



Environmental Policy and Planning

The Environmental Policy and Planning Group is a group within the Department of Urban Studies and Planning School of Architecture and Planning

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<http://web.mit.edu/dusp/epp>

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CLIMATE COLAB CONTEST: REFLECTIONS ON PRESENTATIONS AT THE UN AND THE US CONGRESS

by Christopher Chung and Shoko Takemoto

THE CONTEST

The Climate CoLAB contest—hosted by the MIT Center for Collective Intelligence—was an opportunity for participants to rethink existing international climate negotiations while introducing creative strategies to break a seemingly insurmountable North-South impasse.

In October 2010, we (Christophe Chung [MCP 2 IDG] and Shoko Takemoto [MDP 2 EPP]) participated in the challenge. As classmates of International Environmental Negotiation—a course co-taught by Professor Larry Susskind (MIT) and Professor William Moomaw (Tufts), we submitted a proposal to address the question, “What international agreements should the world community make?”

After submitting our proposal, expert judges short-listed four proposals which they felt were strongest. Of these four proposals, our proposal titled Overcoming the North-South Divide won both the Popular Choice and the Judge’s Choice.

THE PROPOSAL

In our proposal, we identified a combination of a lack of trust between developed and developing countries, as well as negotiations, which fail to involve all actors’ interests, as key barriers to reach international consensus. We therefore proposed three actions related to adaptation, mitigation, and negotiation, which can help bring agreement towards significant global reduction of greenhouse gas (GHG) emissions. We put forth a strategy, which can get countries to agree to a hypothetical 50% reduction of GHG emissions of 1990 levels by 2050.

With regards to action on adaptation, an enhanced Adaptation Fund will allow developing countries—particularly Least Developed Countries (LDCs)—to receive the attention and funding it urgently needs and ultimately foster an environment of trust between Annex I countries and the G77. With regards to action on mitigation, we believe a collective approach is more effective by establishing “mitigation clusters” (MCs) that allow the needed flexibility for developed and developing countries to implement GHG emissions reduction targets together. With regards to reaching consensus, we propose that adaptation finance be leveraged to compel non-Annex I countries to commit to mitigation.

CLIMATE COLAB CONTEST: REFLECTIONS ON PRESENTATIONS AT THE UN AND THE US CONGRESS

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Ultimately, the approach is two-pronged and proposes that, rather than attempt to reach agreement on all issues at once, reaching consensus on the low-hanging fruit (which we argue is climate change adaptation) is a stepping stone towards reaching consensus on climate change mitigation. This strategy is based in an attempt to reframe the international climate change treaty as a sustainable development scheme, rather than a burden-sharing mechanism.

PRESENTATIONS

Having the opportunity to present at both the UN and the US Congress was certainly a highlight of the experience. At the UN, we presented to Janos Pasztor, Director of the UN Secretary General's Climate Change Support Team and at the US Congress, we presented at a briefing hosted by Congressman Edward Markey, co-author of the Waxman-Markey Bill (a.k.a. The American Clean Energy and Security Act).

An initial surprise was noticing how open the practitioners and policymakers were to our ideas. While we did not expect to make immediate change in policies with our winning proposal, we appreciated the guidance and advice on how to pursue specific ideas within our proposal a bit further. A particular point we were encouraged to further explore was a financing mechanism which could incentivize Annex I countries to contribute more to adaptation, while using this adaptation funding to leverage non-Annex I countries to agree to mitigation targets.

At both the UN and the US Congress, we were reminded to keep in mind the politics—both international and domestic—which can easily impede the implementation of a sure-fire scheme. At the US Congress, we were further reminded to keep things simple. As governments not only need to reach agreement with other foreign governments, but also with their respective domestic constituencies, it is important to ensure that whatever is proposed

can be easily understood by voters as being both needed and important in our daily lives.

Since presenting, we've begun coordinating with the other winning teams—through the MIT Climate CoLab interface—to see how our three proposals can be streamlined into a single proposal. We are also looking further into the idea of clustering countries along collective interests as well as seeing how a bolstered Adaptation Fund can both incentivize Annex I countries to contribute more to adaptation, while leveraging its funds to encourage non-Annex I countries to agree to mitigation targets.

Participating in the Climate CoLAB not only provided us with an opportunity to learn how to develop creative solutions to the complex issue of climate change policymaking, but also offered us a unique opportunity to apply our ideas generated in a classroom environment to a 'real world' context. By utilizing the feedback we've received and our own reflections from this experience, we hope to continue to pursue this action-oriented learning during our remaining time at MIT.



MIT ENERGY EFFICIENCY STRATEGY PROJECT

by Harvey Michaels, Lecturer/Specialist in Energy Efficiency Strategy

The ongoing *MIT Energy Efficiency Strategy Project* (EESP) is a faculty and student research team conducting case studies and analysis of breakthrough strategies for enabling efficiency, led by PI Harvey Michaels (EPP) with support from CoLab and Amy Stitely. The strategic focus on community-based efficiency innovations continues to build this semester, with more than a fifteen DUSP, ESD, Sloan, and Tufts students actively collaborating, most either performing funded research or preparing their thesis/dissertations on this topic. Together, we explore various facets of a breakthrough community strategy design, by exploring objectives such as:

- How do we get the retrofit rate to move up 5-10x?
- How do we reduce incentive costs at the same time?
- How do we maximize workforce and social benefits?

Funded by the Edison Foundation, NSTAR Electric, CISCO, and Duke Energy, the project meets for topical discussions most weeks, in addition to frequent targeted meetings or interviews. In addition, the students are planning to discuss their work in an open Community Energy Innovations Workshop on Friday April 29, 12-3 in 9-450. Please plan to come!

Students are exploring strategies such as:

- Community energy benchmarking and feedback systems, such as the GIS being developed - with Joe Ferriera.
- Community-based efficiency service initiatives, and their potential for green workforce development, with consideration of Renew Boston as well as many stimulus-funded "Better Buildings" programs, with many leveraging financing – with Karl Seidman.
- Community/utility marketing partnerships that provide the opportunity to leverage existing social networks, relationships, trust, and community norms to increase the participation in energy efficiency programs.
- Community-enabled commercial/institutional program models, including *MIT/NSTAR Efficiency Forward*, and Envision Charlotte.
- Community management and regulatory initiatives that use ordinances to require retrofits, or that upgrade town buildings, such as Massachusetts Green Communities.

For more information, visit: <http://stellar.mit.edu/S/project/community-ee>.

MULTIDIMENSIONAL LEARNING THROUGH SIMULATION: EPP FACULTY AND STUDENT DEVELOP EXERCISES TO HELP WRI EXPLORE CLIMATE CHANGE ADAPTATION

by Todd Schenk

Games are often discounted as the stuff of children's play or Saturday nights at the cottage. Some social scientists – including psychologists, sociologists and economists – use games for research. Facilitators and trainers also use games to advance group learning and cohesion. Much more can, however, be done to harness the potential they offer for both researching group dynamics and facilitating group learning – ideally concurrently. In the context of public policy, this is especially true when the interactions between stakeholders are important and the subject is contentious. Lawrence Susskind, Ford Professor of Urban and Environmental Planning, asserts that “role play simulations provide an unusual opportunity for public officials and stakeholders to master a great deal of technical material and experiment with new ways of working together. In a compressed period, using fact patterns not dissimilar from their own, large groups can use such ‘games’ to explore problems they might otherwise be unable to discuss, if only for political reasons”.

Many readers will be familiar with the relatively prolific use of games as facilitative tools in the arena of consensus-based decision-making, and of EPP's expertise in this area. The World Resources Institute (WRI) harnessed this expertise for a somewhat unique purpose when it hired the Consensus Building Institute to develop and facilitate two scenario exercises so that it could better understand how decision-makers around the world might respond to climate change in the future. Philip Angell, the Director of the World Resources Report for WRI explains: “When we chose to explore adaptation decision-making as the topic for the [next] World Resources Report, we wanted our research to go beyond case studies and the literature. We wanted an in-depth, realistic look at the challenges and forces that national level officials faced when confronted with choices about how to manage climate change impacts.” This unique approach was necessary because of the dearth of real world case studies of governments actively altering their decisions in light of the risks associated with climate change.

Two exercises were developed and implemented for WRI – one exploring energy sector planning, particularly hydroelectricity, in Ghana, and the other agricultural planning in the Mekong Delta in Vietnam. In both cases, high level decision-makers and other key stakeholders from various agencies and organizations were brought together to participate in the simulations and then share their insights and reflect on their own situations and estimations of how they might respond to climate change in the future.

Facilitation is an important component of successful simulation exercises. “When such interactions are professionally facilitated, the ‘after-game’ conversations shift rapidly to what the parties might try next in ‘real life’”, says Susskind. Developing appropriate sets of instructions and fact patterns is also critical to success. A balance must be struck between mimicking reality and abstracting to detach the players from unnecessary political hang-ups and make the exercise digestible in a limited amount of time. In the case of the Ghana exercise, more than twenty stakeholders were interviewed and numerous documents reviewed to develop an accurate appreciation of the context. The final exercise developed and implemented did not, however, take place in Ghana but in the fictional country of ‘Suna’. Suna bears a great deal of resemblance to Ghana, but the facts were slightly changed.

Fostering group learning among participants was an important collateral benefit, in part to entice senior people to participate, but the ultimate objective of this project was to increase WRI's understanding of how decision-makers will respond to climate change in the future. The project was considered a success by all involved. “The use of role-playing exercises based on realistic but hypothetical scenarios has provided the rich insight we needed”, says Angell. Participants also responded very positively, confirming that the exercises helped them to start thinking about how they might plan for the risks associated with the climate change moving forward.

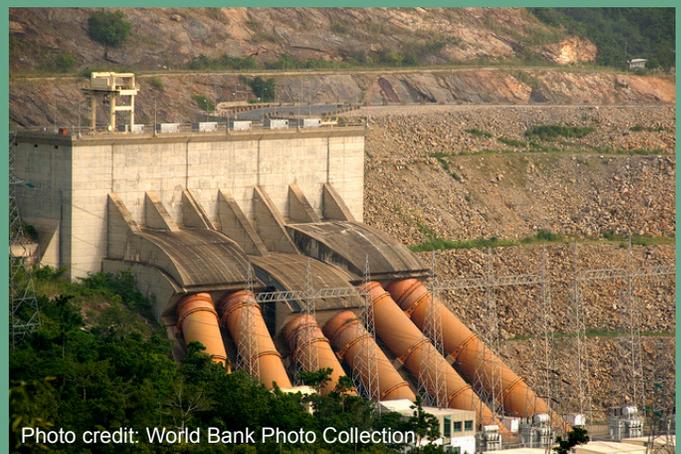


Photo credit: World Bank Photo Collection

HELPING COMMUNITIES MANAGE THE RISKS ASSOCIATED WITH CLIMATE CHANGE

by Todd Schenk

Communities large and small are starting to recognize that climate change poses a set of increasingly serious risks to their citizens, existing infrastructure, and plans for the future. For a long time, the focus was on mitigating emissions to avoid climate change. While mitigation remains very important, it is becoming clear that some degree of change is inevitable – many would argue that it is already underway.

Effective adaptation cannot be accomplished solely via standalone ‘climate action plans’. Instead, the risks associated with climate change need to be factored into everyday decision-making, and particularly into decisions that have longer-term implications like those around zoning and the construction of infrastructure. The uncertain and dynamic nature of climate change, particularly at the local scale, makes this sort of risk accounting difficult. Disagreement among stakeholders around the nature of change and how communities should respond further complicates the process. Almost any adaptation measure will create winners and losers, and have fans and opponents.

To this end, a consortium of partners led by the Consensus Building Institute (CBI) and funded by the Lincoln Institute of Land Policy provided the second offering of it’s ‘Local Communities Adapting to Climate Change: Managing Risk in Decision Making’ course in November. Lecturers included EPP’s own Prof. Lawrence Susskind; Dr. Paul Kirshen, Battelle’s climate change lead; Steve Aldrich, the founder and President of Bio Economic Research Associates LLC; and Patrick Field, Managing Director of North American Programs at CBI, Associate Director of the MIT-Harvard Public Disputes Program, and EPP alum. I acted as the project manager.

The course - which the project team is already

expanding upon and offering elsewhere – provides local and regional leaders with a practical set of tools that help them assess the potential impacts of climate change, and manage these risks in their decision-making. Participants came from municipal and state agencies – including planning departments and local conservation commissions - and organizations that work with local and state governments. Most participants were from New England, but people came from as far away as New Mexico. Tools introduced fall under the banners of risk assessment, modeling and climate downscaling, scenario planning, and collaborative approaches to decision making. Under the banner of scenario planning, for example, participants are introduced to techniques for developing a range of potential alternative futures against which the options they have before them can be assessed. The goal is to identify alternatives that are robust under numerous possible futures.

The emphasis of the course is not on presenting these tools individually, but on how they fit together into a holistic approach to adaptation that communities can realistically and relatively easily adopt. “The course provides local and regional leaders with a set of tools for better understanding what changes climate change might bring and how they fare under different future scenarios. This is really a unique approach, combining the best of regional modeling with sophisticated scenario planning and consensus building. The course is geared toward local officials incorporating adaptation planning into today’s decisions with long-term investment horizons”, says Field.

Feedback on the course has been overwhelmingly positive. The Chair of Lincoln’s Department of Planning and Urban Form, Armando Carbonell, affirms that “the course provides critical tools and information at a time when many communities are becoming aware that, even with Herculean efforts, yet unseen, to mitigate greenhouse gas emissions, they will need to deal with the unavoidable impacts of climate change at the local level”. Many communities feel overwhelmed by the challenge of responding to climate change. The course presents a roadmap to help them start today. It does not call for a sea change in their modus operandi, but rather for an accounting of the risks and gradual shift as the impacts of climate change become clearer and decisions with long-term implications are made.



NEGOTIATING A GLOBAL MERCURY TREATY

by Leah Stokes

Over the past 50 years, Mercury has proven itself a protracted pollutant to manage at the international level. Although many of mercury's harmful health effects have been known for centuries, including permanent cognitive developmental effects in young children, the element remains unregulated by the international community at large. In addition, mercury poses particular risks to vulnerable populations, including northern communities, a fact mirrored in other environmental problems, including climate change. Although the Convention on Long-Range Transboundary Air Pollution (LRTAP) signed by European and North American countries in 1998 regulates mercury, currently, most emissions emanate from countries outside of the agreement, particularly from Asia. Given the element's transport dynamics, mercury is a global problem requiring a global solution.

Often, when chemicals are phased out in Northern countries, negotiating a MEA provides a forum to advance phasing out the chemicals in the South. Without an international agreement that includes developing nations, further improvement in global mercury control may prove difficult to attain. While chemicals regimes have a long history, they have not been as well studied as other multilateral environmental agreements. Compared to other environmental negotiations, in which a motivating Convention is negotiated first, and then followed by an implementation-oriented Protocol, chemicals management tends to proceed with less hierarchical stand alone treaties that hold equal weighting in international law. As a result, chemicals regimes have proliferated, with overlapping jurisdictions. In the recent debate over mercury regulation through United Nations Environment Programme's Governing Council (UNEP GC), countries frequently questioned the approach of generating numerous treaties, and the effectiveness of signing a new stand-alone chemicals agreement on mercury. Despite reticence on the part of some countries, since 2009 the formal process of negotiating a global mercury treaty through UNEP has begun.

Current efforts in mercury regulation at the global level are grappling with finding an effective way to regulate the toxin, given political willingness to support specific abatement options, alongside scientific considerations. Although basic mercury science is well established, and suggests global action is necessary, countries have expressed hesitancy to move forward on key abatement options. As a result, global mercury management occurs at the interface of science and policy, with negotiators interpreting uncertain risks and evaluating costs of new abatement actions, on top of existing international commitments. In order to study the dynamics of how science is used and interpreted in a negotiation, I am working with Larry Susskind and Noelle Selin to design a negotiation game.

The Mercury Game will focus on the credibility of various sources of technical information, strategies for representing risk and uncertainty, and the problems of finding the right balance between scientific and political considerations. Ultimately, the "results" of the role play should help to make clear how scientific information can be favorably employed in an environmental treaty making process, highlighting what has been learned from the past several decades of environmental diplomacy. The results of the game will be used in a doctoral research project on the relationship between science and policy in international environmental negotiations



We are currently looking for both masters and undergraduate students interested in international environmental negotiations, science policy and/or chemicals management to work with us on designing the game. Interested students should contact lstokes@mit.edu

REFLECTIONS OF A VISITING PHD STUDENT

by Christian Downie



In September 2010, I was fortunate enough to join EPP and DUSP for the Fall Semester, as a visiting PhD Student from the Australian National University in Canberra. With an interest in international environmental negotiations, specifically the climate change negotiations, I was looking forward to working under the supervision of Professor Larry Susskind and being part of a student community in which many people share similar interests. The opportunity to work in a space with such a wonderful concentration of expertise I hoped would greatly enhance my research, and inspire the further development of my own ideas about environmental negotiations. However, no one really knows what to expect from student exchanges, so I arrived with high expectations, but also prepared for the possibility that academics and research students would be pre-occupied with their own work and not feel inclined to devote much time to someone who was 'passing through'.

Fortunately, this did not prove to be the case. I found the time I spent at DUSP rewarding on several fronts. My discussions with Professor Susskind and other faculty in and around MIT proved very helpful as I sought to refine my research question and thesis structure. Second, at the beginning of the semester I decided to throw myself into seminars and classes, which overlapped with my research. For example, I had a wonderful time in the 'International Environment Negotiations' class taught by Professors Moomaw and Susskind. Finally, the graduate student community in DUSP was great both as a social distraction, when the solitary confines of thesis research became too much, but also as a sounding board for many of my own ideas.

Overall, despite the cold, which can be debilitating for an Australian who has rarely seen snow, it was a great semester. I strongly encourage the DUSP faculty to continue to invite students from outside MIT to undertake exchanges so they too can share in the richness and diversity of the academic community, and contribute to it as well, which I hope I was able to do.

I look forward to see many of you again in the near future and best of luck with your research!

Linda Ciesielski's Photo Exhibition



This month, recent graduate Linda Ciesielski (MCP), is showing her photos in an exhibition at MIT's Rotch Library, entitled "Street Scenes of Istanbul." These photos were taken on a class trip for Prof. Antoni Muntadas' Public Art course in March 2009. When she stopped for a cup of Turkish tea and inadvertently missed the class bus, she spent the rest of the day exploring and photographing the city streets.

The exhibit is funded in part by a Director's Grant from the Council for the Arts at MIT, and runs through March 2, 2011. The photos have become part of the MIT Libraries digital collection and the Aga Khan Visual Archive.

Sarah Madden

After graduating from EPP in June 2010, I joined Sasaki Associates in Watertown, MA. Sasaki is an interdisciplinary design and consulting firm, combining planners, urban designers, landscape architects, architects, and engineers on regional, community, urban district, campus, and site projects. I am a Planner in the Campus Studio, where I work on a number of university campus master plans. On a day-to-day basis, that means I work closely with a mix of project teams to construct ideas and concepts, craft design solutions, and express and illustrate our thinking. I also work a bit with the Urban Studio, as well as researching how environmental planning and sustainability issues inform our work.

The question of how I got the job is a blend of the blandly obvious with a dose of luck and persistence. The short version is that I started as a summer intern, and was lucky to be offered a permanent position. The longer story starts in late winter, when I met with several of my MIT mentors to ask for their advice and insight for my job search. Those conversations generated several leads for interdisciplinary design firms, including Sasaki, who had sent a lead engineer to my Water, Landscape, and Urban Design workshop course (taught by Jim Wescoat) to speak about the design of the Stata Center bioswale. I've always been infected with a love of design, and tend to organize my own thinking in between the analytical study of patterns and the more intuitive and iterative creative process. I looked to design firms as a path that would overlay these strategies and processes in practice.

I applied to Sasaki's summer internship program in early spring, and joined the firm immediately after graduation. The ten week internship was an extraordinarily valuable experience to start to connect my education with the reality of professional practice, and to set the stage for the more pressing problem: winning a permanent position. This process is best expressed in terms of a more mundane truth about dedication and focus, and one that relates to my undergraduate experience: I am a proud alumnus of U.C. Berkeley, but a lot of courses there were perennially oversubscribed, and the trick was to be persistent, determined, and doggedly stick it out when the professor politely told those who weren't on the enrollment list to get lost. It usually worked. Securing a job during a recession had many similar parameters, and required a similar level of dedication. As a result, I met as many people as possible over the summer, set up coffee meetings with firm VIPs, produced some quality work, asked for a job, and, to cover my bases, cultivated leads elsewhere for leverage. Thankfully, it worked out.

As an environmental planner, I am interested in the intersection of environmental and land use issues with design practice. I have learned a great amount about the process of developing land use plans, cultivating relationships, and making the case for environmental planning and regional design thinking. I am very happy with my work, the smart, energetic, and motivated people who are my teammates, and the multitude of opportunities to think about challenging problems and create interesting solutions. The time has flown by.

Sarah Hammitt

Alumni Profile

Upon graduating in June from DUSP with a MCP and a Certificate in Environmental Planning, my prospects for finding a job seemed most promising in New Orleans. With the ongoing Katrina recovery and the small problem of an oil leak in the Gulf, someone had to be in need of an environmental planner, right? I ended up in Mississippi, a slight detour from the plan, but for a great opportunity nonetheless.

After a few weeks of riding the streetcar to meetings with everyone I could get hold of, I landed a six-month Recovery Planner position with James Lee Witt Associates in Gulfport, MS. Under a contract with BP, Witt Associates would be conducting a stakeholder assessment for which I would interview a wide range of stakeholders on their needs and priorities for long-term recovery from the oil spill. After six weeks, I took on new responsibilities coordinating the four planning teams in Louisiana, Mississippi, Alabama, and Florida, as well as analyzing the data coming in from hundreds of interviews. Currently, I am transitioning to a position coordinating directly with BP's Gulf Coast Restoration Organization in Houston. I am excited to gain greater exposure to the complexities of an unprecedented recovery process, and in turn influence the process toward a successful recovery for the environment and all impacted communities.

I find that I am utilizing skills that I gained at MIT, but had not appreciated until now. My broad planning background helps me to understand complex economic, social, and environmental issues, while my internship with MUSIC taught me how to engage diverse stakeholders, analyze qualitative and quantitative information, and effectively communicate ideas.

For EPP MCP2s starting the job search, I would advise you to be patient and persistent, have confidence in your skill set (even if you're not yet sure what that consists of), and use the DUSP network. A key consideration in my decision to move to New Orleans was the strong local DUSP network doing meaningful and exciting planning in every field from energy efficiency, to design, to neighborhood revitalization. Networking in New Orleans is similar to other cities: trolling Infinite Connection, Facebook, and LinkedIn for all local contacts; setting up informational interviews; and maintaining one's visibility in planning circles through personalized updates and social engagements. One difference, however, is that many job seekers in New Orleans piece together part-time, short-term, and volunteer positions until a more permanent opportunity comes along, even going so far as seeking grants to fund themselves within an organization. I would advise EPP MCP2s to be patient in the job search and to find creative ways to continually develop your planning skills, while also making yourselves valuable within the planning community. And finally, do not hesitate to drop the MIT name.

Evan Thomas Paul

My goal throughout my time at DUSP was to position myself to facilitate regional-scale environmental planning and mediate disputes on energy and natural resource issues in Northern California. My coursework included geospatial modeling and analysis with Mike Flaxman and Juan Carlos, System Dynamics modeling with Damon Centola and Anjali Sastry at Sloan, Organizational Learning with Peter Senge, and, of course, Negotiation and Dispute Resolution with Larry Susskind. I also had an RAship throughout both years with Larry through MUSIC focused on multi-stakeholder engagement in climate adaptation planning.

The summer between my first and second years at DUSP, I worked as a Summer Fellow with CONCUR an environmental dispute resolution firm founded by two DUSP PhD alums, Scott McCreary and John Gamman. I had the opportunity to support some very intensive stakeholder negotiations to create a new network of Marine Protected Areas in Southern California. I also spent that summer doing informational interviews with a wide variety of firms in the Bay Area doing related work.

I applied for a few positions over my second year, with nothing really panning out because they were a stretch given my background or the timing was off (they wanted someone in March, I was done in June). One of the firms that turned me down due to this timing conflict was Kearns & West, a mediation and communications firm with offices in San Francisco, DC, Portland, and a new office in Davis, CA. I hadn't secured anything full-time by graduation and, instead, lined up some short-term contract work over the summer with the Consensus Building Institute. I kept in touch with all my California contacts and updated them on my availability post-contracts. Kearns & West got back to me and said they were interested in creating a position for me in the new Davis office.

After some back-and-forth negotiating salary, I started as a Mediator at Kearns & West in October and immediately jumped into several great projects, including conducting an evaluation of stakeholder engagement in the Central Valley Flood Protection Plan, helping to design stakeholder participation in a comprehensive management plan for the San Francisco Bay Delta, and developing a negotiation plan for the California Department of Water Resources to support their upcoming negotiations on hydro-electric facility relicensing.

Given my GIS and System Dynamics coursework, I've also taken the lead on developing a new practice area for the firm focused on collaborative modeling and computer-aided dispute resolution. This has included meetings with the Army Corp' Institute for Water Resources, the Stockholm Environment Institute, California Water Plan staff at the Department of Water Resources, and others. It's been great to merge these two areas of interest and carve out a fairly unique role in the firm. Connections I'd made through my course with Peter Senge have also enabled me to begin conversations about how we might support collaborative work in sustainable agriculture policy and value chain reform.

As you're thinking through coursework, internships, and jobs, one recommendation I'd give is to take the courses you're interested in, even if how they will all fit together isn't readily apparent at first. You can use your thesis as an opportunity to tie them together and the people you meet during these studios and project-based classes, as well as through thesis interviews, can be invaluable in connecting you to future work opportunities. Also keep contract work opportunities in mind as something to fall back upon if a full-time position that you're excited about isn't readily available. Spending some time at MIT post-graduation in a summer-long RAship or short-term contract for a local organization is still time well-spent while looking for full-time work, and it can also enable you to not break a rental lease you might have (this was actually a problem for me).

If you're currently trying to think through these issues and would like someone to chat to who has been through it recently, feel free to shoot me an email – evanthomas paul@gmail.com.

Leanne Farrell

Alumni Profile

In this first chapter of my post-DUSP life, I find myself getting acquainted with a whole new (to me) part of the labor economy: the private sector. Since August, I've been at Environmental Resources Management (ERM), a global environmental consulting firm, based out of Washington, DC. I work primarily in the Impact Assessment and Planning practice area, with projects spanning potentially everything from upstream baseline assessments and due diligence, to third party monitoring and evaluation of ongoing programs and activities, to Corporate Social Responsibility (CSR) and/or sustainability strategic planning. Strategy-level work could include both site-specific planning as well as helping clients set up or improve their social and environmental management systems at an institution-wide level. So far, my projects have dealt mostly with the social management challenges (including stakeholder engagement, social impact mitigation and community investment) related to large industrial development projects (thus far mainly of the extractive or energy-sector varieties). The clients I work with include international financial institutions, bilateral donor institutions, and multinational corporations looking to uphold international standards for social and environmental management in their projects and investments, and/or to identify key social and environmental risks and liabilities before closing transactional deals (such as corporate mergers and acquisitions).

I am only four months into the job, but so far at least, I have surprised myself by how much I'm enjoying it. The work is challenging, quite varied, and extremely substantive. I am given substantial responsibility – I started managing projects on my second day on the job. As I gain experience, there are seemingly infinite opportunities to take on new challenges and to prevent the learning curve from ever flattening out. Being a private firm, there is also a constant push to eliminate internal inefficiencies and overhead costs, which translates into a refreshingly flat management structure and lots of direct engagement with clients. I also travel internationally frequently, so far mostly to Latin America, but Africa work is likely on my horizon as well.

Yet as with any job, this one has its cons as well as pros, although the two are often opposite sides of the same coin. For example, the fabled work-life balance is frequently thrown seriously off-whack, especially when last minute work travel pops up – although of course that's not really anything new from my DUSP days, and at least now I get paid for it! I have also found it challenging to adjust to the billable hours system and bottom-line-driven pace of private consulting, coming out of a graduate school context where the concept of time is completely different. But again, on the flip side, being accountable to a billable hours system is forcing me to become more efficient – overall a good thing.

Lastly but most importantly, there are certainly ethical considerations in this type of work which make it not for everyone, but the opportunity to engage those ethics up close and personal is ultimately a key reason why I took the position. Put simply, I am consulting directly to the so-called “evil empire” – e.g., multinational extractive industry corporations and the like. My primary task is to provide them advice and support in their efforts to improve their social and environmental practices and reduce their negative impacts, but one could also interpret this as helping enable them to do their

Leanne Farrell

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work. Being at heart a die-hard public interest advocate who ultimately sees myself professionally in the public sector (there's a reason I chose DUSP), it was a difficult decision for me initially to take this job. Yet in the end, I decided that the learning opportunity was too great to pass up: I will no doubt be more valuable and effective in defending the public interest in either a regulatory/compliance or advocate role if I have a fully nuanced "insider" perspective on the industries that are the targets of regulation and advocacy. No job is forever, and I see now as the time in my career, if ever, to try my hand at pushing the "dirty" industries from the inside to be more sustainable and better corporate citizens. The private sector must ultimately be engaged if we are to ever achieve sustainable development.

Advice to MCP2s in the job search:

Every person has a unique combination of skills and interests as well as financial, geographic, and other personal factors to weigh in considering job prospects, so generalized advice about conducting a job search obviously must come with many grains of salt. With that in mind, below are the main factors that were important to me in choosing my next job after DUSP.

- Don't think of your next job as your lifetime career position. Especially in this economy, think broadly about what jobs can give you additional skills, experience, and/or networks that in turn can advance you to something else in the future. Be also open-minded about the sectors of the economy in which you might find interesting work on the causes you care about.
- Take a job that will maximize your professional responsibility and skill development, even if it is not for your life-long "dream organization," rather than taking a menial job inside that dream organization just to get your foot in the door. You can always move laterally later (which may be easier and faster than pushing through internal glass ceilings).
- Network, network, network! As with most of the professional workforce, I got my job through networking, not through any posted job advertisement. Ask the faculty to put you in touch with people; utilize DUSP alumni connections; re-connect with former colleagues; tap each other's networks. Do informational interviews; they are a great way to meet people, build your network, and learn about types of work you might not have known about or considered before.
- Talk to Larry Susskind for advice on negotiating up your salary before accepting an offer – it really works!

Researcher Spotlight

Chris Horne is a research associate at DUSP working on a joint project with MIT, Fish and Wildlife Service (FWS), and the US Geological Survey (USGS) titled: "Addressing the Challenges of Climate Change in the Greater Everglades Landscape", informally known as the "Everglades Project". The goal of this project is to explore some of the most important management and conservation challenges posed by climate change and urbanization over the next 50 years in the greater Everglades region in order to support long-term strategic planning. To accomplish this goal, the research team is using a scenario-based simulation modeling approach heavily influenced by stakeholder participation. Embedded in the project are efforts to develop best management practices for the FWS Landscape Conservation Cooperative (LCC) initiative and the state wildlife agency's climate change adaptation plans.

SCIENCE IMPACT COLLABORATIVE PROJECT UPDATES

Project with National Audubon Society in the Atchafalaya Basin, Louisiana

How can an environmental advocacy group work within – or around – existing government processes to enhance the ecosystem services provided by Louisiana’s rivers, bayous and marshes?

In the wake of Hurricanes Katrina and Rita, the National Audubon Society ramped up its efforts to advance the health of coastal Louisiana and the Lower Mississippi River Valley. As a part of this work, the Audubon Society focused on improving the management of the Atchafalaya River, which feeds nutrients and sediment to the coast. In May 2009, the National Audubon Society asked MIT DUSP PhD student Tijs van Maasackers and the MIT Science Impact Collaborative (SIC) to help tackle this challenge. With DUSP MCP students Deborah Lightman and Amanda Martin, the project team has spent the past year and a half developing materials for Audubon to use to move forward with consensus-building approaches in the Atchafalaya Basin.

The Atchafalaya Basin is a classic illustration of the challenges of decision-making in the face of competing demands and scientific uncertainty. The Basin currently provides a medley of services to its diverse users. It protects the region against floods and supports fishermen and timber and oil companies; it is also central to culture, recreation, and tourism, and is among the most ecologically varied regions in the country. Within the last century, dams, levees and infrastructure projects have drastically altered the Basin’s ecosystem, and the majority of stakeholders are unhappy with the changes that have occurred. However, any large-scale management changes would have unpredictable effects and the resultant costs and benefits would be distributed unequally across space and user groups. Additionally, many stakeholder groups are distrustful of each other and of the government agencies charged with management of the Atchafalaya Basin. Conflicts between user groups span generations and lawsuits are ongoing. Stakeholders blame the Army Corps projects for the Basin’s degradation, and recent decades of unimplemented restoration projects have eroded confidence in the government’s ability to get things done.

Under the supervision of Larry Susskind, the MIT Science Impact Collaborative graduate students spent several months conducting over 50 interviews with stakeholders to provide a basis for Audubon’s collaborative work in the region. In two phases, the MIT team developed a preliminary and final stakeholder analysis, synthesizing critical stakeholder clusters and key interests, issues, and relationships. This work supported the development of a negotiation simulation based on the political, economic, and ecological dynamics of the Basin. This fall, the team developed a final report that identified several opportunities to utilize consensus building in the advancement of the ecological health of the Basin and the creation of new institutions to improve stakeholder relationships. With feedback from Audubon and a network of environmental NGOs in the Basin, the team further fleshed out recommendations for the development of two separate initiatives: a joint economic development and ecological management plan, and a collaborative easement program. The team looks forward to formalizing in writing an analysis of their work within a theoretical framework of collaborative decision-making this spring.



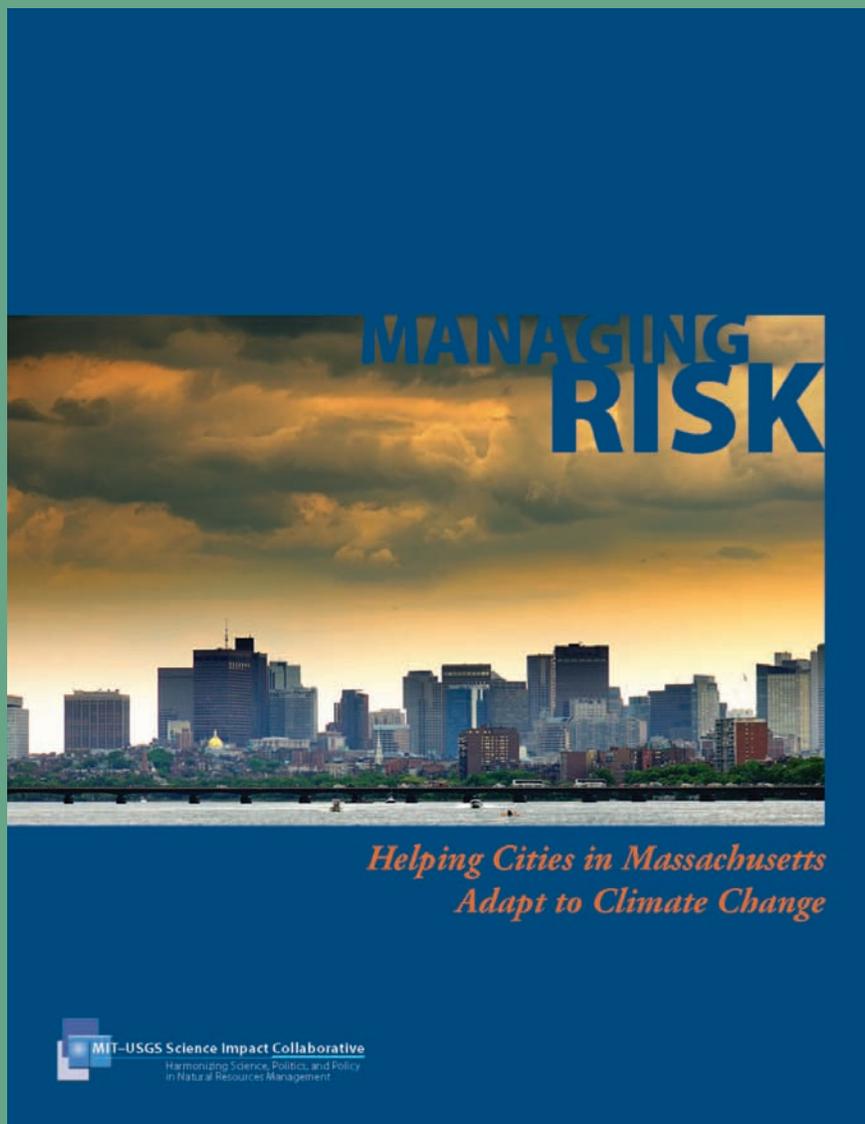
Atchafalaya Basin, Louisiana

SCIENCE IMPACT COLLABORATIVE PROJECT UPDATES

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The Massachusetts Climate Change Adaptation Project

The MIT Science Impact Collaborative is working with the city of Gloucester and other coastal cities in Massachusetts to implement and evaluate a set of tools that communities can use to manage climate change risks. Three role-play simulations ask local stakeholders to step into hypothetical climate change scenarios in which representatives of a range of stakeholder groups are given scientific information and asked to negotiate risk-management responses. Participants experience the key challenges that often arise when municipalities seek to adapt to and not just mitigate climate change risks. Our goal is to see whether it is possible to factor climate change risks into everyday municipal decision-making. We are particularly interested in determining whether it is feasible to use a consensus building approach to overcome the usual barriers to climate adaptation at the local level. Ultimately, our goal is to test and package these tools -- together with a widely accessible explanation of how they work -- for distribution, free-of-charge, via a dedicated website, to communities across the country that are just beginning to consider whether and how to adapt to climate change.



SCIENCE IMPACT COLLABORATIVE PROJECT UPDATES

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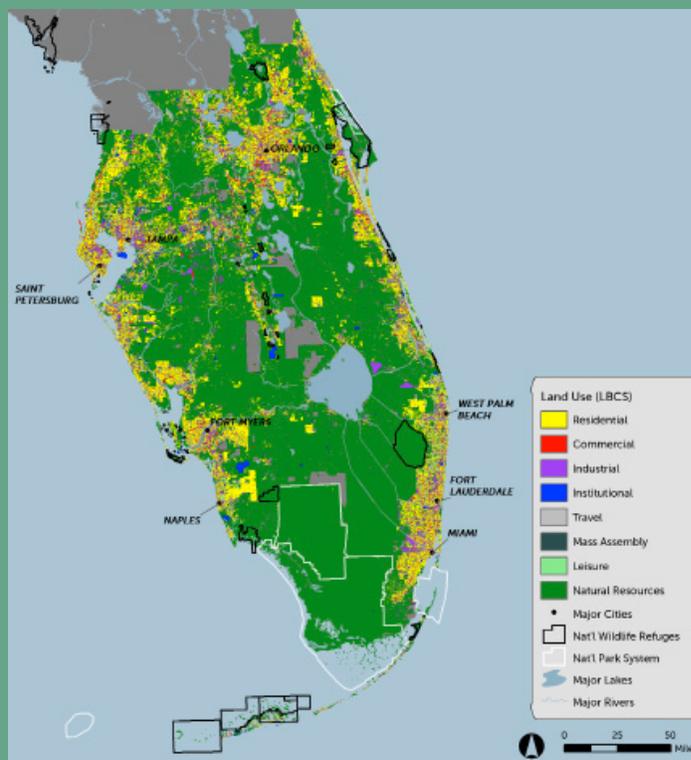
“Addressing the Challenge of Climate Change in the Greater Everglades Landscape” is a research initiative funded by the U.S. Fish and Wildlife Service (USFWS) and the U.S. Geological Survey (USGS) and carried out by a group of researchers at the Department of Urban Studies and Planning at the Massachusetts Institute of Technology (MIT).

The study investigates possible trajectories of future transformation in Florida’s Greater Everglades Landscape relative to four main drivers: climate change, shifts in planning approaches and regulations, population change, and variations in financial resources. Through a systematic exploration at the landscape-scale, this research identifies some of the major challenges to future conservation efforts and illustrates a planning method which can generate conservation strategies resilient to a variety of climatic and socioeconomic conditions.

This project integrates the best available scientific information on climate change with local knowledge and expertise in order to create a suite of management-relevant scenarios for Florida’s Greater Everglades Landscape . Scenarios are conceived not as blueprints for the future, but rather as learning tools for management of uncertainty. The scenarios are internally-consistent bundles of assumptions with four dimensions. Each scenario is projected into the future using a computer simulation technique that creates land use visualizations called “Alternative Futures” (AF). Three future time intervals were simulated for each scenario: 2020, 2040, and 2060.

Each Alternative Future visualizes land use patterns and landscape changes such as coastal inundation, urbanization, and infrastructure expansion. Future changes in conservation lands are modeled and/or designed based on the input from local experts and managers and using the best available ecological information and data.

This research quantifies the complex range of conditions under which conservation strategies may operate, allowing today’s managers to make strategic decisions despite considerable individual and compound uncertainties. It supports adaptive management by integrating the cumulative impacts of possible decisions across a range of scales. This allows managers not only to consider how to address those issues within their immediate purview, but also to form partnerships they may need to better prepare for future changes.



Everglades Study Region