v. Washington*.[23] The Court of Appeals interpreted the tribes' treaties as restricting the construction of barriers to preventing salmon from reaching the tribes' traditional fishing grounds. Although the decision applied only to structures built to allow roads to cross streams, it may also apply to dams and other structures with the potential to significantly degrade salmon habitat. In "Implications Beyond Culverts: The Challenges Tribes Will Face Extending *United States v. Washington* to Other Habitat-Depleting Policies," Shelby Culver explores what this decision means for future tribal efforts to protect salmon.[24] Ms. Culver concludes that extending the logic in *United States v. Washington* to a wide range of structures impacting salmon habitat will not be easy.

19. Jarrod Ingles, *A Narrative Understanding of NEPA Public Participation*, 46 ECOLOGY L.Q. 251, 555 (2019).

20. 870 F.3d 1222 (10th Cir. 2018), *cert. granted* Cty. of Maui, Hawaii v. Hawaii Wildlife Fund, 139 S. Ct. 1164 (2019).

21. 42 U.S.C. §§ 4321–70.

22. 17-269 (June 11, 2018).

23. 853 F.3d 946 (9th Cir. 2017).

24. Shelby Culver, *Implications Beyond Culverts: The Challenges Tribes Will Face Extending United States v. Washington to Other Habitat-Depleting Policies*, 46 ECOLOGY L.Q. 251, 591 (2019).

Native American tribes have resisted uranium extraction on and near their reservations for decades. However, a growing interest in nuclear energy use has amplified the need for tribes to develop a reliable strategy for opposing these projects. Cheyenne Overall's note entitled, "NEPA: A Tool for Tribes Resisting Uranium Extraction Projects," studies the Oglala Sioux's attempts to use NEPA to halt uranium extraction projects within the tribe's traditional territories.[25] In *Oglala Sioux v. Nuclear Regulatory Commission*, the Oglala Sioux argued that the Nuclear Regulatory Commission (NRC) failed to adequately consider the Dewey Burdock project's impacts on the tribe's cultural and ecological resources when it granted a license allowing the uranium extraction project to proceed.[26] Surprisingly, the D.C. Circuit sided with the tribe and concluded that the Nuclear Regulatory Commission failed to comply with NEPA's cultural resource analysis requirement. In an attempt to explain why the Oglala Sioux's cultural resource challenge was effective, Ms. Overall argues that the Nuclear Regulatory Commission's structure, norms, and rules actually facilitate tribal challenges to extraction projects on cultural resource grounds. She also underscores the limits of NEPA challenges to uranium extraction projects on ecological grounds and explains why the NRC's characteristics often shield its ecological resource conclusions from challenges in the courts.

We congratulate all of the authors for a job well done.

25. Cheyenne Overall, *NEPA: A Tool for Tribes Resisting Uranium Extraction Projects*, 46 ECOLOGY L.Q. 251, 625 (2019).

26. 896 F.3d 520, 525 (D.C. Cir. 2018).