

Environmental Planning and Management

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Edward J. Bloustein School of Planning and Public Policy
Rutgers, The State University of New Jersey
Fall 2024

Professor: Andrea Restrepo-Mieth, Ph.D.

Class: Wednesdays 1:00 p.m. to 4:00 p.m., Civic Square Building, room 253

Student hours: Tuesdays 3:30 p.m. to 5:30 p.m. or by appointment

Office: 356 Civic Square Building

Email: Andrea.rm@rutgers.edu

Class website available on Canvas

This syllabus is subject to minor revisions.

Course Description

This introductory graduate-level course is designed as an overview of the main issues, concepts, and methods underlying environmental planning and management. Throughout the course we will look at how planning can be used to avoid or minimize environmental problems and how management processes and practices can enable us to meet those planning objectives. The course is structured in four parts. First, we will examine the core concepts and history of environmental planning and management. Second, we will look at specific themes such as water, air, and waste management, and analyze existing and emerging issues in each area. Third, we will study assessment tools and decision-making theories to gain a better understanding of how ecological, social, economic, and political factors influence environmental planning and policy. Lastly, we will analyze the importance of cross-cutting critical challenges such as climate change, environmental justice, and climate justice, and how these impact the outcomes of environmental planning and management. While the course emphasizes environmental planning and management in the United States, a global comparative perspective is introduced through readings, lectures, and discussions.

Planning Advisory Board (PAB) Curriculum Criteria

This course addresses the following Planning Advisory Board components listed in [the 2022 PAB Accreditation Standards](#) (stressed competencies are listed for each component):

- A. Guiding values:
 - 2) Sustainability, resilience, and climate justice
- B. Required knowledge and skills:
 - 1) General knowledge in global context: a) Planning history and theory; b) Planning law and institutions; c) Urban and regional development
 - 2) Skills and tools: a) Planning process and engagement; c) professional, communication, and leadership skills

Course Objectives and Learning Outcomes

My objective is to guide you through the course materials so that by the end of the semester you:

- Understand how environmental planning and management emerged and evolved;
- Are familiar with key environmental protection legislation and programs;
- Understand thematic and cross-cutting challenges faced by environmental planners and managers and how these structure the choices and actions of planners and citizens;
- Articulate what constitutes effective environmental planning; and
- Develop analytical and practical skills to address urban environmental issues.

Given the nature of the course, I hope our work as a class inspires you to be an engaged global citizen and to act on the knowledge and skills obtained throughout the semester. Finally, through the assignments and class discussions, I expect that you will practice and improve analytical, verbal, writing, and argumentative skills.

Course Structure

Class Format

In general, most class meetings will be devoted to lectures, discussions of readings, individual work, and group work. The class is structured for participatory learning.

Readings

You are expected to complete the weekly readings before the class meets to facilitate a deeper understanding of the material covered in the lecture and to be able to participate meaningfully in the in-class activities. Be prepared to ask questions and engage in discussions in class. You need to allow enough time for reading.

Assessment

Your grade is based on four areas of evaluation:

1. Takeaways, questions, and discussion: 20% (5x4%)
2. Reading summaries: 10% (2x5%)
3. Case study presentation and summary: 20%
4. Policy paper: 50% (5%+20%+25%)

Takeaways, questions, and discussion (20%). Reflect on the readings assigned for the week (weeks 2-10, 14-15) and post in Canvas a key concept or argument that you found interesting or problematic. Raise two or three questions the reading prompted for you which can help guide our discussion in class. Approximate length should be 300 words, and you should engage with at least two of the assigned readings. You should complete all the assigned readings before class irrespective of whether you are posting a reflection in Canvas. I expect you to attend class and to come prepared to participate in our in-class discussion. These discussions are an opportunity for you to synthesize your understanding of the assigned readings, critically examine concepts and policy issues, and clarify ideas presented in the readings or the lectures. Your participation will be evaluated based on your ability to add informed insights into the discussion, to raise questions that contribute to a fruitful conversation, and to actively take part in the in-class activities. I may cold-call on you on the week you post a takeaway. To receive full credit, takeaways and questions must be posted to Canvas for five out of nine weeks by Monday (any time before midnight). Posts

done after midnight will receive a 10 point deduction for each 24-hour period. Each takeaway is worth 4%. You should not post a takeaway on a week you are presenting your case study or submitting a reading summary.

Reading summaries (10%). You must choose any two classes between weeks 3-10, 14-15 and write a two-page summary of one of the readings assigned for that week. Sign-up in advance as only one student can summarize each reading. You should provide a succinct but detailed summary of the arguments developed by the author(s). Your summary should end by identifying two or three questions or puzzles that you think warrant further discussion. The summaries must be posted to the class website 24 hours before class, or you will be docked ten points. Summaries will not be accepted if they are posted on or after 1:00 p.m. the day of the class. Each summary is worth 5%. You should not do a reading summary on a week you are presenting your case study or posting takeaways.

Case study presentation and summary (20%). Working individually or in pairs, choose a class between weeks 3-5, 7-10, 14-15 and prepare a three-to-four-page double-spaced summary of a case study on that topic. You will have twenty minutes to present the case in class. Only one person/pair may present in each class. The case study may be from any place in the world. We will use the case study as a concrete example to kick-off our discussion of the readings. You must meet with me at least one week prior to your presentation so we can go over the slides and course-correct if needed. The presentation slides and summary are due by noon on the day before the presentation date or you will be docked ten points off the grade. You should not do a reading summary or post takeaways on a week you are presenting your case study.

Policy paper (50%). Explore an environmental issue of interest and develop a 10-page double-spaced planning policy paper. The grade is determined as follows:

Topic selection (5%)

Draft paper presentation (20%)

Final paper (25%)

The final paper should:

1. Briefly summarize the issue, its causes, and consequences
2. Analyze current policies or programs designed to address the problem
3. Outline specific steps that could be taken to deal with the issue and suggest criteria to evaluate the recommendations.

The final policy paper is due by midnight on December 15. Late submissions will not be accepted without prior instructor approval (to be requested in writing).

Grading Policies

I encourage you to keep track of your progress in the course and to consult with me after class or during office hours if you have any concerns or questions. Please email me to set up a meeting if neither one of these times are convenient for you.

I provide rubrics in Canvas to guide you on how I grade assignments.

Assignments should be submitted through Canvas on the due date stated in the syllabus and in a readable format (Word or PDF). E-mail submissions or links to cloud-based documents (such as box or google drive) will not be accepted.

Incompletes are the bane of students and will not be given (except in extremely rare and extenuating circumstances).

Re-grade Policy

- Students who believe their work has been graded incorrectly should submit a written request within a week of the work being returned. Requests submitted after a week will not be considered unless they are related to administrative mistakes (for example, entering the score incorrectly into the gradebook).
- Requests should describe in a detailed manner what you believe is incorrect and why.
- If you request a re-grade within the appropriate timeframe, a written response will be provided within one week of receiving your request. This written response is final. Please note that a request to re-grade may result in a re-grade of the entire assignment, therefore, a re-grade request may result in an increase or decrease of your overall score for the assignment.

Classroom Conduct

Attendance and Absence from Class

Attendance in class is mandatory and promptness counts. Class will start on time. If you expect to miss one or more classes, please use the University absence reporting website at <https://sims.rutgers.edu/ssra/> to indicate the date and reason for your absence. I always appreciate the courtesy of an email letting me know you will be absent but you are still required to report the absence via official University channels. If you miss class for longer than one week, you should contact a dean of students to help verify your circumstances. Absent students are responsible for all material and course changes announced in class.

Technology in the Classroom

I find that students are more engaged when they are not distracted by their computers, tablets, or cell phones. As such, **laptops, tablets, and mobile phones are not allowed in class unless** I specifically ask you to use these devices for an in-class activity. When we finish the activity, I will ask you to put away your devices. That means putting them in a bag, not leaving them on the table. All lecture slides will be made available on Canvas.

While I understand that many students prefer to take notes on their electronic devices, you will not be allowed to do so in this class for three reasons. First, the literature on learning indicates that students retain more information when they take notes by hand. Second, electronic devices provide an incredibly strong temptation to multi-task and understanding falters when we multitask. Finally, we are more present in our classroom and are better able to connect as

human beings during our precious time together. You may contact the office of disability services if you need to use your computer to take notes. Please have them email me confirming this. Note that I ask that you email me your class notes at the end of class if you receive an accommodation from ODS.

Additional Resources

Disability Support

Students with disabilities are encouraged to seek academic adjustments through the Office of Disability Services (ODS). If you plan to seek accommodations, please speak with me as soon as possible and follow the procedures outlined here <https://ods.rutgers.edu>. If you are concerned you have a disability-related condition that is impacting your academic progress, there are academic screening appointments available on campus that can help diagnose a previously undiagnosed disability.

The Rutgers Office of Disability Services is located at Lucy Stone Hall (Suite A145) on the Livingston Campus. ODS can be reached by phone (848-202-3111) or by email (dsoffice@echo.rutgers.edu).

Students who develop disabling medical problems or other issues during the semester should consult the director of their academic program or Bloustein Associate Dean of Student Services, Steve Weston.

Academic Integrity

Integrity and honesty should be at the core of what you do as a professional and in your everyday life. I expect you to practice that integrity and honesty in your academic endeavors. Please take a few minutes to read the Rutgers academic integrity policy which can be found here: <http://academicintegrity.rutgers.edu/>

Any work you submit should be your own, original work. Plagiarism is taken very seriously at Rutgers. Plagiarism includes using someone else's ideas or work without clearly citing the source of that information. If you do not know how to cite a source or are unclear about what plagiarism is, come see me or speak with a Rutgers librarian. Plagiarism can also be copying the work of a class member. Cheating, plagiarism, and other forms of academic dishonesty will not be tolerated and have serious consequences. Cases of plagiarism will be pursued following university regulations. I use Turnitin.com to analyze textual similarity for all assignments submitted using Canvas.

ChatGPT and other AI Tools

You may use emerging technologies for your case study and final paper so long as they conform to Rutgers' code of conduct, which mandates "that all work submitted in a course, academic research, or other activity is the student's own and created without the aid of impermissible technologies, materials, or collaborations." You must become acquainted with the dangers of AI and know that you are responsible for any errors or omissions that may result

in the use of these tools. If you use AI, you must disclose its use in an appendix to your assignment. The appendix must specify the AI tool used, how it was used, what content was produced by the AI tool and how it was incorporated into the submitted work, and the prompt used to generate the content. You may not use AI for any of the takeaways or summary assignments. In other words, use these tools to help you learn, not to help you cheat.

Library and Other Resources

Rutgers University Libraries offer numerous resources to assist students. Librarians can help guide you through research and reference tools. A series of LibGuides are available to get you started. The librarian who specifically supports the Bloustein School is Julia Maxwell. She is a great asset and can be reached at julia.maxwell@rutgers.edu

Communications and Email

If you have a question about the course, you should first browse through the course site on Canvas. Your second course of action should be to come to talk to me prior to/after class or during student hours. Your third course of action is to email me.

If you do decide to email me, please make sure to put the course name (Environmental Planning or EPM) in the subject line of your message and your full name in your email message. You can expect a response within two business days (i.e. not on weekends). But, if your email implies a long answer, please see me during student hours. Lastly, please follow email etiquette: it is a good habit to build as planning professionals. Some simple yet great advice for professional email can be found here: <https://sasundergrad.rutgers.edu/advising/what-is-advising/emailing>

Student hours

Student hours are individual meetings with me that allow you to clarify assignment directions, ask questions about readings or lectures, and gain feedback. I hold student hours on Tuesdays 3:30 p.m. to 5:30 p.m. or by appointment. You should reach out to me ahead of time to schedule a time and clarify if you want to meet in person or over zoom.

Semester overview

Week	Date	Topic	Deliverable
1	Sep 4	Introduction and overview	Select readings to summarize and case study week
2	Sep 11	Foundations of environmental planning and management	
3	Sep 18	Air and transportation	
4	Sep 25	Water	
5	Oct 2	Waste management	
6	Oct 9	Land contamination	Final paper topic selection due
7	Oct 16	Biodiversity, wildlife and wetlands	
8	Oct 23	Disasters, hazards, and coastal management	At least 25% of your grade should have been submitted by this date

9	Oct 30	Assessment tools	
10	Nov 6	Decision-making	
11	Nov 13	Climate change	
12	Nov 20	**No class, Friday classes**	Enjoy Thanksgiving!
13	Nov 27	Final project presentations	Draft paper presentation
14	Dec 4	Final project presentations	Draft paper presentation
15	Dec 11	Environmental and climate justice	
	Dec 15		Final paper due by midnight

Course Outline and Reading List

Readings are subject to change. Follow the directions listed in Canvas, which will have the most up to date reading assignments. The required textbooks for this course can be found as e-books through Rutgers University Libraries or be purchased from the Rutgers Bookstore or your favorite book seller. I will provide all other course materials through Canvas.

Required textbook: Daniels, T. (2014). *The Environmental Planning Handbook for Sustainable Communities and Regions* (2nd Ed.). Routledge.

Required textbook: Barnett, J., & Bouw, M. (2022). *Managing the Climate Crisis: Designing and Building for Floods, Heat, Drought, and Wildfire*. Island Press.

Recommended textbook: Bardach, E., & Patashnik, E. M. (2019). *A practical guide to policy analysis: The eightfold path to more effective problem solving* (6th Ed.). Sage. (Actually, any edition will do)

Part I: Core concepts and history

Week 1: Course overview, introduction to environmental planning and its history

Daniels, T. L. (2009). A trail across time: American environmental planning from city beautiful to sustainability. *Journal of the American Planning Association*, 75(2), 178-192. DOI: [10.1080/01944360902748206](https://doi.org/10.1080/01944360902748206)

Susskind, L. (2008). The environment and environmentalism. In G. Hack, E. L. Birch, & P. H. Sedway (Eds.), *Local planning: Contemporary principles and practice* (pp. 74-80). ICMA.

Barnett, J., & Bouw, M. (2022). *Managing the Climate Crisis: Designing and Building for Floods, Heat, Drought, and Wildfire*. Chapter 1: The Climate Crisis: A National Security Problem (p.1-15)

Recommended

Greenberg, M.R. (2008). Introduction: A quick walk through a framework of six environmental policy criteria (pp.1-9) In *Environmental policy analysis and practice*. Rutgers University Press.

Mumford, L. (1925). The regional framework of civilization. In *The Lewis Mumford Reader* (pp. 207-216).

Olmstead, F. L. (1886). Notes on the plan of Franklin Park and related matters. Part Fourth: Of the difficulties of pursuing a sound policy, and the means by which they are to be overcome (pp.89-112). <https://hdl.handle.net/2027/mdp.39015033837710>

Week 2: Foundations of environmental planning and management

Daniels Ch.1 Taking stock of the environment and creating environmental plans (pp.3-40).

Ch.2 The legal, economic, ethical, and ecological foundations of environmental planning (pp.41-75)

Carter, N. (2007). The environment as a policy problem. In *The politics of the environment: Ideas, activism, policy* (pp. 173-206). Cambridge: Cambridge University Press.
doi:10.1017/CBO9780511819179.012

Recommended

Association of New Jersey Environmental Commissions. *Environmental Commissioners' Handbook* (6th ed.).

<https://anjec.org/wp-content/uploads/2019/07/EnvCommissionersHandbook-2017.pdf>

Carson, R. (1962) *Silent Spring*. Conclusion.

Cronon, *Nature's Metropolis*, skim chapter 1, and read chapter 2.

Eccleston, Charles H and Frederic March. (2010). Ch. 7: Environmental management systems (pp.171-206). *Global Environmental Policy: concepts, principles and practice*. Taylor & Francis Group.

Oates, W. E. (Ed.) (2006). *The RFF Reader in Environmental and Resource Policy*, 2nd Edition. Washington, DC: Resources for the Future.

Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press.

Ostrom, E. et al. (1999). Revisiting the Commons: Local Lessons, Global Challenges. *Science*, 284 5412 (pp.278-282).

Part II: Which environment?

Week 3: Air and transportation

Daniels. Ch 3. Planning for sustainable air quality

Daniels Ch 18. Transportation Planning and the environment

Barnett, J., & Bouw, M. (2022). *Managing the Climate Crisis: Designing and Building for Floods, Heat, Drought, and Wildfire*. Chapter 6: Life-Threatening Heat

Brian Stone Jr., Adam C. Mednick, Tracey Holloway & Scott N. Spak (2007) Is Compact Growth Good for Air Quality? *Journal of the American Planning Association*, 73:4, 404-418, DOI: [10.1080/01944360708978521](https://doi.org/10.1080/01944360708978521)

Recommended

Feng, J., Gao, K., Khan, H., Ulpiani, G., Vasilakopoulou, K., Young Yun, G., & Santamouris, M. (2023). Overheating of Cities: Magnitude, Characteristics, Impact, Mitigation and Adaptation, and Future Challenges. *Annual Review of Environment and Resources*, 48(1), 651–679. <https://doi.org/10.1146/annurev-environ-112321-093021>

Hoppe, J., Hinder, B., Rafaty, R., Patt, A., & Grubb, M. (2023). Three Decades of Climate Mitigation Policy: What Has It Delivered? *Annual Review of Environment and Resources*, 48(1), 615–650. <https://doi.org/10.1146/annurev-environ-112321-103821>

Namdeo, A., & Almutairi, S. (2019). Transport and air pollution. In S. Davoudi, R. Cowell, I. White, & H. Blanco (Eds.), *The Routledge Companion to Environmental Planning* (pp.300-309).

Pillarisetti, A., Ye, W., & Chowdhury, S. (2022). Indoor air pollution and health: bridging perspectives from developing and developed countries. *Annual Review of Environment and Resources*, 47, 197-229.

Tsoulou, I., Senick, J., Mainelis, G., & Kim, S. (2021). Residential indoor air quality interventions through a social-ecological systems lens: A systematic review. *Indoor Air*, 31(4), 958-976.

Yuan, M., Song, Y., Huang, Y., Hong, S., & Huang, L. (2018). Exploring the Association between Urban Form and Air Quality in China. *Journal of Planning Education and Research*, 38(4), 413–426. <https://doi.org/10.1177/0739456X17711516>

Week 4: Water

Daniels Ch.5. Planning for a sustainable water supply.

Ch 6. Planning for sustainable water quality

Barnett, J., & Bouw, M. (2022). *Managing the Climate Crisis: Designing and Building for Floods, Heat, Drought, and Wildfire*. Chapter 7: Shortages of Fresh Water

NJDEP new water supply plan (read the executive summary) https://dep.nj.gov/water-supply-plan/?utm_medium=email&utm_source=govdelivery

NPR. (2023). [The Supreme Court has narrowed the scope of the Clean Water Act.](#)

Pauli B.J. (2019). Chapter 2: How did it happen? Two tales of the origins of the crisis. In *Flint fights back: Environmental justice and democracy in the Flint water crisis*. Cambridge, MA: MIT Press, pp.49-69.

Recommended

Anand, N. (2017). *Hydraulic city: Water and the infrastructures of citizenship in Mumbai*. Duke University Press.

Hurdle, J. (2022). Urban Waters: Discovering the Hidden Beauty of a Jersey River
<https://e360.yale.edu/features/cooper-river-new-jersey-pollution-environment>

Furlong, K. (2016). *Leaky governance: Alternative service delivery and the myth of water utility independence*. UBC Press.

Mandarano, L. (2011). Clean Waters, Clean City: Sustainable Stormwater Management in Philadelphia. In *Sustainability in America's Cities: Creating the Green Metropolis*, M.I. Slavin (Ed.). Island Press.

Millington, N., (2018). Producing water scarcity in São Paulo, Brazil: The 2014-2015 water crisis and the binding politics of infrastructure. *Political Geography*, 65, pp.26-34.

Week 5: Waste management

Daniels Ch 7. Planning for solid waste and recycling

Hacking, N. (2019). Waste and management of environmental resources. In S. Davoudi, R. Cowell, I. White, & H. Blanco (Eds.), *The Routledge Companion to Environmental Planning* (pp.257-267).

Pollans, L.B. (2021). Introduction (pp.1-18) and Ch.1: the evolution of America's weak recycling waste regime (pp.19-43). In *Resisting Garbage: The politics of waste management in American cities*. University of Texas Press.

Recommended

Hostovsky, C. (2006). The paradox of the rational comprehensive model of planning: Tales from waste management planning in Ontario, Canada. *Journal of planning education and research*, 25(4), 382-395.

Zapata Campos, M. et al (2014) The travel of global ideas of waste management. The case of Managua and its informal settlements. *Habitat International*, 41, pp.41-49.

Peterson, J., & Hughes, S. (2017). Governing garbage: advancing urban sustainability in the context of private service delivery. *Cities*.

Vergara, S. E., & Tchobanoglous, G. (2012). Municipal solid waste and the environment: a global perspective. *Annual Review of Environment and Resources*, 37, 277-309.

Week 6: Land contamination, brownfield redevelopment, and superfunds

Daniels Ch 8. Toxic substances and hazardous waste

Hollander, J., Kirkwood, N., & Gold, J. (2010). *Principles of brownfield regeneration: cleanup, design, and reuse of derelict land*. Island Press. Ch.2: Approaching brownfield redevelopment (pp.7-20). Skim Ch.3: Remediation (pp.21-50).

Harvard Law School Program on Negotiation. East Falls Brownfields. Read the general instructions and the instructions for the role I will randomly assign you. Not eligible for reading summary assignment.

Lee, S., & Mohai, P. (2013). The socioeconomic dimensions of brownfield cleanup in the Detroit region. *Population and Environment*, 34(3), 420–429. <http://www.jstor.org/stable/42636678>

Recommended

Carson, R. (1962). Ch. 3: Elixirs of death. In *Silent spring*. (pp. 15-38). Houghton Mifflin Company.

Hazard NJ Podcast: <https://www.npr.org/podcasts/1101481285/hazard-n-j>

Week 7: Planning for biodiversity, wildlife and wetlands

Daniels Ch 10. Planning for wildlife habitat

Ch 11. Planning and managing wetlands

Barnett, J., & Bouw, M. (2022). *Managing the Climate Crisis: Designing and Building for Floods, Heat, Drought, and Wildfire*. Chapter 8: Wildfire (pp.149-168)

Randolph, J. (2011). Ch 11: Wildlife habitats and urban biodiversity. In *Environmental land use planning and management* (2nd Ed.) (pp.347-378)

Gonzalez-Garcia et al. (2022). Biodiversity and ecosystem services mapping: Can it reconcile urban and protected area planning? <https://doi.org/10.1016/j.scitotenv.2021.150048>

Recommended

Alagona, P.S. (2022). *The accidental ecosystem: People and wildlife in American cities*. University of California Press.

ICLEI Local Biodiversity Strategy and action plan guidelines (LBSAP guidelines).

McHarg, I. L. (1992). *Design with nature* (25th anniversary ed.). J. Wiley.

Nijhuis, M. (2022). *Beloved beasts: Fighting for life in an age of extinction*. Norton.

NPR. (2023). [The EPA removes federal protections for most of the country's wetlands.](#)

Nyhus, P. J. (2016). Human–wildlife conflict and coexistence. *Annual review of environment and resources*, 41, 143-171.

Turo, K.J., Gardiner, M.M. The balancing act of urban conservation. *Nat Commun* **11**, 3773 (2020). <https://doi.org/10.1038/s41467-020-17539-0>

Yang, B. (2019). McHarg's ecological wisdom. In *Landscape Performance* (1st ed., pp. 205–211). Routledge. <https://doi.org/10.4324/9781315636825-17>

Week 8: Disasters, hazards, and coastal management

Daniels Ch. 12. Coastal zone management

Ch. 13 Planning for natural hazards and natural disasters

Barnett, J., & Bouw, M. (2022). *Managing the Climate Crisis: Designing and Building for Floods, Heat, Drought, and Wildfire*. READ ONE of these chapters and come prepared to contribute to the discussion based on the chapter you read:

- Chapter 3: Flooding from sea level rise and storm surges
- Chapter 4: Flooding along rivers
- Chapter 5: Flooding from Extreme Storm Events.

O'Neill, E. Understanding risk in environmental planning. In S. Davoudi, R. Cowell, I. White, & H. Blanco (Eds.), *The Routledge Companion to Environmental Planning* (pp.300-309).

Recommended

Film: Lee, S. (2010) *If God is willing and da creek don't rise*. 255 minutes

Melina Matos, Philip Gilbertson, Sierra Woodruff, Sara Meerow, Malini Roy & Bryce Hannibal (2022) Comparing hazard mitigation and climate change adaptation planning approaches, *Journal of Environmental Planning and Management*, DOI: [10.1080/09640568.2022.2093171](https://doi.org/10.1080/09640568.2022.2093171)

Olshansky, R., & Johnson, L. (2014). The Evolution of the Federal Role in Supporting Community Recovery After U.S. Disasters. *Journal of the American Planning Association*, *80*(4): 293-304.

Pal, I., Kumar, A., & Mukhopadhyay, A. (2023). Risks to Coastal Critical Infrastructure from Climate Change. *Annual Review of Environment and Resources*, *48*(1), 681–712. <https://doi.org/10.1146/annurev-environ-112320-101903>

Perkiss, A. (2022). *Hurricane Sandy on New Jersey's Forgotten Shore*. Cornell University Press.

Lindsey Ward Lyles, Philip Berke & Gavin Smith (2014) Do planners matter? Examining factors driving incorporation of land use approaches into hazard mitigation plans, *Journal of Environmental Planning and Management*, *57*:5,792-811, DOI: [10.1080/09640568.2013.768973](https://doi.org/10.1080/09640568.2013.768973)

Rivera, D.Z. (2022), Disaster Colonialism: A Commentary on Disasters beyond Singular Events to Structural Violence. *Int. J. Urban Reg. Res.*, 46: 126-135. <https://doi.org/10.1111/1468-2427.12950>

Part III: Tools and techniques

Week 9: Assessment tools

Eccleston, C., & Doub, J.P. (2012). Preparing NEPA Environmental Assessments: A user's guide to best professional practices. Ch 5: Environmental assessment process and Ch 6: environmental impact assessment.

Krupnick, A. J., & Siikamaeki, J. (2007). How People Value What Nature Provides. In *Resources* (Washington, D.C.) (Number 165, pp. 14–16).

Greenberg, M.R. (2008). Ch. 7: Policy measurement and Assessment Tools. In *Environmental policy analysis and practice*. Rutgers University Press.

Steiner, F. R. (2008). *The living landscape: an ecological approach to landscape planning* (2nd ed.). Island Press. "Two Examples of Biophysical Inventory and Analysis," pp. 122-140

Ulibarri, N., & Han, D. (2022). NEPA and climate change: Consideration of climate mitigation and adaptation in infrastructure review process. *Environmental Research: Infrastructure and Sustainability*, 2(1), 015004. DOI 10.1088/2634-4505/ac5006

Recommended

NJ "baby" NEPA: <https://dep.nj.gov/oppn/>
https://ceq.doe.gov/docs/laws-regulations/state_information/NJ_NEPA_Comparison_23Dec2015.pdf

Eccleston, Charles H and Frederic March. (2010). Ch. 5: Environmental impact assessment (pp.111-133). *Global Environmental Policy: concepts, principles and practice*. Taylor & Francis Group.

Eccleston, C.H. (2014). *The EIS Book. Managing and preparing environmental impact statements*. CRC Press.

Greenberg, M.R. (2008). Ch. 1: A statement of values and forty years of field trials (pp.1-24). In *The Environmental Impact Statement after Two Generations: Managing environmental power*. Routledge.

Greenberg, M.R. (2008). Ch. 8: NEPA and the challenges of the early twenty-first century (pp.195-209). In *The Environmental Impact Statement after Two Generations: Managing environmental power*. Routledge.

Sagoff, M. (2012). Chapter 2: At the shrine of Our Lady of Fatima or Why political questions are not all economic. In *The economy of the earth: Philosophy, law, and the environment* (2nd Ed.). Cambridge University Press.

Week 10: Decision-making

Atkinson, G., & Mourato, S. (2008). Environmental cost-benefit analysis. *Annual review of environment and resources*, 33, 317-344.

Barnett, J., & Bouw, M. (2022). *Managing the Climate Crisis: Designing and Building for Floods, Heat, Drought, and Wildfire*. Chapter 11: Costs and Benefits of Managing Climate Threats

Eccleston, Charles H and Frederic March. (2010). Ch. 6: Environmental decision-making theory and practice (pp. 135-169). *Global Environmental Policy: concepts, principles and practice*. Taylor & Francis Group.

Greenberg, M.R. (2008). Ch. 8: Decision-making and Communication Tools (pp.224-249). In *Environmental policy analysis and practice*. Rutgers University Press.

Recommended

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Part IV: Where to from here?

Week 11: Planning for climate change

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- Chapter 10: Recent Progress in Managing Climate Threats

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Meerow, S., & Woodruff, S.C. (2020). Seven principles of strong climate change planning. *Journal of the American Planning Association* 86(1), 39-46.

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Hanzl, M, & Fernández-Maldonado, A.M. (2021). Editorial to the Special Issue on planning resilient cities and regions. *Cities*.

Lewis, Simon L., and Mark A. Maslin. "Defining the Anthropocene." *Nature* 519, no. 7542 (2015): 171-180.

Benedict, M.A. & McMahon, E. T. (2006). Ch.1. Why Green Infrastructure? In *Green Infrastructure: Linking landscapes and communities*. Island Press. Pp 1-22.

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Week 12: **No class, Friday classes**

Week 13: Project presentations

Short presentations of your draft paper for group review and constructive feedback.
Attendance required by all students.

Week 14: Project presentations

Short presentations of your draft paper for group review and constructive feedback.
Attendance required by all students.

Week 15: From environmental justice to climate justice, the importance of participation

Ajibade, I., et al. (2022). Are managed retreat programs successful and just? A global mapping of success typologies, justice dimensions, and trade-offs. *Global Environmental Change*.

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Fitzgerald, J. (2022). Transitioning from Urban Climate Action to Climate Equity. *Journal of the American Planning Association*, ahead-of-print, 1-16.

Mendez, M. (2020). *Climate Change from the Streets: How Conflict and Collaboration Strengthen the Environmental Justice Movement*. Yale University Press. Ch. 1.

O'Neill, K. (2012). The Comparative Study of Environmental Movements. In P. F. Steinberg, & S.D. VanDeveer. *Comparative Environmental Politics: Theory, Practice, and prospects*. MIT Press.

Schlosberg, D. & Collins, L.B. (2014). From environmental to climate justice: climate change and the discourse of environmental justice. *WIREs Clim Change* 5, 359-374.

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