# Workshop Report: Re-Imagining Environmental and Natural Resources Law

March 21-23, 2019









# **ABOUT MERIDIAN INSTITUTE**

Meridian Institute is a mission-driven, non-profit organization that has helped our clients and partners develop and implement solutions to complicated, often controversial problems—big and small, global and local—for over two decades.

We do this with an innovative approach that brings together three elements: our deep understanding of the issues at hand, as well as the people, politics, and power dynamics that surround them; our dedicated, expert team; and our ability to foster constructive discussions, manage decisions, and support actions that shape the world for the better. We work not only to shape meaningful consensus and action in the near term, but also to build our partners' capacity for cooperation that often continues for years, even decades.

We focus on five key services: collaboration, implementation, strategy, research, and philanthropic support. We bring our skills to bear on a diverse range of issues, including environment & natural resources, climate change, agriculture & food systems, forests, health, oceans & coasts, resilience, science & technology, and water. Across issues, boundaries, and systems, our work is a catalyst for powerful impact.

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### **OVERVIEW**

This year, 2019, marks the 50<sup>th</sup> anniversary of the National Environmental Policy Act (NEPA), the Environmental Law Institute (ELI), and the environmental law program at George Washington University School of Law (GWU). Recognizing the progress made over the last 50 years, GWU and ELI jointly convened a meeting of environmental and natural resources legal scholars and leaders from the community of practitioners in March 2019 to discuss the critical issues and solutions that will define the next 50 years of environmental and natural resources law. See Appendix A for a list of participants. The Johnson Foundation at Wingspread hosted this meeting, and Meridian Institute provided facilitation support.

The meeting agenda, which is available in Appendix B, included presentations, plenary discussions, and small group discussions. Discussions focused on opportunities to address four substantive topics: climate change, ecosystem degradation, non-point source pollution, and materials conservation and reuse. Participants broadly agreed that these four challenges are some of the most pressing environmental issues that will require focused attention in the years ahead. Though all discussions included recognition of the broad international context, the meeting focused primarily on environmental and natural resources law in the United States.

The goal of the meeting was not to reach consensus on solutions, but rather to bring new ideas to the table, connect leaders in the field, and lay the foundation for a conversation that will continue at an Airlie House convening in November 2019. Key points and outcomes are noted in this meeting summary, divided as follows:

- 1. Presentations to Initiate the Discussion
- **2.** Exploration of Key Substantive Issues and Potential Solutions
- 3. Context for Solutions
- **4.** Themes for Future Discussion and Next Steps

## PRESENTATIONS TO INITIATE THE DISCUSSION

Multiple framing presentations were provided on the first day of the meeting to prompt discussion on the broad topic of re-imagining environmental and natural resources law. A brief summary of each presentation is provided below, and slides are included in the appendices noted below.

#### AUSTRALIAN PANEL OF EXPERTS ON ENVIRONMENTAL LAW: ROB FOWLER

The purpose of this presentation by Rob Fowler was to share lessons learned from a recently conducted process to re-imagine Australian environmental law. Slides available in Appendix C.

Given that Australia is currently facing major environmental challenges, the Australian Panel
of Experts on Environmental Law (APEEL), developed a <u>blueprint</u> for the next generation of
Australian environmental laws.

- APEEL was comprised of 16 people, including law professors, retired judges, practicing
  public interest attorneys, etc., who worked voluntarily for several months. Rob Fowler led
  and coordinated this group. The project began with a brainstorming exercise in which
  participants identified key subject areas and produced white papers.
- Research, discussion, and writing were conducted in tandem with political action to build a
  foundation for the group's recommendations to be considered by the major Australian
  political parties. This included conducting lobbying activities and writing a document
  entitled "A Fair Go for Australia" for one leading political party.
- APEEL made many recommendations, but several key recommendations referenced during the presentation included:
  - Establishing and creating the basis for federal, state, and local government commitments to abide by a set of environmental rights and principles;
  - The Australian federal government providing leadership for a series of national and state-level environmental strategies; and
  - The creation of a federal environmental protection authority which had not previously existed in Australia.
- Some of these recommendations have gained political traction: e.g., a leading Australian
  political party has adopted into their platform the idea of creating a federal environmental
  protection agency.
- Among the many lessons learned, several relevant to this process include:
  - Many of the recommendations were grounded in top-down federal activity. This may or may not be appropriate for the US context, since the US has several federal environmental agencies and policies that Australia does not. There may be an opportunity to discuss potential changes to existing US institutions and implementation mechanisms.
  - In Australia, it was critical to build a strong political constituency to ensure that the time and energy spent drafting the APEEL recommendations resulted in tangible outcomes. It was important to create a broad political constituency and speak with multiple different parties.
  - The linkages between human immigration and population growth and environmental protection were particularly challenging and were not resolved by APEEL.

#### A SCIENTIFIC PERSPECTIVE ON KEY ENVIRONMENTAL ISSUES: JESSICA HELLMAN

The purpose of this presentation by Dr. Jessica Hellman from the Institute on the Environment at the University of Minnesota was to provide a scientific perspective on key environmental challenges to serve as a foundation for the focus on legal reforms. Slides available in Appendix D. Dr. Hellman's key points included:

- Planetary changes: climate change is already happening, and it will continue, resulting in major changes to the planet. The legal field should plan ahead to address the legal implications of those changes.
- Equity: climate change will impact different countries and groups of people disproportionately. There may be legal approaches to sharing impacts more equitably.

- Side effects: climate change will require significant adaptation. The law must account for both the need for significant adaptation actions and the liabilities associated with unintended consequences of adaptation actions.
- Data availability: there has been a dramatic increase in the amount of data available about the environment. The legal implications of this is that as publicly available information increases it will be more difficult to hide "bad behavior."
- Migration: climate change will continue to incentivize human migration. This will have legal impacts because human migration challenges political borders.
- Financial impacts: climate change will have impacts on corporate financial stability and liability that will likely need to be addressed by lawyers and risk assessors.

In follow-up to the presentation, there was a brief Q&A discussion. Key points included:

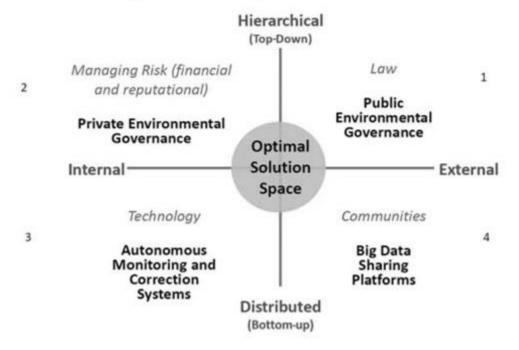
- Citizen science and remote sensing are both important data-gathering mechanisms serving
  different purposes. Citizen science engages community members and helps ecologists
  gather information that cannot be gathered via remote sensing technology (e.g., counting
  butterflies). Remote sensing allows scientists to gather a much larger amount of data than
  ever before.
- Voluntarily reported data about GHG emissions is not always reliable. For example, the data provided about methane releases from oil and gas production does not match observations from drones. There are some "back of the envelope" calculations that the scale of emissions from methane means natural gas is no better than coal from an emissions standpoint.
- Although climate change mitigation is a critical, high priority need, from a scientific standpoint there is an equally pressing need to focus on adaptation efforts that enhance community and ecosystem resilience.

#### **ECOSYSTEM OF ENVIRONMENTAL GOVERNANCE DRIVERS: SCOTT FULTON**

This presentation by Scott Fulton, President of the Environmental Law Institute, provided an overview of one possible framework for analyzing and discussing environmental governance drivers. Slides are available in Appendix E. Key points included:

- We are moving towards an environmental protection regime with increasingly distributed roles and accountability as the result of big data, technological advances, social media, and a multi-tiered governance system.
- One possible way to conceptualize the different environmental governance drivers is the four-quadrant model developed by Scott Fulton and David Rejeski in their paper "A New Environmentalism: The Need for a Total Strategy for Environmental Protection".

# Figure I. Ecosystem of Drivers



- Quadrant 1, Public Environmental Governance: this is driven by the rule of law, which
  requires access to information, public participation, regulatory coherence, enforcement (by
  regulators and/or citizens as private attorneys general), effective dispute resolution,
  integrity systems, auditing/oversight, and workable laws.
- Quadrant 2, Private Environmental Governance: this is driven by company compliance objectives, sustainability policies, and measures to ensure conformance both internally and across business spheres (e.g., supply chains, investment portfolios, etc.). Increasingly, environmental performance is being impelled by market forces not directly catalyzed by regulators.
- Quadrant 3, Autonomous Monitoring & Correction Systems: this is driven by emerging technologies that are increasingly allowing for machine monitoring and machine correction of environmental anomalies.
- Quadrant 4, Online Communities & Data Sharing Platforms: this is driven by the availability
  of unprecedented amounts of environmental data being generated through a proliferation
  of environmental sensing technologies, and the development of data sharing platforms
  which, by informing customer and societal approval, can create pressure for environmental
  performance.
- Potential implications of the quadrant model for the future of environmental and natural resources law include:

- Lessons learned from public environmental governance that can be applied to the other quadrants regarding such things as the importance of stakeholder engagement, transparency, accountability, and dispute resolution mechanisms.
- Legal structures (i.e., Quadrant 1) could potentially be viewed from the vantage point of catalyzing and/or enabling the evolution of the other three quadrants. This must take into account that legal structures inherently change more slowly than private governance structures, technological capacities, and communities.

In the brief Q&A discussion that followed the presentation, key points included:

- There is an important role for the law in assuring data transparency, including transparency
  regarding the underlying assumptions in models used to process data, because often people
  defer to the outputs of a model without fully understanding its underlying assumptions and
  analytical methodology.
- Different quadrants will vary in relevance depending on the environmental issues that are
  the focus of attention. For example, public environmental governance and top-down
  regulations may be especially needed in addressing ambient or broad environmental quality
  objectives like biodiversity, whereas private environmental governance may work best in
  areas more readily reduced to compliance obligations and best practices.
- Different areas of law apply to different quadrants. For example, administrative law is relevant to public environmental governance, but corporate and securities law is very relevant to private environmental governance.
- There are multiple additional frameworks available for discussing environmental governance. Additional frameworks were raised during the meeting, including:
  - A framework on institutional design, with three axes: centralized/decentralized;
     coordinated/independent; and overlapping/distinct.
- There are several important considerations not immediately evident in this model:
  - The role of "private environmental law" including tort litigation, wherein individuals influence corporate governance through litigation.
  - The reach of market forces across all quadrants.
- Though it could be helpful to share lessons learned from public environmental governance with those practicing other governance approaches, the strength of other governance approaches may lie in their differences.
- Given the pace of global warming, we may also need to think about governing disaster scenarios, which may result in new governance frames.

#### **EXPLORATION OF KEY SUBSTANTIVE ISSUES AND POTENTIAL SOLUTIONS**

The group split into breakout groups on four substantive topics jointly agreed to be key substantive environmental concerns. These topics were ecosystem degradation, non-point source pollution, materials conservation and reuse, and climate change. The small group discussions were intended as brainstorming exercises, not attempts to reach consensus agreements on next steps. Each group's discussion built on the following questions:

- What are the 2-3 critical outcomes/goals for this topic? Where do we need to be and by when?
- What are the key legal tools and strategies for making tangible progress to achieve those outcomes/goals within the determined timeframe?
- Are there gaps and/or insurmountable impediments to applying "traditional" legal tools and strategies? How might those gaps be filled?
- Can public lawmaking advance emerging governance approaches (as per the quadrant framework), including but not limited to:
  - Private environmental governance
  - Autonomous monitoring and correction systems (i.e., technology-based approaches to governance)
  - Community-based approaches including citizen science, big data sharing platforms, and grassroots advocacy
  - Markets
  - Corporate/securities law
  - o Other?
- What else do we need to know to progress towards the 2-3 critical outcomes/goals? Who is well-positioned to do the necessary research?

Each group provided a report-out to the full plenary after the breakout session and had the opportunity to get input from the full plenary group.

#### **ECOSYSTEM DEGRADATION**

- The ecosystem degradation group agreed that the topic is too broad to be addressed with only 2-3 goals. They noted that much of the problem is that ecosystems are approached from a species or project perspective, within political boundaries, or only for the short-term. Ideally, ecosystems approaches should look across the entire ecosystem and take long-term consequences of actions into account.
- The group identified aspects of the problem ranging from biodiversity to wetlands loss, discussed options for managing those problems, and then began a gap analysis to identify 8 transitions necessary for making progress to protect ecosystems.
  - For example, the group identified that governing ecosystems using political boundaries leads to misaligned ecosystem management and subsequent degradation, because ecosystems often cross political boundaries. Therefore, it may be helpful to increasingly use ecological, rather than political, boundaries for governance purposes. Next steps for achieving this could include creating watershed and airshed-based and biome-based authorities.
- The group made minor updates to the gap analysis following the meeting, and the resulting table is available in Appendix F.
- The group also briefly explored more radical changes, such as creating an exception to procedural statutes like the ESA and NEPA that may be serving to elevate local

environmental considerations over society-wide concerns associated with issues like climate change. This was not pursued further but could be grounds for future discussion.

#### NON-POINT SOURCE POLLUTION

- This group focused on the need to address diffuse sources of pollution not easily addressed by existing environmental regulation, with the joint motivations of positive environmental and public health outcomes. Success would include:
  - Improved ability to measure substantive environmental results;
  - Creation of a structural framework to accelerate the pace of change in addressing diffuse sources of pollution; and
  - Ability to look across environmental media (e.g., the air-water interface) and account for non-environmental social benefits.
- The group drew from the standard toolkit used in environmental management, including prescriptive regulation, taxes, subsidies and other incentives, etc. They determined that though gaps exist the existing tools are helpful, as long as solutions are applied at the necessary scale/landscape level.
- Several opportunities for improvement of the existing toolkit were identified, including:
  - Existing systems should be examined to determine whether they can allow for more
    "creative trade-offs," whereby certain standards can be exceeded if the environmental
    impact is offset by over-controls in other areas, such that the environmental impacts net
    out positively. While this flexibility can be circumstantially beneficial or problematic
    depending on how it is designed, additional experimentation in this area may be
    warranted.
  - New technologies and data will increase the potential to monitor and detect the sources and impacts of non-point pollution. Further scientific research on the health impacts of cumulative exposures to multiple pollutants may alter thinking regarding which pollutants are most important to regulate. Regulatory frameworks will need to evolve to incorporate this new technological capacity and scientific information.
  - Diffused pollution can lead to disproportionate pollution exposures in vulnerable and economically disadvantaged communities. Enhancements to the standard legal toolkit should provide an opportunity to achieve more equitable protections of these communities.
- The group created a table summarizing their thoughts, available in Appendix G.

#### **MATERIALS CONSERVATION AND REUSE**

- The group approached materials conservation and reuse from a materials lifecycle
  perspective. Members noted that there is not major public scrutiny of materials
  conservation and reuse in the same way that there is for other environmental issues. This
  corresponds to the fact that there are few legal structures and statutes that address this
  issue.
- Sub-issues within materials conservation and reuse include:

- Waste generated by plastics, packaging, electronics, and batteries;
- Industrial waste;
- o Mineral scarcity, especially rare earth minerals key to electronic devices;
- Worker exposure to toxic substances (on the extraction side); and
- o Community impacts of landfills and waste.
- Potential areas of action include:
  - o "Fate labeling": a labeling scheme on consumer products that indicates not just where the materials originated but also where they will be disposed of.
  - Extended producer responsibility: this could include learning from existing laws in the European Union regarding materials lifecycles and adopting similar approaches in the United States.
  - Community impact fund: requiring that all participants in the production cycle pay into an impact fund dedicated to addressing concerns that arise in communities from materials production and waste. This might reduce the time, expense, and negative energy associated with litigation, while still providing communities with resources needed to provide public health support.
  - Supplier Responsibility Guidelines: promoting supplier best practices, including transparency.
- Future work could include research on corporate transparency and state regulations on
  extended producer responsibility, as well as inclusion of voices from impacted communities.
  There also may be utility in revisiting the Resource Conservation and Recovery Act (RCRA) to
  enable further recovery of materials already entrained in commerce. It was mentioned that
  a helpful resource for further work is an ELI project entitled Resource to Recovery that
  includes information about how the legal system currently addresses the materials lifecycle.
- Long-term solutions will likely require corporate leadership and cultural change around materials use.

#### **CLIMATE CHANGE**

- The group approached climate change from a mitigation perspective (as opposed to an adaptation perspective) and drew heavily on recommendations in the recent book <u>Legal</u> <u>Pathways to Deep Decarbonization</u> organized and edited by meeting participants John Dernbach and Michael Gerrard and published by ELI. Professors Dernbach and Gerrard were in attendance.
- From a technical perspective, the group prioritized solutions that enhance energy efficiency, decarbonization of electricity, and electrification of vehicles. From a legal perspective, they focused on the solutions in the Legal Pathways book. Categories of legal tools identified were:
  - More regulation;
  - Clearer targeting of regulation;
  - Reduction or removal of legal barriers;

- Market-leveraging approaches;
- Removal of incentives for fossil fuels;
- Elimination of barriers to renewables;
- Trades/allowances;
- Research and development;
- o Insurance;
- o Property rights; and
- Social equity.
- The group identified a potential conflict between the need to move quickly on climate mitigation and the operation of the various environmental procedural statutes, which have been invoked in ways that have slowed progress on renewable energy projects.
- Potential next steps included:
  - Conducting further analysis and prioritization of the recommendations from the Legal Pathways book to create draft legislation (the group saw pro-bono lawyers as a potential resource for this work);
  - Conducting more research on the potential role of state agencies as a focal point for action;
  - Considering process reforms under NEPA and the ESA that would allow for landscape level assessment processes that might reduce project-by-project conflicts and delays;
  - Initiating more discussion about social equity and justice as relevant to the fast-moving implementation of new climate regulations; and
  - Contributing to future political and social understanding of climate change imperatives and opportunities.

#### **CROSS-CUTTING ISSUES**

During the next step in the workshop, the group split into breakout groups to discuss five cross-cutting issues that they jointly identified at the workshop. These cross-cutting issues included environmental justice, layered governance, private governance, legal institutions, and the need to create the legal basis for adaptation in anticipation of a 4 degrees Celsius climate change scenario. The breakout groups provided report backs leading to a brief discussion in the full group of each topic.

#### **ENVIRONMENTAL JUSTICE**

- The environmental justice group noted that disproportionally impacted communities should have a more significant voice in the dialogue about the future of environmental law, and that this convening would have benefitted from stronger representation from the environmental justice community. The full group supported increasing representation from the environmental justice community in any future meetings that build upon the outcomes of this meeting.
- The group presented two major topics for consideration regarding environmental justice and the law:

- The need for better vehicles for addressing differential environmental quality at the community level that are the result of historical race-based policies and practices. It was observed that where people live in relation to pollution sources is not just a function of economics; it is also attributable to dynamics that had their roots in a segregationist past. Addressing this, at a minimum, requires financial mechanisms to allow for technical analysis of current conditions and study of options for addressing them.
- The justice-related implications of pursuing radical strategies to address climate change were discussed. On the one hand, moving too quickly with approaches for preventing catastrophic climate change that short-circuit public participation could result in insufficient community participation in decision-making processes. On the other hand, if climate awareness leads to a restructuring of where people live or industry is carried out, or catalyzes job growth in new sectors, then the transformation may serve as an opportunity to rectify some of the injustices of the past. Taking advantage of such a moment of opportunity would require intention and forward-leaning policy commitment.
- New monitoring technologies that promise to make much more granular awareness of environmental conditions will likely create new imperatives for serious attention to communities overburdened by pollution.
- The group focused primarily on communities in the United States (workers, urban communities, rural communities, etc.) and the distinct struggles they face. However, there was recognition that climate change is expected to result in mass international migration which has a multitude of environmental justice implications.

#### LAYERED GOVERNANCE

- This group identified regional approaches as key to addressing environmental challenges because many environmental problems are regionally based (e.g., regional flooding, forest fires, water scarcity, etc.). In addition, tribal, state, and local governments may be able to move faster and more effectively than the federal government on many of these issues.
- The group proposed creating "pre-authorization compacts" for regional governance bodies that frequently need to address different parts of the same environmental event or phenomenon. Existing examples of this include:
  - Water compacts, including the Great Lakes and Chesapeake Bay compacts
  - Regional electricity grids
- Some group members suggested conducting further research and analysis on:
  - o Incentives and mechanisms for effective regional governance;
  - Oversight mechanisms for the federal government on regional action; and
  - The potential role of technology in increasing information flows between different levels of government and the public and allowing public assessment of performance across government(s) in ensuring environmental quality.

#### PRIVATE GOVERNANCE

- This group discussed the relationship between public and private environmental governance, defining private governance as voluntary standards and systems a company uses to ensure accountability for environmental and social best practices for itself and its supply or business chain. The group posed two main questions:
  - When and how should public government stimulate, interact with, and/or control private governance?
  - When and how should private governance influence public governance?
- In thinking about these questions, the group used examples of corporate supply chains and made the following points:
  - Private standards must connect clearly to public laws; standards should be aligned with public laws and seek to address gaps in ambition within and avoid duplication with the public regulatory framework.
  - The reach and contribution of private governance depends to some degree on public confidence in private sectors system. To this end, private actors should be encouraged, either through public regulation or social pressure, to be very transparent about their activities, including supply chain monitoring and reporting. This transparency must take into account corporate antitrust and general liability concerns and the need to protect proprietary / confidential business information.
  - Improving transparency will require significant corporate effort. The <u>Accountability Framework Initiative</u> was referenced as an example of a guide to best practices for transparent supply chain reporting. One participant suggested that standard setting should be approached at the sector level rather than the individual company level if antitrust concerns can be overcome.

#### **LEGAL INSTITUTIONS**

- The existing legal institutions were created to respond to crises and challenges of the past. To determine what may need to shift to address the environmental challenges of the future, this group discussed the pros and cons of existing institutions, identified gaps, and explored opportunities for filling those gaps.
- The institutions addressed included courts, agencies, NGOs, community structures, industry associations, markets, political institutions, and private property regimes. The conversation focused primarily on courts, as inherently legal institutions.
- The group identified that courts are non-specialized institutions, and there could be benefits
  to creating specialized environmental courts that would have a higher level of scientific
  knowledge embedded in the court, following the example of a good many other countries
  around the world.
- Barriers to successful citizen suits as an engine for change include the fact that causation and attribution are often difficult to prove, there is often a lack of representation for environmental justice communities, and working with science and evidence is resource and expertise intensive.

The group determined it would be helpful to continue thinking about institutional reform by
discussing the pros and cons of existing institutions, identifying gaps and barriers to
environmental solutions, and proposing alternative institutional approaches. Resources for
future work could include state constitutions that include environmental rights and existing
scholarship on property law in relation to environmental services of property.

#### ADAPTATION IN THE 4 DEGREES CELSIUS CLIMATE CHANGE SCENARIO

- This group discussed the potential for a 4-degree Celsius world, given current projections of GHG emissions levels and the lack of concrete progress on climate change mitigation efforts. The conversation focused around key adaptation opportunities and their associated legal implications and needs.
- The group identified multiple potential impacts of climate change including crop failure, sea level rise, drought, storms, disease vectors, and immigration waves. The group created a matrix that was designed to stimulate a brainstorming effort to identify options for how to adapt to climate change impacts, including legal needs, market impacts, and governance considerations. Additionally, using sea level rise as the example, the group explored how legal tools can be fashioned to allow for tailored support of different responses to sea level rise impacts over time, allowing for escalation of measures and increasingly regulatory overrides as impacts worsen.
- The matrix summarizing this group's thoughts can be found in Appendix H. This table is only partially completed. As a next step, this group or others could continue working on this table.

# THEMES FOR FUTURE DISCUSSION AND NEXT STEPS

The purpose of this meeting was to bring together leading experts in environmental and natural resources law to jointly explore innovative options for addressing current and future environmental challenges. Because it was exploratory, there was no effort to develop consensus recommendations, and no final decisions were taken. However, multiple next steps were proposed, as follows. These next steps are proposed in the context of a meeting that the Environmental Law Institute plans to host in November at Airlie House to commemorate the formation of the Institute and continue these conversations on the future of environmental and natural resources law.

#### PROPOSED NEAR-TERM RESEARCH AND ANALYSIS

- Explore scenario planning frameworks to ensure future conversations are grounded in specific scenarios. For example, one framework could include an axis on temperature change and an axis on governmental functionality.
- Conduct research on successful multi-sectoral regional governance and determine options for expansion of multi-sectoral regional governance.
- Follow-on from existing work conducted on the four substantive topic areas (climate change, ecosystem degradation, non-point source pollution, and materials proliferation).

- Each group could build upon the framework developed by the ecosystem degradation group (see Appendix F) to clarify goals and potential next steps.
- Each group could identify a clear problem statement they are seeking to address through their further discussion and analysis.
- Volunteer engagement with the process John Dernbach and Michael Gerrard are leading to engage pro-bono lawyers to help implement the recommendations in *Legal Pathways to Deep Decarbonization*.

#### THEMES FOR FUTURE DISCUSSION

- Further explore potential tradeoffs and synergies between 1) rapid innovation to address
  climate change through, among other things, dramatic expansion of renewable energy and
  local concerns about or opposition to individual projects, and 2) finding innovative ways to
  ensure preservation of environmental and public health protections and to honor
  participatory community processes;
- Examine whether NEPA and ESA processes (and related state process) can be run at a landscape or industrial scale to ensure resolution of high-level societal tradeoffs;
- Discuss nuclear power, considering both the historic opposition of the environmental movement to nuclear power and the carbon neutrality of nuclear power as an energy source;
- Examine where and how reform thinking might move beyond US needs and political realities to help address international needs and political realities;
- Consider whether there are specific steps that can be taken to accelerate the contribution of private environmental governance to environmental performance;
- Assess how to overcome paralysis in dealing with environmental justice to better distribute environmental burdens and benefits;
- Look at how greater efficiency and innovation can be achieved in the context of layered public governance (federal/state/tribal/local);
- Analyze the potential application of other fields of law (e.g., securities and corporate law) to advancing environmental performance;
- Determine the potential to include environmental law more fully in lawyer education (clinics, ABA, bar exam, etc.);
- Understand more fully how technology can contribute to the next generation of environmental law;
- Create opportunities to increase citizen awareness of and engagement with environmental issues;
- Discuss if and how it may be appropriate to inform in a non-partisan fashion the U.S. electoral process; and
- Identify funding opportunities to build on the momentum established at the workshop.

#### POTENTIAL PROCESS FOR FUTURE WORK

- Group members were urged to publish white papers and peer-reviewed journal articles, write blogs, and/or participate in podcasts or videos to share their thoughts on the future of environmental and natural resources law. GWU and ELI have the capacity to support some of these endeavors.
- Further discussions are needed on the objectives of and approach to the Airlie House meeting: multiple group members proposed a slightly larger but still relatively small convening (50-60 people), for the purposes of efficiency, but there were also several conversations about the importance of bringing younger voices, members of environmental justice communities, NGO environmental advocacy groups, and industry representatives to the table.
- Group members expressed interest in remaining involved, as possible, in this conversation.

The workshop concluded with expressions of gratitude toward the Johnson Foundation for hosting the group in a setting that resulted in creative thinking regarding significant societal challenges.