

Lessons in Policy & Law - Flash Presentations

Adaptive Governance Initiative

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Over the past several years there has been a growing realization that Louisiana's coastal crisis has much broader consequences than current restoration and protection efforts and sporadic, post-disaster resilience funding can address. This is underscored by a steady migration of people and businesses away from vulnerable areas - away from the coast. Given the magnitude and urgency of the needs and the scarcity of resources, every available dollar and effort must be leveraged to address multiple needs and achieve maximum benefit. Further, the considerable benefits of large-scale restoration efforts will be drastically undermined if the people who drive the economy and culture of the coast do not have sustainable communities that allow them to adapt and thrive. This understanding was powerfully conveyed to state agency leadership at the State Agency Resilience Workshop the Center for Planning Excellence (CPEX) held in October 2018 in partnership with the Governor's Office and the Governor's Office of Coastal Activities. Among other important outcomes, the workshop garnered consensus among top state leadership that coordinated efforts of all agencies will be required to adequately address the breadth and depth of the coastal challenges and to ensure that restoration and protection efforts achieve the desired results. All agencies' work has and will be directly and indirectly impacted by land loss and climate change, and they each have a role to play in mitigating those impacts for the people, communities, and geographies they serve. To respond to this need, Governor Edwards issued Executive Order JBE-2020-18 thereby formally establishing the Adaptive Governance Initiative. To support and drive a coordinated and proactive approach at the state level that integrates climate change and land loss data and projections into decision making and resources allocation, the Executive Order appointed the State's Chief Resilience Officer and Resilience Coordinators from state agencies to help agencies understand their relationship to the coastal changes and to each other, develop strategies and tools that aid in the integration of climate change data in decision making of agencies, leverage partnerships and maximize returns of investment, and to develop a framework for proactive, climate-adaptive governance for Louisiana to address long-term resilience needs. To date, CPEX has worked closely with the Chief Resilience Officer (CRO) to document the direct and indirect impacts of climate change on agencies ability to provide services and manage assets, and work with the Resilience Coordinators to help them see their stake in responding to and addressing these impacts through strategic actions within their agencies. Guided by a Resilience Framework and developed through research and analysis, collaboration, and experience of the Resilience Coordinators, four principles of resilience were established: Information, Integration, Participation, and Resourcefulness. These principles facilitate the development of strategic actions by each agency to continue to meet the needs and support the efforts of Louisiana's communities as they too adapt to climate change impacts - whether it is as a receiving community or migrating community.

Exploring Managed Retreat in the Land of Steady Habits

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Many Connecticut coastal neighborhoods are vulnerable to sea level rise and storm surge. Yet, except for a fleeting interest after Hurricane Sandy, little attention is being paid to long term solutions like managed retreat. To complicate matters, Connecticut is a Home Rule state with 169 towns each with their own governmental structure. As a result, there is little coordination across town borders when it comes to climate adaptation planning. Unlike the robust discussion engendered by the topic of hookah lounges, a September 2020 posting on CT Planners ListServ asking if communities had a formal or informal policy on managed retreat netted two responses-one referencing a community in New York and the other saying it would never happen in their community. The recommendations from a recent final draft report from the Governor's Commission on Climate Change (GC3) did not include or even mention managed retreat, despite looking at a 2050-time horizon. To start the conversation, the UConn Climate Adaptation Academy (CAA), a program of Connecticut Sea Grant and the UConn Center for Land Use Education and Research, held a virtual workshop on managed retreat in December 2020 with over 100 attendees. Dr. A.R. Siders from the University of Delaware was the featured speaker. The workshop was planned as part of a series of actions to address the question: How do we make managed retreat a viable option for a Connecticut neighborhood/area when considering policies for addressing the challenge of sea level rise or riverine flooding? The CAA is developing a framework for evaluating managed retreat impacts in Connecticut from an economic, political, environmental, social and legal standpoint. The initial phase will be to determine the status of managed retreat efforts in Connecticut and to develop a coordinated approach to educating the public. UConn faculty will work with UConn Climate Corps students and will identify vulnerable Connecticut communities and evaluate municipal and social impacts as well as reviewing state and local policy initiatives. The UConn Climate Corps is an undergraduate classroom and service learning opportunity that debuted in the 2017-18 academic year. The program consists of a 3-credit course (Fall semester) on the local impacts of climate change, followed by a 3-credit independent study (Spring semester) during which students work with Extension faculty to assist Connecticut communities in adapting to climate change. Thus, Climate Corps students engaging with this topic and local communities, will help to further the discussion of this sensitive topic. By the conference date, we will be able to report on progress, lessons learned and how we plan to move forward. Through a series of prompts, we will engage the conference participants in a discussion of the Connecticut experience with managed retreat to date, how it has moved forward or stalled, and what other states have done to promote managed retreat. This discussion will further the development of best practices and highlight what to do and, more importantly, what not to do when developing a managed retreat program. The Connecticut experience can serve as a roadmap for others in states that are considering managed retreat as a viable strategy to address sea level rise and storm surge.

Key Decisions in Development Control and Managed Retreat - Western Australia

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In Western Australia, the State Coastal Planning Policy requires communities to prioritise managed retreat as a strategy for managing coastal erosion and storm surge inundation, in preference to other strategies such as shoreline stabilisation using seawalls and rock groynes. Despite managed retreat being a high priority adaptation strategy in the State, there is no funding for implementation measures such as property buyouts or property owner relocation expenses. This situation means that planning authorities such as Local Governments and State Agencies face difficult decisions when presented with applications for new development and subdivision in coastal hazard areas. This presentation will discuss two recent

decisions made by planning authorities in Western Australia that aimed to ensure the appropriate development and use of land likely to be affected by coastal hazards. The first was made by State Agencies and affected subdivision proposed on a greenfield site. The second was made by a Local Government and affected the redevelopment of land in an existing coastal settlement. Both decisions approved new development conditional upon the relocation of those developments in the future, when coastal hazards occur. Both decisions were made in the absence of clear precedent or formal planning guidance for these specific circumstances. This presentation will describe the legal instruments used to facilitate the continued development and use of these properties, and the decision pathways that led to these positive outcomes. The presentation will finish with a discussion on how both decisions may help facilitate future managed retreat in these areas and how each decision has influenced recent changes to the State's coastal planning framework.

Law's Disaster: Heritage at Risk

Author: Sara Bronin (UConn Law School)

If COVID-19 has taught us anything, it is that our laws and legal institutions are ill-prepared for disasters of all kinds. Even as we continue to consider the ramifications of the pandemic, we must also grapple with natural hazards – large-scale meteorological and geological events such as hurricanes, tropical storms, tornadoes, floods, blizzards, wildfires, earthquakes, extreme heat, and drought – that will inevitably wreak havoc during our long recovery. Some consequences of these disasters are well-known: loss of life, economic catastrophe, and destruction of homes. Perhaps less well-known are the threats to the historic and cultural sites that speak to human identity and create a sense of connection across generations. A hurricane or earthquake could destroy completely an old building, especially one that has not been structurally reinforced. Extreme heat and intense precipitation can weaken joints, erode paint or other protections, and bring mold, reducing the lifespan of historic materials. Climate change, exacerbated by man, has made many of these events more frequent and more intense. Given the increasing risks to historic sites, one might think that disaster-related planning, mitigation, and recovery efforts are being undertaken with increased urgency. Of particular urgency is the question of managed retreat in the case of flood and fire risks. Unfortunately, this is not the case. This presentation will be based on an essay accepted for publication for the summer edition of the Columbia Journal on Environmental Law. The Essay argues that legal reforms at the intersection of disaster law and historic preservation law are desperately needed to protect historic places before they succumb to flame, water, wind, or the earth itself. It starts by explaining what's at stake: archaeological sites, vulnerable buildings, and even threatened national landmarks like Mesa Verde and the Statue of Liberty. It then establishes the three stages where disaster-related legal protection of historic resources is needed: before, during, and after disaster. The Essay next critiques the multi-governmental, federalist framework for heritage-related disaster planning, and highlights two states and four local governments starting to make necessary reforms. While no physical or legal intervention will ever be able to make historic sites last forever, we should try to make them more resilient to the avoidable consequences of obvious threats by changing the laws that render them vulnerable.

Legal Remedies for Climate-Induced Displacement and Migration

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This paper considers various legal issues relating to climate-induced migration and displacement. It seeks to answer the following questions: 1. What theories of liability have been raised against private companies and States to seek compensation for damages relating to climate-induced migration and displacement? 2. Which jurisdictions are the most favorable to hearing claims? Which laws are the most frequently cited (humanitarian, human rights, tort, contract, criminal law)? What procedural hurdles exist? 3. What recommendations can be formulated for communities that are experiencing aggravated effects of climate change?

Lessons Learned from Two Relocations of Indigenous Communities: Newtok, AK and Isle de Jean Charles, LA

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Newtok Village, Alaska and Isle de Jean Charles, Louisiana are both small indigenous communities facing severe land loss due to climate change. Despite their geographic differences and different status in terms of federal tribal recognition, there are a number of similarities and lessons to be learned from comparing the two relocation efforts. The tribes involved do not own land, have limited political clout, and lack the resources to fully navigate the relocations on their own. As such, both communities rely on outside assistance that limits their control over the relocation but is critical to relocation success. This presentation compares the two relocation efforts and identifies lessons learned in regard to relocation strategies and environmental justice.

Managed retreat in a context of three kinds of emergencies: The case of Louisiana's coast

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Climate and other major bio-physical changes bring three, not just one, emergencies. These are the visible, conceptual and existential, all of which are urgent and important when considering when or how one might act in the face of major challenges. The three emergencies are starkly illustrated in Louisiana, where historical coastal development and climate-induced sea level rise are producing visible emergencies such as land loss and increased impacts from floods and storm surges. The visible emergencies, however, cannot be overcome without addressing conceptual emergencies where current ways of organising, thinking and approaching the challenges are inadequate for the scale of change. The conceptual emergencies, in turn, cannot be overcome without addressing the existential, where different cultures, values and identities are needed to overcome existing conceptual challenges. Considering a managed retreat through the lens of the three emergencies is helpful for three main reasons. First, just considering a managed retreat highlights that some recognition is being given to working with conceptual and existential emergencies. Second, any managed retreat will especially need to work with existential issues as communities, businesses and families try to make sense of the scale of the change. Finally, those seeking to stimulate a managed retreat will themselves need to consider how they need to re-evaluate existential and conceptual issues if their approaches are to be considerate and creative and able to transcend the kinds of thinking that have led to the challenges in the first place.

Polycentric and nested systems? A review of climate-induced relocation in U.S. communities

Author: Christopher Galik (NC State University)

Climate change has and will continue to have a profound effect on both individuals and the communities in which they reside (Nature Climate Change, 2019). Coastal communities face the prospect of sea-level rise (Rossi, 2019). Inland areas are not immune, faced as they are with the potential for flooding rivers and wetter, slower-moving storms, and increasing drought (Knobloch, 2009; McGowan 2012). Communities elsewhere must contend with melting permafrost and increasingly intense bush and wild fires (Bronen and Chapen, 2013; Nawrotski et al., 2014). A pressing question is how communities forced to confront climate-induced catastrophe, including both rapid and slow-onset hazards, undertake the decision of how and when to respond. These decision-making processes play out at multiple scales, from the individual home to the entire community, with broadly-felt social, economic, and environmental implications (Mortreux et al., 2018; Loughran & Elliott, 2019). Despite recognition of the nested and overlapping configuration of existing disaster response programs in the U.S. (Bierbaum et al., 2013; Bronen, 2015; McAdam & Ferris, 2015; Boda & Jerneck, 2019), there has been little formal analysis of the configuration of individuals, agencies, and authorities associated with the most extreme forms of climate adaptation: the relocation of entire communities. Using an established analytical framework (e.g., Carlisle & Gruby, 2019), this analysis will seek to address this important gap by evaluating the institutional context in which communities in the U.S. are currently confronting climate-induced relocation. Specifically, it will review the experience of several U.S. communities that have already undertaken relocation planning in response to climate-induced hazards. It will assess the extent to which these instances of community relocation have demonstrated the features and enabling conditions of polycentric systems, thus allowing for a more rigorous analysis of the potential strengths and weaknesses of previous planning efforts. In doing so, the analysis will likewise allow for a more nuanced understanding of gaps and redundancies in program coverage and administrative oversight, contributing to the development of a more responsive and equitable decision-making process for community relocation decision-making in the future.

Rethinking the Heavy Hand of Flood Prevention in Informal Settlements: An Investigation of Design-Based Retreat Practices in Metro Manila

Author: Samuel Geldin (University of Pennsylvania)

As academics and practitioners increasingly employ the strategy of managed retreat to adapt to flood impacts, place-based definitions, practices, and processes of retreat will require further refinement. In the Global South, state-led retreat often entails relocating informal settlers from flood-prone areas, but in practice, retreat could encapsulate in-situ designs to mitigate flooding and avoid resettlement. This presentation reports my preliminary dissertation findings, exploring why governments in the Global South favor the relocation approach to retreat, rather than a design-based approach. I will present the experiences of two case study cities, produced using document analysis and roughly 30 interviews with public, private, and civil society actors involved in implementing upgrade and relocation programs in Metro Manila, the Philippines. These case studies will not only reveal the decision-maker logics and practices for planning retreat in informal settlements, but also what incentives exist for strategically avoiding resettlement. This study ultimately aims to inform the conditions under which lower-middle

income nations across South and Southeast Asia would include design-based approaches as part of their flood retreat strategies.

Too Damn High: Relocating Renters from Rising Seas

Co-Authors: Collyn Chan (Nelson\Nygaard), Devon McGhee

Overwhelming demand for affordable housing in New York City has been an issue for decades, with over 300,000 families currently on NYCHA's waiting lists. In 2012, Hurricane Sandy devastated the City's housing stock – including 20% of its public housing and over 100,000 units of privately owned, affordable, rent-stabilized or subsidized housing. By 2050, 4000 units of affordable housing in the City will be affected by sea level rise each year, further exacerbating this cascading issue. Managed retreat and relocation provides opportunities to enable a just transition to more affordable and accessible housing. Currently, post-disaster buyout programs are the most common approach to moving people and property out of harm's way. These programs rarely consider where buyout participants relocate to or why. Additionally, buyouts are traditionally limited in scope, only providing homeowners with the monetary and administrative resources to relocate. Moreover, post-disaster Federal aid has been shown to exacerbate inequalities. In short – our systems have not been designed to enable renters, marginalized populations, and the most vulnerable in our communities to participate in climate change adaptation through managed retreat. This project examines how the development of retreat and relocation strategies for renters and tenants addresses vulnerability to climate change and also increases the availability and quality of affordable housing in urban areas like New York City. Through interviews with experts and local officials working on the sometimes siloed issues of housing and climate change and an analysis of existing programs; our project documents how the City is currently addressing this confluence of inequity in housing access, Hurricane Sandy recovery and climate change. Through this analysis, we develop adoptable recommendations for how managed retreat and relocation strategies can be designed to accelerate the transition to a more just future.