Editor’s Perspective

This symposium issue begins with an article by Professor Craig Anthony (Tony) Arnold, based on his keynote address at the symposium. The symposium was organized around two highly influential previous works by Professor Arnold, "Fourth-Generation Environmental Law: Integrationist and Multimodal," 35 William & Mary Environmental Law & Policy Review 771 (2011), and "Adaptive Law and Resilience," 43 Environmental Law Reporter 10426 (2013), which he co-authored with environmental scientist Lance Gunderson.

The article for this symposium, "Environmental Law, Episode IV: A New Hope?: Can Environmental Law Adapt for Resilient Communities and Ecosystems," builds on the themes that Professor Arnold developed in his prior works. In this article, he describes the evolution of U.S. environmental law through four generations and the characteristics of each generation. The fourth generation of environmental law aims to increase the resilience of linked social systems and ecosystems (social-ecological resilience). Given that systems can collapse under disturbances and shift to entirely new structures and functions, our environmental law institutions need improved adaptive capacity. There are five distinct and important alternatives to traditionally rigid, fragmented, certainty-seeking environmental law structures: adaptation, adaptive management, adaptive planning, adaptive governance, and adaptive law. Fortunately, adaptive environmental law and governance institutions are emerging, aimed at improving social-ecological resilience. Examples include developments in adaptive watershed governance institutions. These examples of fourth-generation environmental law suggest reasons to hope that environmental law can adapt for resilient communities and ecosystems. However, the article also explores the reasons why fourth-generation environmental law might disappoint us: its inherent limits and flaws. Nonetheless, hope itself is an adaptive and resilience-building strategy. The final section of the article discusses research on the psychology of hope and what it means for how we think about environmental law in the United States. Professor Arnold is the Boehl Chair in Property and Land Use at the University of Louisville, where he teaches in both the Louis D. Brandeis School of Law and the Department of Urban and Public Affairs and directs the interdisciplinary Center for Land Use and Environmental
Responsibility. He is also an Affiliate of the Ostrom Workshop on Political Theory and Policy Analysis at Indiana University, Bloomington.

Our next article comes from Donald J. Kochan, the Associate Dean for Research & Faculty Development and Professor of Law at the Chapman University Dale E. Fowler School of Law in Orange, California. Professor Kochan’s article is entitled Economics-Based Environmentalism in the Fourth Generation of Environmental Law. Professor Kochan terms his approach “economics-based environmentalism” and contends that the advantages of using economic principles come from the benefits available in private ordering, markets, property rights, liability regimes and incentives structures that will better protect the environment than alternatives like state-based interventionist, prescriptive rules that lack the adaptability and tailored effect of economics-based rules. Professor Kochan includes in his essay a proposal that would embed in law a requirement that agencies prove the existence of market failure and the exhaustion of economic alternatives to governmental regulation before being allowed to proceed with any top-down, interventionist governmental regulation. The final portion of Professor Kochan’s essay focuses on realities of decision-making exposed by law and economics and describes barriers to any effective reform in the emerging fourth generation of environmental law – whether it be those reforms proposed by others or even those suggested by Professor Kochan.

Melinda Harm Benson, Associate Professor of Geography and Environmental Studies and affiliated faculty at the University of New Mexico College of Law, argues that there is a pressing need to rethink our relationship to environmental challenges. In her article Reconceptualizing social-ecological relations— is resilience the new narrative?, she posits that we must face the emerging realities of the Anthropocene. These realities include unprecedented and irreversible rates of human-induced biodiversity loss, exponential increases in per-capita resource consumption, and global climate change. She explains that, combined, these and other factors are increasing the likelihood of rapid, non-linear, social and ecological regime changes. New narratives and orientations are therefore needed to provide the necessary capacity to deal with these challenges in a meaningful and equitable way. The concept of “resilience” is then introduced as an emerging as a new narrative with potential in this regard. After situating resilience within current and historical narratives regarding social-ecological relations,
Professor Benson examines the potential for resilience to shift the environmental paradigm.

Professor Elizabeth Kronk Warner is an Associate Professor and Director of the Tribal Law and Government Center at the University of Kansas School of Law. Professor Kronk Warner’s article is entitled *Indigenous Adaptation in the Face of Climate Change*. The article explores adaptation efforts undertaken by tribes in response to the impacts of climate change on their communities. Tribes are not immune from the impacts of climate change. Though many tribal communities contribute little, if anything, to the problem of climate change, they are uniquely vulnerable to its impacts given their locations and connection to land. As a result, tribes are increasingly looking at adaptive strategies to increase resiliency in the face of climate change. Accordingly, this article takes a closer look at tribal adaptation plans in the hopes of identifying emerging trends. Although the article is largely descriptive, the hope is that other tribes developing their own adaptation plans can consider the factors and potential trends discussed herein. Moreover, the identified emerging trends may be helpful to non-tribal communities engaged in adaptation management. Finally, this article may serve as a first step toward a normative discussion of what constitutes best practices in developing tribal adaptation plans.

Professor Andrew Long is an attorney with expert research and writing skills. And experience preparing appellate briefs, pleadings, and administrative materials. He has authored more than 20 publications, including practitioner guidance and academic research, as well as consultation reports for international organizations and of course his piece for this edition of JESL, *Global Integrationist Multimodality: Global Environmental Governance and Fourth Generation Environmental Law*. This piece examines how the concept of “integrationist multimodality,” developed by Professor Tony Arnold in *Fourth Generation Environmental Law*, relates to the trajectory of international environmental law and regulation of global environmental challenges more generally. Professor Long has delivered more than 30 presentations at top-tier U.S. institutions such as Yale and Georgetown, in several European countries, and to scientific, regulatory, and business audiences. He has seven years’ experience teaching environmental, property, and administrative law, as well as negotiation and appellate advocacy skills, at three ABA-accredited law schools.
Our first student note comes from JESL’s Editor in Chief, Scott Martin. Mr. Martin will graduate from the University of Missouri School of Law in the spring of 2015 having served two years on this Journal as well as earning a Criminal Law Certificate. As an undergraduate at the University of Missouri Mr. Martin majored in Strategic Communications through the University of Missouri School of Journalism and served as captain of the men’s varsity swim team. In this edition of the Journal he addresses the ability of local governments to protect local their environments through zoning ordinances in *What the Frack?! How Local Zoning Laws Keep Dangerous Mining Techniques Off Our Property*. The article draws its central arguments from the case Matter of Norse Energy Corp. USA v. Town of Dryden and highlights the steps local governments have been taking to keep hydraulic fracturing companies off their local land. The inspiration for this article comes from Mr. Martin’s personal experience dealing with a mining company trying to operate on land his family owns.

Allison Tungate authors *Clarifying the Preemptive Scope of CERCLA Section 9658*. Ms. Tungate is a J.D. candidate at the University of Missouri School of Law with an anticipated graduation date of May 2015. Ms. Tungate received her B.A., *cum laude*, in political science and public relations from Webster University in 2012 and wishes to thank Ms. Molly Ritzheimer, Mr. Scott Mikulecky and Mr. and Mrs. Mark Tungate for their guidance and support in writing her article. In the publication, Ms. Tungate explains that the Fourth Circuit’s interpretation that the preemptive language found in Section 9658 of the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”) was meant to preempt not only statutes of limitation, but also statutes of repose, accurately reflects Congress’s intent in passing the section. Specifically, Ms. Tungate argues that the Fourth Circuit reinvigorated Congress’s intent in making CERCLA a remedial statute by insuring that victims of toxic waste will not be hindered by inconsistent and restrictive state procedural obstacles. Instead, plaintiffs will have clarity as to when to file claims arising from alleged unlawful hazardous waste dumping and defendants will not longer be susceptible to a wave of litigation since plaintiffs will be required to bring claims within three years of discovery.

Jafon Fearson authors our next note, *Making the Right Step Under the Wrong Authority: Kansas’s Expansion of CERCLA to Include State Statutes of Repose*. Mr. Fearson is a J.D. candidate at the University of Missouri
School of Law set to graduate in May 2015, and received his B.S. in Biomedical Engineering from the University of Alabama at Birmingham in 2012. In his note, Mr. Fearson comments on the United States District Court for the District of Kansas’s decision to expand CERCLA’s reach by holding that Kansas’s statute of repose, and not just its statute of limitations, is also preempted by CERCLA. More specifically, Mr. Fearson argues that the expansion goes beyond Congress’s intent, and poses serious constitutional concerns regarding violation of due process for defendants who are not federal agencies.

Theodore Lynch authors *Rise of the Super-Legislature: Demanding a More Exacting Monetary Exaction*, a casenote about the Supreme Court decision *Kootnz v. St. Johns River Water Management District*, 133 S.Ct. 2586 (2013). Mr. Lynch is a J.D. candidate at the University of Missouri School of Law with an anticipated graduation date of May 2015. Mr. Lynch received his Bachelor of Arts in Business Administration and Master of Tourism Administration in Sport and Event Management in 2009 from George Washington University. In addition to the *Kootnz* case, Mr. Lynch’s casenote examines the Courts’ modern Fifth Amendment regulatory takings jurisprudence, the land-use exaction cases, and economic substantive due process. Mr. Lynch explains that the Court found the government’s demands to be prohibited by the unconstitutional conditions doctrine because they frustrated the Fifth Amendment right to just compensation. Additionally, Mr. Lynch explains that the Court held that monetary exactions requested by the local government must satisfy the nexus and rough proportionality requirements now common to land-use exaction cases. In the comment section Mr. Lynch argues three points: First, the Court’s depiction of the instant case downplayed the fact that the petitioner was in negotiations with the Water Management District at the time and the “demands” put on his property were in reality suggestions or counter proposals by the government during the negotiation, a common practice between landowners and the District so that litigation could be avoided. Second, the holding illustrates the Court reassuming a role of super-legislature by finding that a taking had occurred during State’s land-use permitting process, which had been in place since 1984 to protect its wetlands. Finally, the consequences of this ruling will fall largely on the public and surrounding communities of property owners with environmentally damaging developments. Those private property owners will now be able to more easily shift the negative
externalities and costs of their development onto the public instead of bearing it themselves.

Angelina Whitfield authors *Blocking Eco-Patent Trolls: Using Federalism to Foster Innovation in Environmental Technology*. Ms. Whitfield is employed in the Antitrust Division of the Illinois Attorney General's Office. She received her J.D. from the University of Missouri in 2014. She wishes to thank Dennis Crouch for his assistance and guidance. In her article, Ms. Whitfield explains how the increasing flood of patent-troll-related litigation has impeded the growth of environmentally beneficial technology. Specifically, Ms. Whitfield asserts that because environmental innovation requires large-scale capital investment, patents provide little incentive if innovation is likely to lead to costly litigation. She states that the U.S. Patent Office's failure to discriminate between patents on environmentally-beneficial and harmful technologies may represent a failure to meaningfully prioritize socially valuable patents. Lastly, Ms. Whitfield concludes that the holding in *Forrester* encourages states to resolve suits involving environmentally-beneficial patents under their own laws, reducing both the pressure on federal courts and the national impact of patent trolls.